

**FROM POLICY TO EVERYDAY LIFE: A MULTIDIMENSIONAL STUDY OF LOW-
INCOME URBAN HOUSING IN CHINA**

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A thesis submitted in partial fulfilment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

in

THEORETICAL AND COMPUTATIONAL SCIENCE

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ABSTRACT

This dissertation is a combination of four papers that explore the housing issues of the low-income group in urban China. The first paper uses a policy-cycle analytical framework to portray the dynamic process of national housing policy evolution from 1998 to 2017 with an emphasis on the changing role of China's central government. The second paper examines localization processes of China's low-income housing policy in two major cities, aiming to advance the debates over how central-local dynamics, amidst the state's rescaling processes, have played out in China. The third paper explores housing mobility among low-income urban residents in Shanghai and Chengdu. It investigates how life-cycle factors, housing experience, place-based factors, and their interactions together shape individual moving intentions. The last paper proposes a four-period model to reconceptualize the housing career of the urban poor and depicts a vivid housing trajectory by analyzing their lived experiences in each period.

ACKNOWLEDGMENTS

It is my honor to acknowledge the roles of several individuals who were instrumental for the completion of my Ph.D. research.

First of all, I would like to express my sincere gratitude to my supervisor Professor Wei Xu, who encouraged me to pursue this project and taught me the art of geography. Without Prof. Xu's continuous guidance, support and encouragement, it is hard to fathom how I could ever have completed such an ambitious and lengthy research project. It has been a great privilege to study and work in the kind, intellectual, critical-thinking and supportive environment created by Prof. Xu.

I would like to acknowledge the valuable support and input from my committee members: Prof. Ian MacLachlan and Prof. Ivan Townshend. Prof. Ian MacLachlan has been a tremendous help in improving my English skills and has provided countless suggestions and comments for my Ph.D. thesis. Thank you for being a great mentor to me. Prof. Ivan Townshend has provided valuable literature suggestions, model critiques and manuscript editorial advice. The research wouldn't have been possible without support from both of them.

I am very grateful that Prof. Yu Zhu at Fujian Normal University gave me the chance to come to Canada. I would like to express my heartfelt gratitude to Prof. Tom Johnston as my defense chair, and Prof. Youqin Huang and Prof. Kurt Klein as external examiners for my defense, for their patience, support and insight that helped me overcome this last challenge of my doctoral studies. Thanks to Prof. Stefan Kienzle, Prof. Judith C. Kulig and all the other faculty members of

the Department of Geography, the School of Graduate Studies, and the University of Lethbridge for providing an excellent study and research environment.

I would like to thank my dear friends Chaowen Wang, Rongxu Qiu, Jiangjiang Kang, Qingyuan Tang, Zehan Pan, Emma Guo, Chuqiao Yu, Lingling Xu, Qianhui Bai, Xiaohui Hu, Qinchang Gui, Xiao Lin, Fan Yang for their moral support and encouragement.

Special thanks also go to Ms. Jing Zhu. She and Prof. Wei Xu treated us as family members and hosted us at many holiday meals with delicious food and good company during the past seven years. I am deeply indebted to them for their kindness and guidance.

This work would not materialize without the financial support from Mitacs GlobalLink, National Natural Science Foundation of China (NFSC# 41329001) and the University of Lethbridge.

Lastly, my deepest appreciation belongs to my wife, Jiexia Dong, my mom, my dad, and my aunt for their great support and understanding.

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CHAPTER 1: INTRODUCTION

Prior to the economic reforms in 1978, under a communist regime, China's housing allocation system functioned under the ideology of egalitarianism and was welfare-oriented and state-controlled with a high level of homogeneity and low overall housing quality (Wang, 2000; Chan, 2010). On the production side, urban housing units built during the pre-reform era were normally small with minimal facilities or amenities and took little cognizance of individual needs. The state and *danwei* (work-units) as major builders of public housing were only responsible for housing construction; after that, the state collected "nominal rent" to support public housing. Therefore, urban housing was supposed to be self-sustaining (Wu, 2002). On the delivery side, housing was conceived as a major part of the socialist welfare bundle along with public education, health care and pensions (Zenou, 2010). The outcome of such a system is that urban-housing shortages and over-crowding problems were severe, housing mobility was extremely low, but housing inequality was of little consequence (Ma, 2002).

The year of 1988 was pivotal for China's urban housing system. The "88 Plan" (State Council, 1988) signified the start of a nation-wide comprehensive housing reform. The overall objective of housing reform was clearly identified as "accomplishing housing commodification according to the principles of Socialist Planned Market Economy (it was rephrased as "Socialistic Market Economy" in 1992)" (State Council, 1988). Three years later, China's housing reform reached another milestone. The "94 Decision" (State Council, 1994) signified that the emphasis of China's housing reform had shifted from the adjustment of a welfare housing system to the establishment of a more "unified 'commercialized' housing stock, mainly composed of owner-occupied housing" (Hui, 2009: 383). It officially proposed two distinct housing provision systems:

affordable housing system and market housing system (Cao and Keivani, 2014). Four years later, the issuance of the “98 Resolution” (State Council, 1998a) formally ended the long-standing welfare housing allocation system. China’s urban housing distribution system officially switched to an “owner-competition market system” (Hui, 2009: 32). The 1998 resolution is widely recognized as a significant step towards “radical marketization” (Yu, 1999; Ma, 2002; Ye and Wu, 2008; Hui, 2009; Zenou, 2010). Scholars assert that the “98 Resolution” was a short-sighted strategy to stimulate the real estate market in response to the 1997 Asian Financial Crisis, and that it ignored many unsettled issues from previous reform periods. Critics believe that the “98Resolution” has led to the consolidation of a “privilege class” formed under the welfare housing allocation system, leading to further deprivation of a “loser class.” They conclude that with an irrational commodified housing market boom and the sudden withdrawal of government from housing provision without practical alternatives, the gap between the winners and losers would grow wider and the urban low-income housing issue would soon become acute (Wang and Murie, 2000).

It appears that many of these concerns were valid. China’s urban housing market from 1998 onwards, has become increasingly polarized and afflicted with market-based problems such as housing speculation (Chen et al., 2011). After the “98 Resolution,” the unprecedented growth of housing expenditure largely offset the growth of urban income which was supposed to stimulate the domestic consumption (Li, 2012). A direct consequence of this was a sharp increase in real estate investment and house prices. After nearly four years of silence in urban housing regulation (1999-2002), Beijing began to regulate and stabilize housing prices in 2003. These efforts were further strengthened and became one of the priorities of the central government between 2005 and

2007. During this time, the central state issued numerous “suggestions,” “notices,” and “decisions” requiring local governments to “make stabilizing housing prices their primary task” and to “strengthen land-use supervision” (State Council, 2004; State Council, 2006a; State Council, 2007b). And yet, amidst all the measures, 2003-2007 was the fastest period of house price inflation that China has ever seen. There was, as some scholars suggested, “an ongoing battle” for controlling urban housing prices between China’s central government and local forces consisting of local governments and developers (Fu and Lin, 2013: 123). In 2007, under the increasing pressure of social discontent and instability and for the first time since 1998, the central government made the “provision of affordable urban housing” a priority for national housing regulations (State Council, 2007b). Various low-income housing projects including Capped and Restricted Housing (CRH) and Economical and Comfortable Housing (ECH) were proposed. These projects seemed promising on paper; however, the results have yet to be seen. As Huang and Li (2014: 6) argue, “there are many structural problems that prevent local governments from full commitment in low-income housing.” In 2008-2009 and again in 2014-2015, economic recession prompted the central government to emphasize the economic-stimulus function of the housing sector. In 2016, the central government focused on preventing a housing bubble market from forming. In 2017, the central government sought to upgrade regulatory frameworks by proposing a long-term mechanism in housing regulation which aimed to curb the real estate bubble; to regulate macro scale capital flows; and to support a reasonable level of home purchases. From 2008 to the present, amidst the constant adjustments of housing policies, the urban housing market in China has become extremely unbalanced (Li, 2012; Yang and Chen, 2014b). Major cities have experienced three rounds of housing price spikes in 2009, 2012 and 2015. The mounting housing affordability crisis in large cities has become an acute social issue and even posed a threat to

political stability (Chen, Yang, et al. 2014). Meanwhile, the third and fourth -tier cities are facing severe issues of excessive housing stock due to housing over-supply.

This historical review outlines the changing institutional arrangements within which China's urban housing market has unfolded. It shows that China's urban housing market has experienced "a zig-zag path in the past 30 years because of dramatic changes in ideology and political economy" (Huang and Clark 2002: 9). These changes, collectively known as housing reforms, have dramatically altered China's housing allocation system from welfare housing to asset-based housing, from state-based or publicly administered housing allocation to market-based housing delivery, and from unitary administration to multiple and comprehensive policy measures (Ye et al. 2006). There are extensive discussions in the literature about this complex process of change and how it has shaped China's urban housing market to date (Wang and Murie, 2000; Lee and Zhu, 2006; Li and Li, 2006; Logan et al., 2010; Chen et al., 2011; Liu et al., 2012a; Huang, 2013). Among these seminal discussions, four important issues are not yet fully understood or are still widely debated.

The first issue is how to understand the transformations that have taken place in China's urban housing market from 1998 to the present. Supporters of convergence theory argue that from the 1990s to the 2000s, China has followed many East Asian countries in taking a neoliberal path of housing market restructuring featuring marketization initiatives, privatization of public housing, establishment of property rights law and development of mortgage finance (Agus et al., 2002; Wu, 2010a; Wang et al., 2012; Doling and Ronald, 2014). However, opponents cite mounting evidence showing significant differences in housing provision systems among the East Asian countries as housing market transformation proceeds (Groves, 2016). They further argued that the housing

distribution system created by the Chinese government's unleashing of market power is not, as some neoliberals have put it, an entirely market-oriented resource allocation system (Nonini, 2008). On the contrary, housing reform has spawned a host of state-owned or state-controlled property development giant firms, (e.g. China Resources Land and Poly Real Estate) which, together with China's government-monopolized land supply system, have played a pivotal role in the allocation of resources in China's housing market. This result, ironically, has not weakened, but greatly strengthened China's ruling foundation and economic viability as an authoritarian state (Xia and Liang, 2015; Tansel, 2017). The increasingly heated debate over neoliberalism poses a great mystery: what happened in China's 20 years of housing reform, and what is the logic behind the policy evolution?

The second puzzle is the cross-scale central-local dynamics during the transformation. From a scale theory perspective, the central-local relation represents a specific type of cross-scale interaction. According to Brenner (2004: 9), scale is “a vertical differentiation in which social relations are embedded within a hierarchical scaffolding of nested territorial units.” While the central and local governments define different geographical boundaries around which control is exerted and contested (Smith, 1992), it is in the rescaling process that local and central states are reterritorialized to produce central-local scalar fixes in places where reforms and public policies are implemented (Swyngedouw, 1997; Brenner, 1998; Marston et al., 2005). As a result of such process, the state power and authority are reshuffled upwardly to the global and downwardly to the local (Swyngedouw, 1997; Jessop, 1999; Peck, 2002; Robertson, 2018). One prominent feature of Chinese housing reforms involves the reshuffling of political power and authority as well as social responsibilities between the central and local governments. Some scholars believe state

power decentralization and market expansion have dominated the state rescaling process during China's reform period and are responsible for its remarkable economic success (Wei, 2001). Others argue that China's state rescaling witnesses the co-existence of political decentralization and recentralization (Li et al., 2014; Li, 2015; He et al., 2018). Because scale may be viewed as socially constructed and hence fluid, it is "both the result and the outcome of social struggle for power and control" (Swyngedouw, 1997: 140). The inter-scalar struggle for power and control is particularly imperative to how state rescaling is unfolded (Peck, 2002). It is hence fundamental to understanding the dynamics of the central-local relation that penetrates the process of state rescaling in China. On the other hand, China's housing policy is both a means for promoting national and regional economic growth and for maintaining financial and social stability. Thus, the localization process of low-income housing policy at the city level provides an excellent window to understand how the central housing policies are downscaled and how the locals respond to policy implementation challenges through local policy experimentations in public housing provision.

After 30 years of market transition as described above, China's urban housing market has gradually evolved from an extremely low level of egalitarianism to a transitional dual-track market system, and eventually to a highly polarized, highly segregated market (Logan et al., 2010; Pamuk, 2012; Yang and Chen, 2014c). The housing condition of urban dwellers, their perception of housing and their access to housing have all undergone substantial changes, especially for low-income households in China's major cities, who have benefited least from China's economic boom (Dollar, 2007). Therefore, the third question shifts the focus from government and policy to urban low-income residents. How have their housing careers changed as they face skyrocketing housing

prices, and an increasingly polarized market? And how do they respond to these emerging issues? Much of the discussion on this issue is based on life cycle and life course theory (Huang, 2004; Li and Li, 2006; Cui et al., 2015). These studies have developed an analytical framework in which one's housing career can be examined through a series of life events. The housing career is viewed as an exogenous outcome of changes in the life course, a projection of the occupant's life history in the housing market. However, critics argue that this approach ignores continuity and dynamism inherent in one's housing career and neglects factors shaping the experiences and choices, and subsequently knowledge, of an individual's housing career (Murdie, 2002; Eastmond, 2007). This issue is particularly salient when examining China's low-income people. Rapid economic development, urbanization and marketization, together with a lopsided wealth distribution system, have led to an unprecedented level of social disparity in urban China. As a result, a rising heterogeneity has been observed within urban low-income residents (Wang, 2004; Wu et al., 2010). Therefore, it is crucial to employ a more dynamic and realistic approach to understand the evolution of the housing careers of urban low-income earners.

Another critical concern closely related to the housing career for low-income households is housing mobility. Home-moving behavior can be voluntary or compulsory, signifying whether residents are happy with their existing homes or have the ability to improve their housing conditions by moving. Housing mobility has serious implications for its occupants. Voluntary moves to high-quality housing can improve community safety and have a positive impact on the physical and mental health of home-movers (Bolt & van Kempen, 2002; Coulton et al., 2012). In contrast, being forced to move or moving too frequently could jeopardize established social and employment networks, and even worse, disrupt children's education and mental health (Phinney,

2013). For the general population, home-moving often reflects an improvement of housing and neighborhood conditions or a reunion with relatives and friends (Clark et al., 2006). However, for low-income people with scarce economic resources, urban home-moving activities may reflect their vulnerability in health, employment and housing problems (Westen, 1995; Katz et al., 2001). Therefore, there is a need to understand the determinants of residential mobility among the urban poor to address their most significant housing needs.

This study, utilizing a mixed-methods approach, aims to address the four critical questions proposed above. The research data consists of questionnaire and interview data collected in Shanghai and Chengdu in 2015 and 2016, as well as central and local housing policy documents and newspaper articles from 1998 to 2018.

The dissertation is divided into seven chapters. This introductory chapter provides a brief overview of the evolution of China's housing market and identifies the four questions addressed in this study. The second chapter introduces the study area, data collection and research design. The third chapter utilizes the policy-cycle analytical framework to portray and explain the dynamic process of national housing policy evolution from 1998 to 2017 with an emphasis on the changing role of central government in China. The fourth chapter examines localization processes of China's low-income housing policy in two major cities: Shanghai and Chengdu. It aims to advance the debates over how central-local dynamics, amidst the co-evolution of central authoritarianism and local autonomy, have played out in China and how the cross-scale dynamics shape the local implementation of low-income housing policy. The fifth chapter explores housing mobility among low-income urban residents. It investigates how life-cycle factors, human capital, housing experience, place-based factors, and their interactions together shape individual moving intentions.

The sixth chapter proposes a four-period model, through a dialogue with the established life-cycle/life course theories, to reconceptualize the housing career of the urban poor and depicts a vivid and continuous housing trajectory by exploring their lived experiences in each period. The seventh chapter summarizes and discusses the major findings of this study.

CHAPTER 2: METHODOLOGY

2.1 STUDY AREA

Chengdu and Shanghai are the two main study sites. Chengdu is a regional center in southwestern China. As the capital city of Sichuan province, Chengdu reports directly to Sichuan's provincial government. Shanghai is a national gateway city and well-integrated in the global economy. As one of four state designated municipalities, it is like a province and subject to direct central supervision. As shown in Table 2-1, Shanghai had 8.14 million more residents than Chengdu and its economy was almost twice as large as Chengdu's in 2017. The comparison of housing indicators shows that there is a huge difference in the scale of the real estate industry between two cities. In Chengdu, more than half of the total housing investment was contributed by the private sector as of 2017. A strong private economy may imply a strong local state-industry connection that may significantly influence the formation of local political agenda (Breslin, 2012). In contrast to Chengdu, Shanghai is a global city that requires a much more open and transparent regulatory regime that creates greater confidence in the fairness of government procedures. Officials in Shanghai are two or three ranks above their counterparts in Chengdu on the political ladder. In China's political context, this means that the administrative ability and authority of Shanghai officials are greater than those in Chengdu. Further, as indicated by the huge difference in their fiscal revenues, Shanghai and Chengdu have different levels of economic development and prosperity.

Table 2-1 Major differences between Chengdu and Shanghai, 2017

Selected indicators	Chengdu	Shanghai
Population (million)	16.04	24.18
GDP (100 million yuan)	12,170	28,179
Local fiscal revenue (100 million yuan)	1,175	6,406
Percentage of private investment in total housing investment	56%	35%
Geographical location	Western inland city	Eastern coastal city
Political status in urban hierarchy	Sub-provincial level city	Provincial-level city
Political ranks of lead officials	Sub-provincial (ministerial) level	Sub-national level
Level of central supervision	Indirect central supervision	Direct central supervision
Real estate investment (100 million yuan)	2,639	3,709
Sales of commodity residential housing (100 million yuan)	2,421	5,233
Land transaction fees (100 million yuan)	1,189	1,472

Data source: 2018/2016 Statistics Yearbooks of Chengdu and Shanghai, 2018 Annual report on the real estate market of Shanghai and Chengdu

2.2 DATA COLLECTION

All data analyzed in this dissertation were collected by the author, or the project team led by the author. The data collection followed the general protocol of the mixed-methods approach, that is, to collect different types (both quantitative and qualitative) of data regarding one complex social phenomenon (Bazeley, 2002; Gelo et al., 2008). The detailed data collection processes and the profile of the final datasets are outlined in Table 2-2.

Table 2-2 Data collection

Data set	Date of collection	Place of collection	Data type	Sampling method	Sample size
1	Summer 2015	Chengdu and Shanghai	Survey data	Geographically stratified sampling, random interceptions	420 questionnaires on the housing situation of low-income residents
2	Summer 2016	Chengdu	In-depth interview	Follow-up Interviews, snow-ball sampling	12 in-depth interviews with urban low-income residents
3	Summer 2016	Chengdu and Shanghai	In-depth interview	Purposive or judgmental sampling, snow-ball sampling	17 in-depth interviews with local housing bureau officials and insiders of real estate industry
4	2016-2018	n/a	Policy documents	Full sample	98 pieces of housing policy issued by central government between 1998 to 2017 (This count does not include departmental transmittals and revisions of the same policy.)
5	2016-2020	n/a	Policy documents and other miscellaneous official and news documents	Purposive or judgmental sampling	74 low-income housing policy documents, including both central and local housing policy, 44 miscellaneous documents, including memoranda, conference records and news archives

As shown in Table 2-2, data set #1 was collected in the summer of 2015 in Chengdu and Shanghai. Using Shanghai's data collection as an example, first, ten districts were selected to provide balanced coverage across the city. Second, within each selected district, two communities (villages) were randomly selected. Third, in each selected community (village), we employed a combination of intercept and snowball sampling methods to survey 10 qualified respondents. Given that the research target was urban low-income earners, the potential respondents were those residents who were 18-60 years old with monthly earnings less than the city average. The selection of respondents was a mixture of field-based intercept-interviews and snowball sampling. A total of 420 interview questionnaires were conducted for both cities. After careful review and screening of the survey results, 41 questionnaires had missing data and quality problems and were excluded

from the data analysis, resulting in a final data set of 379 valid responses, including 171 from Chengdu and 208 from Shanghai. For a more detailed description of the data collection process for Data set #1, please refer to Appendix 2.

The collection of data set #2 was designed to be a follow-up project to data set #1. During the collection of data set #1, the interviewer asked each respondent if they would like to be interviewed in a follow-up face-to-face interview. Due to the project schedule, the actual follow-up interviews were conducted in the summer of 2016, in Chengdu. Six of the original respondents were successfully recruited and interviewed. During the interview, investigators also asked interviewees to recommend other potential respondents who met the project criteria. Eventually, 12 low-income urban residents were interviewed. The investigators conducted in-depth interviews with the interviewees for 2-4 hours in a face-to-face format, with questions structured to explore their housing careers. All interviews were conducted in Chinese and recorded. The recorded audio was later transcribed into Chinese and then translated into English.

The collection of data set #3 took the form of in-depth and focused interviews. The interviewees include housing bureau officials, real estate industry insiders, and bank staff. The interviews took place in Shanghai and Chengdu in the summer of 2016. In-depth interviews were mostly conducted in a semi-structured way, and in some cases, open-ended questions were also adopted. Respondents were asked about their experiences and views about the details of local low-income housing policies. Following a snowball sampling method, interviewees were also asked to recommend other suitable persons for our interviews. An in-depth interview normally lasted for 2-6 hours and was usually completed in multiple sittings. The in-depth interviews were utilized as the main data source. The focused interview was conducted in a structured manner for a short

period of time, normally between half to one hour. The main goal was to corroborate the theories or stories that have been established in the previous interviews. It was a form of theory triangulation (see Patton, 1980) to increase the validity of findings in this research. Eventually, a total of 17 interviews were conducted.

The sample size of data sets #2 and #3 was determined by a balanced consideration of data saturation and the resource limitations. Data saturation is a key concept in qualitative research design. It measures the point of diminishing returns to qualitative sample size (Yin, 2009). Qualitative research is concerned with the meaning behind phenomena, rather than making statistical inferences or validating hypothesis statements (Gelo et al., 2008). Data collection for qualitative research needs to cover the full spectrum of research questions yet still be cognizant of the potential for repetition and similar statements, which waste data collection resources and increase the difficulty of coding and modeling (Greene et al., 1989). Data saturation is considered to be reached when the new data collected does not shed any further light on the question under investigation, which also defines the ideal sample size for that research question (Greene et al., 1989). However, it is also argued that full data saturation which requires that all of the inquiries and dimensions be saturated is often unrealistic and pointless. Because most research projects, this one included, are constrained by limited funding and timing and are required to make a clearly detailed rationale and strategy beforehand of who will be interviewed, where and how for ethnic reasons (Greene and Caracelli, 1997). Therefore, we followed the principle of “conditional data saturation” (Greene and Caracelli, 1997: 27), i.e., we considered data saturation to have been reached when there were discernible repetitions of responses to core interview questions. After

that, we typically conduct 2-3 additional interviews, mostly focus-group, before concluding the data collection for the given research question.

Data set #4 and data set #5 are based on policy documents and other miscellaneous information that the author collected and compiled from public sources between 2016 and 2020. Data set #4 consists of 98 housing policies issued by the central government during the period 1998-2017. This project is an effort to collect all housing-related policies issued by the central government during that time period. Duplicate policy documents were excluded, as were superseded documents that had been updated. In addition, the author also included land and economic policies directly related to housing regulation, resulting in a collection of 98 documents. All policy documents, unless otherwise specified, were collected from the official websites of the following government departments: the State Council of the People's Republic of China, Ministry of Housing and Urban-Rural Development, Ministry of Finance, Ministry of Land and Resources, and the Central Bank of China. For details of the policies collected, please refer to Appendix 1. Data set #5 mainly consists of low-income housing policy documents issued by the central government and local versions in Shanghai and Chengdu. Selected policy texts related to the three major low-income housing policies: Economical Comfortable Housing (ECH), Low-rent Housing (LRH) and Public-rent housing (PRH) were collected, focusing on policies that were mentioned by interviewees in data set #3.

2.3 RESEARCH DESIGN

The debate over qualitative or quantitative approaches has gone on for decades. Traditionally, these two research paradigms have been recognized as antithetical and significantly different. The quantitative paradigm is argued to follow the positivist logic (Greene and Caracelli,

1997). It holds that there is only one truth, an objective and independent reality that exists beyond human intervention. Ontologically, all the social or natural phenomena in this view of reality, can be fully decomposed to “empirical indicators” that duplicate the “truth” (Gelo et al., 2008). On the other hand, the qualitative paradigm is argued to be based on “interpretivism and constructivism” (Sale et al., 2002). It may include multiple realities or multiple truths (Buckler, 2008). Such arguments are especially popular in social science. As Sale et al. (2002: 47) argue, “reality is socially constructed and so is constantly changing.”

More recently, however, researchers started to identify a convergent trend between the two research paradigms. As Greene and Caracelli (1997) argued, the processes and objects of social research are becoming so complex that it is difficult to distinguish qualitative from quantitative methods. One response to this trend is to use mixed-methods approach combining both qualitative and quantitative methods. In fact, after a period in the paradigmatic debates and fusing, mixed methods research has not just gained acceptability, but popularity, with many researchers arguing that such methods can yield greater understanding and increase the validity of results (Greene et al., 1989; Johnson and Onwuegbuzie, 2004; Gelo et al., 2008).

One of the merits of the mixed-methods approach is its capability to engage with complex and multi-dimensional subjects (Greene et al., 1989). As Riggin (1997) indicates, the philosophy behind mixed-methods approach is a reflection of the extreme complexity of the reality/phenomenon which normally results in a fusion of various data. The research targets of this paper, the housing careers of low-income urban groups and the policy context in which they are formed, fit such a profile. Therefore, this study adopts a mixed-methods research design, the details

of which are presented in Table 2-3. Please refer to the individual methodological discussions in each chapter for details.

Table 2-3 Research design

	Research target	Research method	Data
Chapter 3	National housing policy evolution	Qualitative analysis: content analysis, thematic analysis	Policy documents (data set #4)
Chapter 4	Localization of housing policy	Qualitative analysis: case study, thematic analysis	Policy text, in-depth interview (data set #3, data set #5)
Chapter 5	Housing mobility of urban low-income residents	Quantitative analysis: Logit regression	Survey data (data set #1)
Chapter 6	Housing career of urban low-income residents	Qualitative analysis: case study, life history	In-depth interview (data set #2)

CHAPTER 3: A REVIEW OF CHINA'S HOUSING POLICY FROM 1998 TO 2017

3.1 INTRODUCTION

In urban China, the housing market has experienced “a zig-zag path in the past 30 years because of dramatic changes in ideology and political economy” (Huang and Clark 2002: 9). These changes, collectively known as housing reform, have dramatically altered China's housing allocation system from welfare housing to asset-based housing, from state-based to market-based housing, and from unitary to multiple and comprehensive policy measures (Ye et al. 2006). The outcome of China's economic reform, as Harvey (2005) argued, “has been the construction of a particular kind of market economy that increasingly incorporates neoliberal elements interdigitated with authoritarian centralized control.” Many housing researchers took a radical leap based on Harvey's argument. They tend to downplay the function of an authoritarian state in Harvey's original statement, but emphasize the neoliberal elements (e.g., marketization, privatization and decentralization). As a result, the current literature tends to argue that China's housing reform and the associated policy arrangements constitute a “neoliberal turn” and should be incorporated in the global framework of neoliberal transition (He and Wu, 2007; Wu, 2010a; Peck and Zhang, 2013). Critics of this neoliberal convergence thesis refuted the notion that treats neoliberalization as a universally applicable mechanism of societal transition (Buckingham, 2017). They argued that “[T]he ‘story’ of China's ongoing economic transformation appears to be evolving according to its own logic, which deviates from popular theoretical interpretations and challenges the conventional wisdom of neoliberalism” and “only after we have unloaded ourselves of all pre-conceived theoretical expectations then can we hope to engage in the meaningful and fruitful way ‘of getting the China story right’” (Lin, 2011: p. 742).

Neoliberal or not, researchers generally agree that the housing reforms launched in late 1980 unleashed the great power of the market, which has ultimately re-shaped the landscape of urban China (Figure 3-1). A shift in the provisional responsibility of urban housing from state to market is also essential to the “market economy with Chinese characteristics”(Guan et al., 2001; Li, 2012). The real estate industry has developed at an unprecedented speed: per capita residential area of urban residents in China has doubled and real estate investment has increased nearly 30 times (Li, 2012). Housing has become the leading force in revitalizing Chinese urban economy (Shaw, 1997; Wang, Wang, & Bramley, 2005; Wu, 1996). The real estate industry has become a pillar of China’s economy. The establishment of a market-oriented housing supply system in China is beyond dispute.



Photograph by Lois Conner
Source: Liu HS and Smith K. (2011) Shanghai: A History in Photographs, 1842 - Today: Penguin, Viking

Author’s note : this photo was taken in 1985 at the North Sichuan Road Bridge, Hongkou District, Shanghai. It shows the urban housing landscape in one of China's largest cities before the housing reform.



Photograph by Stephen Wilkes
Source: Liu HS and Smith K. (2011) Shanghai: A History in Photographs, 1842 - Today: Penguin, Viking

Author’s note: this photo was taken in 2005 at the Jin Mao Tower , Pudong District, Shanghai. Compared to the photo on the left, the huge contrast shows how the booming real estate industry has profoundly changed China's urban landscape.

Figure 3-1 Urban China before and after housing reform

The current scholarly debate is on the causes and consequences of this “market transition.” Supporters of convergence theory argue that from the 1990s to the 2000s, many East Asian countries have taken a neoliberal path of housing market restructuring, featuring deep commodification and intensified marketization (Yap, 2015). It is a common view among these countries that real estate development is the most effective way to drive urbanization and urban economic growth, and to catch up with the modern western world (Doling & Ronald, 2014). China follows the East Asian neoliberal model: pursuing marketization operations, privatization of public housing, establishment of property rights law and development of mortgage finance (Agus et al., 2002).

However, opponents cite mounting evidence showing significant differences in housing provision systems among the East Asian countries as housing market transformation proceeds (Groves, 2016). They point out that China's central government is the proponent, designer and implementer of housing reform and more importantly, its biggest beneficiary (Mei and Pearson, 2014). Housing reform and accompanying land reform have helped fund Beijing's aggressive urbanization, industrialization, and modernization programs over the past three decades, enabling China to avoid the excessive foreign investment dependence that has plagued Southeast Asian countries at a similar development stage. Such a dependence has greatly threatened national economic security and even political stability in these countries (Tansel, 2017).

On the other hand, scholars argue that the housing distribution system created by the Chinese government's unleashing of market power is not, as some neoliberals have put it, an entirely market-oriented resource allocation system (Lee and Zhu, 2006). On the contrary, housing reform has spawned a host of state-owned or state-controlled property development giants, which,

together with China's government-monopolized land supply system, have played a pivotal role in the allocation of resources in China's housing market. This result, ironically, has not weakened, not even simply maintained, but greatly consolidated and strengthened China's ruling foundation and economic viability as an authoritarian state (Xia and Liang, 2015; Tansel, 2017). This process, therefore, runs counter to the so-called neoliberal ideology and development path. More recently, the “socialist movement” launched by Chinese President Xi Jinping seems to have put an end to this long-running debate. Xi's aversion to Western values and the capitalist system, as well as his explicit fondness for the traditional socialist approach and vocabulary, has led many researchers to believe that China has officially departed from the neoliberal path that began in the late 1980's and entered a new stage of social progression (Horesh and Lim, 2017; Su and Tao, 2017).

Interestingly, a series of new developments in China's housing market have granted strong practical and political significance to these academic discussions. On the one hand, Chinese housing policy attempts to boost the housing and real estate sector¹ as one of the growth engines to sustain its economic miracle. On the other hand, overheating in the housing market can invoke excessive economic inflation and over-supply in housing stock, jeopardizing social and economic stability. To dampen boom-bust cycles, policy instruments are employed to cool down overheated housing markets. However, in the face of these regulations, the urban housing market in China has become extremely unbalanced (Logan et al., 1999; Sato, 2006; Li, 2012). Major cities have experienced skyrocketing housing prices. In 2016, *The Economist* ranked Beijing, Shanghai and Shenzhen among the cities with highest housing prices in the world (Economist Intelligence Unit,

¹ According to the Classification of National Economic Industries (GB/T 4754-2011) issued by China's National Bureau of Statistics, the real estate industry is a major category K under the category of tertiary industries, which includes four subcategories: real estate development and operation, property management, real estate intermediary services and other real estate activities.

2016). The mounting housing affordability crisis in large cities has become an acute social issue and even poses a threat to political stability (Yang and Chen, 2014b). Meanwhile, amidst the housing boom for the last decade, the third and fourth -tier cities are facing severe issues of excessive housing stock due to housing over-supply (Yu, 2014).

The increasingly heated debate over neoliberalism, seemingly radical ideology turns and the coexistence of “ghost cities” and astronomical housing prices pose a great mystery: what happened in China’s 20 years of housing reform? How can we portray and understand this process? What is the logic behind the policy evolution? This paper aims to offer a more nuanced and eclectic but dialectic perspective on the transformation of contemporary Chinese housing policy. Our goal is to portray and understand the dynamic process of housing policy evolution from 1998 to 2017 with an emphasis on the changing role of government in China.

The most commonly-used research framework in China’s housing reform studies highlights only the policy outcomes and does not come to grips with the policy processes (Shaw, 1997; Wang, 2000; Guan et al., 2001). In these works, the spotlight has been shone on the impact of housing marketization and commodification, and the government has often been recognized as an indifferent “policy generator,” with little attention paid to the initiatives, concerns, struggles and changing logics in forming and executing housing policies, which have long been the focus of Western housing policy research (Bourne, 1981; Clark and Dieleman, 1996; Schwartz, 2014). One possible explanation for this neglect is that China's housing policies have long been seen as an extension of land policy which is heavily regulated by the central government. They were all part of the “neoliberal experiment” that the Chinese government has pursued since the 1980s. Therefore, it is no surprise that scholars simplify the evolutionary logic of China's housing policy to

“marketization, commodification and privatization” (Wu, 2010a). However, some scholars have noted that ever since the central government began to control housing prices nationwide (it is generally acknowledged that large-scale house price regulation began in 2005, while some studies have argued that 2007 or 2012 marked a radical change in the central government's policy approach), the housing policy goals and logics have become increasingly complex, variable, and even self-contradictory (Nie, 2016; Shi et al., 2016; Li et al., 2017; Fan and Yang, 2018). In such a context, it is apparently inadequate to concentrate solely on the outcomes of housing policy implementation. We contend that without a comprehensive analysis of the processes of the formation, implementation and evolution of housing policy, it is impossible to understand the present nature of China's housing policy. To address these deficits and frame our analysis, we have adopted the idea of the policy cycle theory from public policy research.

The idea of analyzing public policy in terms of stages was first proposed by Lasswell in 1956. The theory has since been elaborated further by Brewer and DeLeon (1983), May and Wildavsky (1978), and Anderson (1975). Policy cycle theory argues that instead of focusing on a single aspect of policy, public policy analysis should focus on the policy process which will evolve through a sequence of discrete stages (Fisher, Miller and Sidney, 2015). The theory provides several different analytical frameworks to analyze public policy cycles empirically. In this paper, we have combined and revised the frameworks proposed by Anderson and Jenkins (1976) and Mitchell (1989) to develop an analytical framework to investigate housing policy changes made by the Chinese central government (Figure 3-2). In this paper, we divide China's central housing policy between 1998 and 2017 into six policy cycles, based on changes in policy goals over time. We then apply the analytical framework described earlier to analyze each cycle of policy formation,

implementation, and outcomes. We conclude by synthesizing the characteristics of these six policy cycles to assemble a macro-path of the evolution of China's central housing policy over two decades and show the logic behind it. Sections 3.2 to 3.7 present the evolution of China's housing policy in each stage, while section 8 summarizes and discusses the overall evolution of the policy.

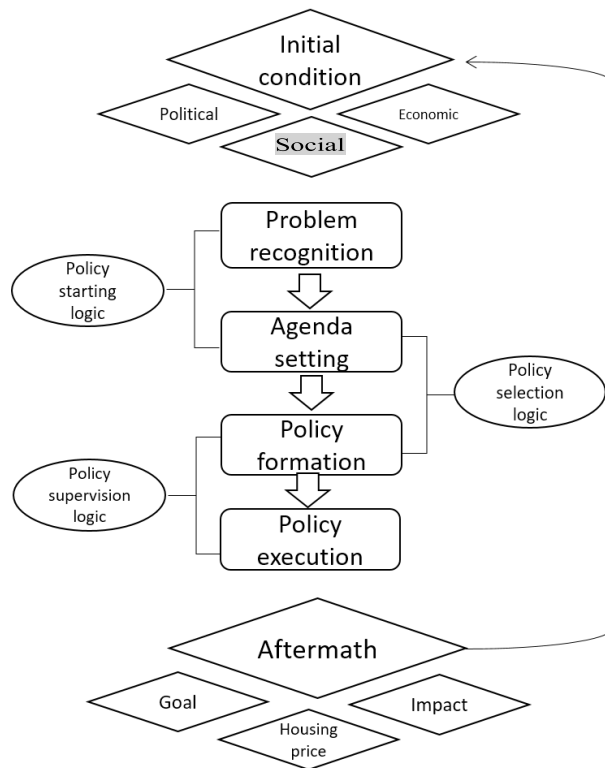


Figure 3-2 Analytical framework for understanding government housing policy evolution

3.2 TRANSFORMING REDISTRIBUTIVE TO MARKET-LIKE HOUSING DELIVERY SYSTEM, 1998-2002

3.2.1 PROBLEM RECOGNITION AND AGENDA SETTING

China's national housing reforms officially began in 1998 when the State Council issued a series of public policies establishing housing markets in China. While often viewed as an abrupt

transition in housing marketization, market reforms in housing provision have been path dependent, featuring a trial-and-error, stepwise process of policy experimentation (Table 3-1).

As early as 1988, the State Council promulgated “Implementation Plan for a Gradual Housing System Reform in Cities and Towns,” a policy to accomplish “housing commodification according to the principles of socialist planning in a market economy.” In 1991, another important housing reform policy, “Resolutions of the State Council for Actively and Appropriately Carrying out Urban Housing Reform,” was issued by the central government, the first official acknowledgment of the ownership of private housing purchased from the public sector. After several years of policy experimentation, in 1994, the state council further announced “The Decisions of the State Council on Deepening Urban Housing System Reform” in an attempt to clarify the ownership of privatized public housing entangled in the relationships among the state, *danwei* (work-units) and individuals. These policies did not noticeably alter China’s housing delivery systems because they were only applied in a limited number of cities. In spite of these housing policy experiments, the housing shortages and overcrowding problems in urban China remained. Four million urban households still lived in a home with floor area of less than 4 m² in 1994 (Yu, 1999: 13). The pilot housing privatization projects were mainly framed within a socialist institutional framework and were foreshadowed by a strong communist ideology. The private sector was largely excluded from the housing market (Huang, 2008). The housing sector remained far from self-sustaining. While limited in impact and scope, the initial policy experiments nonetheless generated invaluable lessons and experiences and set up the required legal path and institutional framework upon which full-scale housing marketization became possible.

Table 3-1 Overview of China's housing reform

	Pre-reform era	Preparation period for reform	Experimental Period	National housing reform	
Time	1949-1976	1977-1987	1988-1997	1998-2007	2008-
Policy scheme	<i>Danwei</i> based Welfare Allocation; public ownership	Welfare allocation combined with market system; transition from public ownership to private ownership		Towards a market dominated housing system; a country of homeowners	Battle on housing price; reemphasis on public housing

At the dawn of housing reform in 1998, the small changes reviewed above were accumulating and coupled with several external triggers to shock China's economic systems, creating a critical juncture which made housing reforms possible. In 1997, a financial crisis swept through the Asian economies and China's economy was severely impacted. Total exports declined significantly as the year-on-year export growth rate fell from 27.6% in January 1997 to -17.3% in October 1998 (National Bureau of Statistics of China, 1998). Foreign investment also declined rapidly. In 1999, FDI experienced negative growth for the first time in the reform era (National Bureau of Statistics of China, 1999). The central government was convinced that an under-developed housing market would be a stumbling block for China's economic success (Shaw, 1997). At this critical moment, to reduce its excessive dependency on foreign markets and elevate domestic consumption, the central government made a rational economic decision and geared housing reform to a full scale, nationwide project of housing commodification and privatization (Wang and Murie, 1999; Wang and Murie, 2000).

3.2.2 POLICY FORMATION AND EXECUTION

In the 1998 Government Work Report (State Council, 1998b), the central government highlighted the importance of the housing market in an unprecedented way. It declared that the aim of housing reform was to make the housing industry a new pillar of economic growth. This

was the first time that “pillar” has ever been used to describe China’s housing sector. It symbolized that the traditional ideology recognizing the housing sector solely as part of welfare system had been officially abandoned. However, given the fact that China’s housing market is far from established and considering the extremely-low wage level in urban China at the time, some researchers argued it was still too early to proclaim housing sector as a “pillar” of economic growth. They further argued that it is not the logical follow-up of previous reform, but rather, a forced response to the 1997 Asian economic crisis (Wang and Murie, 1999; Guan et al., 2001).

It took four months for the central government to transform this ideology change into an executable policy. In July 1998, the State Council issued Policy Document (PD) 98#1. In this milestone policy, the central government stated that the short-term goal of housing reform is the privatization of public housing and the commodification of newly built housing. It further declared that the long-term goal is to make the housing industry a new pillar of economic growth. It is clear that the central government prioritized economic growth at the initial stage of housing reform. PD 98#1 effectively terminated the long-standing welfare housing provision and distributions system. The urban housing system in China was officially transformed from a “state-guaranteed public rental system” to a “state-regulated neoliberal market system” (Hui, 2009: 32).

The introduction of market mechanisms required changes in the existing institutions and agents. During the early stage of the reform, the central government (re)constructed two major systems to implement the reform: personal mortgage system, and urban land distribution system.

The central government first focused on establishing an effective personal mortgage system. Before 1998, only residents in five pilot cities could apply for a housing mortgage, and the application had many limitations. In May 1998, Central Bank issued PD 98#3. This important

policy paper stated that a personal housing mortgage could be used to purchase any kind of private housing; and eventually, to extend the personal housing mortgage policy from pilot cities to all urban areas. Nine month later, PD 99#1 was issued to further loosen the regulation on personal mortgage. Notably, even though the mortgage system has been revised and adjusted through time, the core framework set by PD 98#3 and PD 99#1 has remained unchanged for the last two decades. PD 98#3 and PD 99#1 also marked the turning point of China's housing market from collective consumption to personal consumption. However, the establishment of an institutional framework did not always guarantee its effectiveness (Bourne, 1982). Due to China's saving-based consumption structure and the lack of the real motivations, the housing mortgage failed to draw popularity at the early stage (Lü et al., 2001; Ding, 2003). The momentum has eventually turned since 2002 when the Central bank dramatically decreased the loan rate from 8.01% to 5.76% (Lü et al., 2001).

The second institutional adjustment is the land supply system. Before the land reform, land-use rights for commoditized residential buildings could only be obtained through a land agreement which is strictly controlled by the state. In other words, ten years after the economic reform, the land supply still functioned under a planned economy scheme. The dated and rigid land supply system could no longer match the rising housing demand released by the mortgage reform (Ding, 2003; Deng and Huang, 2004). The central government was clearly cognizant of the problem. The 2001 Government Work Report indicated that “The current task is to create all necessary conditions for the real estate sector to match up residential consumption demand” (PD 01#0). In fact, the central government started to strengthen land management soon after the milestone PD 98#1. In early 1999, two policies (PD 99#3 and PD 99#4) were issued to strengthen the

management of state-owned land. In May 2002, Ministry of Land and Resources issued PD 02#1. The policy declared the government's intention to enforce the bidding-auction-listing system. PD 02#1 marked the official abandonment of the land allocation scheme. The result is a more transparent land market. For developers, especially private developers with weak ties to states, it is now much easier and more efficient to obtain access to urban land. It made large-scale real estate development in urban China possible. For local governments, the bidding-auction-listing scheme could generate significant revenue. However, it is important to note that the 2002 policy did not terminate the land agreement transition. Local government could still transfer land use rights through an agreement justified by as a matter of precedent established by past practice.

In addition to these two major policy changes, the central government also made some adjustments to its housing management, fiscal, and public housing policies. In May 1999, the Ministry of Construction issued a guideline to specify how local government and *danwei* should function in public housing system (PD 99#2). In October 2000, the National Planning Commission & Ministry of Construction issued another policy to clearly define and regulate the collection of real estate intermediary fees (PD 00#1). In January 2001, the Ministry of Finance & State Administration of Taxation co-issued PD 01#1 with the purpose of reducing three taxations related to housing transactions. In November 2002, the Ministry of Construction issued PD 02#3 providing detailed rules and regulations for the implementation of the economic comfortable housing (ECH) program which was first introduced in 1994 to encourage low-middle income households to own homes in cities.

3.2.3 POLICY IMPACT AND AFTERMATH, 1998-2002

Table 3-2 summarizes China's urban housing policies during the 1998-2002 period. At this early stage, the central government focused on transforming the old welfare-based housing system into a new housing provision system with strong market features. It first reformed the housing market by allowing (PD 98#1) and later encouraging (PD 98#3, PD 99#1, PD 01#1) urban residents to purchase commodified urban residence from the market. It then reformed the land market by pursuing the bidding-auction-listing of urban land-uses (PD 02#1).

Table 3-2 Summary of housing policies, 1998- 2002 I

Policy #	Policy type					Supply- demand	
	Administrative measure			Market measure		Demand	Supply
	Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy		
98#1★			+			+	+
98#2				+		+	
98#3★				+		+	
99#1★				+		+	
99#2		O					
99#3	O						
99#4	O						
00#1			+			+	
00#2				O			
01#1★					+	+	
01#2★	+						+
02#1★	O						O
02#2	O			O			O
02#3		O					

★: milestone policies; +: stimulus policy; -: restraint policy; O: neutral

In 1998, at the dawn of the housing reform era, the central government declared two major policy objectives. The first was to make real estate a new pillar of economic growth (PD 98#0, PD 00#0, PD 02#0) and this was achieved. As shown in Figure 3-3, real estate investment has

increased at an average annual rate of 20.5% since 1998. The growth rate of the sold area² was even higher at around 25% annually between 1998 and 2002. The real estate industry has become an important sector of the national economy. The direct contribution to GDP was around 5%. It has steadily increased each year since 1998 and surpassed the financial industry in 2002. Researchers further calculated a comprehensive contribution index of real estate industry to national growth (including direct and indirect contributions). They argued that the actual contribution rate of real estate to the national economy has been maintained at around 15% between 2002 and 2005 (Li, 2006).

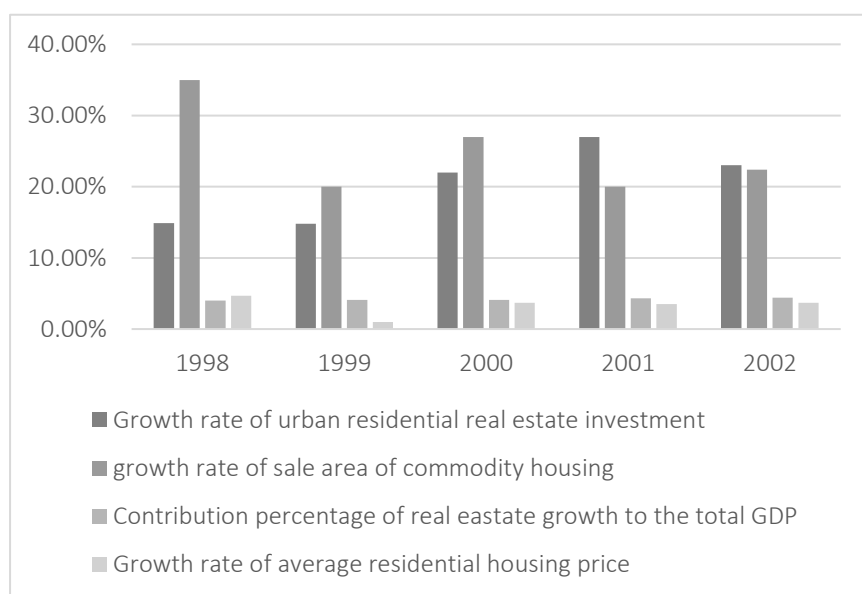


Figure 3-3 Real estate industry development, 1998-2002

Data source: China Statistical Yearbook 1998-2002; China Real Estate Statistical Yearbook 1998-2002

The second goal of the central government was to establish a multi-level urban housing provision system in which all urban residents have access to adequate housing: low-income households through the low-rent-housing program (LRH), middle-low income through the

² The sold area for commodity housing is the total floor area of housing completed in the reporting period that has been formally delivered to buyers or for which (formal) sales contracts have been signed. It excludes the area of commodity housing that is under construction even if a pre-sales contract has been signed.

economic-comfortable-housing program (ECH), and middle-high income households through the commodity housing market in the hope that this comprehensive scheme would eventually promote social stability (PD 01#0). The second goal was unfinished. It is indeed that the demand for housing has been unleashed by policies like PD 98#1 and PD 99#1; and the housing price during this period has maintained a moderate growth rate (see Figure 3-3). The problem is that these policies ignored or undermined two issues. First, various types of traditional agents or institutions (*danwei* for example) continued to act in the housing and land market. Second, urban China has operated at a low wage-level for a long time. As a result, older or resourceful urban residents can still gain access to housing by circumventing the market at minimal cost. For example, during this period, employees of some large state-owned enterprises were still able to obtain urban housing at very low prices through a variety of housing allocation systems; while young or disadvantaged urban residents still cannot afford to purchase their first housing through fully commodity housing market. The newborn housing mortgage system was either unaffordable, inaccessible or unfamiliar to them. The poorly developed allocation system of LRH and ECH further exacerbated the situation (Wang, 2000).

Table 3-3 Summary of housing policies, 1998-2002 II

Effectiveness in achieving established goals	The goal of making real estate a new pillar of economic growth was realized. However, the goal of building a multi-tiered urban housing supply system that benefits people of different income classes has not been achieved at this stage, and it is from this period that the problems of urban housing polarization and structural dislocation that have plagued Chinese policy makers to this day have come to the fore.
Acceptability by the local gov., industries and consumers	At this stage, the local government's attitude toward the central housing policy was mainly positive cooperation. Although at the local level, many ghosts from the planned economy era still haunt housing reform, the fundamental goal of the central government to support the real estate industry is in line with the local government's motivation to develop the local economy, so that the market mechanism can be installed rapidly everywhere.
Unintended effects	The commodification of housing market and land market also brought two major unexpected outcomes: infamous "housing speculation group" and land finance.

The commodification of the housing and land markets also brought some unexpected outcomes which will haunt China's housing market for decades to come. In Aug 2001, a group of 157 people from Wenzhou, one of the wealthiest regions in China, pooled more than ¥20 million into Shanghai's housing market and purchased more than 100 units of housing. The Wenzhou speculation group" (*wenzhouchaofangtuan*) has become an infamous byword that marked the beginning of an era featuring massive housing speculation (Chengri, 2006). The bidding-auction-listing scheme introduced market competition into the determination of land price. After 2001, land prices, which had been set unilaterally by the government, were influenced by market conditions. However, unlike the housing market, the local government is the monopoly supplier of land. This puts the local government in an advantageous position. Besides, in 1994, central-local tax-sharing reform created a severe imbalance between financial power and administrative authority for local states, and eventually caused a financial shortage for metropolitan governments (Cao, 2006). Land reform in 2002 provided an easy solution to the financial problem (Wu and He, 2015). After 2002, the proceeds from land transfer became the main revenue source for local government (see Figure 3-4). Therefore, the local government had a strong impetus to increase the price of land. Land finance (*tudicaizheng*), in which the local state has managed development land as a commodity to gain huge amounts of extra-budgetary income, has become a political norm since 2002. Land finance is one of the main driving forces of China's housing commodification, and one of the main causes of the soaring and seemingly uncontrollable house prices after 2003 (Wu and He, 2015).

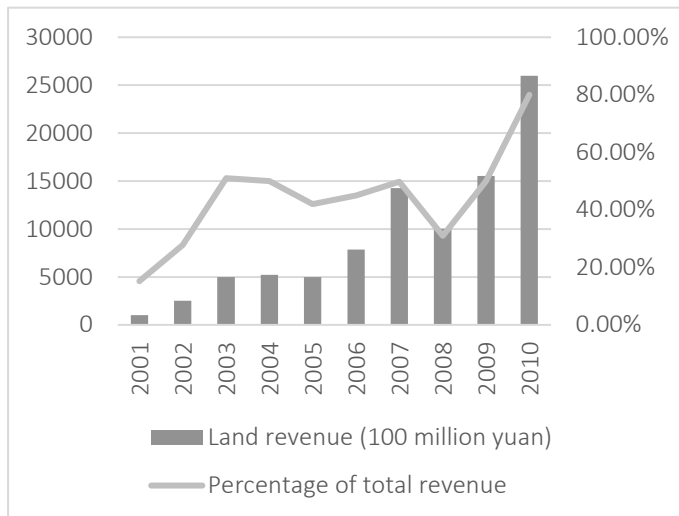


Figure 3-4 Local government land revenue and its percentage of total revenue, 2001-2010
 Data source: Statistical Yearbook of Land Resources of China, 2001-2010

3.3 STATE VS. MARKET ROUND ONE, 2003-2007

3.3.1 PROBLEM RECOGNITION AND AGENDA SETTING

In 2003, the real estate market started to show signs of overheating (Figure 3-5). Real estate investment has exceeded 1 trillion (1.0×10^{12}) yuan at 2003. In 2003-2004, the average price of real estate sales increased by more than 17%. The growth rate of housing prices began to exceed the income growth of urban residents in 2004. Mass complaints began to be heard as housing became unaffordable. The central government recognized the problem and urged local states to be highly vigilant about the overheated housing market in 2003 Government Work Report (PD 03#0). In the 2004 report, the central government elaborated on the situation and declared that the emphasis of current housing regulation was to control “irrational investment” in real estate and to regulate the land supply (PD 04#0).



Figure 3-5 Price index of commodity housing in China, 1999-2004
Data Source: China Real Estate Yearbook 1999-2004

Rocketing housing prices have become the most prominent social event since 2005. Wen Jiabao, China's prime minister held a special session focusing on high housing prices at China's most important political event: " NPC & CPPCC "(*lianghui*). The government's annual reports showed that the recognition of this problem went through three stages. In 2005, the State Council declared the focus to be tightening land supply and mortgage provision (State Council, 2005). The first half of this measure is a continuation of the previous policy. The latter implied that the central government started to recognize the importance of the demand-side. The 2006 report directly addressed the high housing price issue, but only in certain regions. The report stated that all departments should continue to address the problem of "irrational real estate investment" (*feilixinfangdicantouzi*), and to be cautious about rising housing prices in certain regions (State Council, 2006b). In the 2007 report, housing price became the focal point (State Council, 2007a). The report stated that the current task is to promote the sustained and healthy development of the real estate market, to control housing prices, and to maintain a reasonable price level. Notably, the need "to promote the sustained and healthy development of the housing market" was replaced by "to cool down the overheated housing market" as the main vocabulary used in related policies.

3.3.2 POLICY FORMATION AND EXECUTION

In July 2003, the State Council issued PD 03#2 to tighten the land supply, especially for high-end commodity housing (PD 03#2). In March 2004, PD 04#1 was issued, also known as "Great Deadline 831" (*831daxian*). This is a milestone policy in land reform history. It sets a deadline for the complete enforcement of the bidding-auction-listing scheme in the primary land market³, sending a strong austerity signal and effectively restrained the land supply in housing market.

In August 2003, the state council issued PD 03#3. The policy officially described real estate as a pillar industry. It is a continuation of PD 98#1. The role of housing as a public good has been further weakened. Notably, there was a new direction of regulation proposed in this policy. One of the measures PD 03#3 provided to further promote healthy development of the housing market is to "enliven the secondary housing market (market for resale of previously occupied housing)." This is the first time that the secondary housing market has been weighted so heavily in national housing policy. This change reflected the core regulation logic at the time: to cool down the primary housing market (new housing market) by tightening the land supply, restraining real estate investment, and encouraging potential home buyers to purchase housing from the secondary housing market.

Other than the land policy, the central government also cautiously adapted financial measures to cool down the market. In June 2003, the Central Bank increased the proportion of

³ The primary land market refers to the market in which land use rights are granted, i.e. the market in which the Central State, through its designated government departments, grants urban state-owned land or rural collective land (after expropriation as state-owned land) to buyers.

down payment required for high-end commodity housing and secondary housing. In April 2004, the minimum capital ratio of real estate development projects increased from 20% to 35% (PD 04#2). In Oct 2004, the Central Bank raised deposit and loan rates for the first time in 10 years.

On the 26th of March 2005, a week after Wen's speech on housing prices, the state council issued one of the most important housing policies in the regulation era: PD 05#1, also known as "National Eight" (it constitutes eight clauses). This policy soon attracted national attention. PD 05#1 was the first national housing policy directly targeted at controlling housing prices. It proposed two new measures which would have a profound impact on future housing regulations. First, the policy declared that local states should take more responsibility for stabilizing housing prices. It also provided detailed instructions on how local governments should act. The second breakthrough of this policy is that it was devoted to diversifying the regulatory measures. This implies the land-supply-based scheme in 2003-2004 would be changed. It also continued two previous policy directions: tightening the land supply and adjusting the housing supply structure (limiting high-end housing projects and promoting middle to low-end housing developments). However, "National Eight" was widely criticized after its release. Critics argued that the policy suffered from a lack of feasible criteria and failed to provide an incentive for local governments to control housing prices (Logan et al., 2009). In May 2006, state council issued another important housing policy: PD 06#1 which reiterated five clauses from PD 05#1 and emphasized the importance of adjusting housing supply structure. In the same month, the state council issued PD 06#2 to further elaborate PD 05#1 and PD 06#1. Specifically, it provided detailed measures on how to further strengthen the function of tax, mortgage and management policies in battling the soaring housing prices.

“National Eight” and subsequent policies proposed a diversified policy scheme. The first responder was the central bank. In March 2005, the central bank increased the housing provident fund lending rate and the lowest down payment for personal mortgages in certain regions (PD 05#3). In 2007, the central government raised the benchmark interest rate and the deposit reserve ratio multiple times. It should be noted that “raising the interest rate and reserve ratio” is not a housing policy per se. It will, however, effectively reduce the total amount of liquidity in the market. It thus is expected to have a huge impact on the housing market which is extremely capital-sensitive. At the end of 2007, the central bank increased the down payment for housing mortgage for the second time in one year (PD 07#4). The General Administration of Taxation also responded to PD 05#1. In May 2005, they issued PD 05#4. This was the first taxation policy aimed at controlling housing prices.

The central government also continued to tighten the land supply and to restrain investment in real estate. In 2006, the Ministry of Land and Resources issued two policies to strengthen the regulation of the land market (PD 06#3, PD 06#4). In 2006 and 2007, Ministry of Construction, Ministry of Commerce and Foreign Exchange Administration issued two more policies to strictly curtail foreign investment in real estate (PD 06#5, PD 07#2).

In addition to these market-nurturing and regulatory policies, the central Government also took significant steps in public housing in 2007. Prior to 2007, the Central Government issued three major public housing policies, all of which were promulgated by the Ministry of Housing and Construction rather than the State Council; all three policies focused on public housing management and did not address the issue of public housing supply. But in August 2007, it was the State Council itself that issued PD 07#3, the first major public housing policy issued by the

State Council in the reform era which indicates the gravity attached to this initiative. The policy brought up three major changes in public housing regulations. The first was consistent with the core housing policy logic of adjusting housing structure by the central government. The second change indicated that the central government recognized the lack of initiative and enthusiasm by local states in providing public housing programs. Third, the policy declares that migrant workers should not be excluded from the urban public housing programs. However, the policy provides no details on how the program should be executed, and its effectiveness remains uncertain.

3.3.3 POLICY IMPACT AND AFTERMATH, 2003-2007

As shown in Table 3-4, housing regulation before 2005 focused on tightening the supply of housing on the market. The main regulatory tool was land policy. It is obvious that the central state's direct goal was not to curb prices but rather to restrain the investment in the housing market and ultimately, the land supply.

Table 3-4 Summary of housing policies, 2003-2007 I

#	Policy Type				S-D structure		
	Administrative measure			Market measure		Demand	Supply
	Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy		
03#1				-		-	
03#2★	-						-
03#3★			+			+	
04#1★	-						-
04#2			-				-
04#3	-						-
04#4		O					
04#5			-				-
04#6	-						-
04#7				-		-	
05#1★	-			-		-	-
05#2							
05#3				-		-	
05#4					-		-
06#1							
06#2			-	-	-	-	-
06#3	-						-
06#4	-						-
06#5			-				-
07#1★				-		-	
07#2			-				-
07#3★		O					
07#4★				-		-	

★: milestone policies; +: stimulus policy; -: restraint policy; O: neutral

Table 3-5 Summary of housing policies, 2003-2007 II

Effectiveness in achieving established goals	The goal to cool down the construction and investment in the housing sector was achieved during the 2003-2006 period. However, both construction and investment rebounded in late 2016 and have increased rapidly. The goal of controlling the soaring housing prices failed completely.
Acceptability by the local gov., industries and consumers	Evidence suggests that the local state and the real estate sector were generally receptive to the central government's relatively modest regulatory policies before 2005. The massive regulation in 2005 caught everyone by surprise. It suppressed demand temporarily. Once the momentum of the new policy ebbed away, the pent-up market demand was unleashed which eventually caused a new housing boom.
Unintended effects	The housing market has shown strong regional differentiation since 2006.

The primary policy goal was achieved. The new-construction growth rate is the most commonly used index to show annual changes in housing supply. The rate dropped from 28% in 2003 to 10% in 2004 and real estate investment also declined (Figure 3-6). Real estate industries have been generally receptive to the central government's policy which focused on regulating land supply, with an emphasis on promoting and rectifying the land market's bidding-auction system. For small and medium-sized developers, this means that they will be able to purchase land in a more transparent land market. The large state-owned developers, which had hoarded large amounts of undeveloped land before 2004, the adjustment in land supply in the short term will not have much impact (Pamuk, 2012). For local governments, a cooperative attitude is also expected. The land auction and listing system, which was rolled out under the “831-Limit” in 2014, enables local governments to obtain large off-budget revenues through land finance.

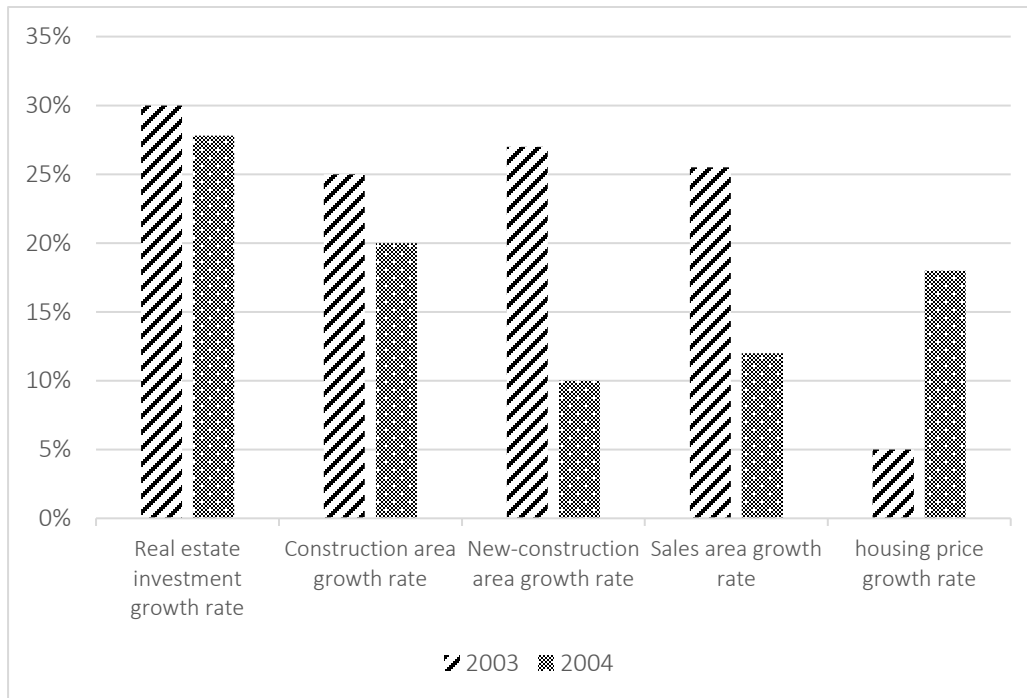


Figure 3-6 Real estate industry development, 2003-2004
 Data Source: China Real Estate Yearbook 2003-2004

With the shrinking supply and increasing demand, housing prices rose rapidly. Between 1998 and 2003, average commodity housing prices increased by only 343 yuan per square meter. In the first quarter of 2004, the price per square meter soared by 352 yuan over the previous year (Huang, 2006). This indicates that the central state’s plan to address the housing demand in the secondary housing market while cooling down the primary housing market was not successful. The strict regulation on the supply side has been shown to be insufficient to cool down the overheated housing market.

The year 2005 has been widely claimed as the start of the massive housing market regulation (Pamuk, 2012; Nie, 2016; Chen et al., 2017). The intensity and frequency of housing policy changes were unprecedented in the reform era.

Table 3-4 clearly shows that the central government has taken a more diversified policy stance since 2005. Mortgage regulation was adjusted more often. The long-absent public housing policy returned. The previous land supply and investment control policies also continued this year with some modifications.

In 2005-2007, the central government’s main policy goal of controlling the soaring housing prices, was not been achieved. As shown in Figure 3-7, both the housing price and sales volume had increased amid the intensive regulation in this period. In the previous period, increasing housing prices could be partially attributed to withdrawn supply. However, Figure 3-7 illustrates that housing supply increased rapidly in the 2005-2007 period.

Further analysis of the trend shows that housing sales and real estate investment seem to have been controlled in 2003-2006; however, they soon rebounded in 2006-2007 and increased rapidly.

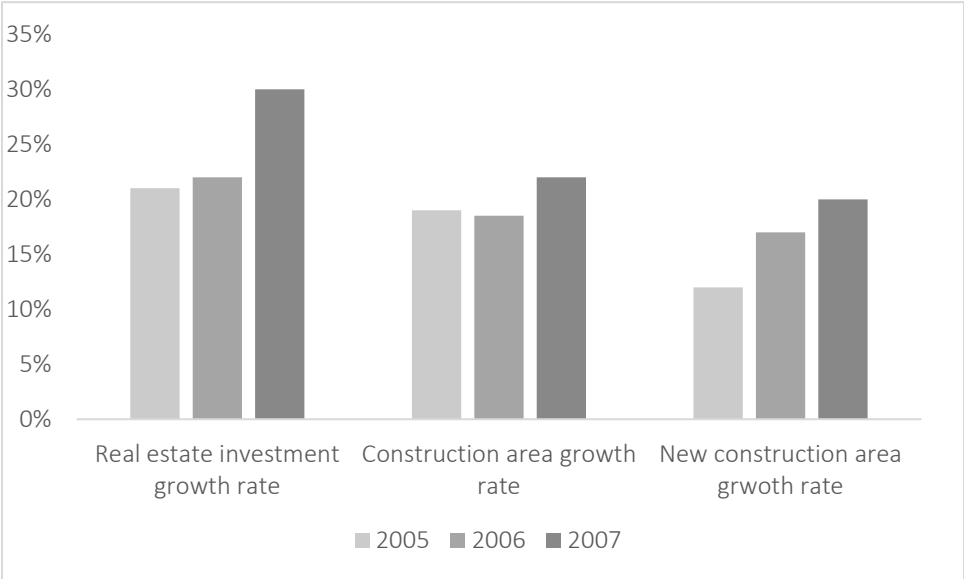


Figure 3-7 Real estate industry development, 2005-2007
 Data Source: China Real Estate Yearbook 2005-2007

The cause of this sharp change in the housing price trend is the massive regulation in 2005 that caught the market unprepared. It temporarily suppressed the demand and investment. However, the policies failed to address the actual demand and long-term investment. Once the momentum of the new policy ebbed away, the pent-up market demand would be unleashed and eventually cause a new housing boom (Li, 2012; Pamuk, 2012).

A new pattern in China’s housing market emerged in 2003-2007. As demonstrated in Figure 3-8, the housing market has shown strong regional variations since 2006. Housing prices in top-tier cities such as Beijing and Shanghai had a significantly faster growth rate than other regions.

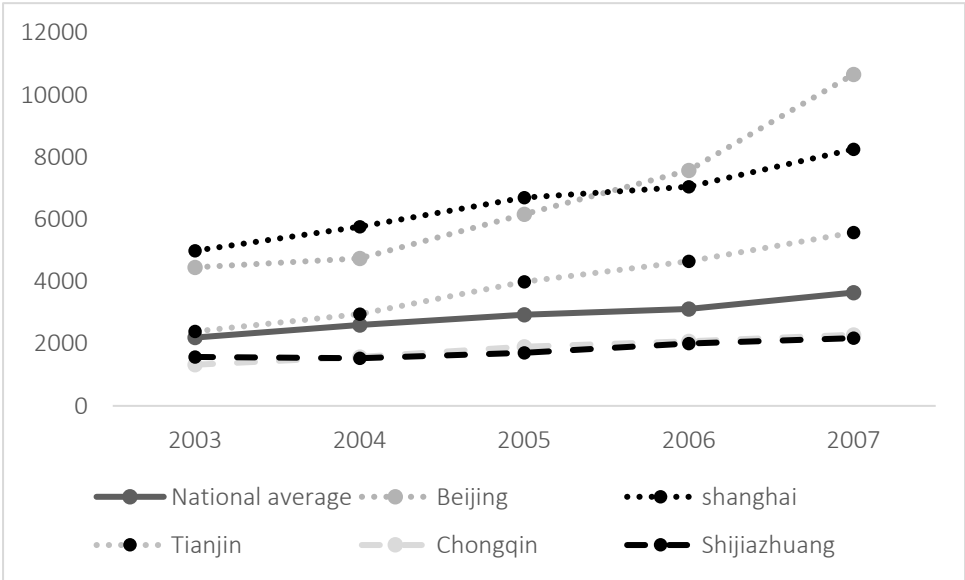


Figure 3-8 Housing price trend in five cities, 2003-2007
 Data Source: China Real Estate Yearbook 2003-2007

3.4 HOUSING SECTOR IN FINANCIAL CRISIS, 2008-MID 2009

3.4.1 PROBLEM RECOGNITION AND AGENDA SETTING, 2008-MID 2009

In 2008, the US subprime mortgage crisis caused a global recession. China's economy was heavily impacted. China's total share of foreign investment fell by 3.6% in 2009 and exports declined by 1.6%. The economic downturn had an instant impact on housing market. The national average housing price and sold area declined for the first time in the reform era (Figure 3-9).

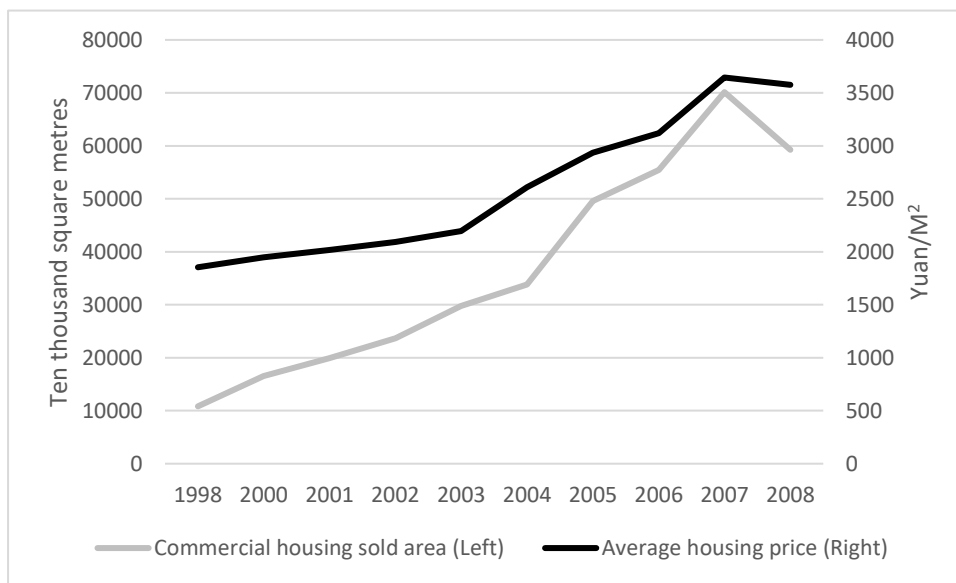


Figure 3-9 Housing price and commodity housing sold area, 1998-2008

Data Source: China Real Estate Yearbook 1998-2008

The 2008 government work report issued in March 2008 had not yet recognized the crisis. It reiterated the significance of controlling housing prices. The tone was completely reversed in the 2009 report, in which the central government indicated that the main goal of macro-control was to reverse the downward slide of economic growth. “Controlling housing prices” was not even mentioned in the government work report for the first time since 2004.

3.4.2 POLICY FORMATION AND EXECUTION, 2008-MID 2009

In the second half of 2008, the central bank lowered the deposit and loan benchmark interest rate and deposit reserve ratio multiple times. This signaled a significant shift to “positive fiscal policy and moderately easy money policy.” Housing policy followed the trend. In Oct 2008, the central bank issued PD 08#4 to reduce the interest rate and down payment percentage on personal mortgages. In the same month, the Ministry of Finance and State Administration of Taxation issued PD 08#3. This policy offered huge tax benefits for housing buyers, especially for first-time purchasers.

At the end of 2008, the central government issued the “¥4 trillion (4.0×10^{12}) economic stimulus plans” as a response to economic recession. The plan set to invest ¥4 trillion in infrastructure and social welfare by the end of 2010. In particular, the plan was dedicated to investing in public housing construction and urban revitalization. As a follow-up response to the plan, the state council issued PD 08#5 in December. This national policy reiterated the importance of the construction of affordable housing and set to further encourage commodity housing consumption through financial leverage.

3.4.3 POLICY IMPACT AND AFTERMATH, 2008-MID 2009

The regulation in this period apparently turned from restraint to stimulation of the housing market. As shown in Table 3-6, the policy emphasis is on stimulating demand in the secondary housing market. The main measures are monetary and fiscal policies. On the supply side, no new land policy has been issued; instead, the central government focused on increasing investment on affordable housing programs.

Table 3-6 shows the central government’s continuous efforts to adjust the housing supply structure by increasing the supply of affordable housing since 2005.

Table 3-6 Summary of housing policies, 2008-mid 2009

Policy #	Policy main feature						
	Administrative measure			Market measure		S-D structure	
	Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy	Demand	Supply
08#1				+		+	
08#2		O					+
08#3					+	+	
08#4				+		+	
08#5★		O		+		+	+
08#6					+	+	
09#1			+				+

The policy was a huge success. Housing prices rocket[ed] through the roof. The growth rates of house price and sold area in 2009 were 25% and 45% respectively, both the highest in reform era. The new housing boom put economic growth back on track. GDP growth rate in 2008 and 2009 were 9.6% and 9.2%. The goal to “ensure economic growth (*baozengzhang*)” was achieved.

3.5 STATE VS. MARKET ROUND TWO, 2009-2013

3.5.1 PROBLEM RECOGNITION AND AGENDA SETTING, 2009-2013

In 2009, due to the stimulation policies, housing demand recovered to pre-2008 levels. However, the housing supply was yet to fully recover. Real estate investment and construction area growth rates were both lower than 2008 levels. As a result, the problem of affordability became more prominent. A comparison with family income shows that 85 per cent of urban

families could not afford housing in that year (Chen, 2009). The appeal of “the second housing reform” which was mainly aimed at de-marketization of housing market attracted wide public attention (Li, 2009a) and the central government recognized this problem. In 2010 and 2011, “controlling soaring housing prices” returned as the policy focus of government work reports. These reports further indicated that it is vital to meet the basic needs of masses.

3.5.2 POLICY FORMATION AND EXECUTION, 2009-2013

In December 2009, prime minister Wen Jiabao made a speech at the State Council executive meeting (PD 09#5). One of the measures Wen proposed was to increase the effective supply of commodity housing by improving the land supply. As we discussed above, the central Government's housing policy since 2003 has generally followed this line: limiting the development of high-end housing, marketizing regular commodity housing, and increasing the supply of affordable housing. This is one of the few state policies that address the importance of increasing the supply of regular commodity housing. Wen also reiterated the importance of controlling investment-speculative purchasing. This would later become the main policy goal between 2010 and 2014. PD 09#5 indicated that the emphasis of housing regulation was officially back to restraint.

The 2010-2013 period was an important turning point in China's housing regulation history. The launch of the ¥4 trillion (4.0×10^{12}) program has pumped vast amounts of liquidity into capital markets, which, if allowed to flow unchecked into the lucrative commodity real estate sector, would inevitably fuel short-term speculation in the housing market. The program would also make the central goal of the program, to revive China's real economy (*shitijingji*), a pipe dream, or it might even endanger the country's overall economic order (Liu et al., 2017). Amid these concerns,

the central government introduced several new housing regulation policies. The density and intensity of these policies even surpassed 2005. On the demand side, the financial policy continued to play a significant role. At the beginning of 2010, the state council issued Policy PD 10#1. The new policy aimed at suppressing speculation in the housing market by increasing the down payment percentage for second housing purchase. This new “differentiated mortgage policy scheme” has become the main mortgage regulation tool. In ensuing years, the down payment percentage for second housing purchase increased two times to 60% (PD 10#2, PD 11#1) while access to mortgage money for purchase of a third housing unit in selected cities was suspended (PD 10#6). The Ministry of Finance and State administration of taxation also issued several housing taxation policies to dampen housing demand (PD 10#7, PD 11#1, PD 13#1).

Notably, there was a new trend in housing regulation on the demand side. The “old-school” administrative order returned. In April 2010, the state council issued PD 10#2, later called “New National Ten.” This milestone policy brought significant change to housing regulation as it enabled local government to take direct administrative action to limit the number of houses a household can buy within a certain time frame. This decree is now known as a Housing-Purchase Restriction Order. In the same month, the Beijing Municipal Government implemented PD 10#2 and issued PD 10#3. This was the first Housing-Purchase Restriction Order in China’s housing regulation history that directly limits the number of housing units that each household can buy. Four months later, the policy was extended to first-tier cities such as Shanghai and Guangzhou (PD 10#8). A year later, the central government urged second and third-tier cities to take necessary measures to limit housing purchases (PD 11#3). The policy had expanded to 49 cities by the end of 2013 (PD 13#1, PD 13#3).

On the supply side, under the influence of “4 trillion (4.0×10^{12}) stimulus plans,” we observe the most radical affordable housing program since 1998 which marks the start of the housing reform era. The central government issued multiple policies to increase investment in affordable housing (PD 10#2, PD 10#5, PD 11#2, PD 13#1, PD 13#5), and to encourage local governments to undertake their own affordable housing initiatives (PD 10#2, PD 13#2). The central government also issued several policies to increase the land supply for small-medium sized commodity housing (PD 10#2, PD 13#1).

3.5.3 POLICY IMPACT AND AFTERMATH, 2009-2013

The central government continued its diversified policy scheme. Financial policy has gradually become the main regulatory tool to reduce housing demand. On the supply side, the central government promoted affordable housing. Increasing the land supply for commodity housing was mentioned but with few follow-up policies.

Two new trends became apparent. First, the direct administrative order not only returned, but also became the major policy tool in this period. This result defied the expectations of researchers who argued that China’s housing reform is a process of neoliberalization (Wu, 2010a). Second, the central government recognized the regional differentiation issue discussed in section 3.4.3. The one-size-fits-all policy was replaced by a more localized and flexible policy scheme in which local governments were empowered to make their own adjustments to central policies. However, it should be noted that this “de-centralization” has been strictly limited to policies related to housing demand and affordable housing management. Other policy tools (e.g. land supply policy) has still been completely controlled by the central state.

Table 3-7 Summary of housing policies, 2009-2013

Policy #	Type of policy					S-D structure	
	Administrative measure			Market measure		Demand	Supply
	Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy		
09#2,3,4					-	-	
09#5★	-	O		-		-	-
10#1				-		-	
10#2★	-		-	-		-	-
10#3★			-			-	
10#4	-						-
10#5		O					O
10#6★				-		-	
10#7★					-	-	
10#8			-			-	
10#9				-		-	
10#10				-		-	
11#1★				-	-	-	
11#2		O					O
11#3			-			-	
11#4				-		-	
11#5				-		-	
12#1				+		+	
12#2				+		+	
13#1★		O	-	-	-	-	-
13#2		O					O
13#3				-		-	
13#4		O					O
13#5		O					O
13#6					-	-	

Table 3-8 Summary of policies, 2009-2013 II

Effectiveness in achieving established goals	Housing price continued to rise. However, the overall rising trend has been controlled.
Acceptability by the local gov., industries and consumers	Similar to 2005, this round of regulation also featured the extensive use of administrative orders such as purchase-limitation order; but two important developments distinguish it from 05 regulation. First, the central government gave more autonomy to local governments; and second, local governments had had experience from 05 regulation and were much more mentally-prepared. This round of regulation was more effective at the local level than it was in 2005.
Unintended effects	The trend of regional differentiation continued to grow.

Housing prices continued to rise during the 2010-2013 period. However, the overall rising trend was controlled (Figure 3-10). In the first half of 2012, the Chinese economy increased by only 7.6 per cent, which was the lowest growth rate in the aftermath of the financial crisis. To “maintain the growth,” the central bank reduced the benchmark interest rates and deposit reserve ratio multiple times (PD 12#1, PD 12#2). Amid the easy money policy, sales and investments in the housing market, especially in first-tier cities, started to rebound. This is yet another piece of evidence showing that the central government treats the housing market as a tool to achieve economic growth.



Figure 3-10 Housing price trend, 2009-2013
Data Source: China Real Estate Yearbook 1999-2004

On the local level, the trend of regional differentiation continued to grow. Comparing Figure 3-8 to Figure 3-11, the gaps between cities widened. Top-tier cities such as Beijing and Shanghai became quite distinct from the second and third-tier cities. The figure also shows that Beijing and Shanghai were more sensitive to national housing regulation. The impact of the “strongest regulation” of 2010-2011 and the easy money policy in 2012 is clearly demonstrated in Figure 3-11. In comparison, the housing price trend in Chongqing and Shijiazhuang in Hebei seems unresponsive to these policy events.

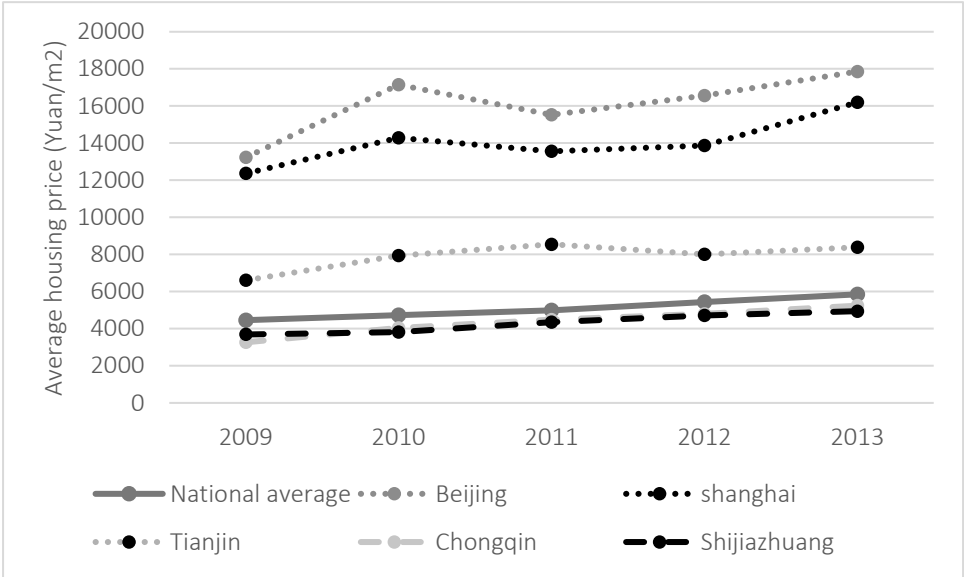


Figure 3-11 Housing price trend in five cities, 2009-2013
 Data Source: Wind Economic Database

3.6 HOUSING IN THE “NEW NORMAL,” 2014-2016

3.6.1 PROBLEM RECOGNITION AND AGENDA SETTING, 2014-2016

In 2014, China’s national economy was facing downward pressure again. In May 2014, President Xi Jinping proposed the “new normal” as a term to describe China’s economic condition

and development (Gu et al., 2014). One of the critical implications of the “new normal” is that China’s economy will operate at a slower growth rate.

Researchers argued that one of the main causes of the “new normal” is the “unbalanced development of real estate industry” (Li et al., 2017). In 2013-2014, this unbalanced development can be summarized as “total volume withdrew with extremely high housing stock (*zenglianghuiluo, cunliangjigao*).” As shown in Figure 3-12, commodity housing sales dropped precipitously at the beginning of 2014. It was the largest fall in commodity housing sales since 2008. Domestic demand would be inevitably affected by this significant decrease in housing sales which posed a grave threat to the national economy which has become dependent on continuous prosperity of housing market (Zhou, 2013; Yang and Chen, 2014c). Figure 3-13 demonstrates the excessive housing stock issue. The unoccupied area of commodity residential housing increased rapidly from 2010 to 2013. By the end of 2013, the unoccupied area had reached 32.4 million m². This amounts to 41% of the total floor space completed in that year. This unsettling result aggravated the worry and fear of the housing bubble (Liu et al., 2017; Tsai, 2017). As a response to this dire situation, the 2015 Central Economic Work Conference indicated that the current emphasis in housing regulation is to promote “steady growth” (*wenzengzhang*) and “housing de-stocking (*qukucun*)” (PD 15#6). In other words, the central government has once again shifted its policy focus to encouraging housing sales and, in so doing, boosted the country's overall economic growth.

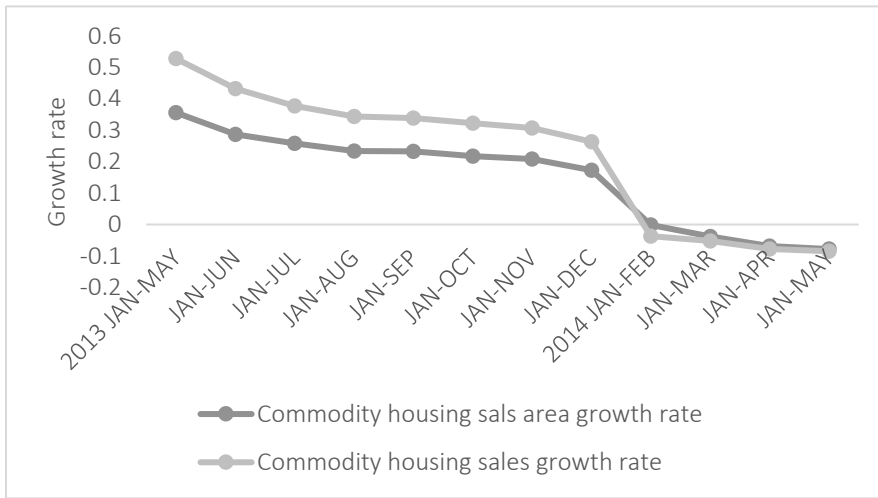


Figure 3-12 Housing sales trend, May 2013-May 2014
Data Source: Wind Economic Database

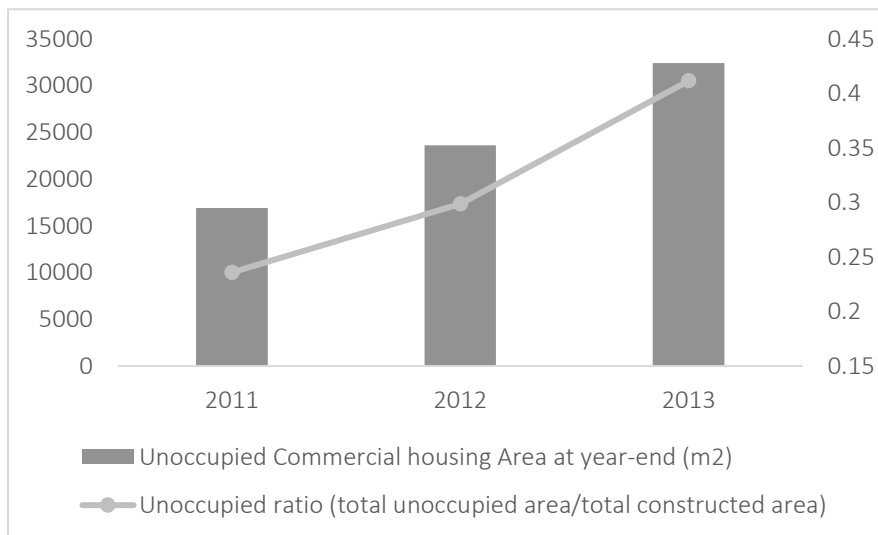


Figure 3-13 Housing stock, 2011-2013
Data Source: China Real Estate Yearbook 2011-2013

3.6.2 POLICY FORMATION AND EXECUTION, 2014-2016

In July 2014, Hohhot became the first city in China to abolish the Housing-Purchase Restriction Order issued two years previously (PD 14#1). By the end of 2014, except Beijing, Shanghai, Guangzhou and Shenzhen, most cities had abolished Housing-Purchase Restriction Order.

In September 2014, the central bank and CBRC issued PD 14#2 known as “930 New Deal.” PD 14#2 marks a policy turn from restraint to promotion of the housing market. The policy decreased the down payment percentage for both first and second house purchases (indirectly). In March 2015, Central Bank, MOHURD and CBRC issued a series of policies known as “330 New Deal” (PD 15#1, PD 15#2, PD 15#3). These policies further decrease the down payment percentage for second house purchases. At this point, the central government basically abolished all mortgage adjustments between 2010-2013 and reversed the overall mortgage rate to the pre-2010 level while maintaining the “differentiated mortgage policy scheme.” The 330 New Deal also included policies to adjust the housing provident fund and housing tax. Last but not the least, the 930 New Deal decreased the land supply in certain cities as a measure to address increasing housing stock.

From November 2014 to the end of 2015, the central bank reduced the benchmark interest rates and reserve ratio multiple times. In February 2016, PD 16#2 was issued to provide further tax benefits for housing buyers. Beijing, Shanghai, Guangzhou and Shenzhen were treated differently in this policy. In March 2016, the central bank reduced the reserve ratio again.

3.6.3 POLICY IMPACT AND AFTERMATH, 2014-2016

The housing regulation in this period was very similar to that of 2008-2009 (Table 3-9). Regulation focused on releasing housing demand to stimulate economic growth. Once again, the central government relied on financial policy tools. Amidst the “housing market de-stocking” policy, the radical affordable housing policy scheme adapted since 2007 was temporarily abandoned. The policy goals are to maintain steady growth of the housing economy, and to prevent the possible risk of another housing bubble.

Table 3-9 Summary of housing policies, 2014-mid 2016 I

#	Policy Type					S-D structure	
	Administrative measure			Market measure		Demand	Supply
	Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy		
14#1			+			+	
14#2				+		+	
15#1				+		+	
15#2				+		+	
15#3	+						+
15#4				+		+	
15#5				+		+	
15#6			O				
16#1					+	+	
16#2				+		+	

Table 3-10 Summary of housing policies, 2014-mid 2016 II

Effectiveness in achieving established goals	The goal of “housing market de-stocking” was achieved in first-tier cities; housing stock is still high in second and third-tier cities. The real estate investment and developer land purchase rate decreased steadily. Steady growth was achieved, and the overheated housing investment seems to have cooled.
Acceptability by the local gov., industries and consumers	Similar to 2009, industry and home buyers are extremely sensitive to stimulatory regulation. In first-tier cities, demand for housing, which was restrained by the 2013 “strongest regulation,” was fully released under the impact of the regulations such as 930 New Deal and the 330 New Deal; while in second- and third-tier cities, housing prices did not rise significantly as inventory pressures remained high.

Unintended effects	The co-existence of soaring housing prices in the first-tier cities and the high level of vacant housing stock in third and fourth-tier cities.
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The goal has been partially achieved. As shown in Figure 3-15, the volume of housing transactions has rebounded and increased rapidly after “930 New Deal” and “330 New Deal” were promulgated. On the supply side, real estate investment and the developer land purchase rate have decreased steadily since the new “de-stocking” policy scheme. “Steady growth” was achieved, and the overheated housing investment seems to have cooled down. Figure 3-14 shows a less optimistic image. The housing stock continued to increase amid the increasing housing sales and decreasing housing investment in 2014-2015. The unoccupied ratio became dangerously high, reaching 61% in 2015. However, this was to be expected; excessive housing stock is an incremental issue. It required a long time to clear the market surplus. The downtrend observed in 2015-2016 is a

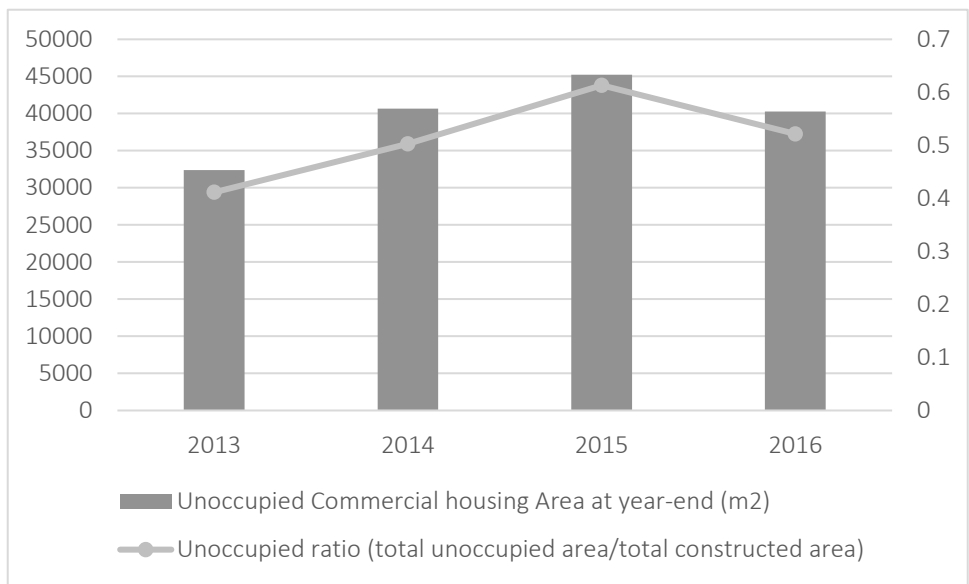


Figure 3-14 Housing stock situation, 2013-2016
Data Source: China Real Estate Yearbook 2013-2016

positive sign. In any event, the “de-stocking” of the excessive housing inventory is still an unfinished task.

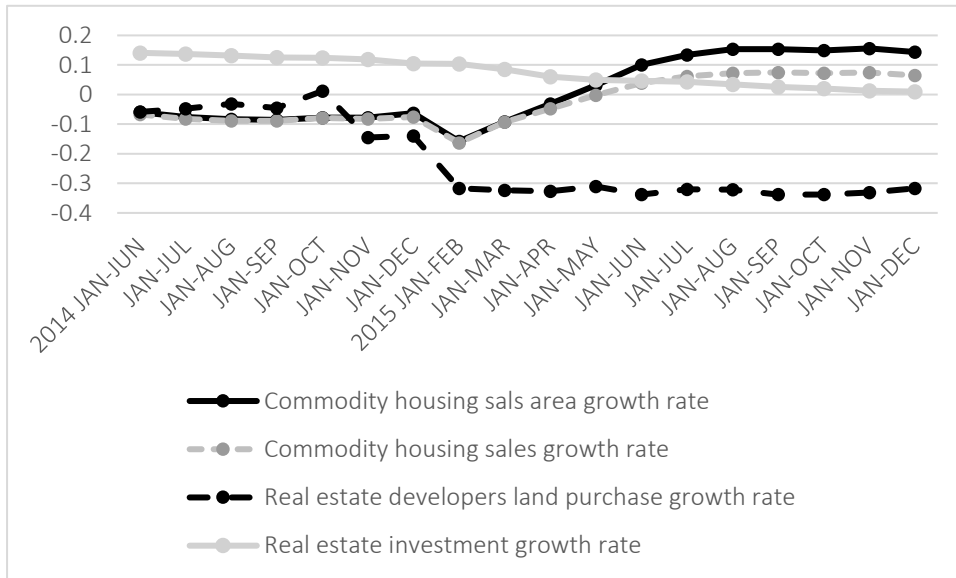


Figure 3-15 Housing sales and investment trends, June 2014-December 2015
 Data Source: Wind Economic Database

Another significant trend in this period was the widening regional gap which can be summarized as the co-existence of soaring housing prices in the first-tier cities and the high housing stock levels in third and fourth -tier cities. Figure 3-15 shows housing price trend in first, second, and third -tier cities from January 2014 to July 2016. The housing price level in second and third -tier cities increased slightly but remained low. However, the housing prices in top tier cities has soared since the “330 New deal” and ensuing easy money policies.

3.7 STATE VS. MARKET ROUND THREE, 2016 - PRESENT

3.7.1 PROBLEM RECOGNITION AND AGENDA SETTING, MID 2016-2017

At the national level, the goal of “steady growth” has been achieved periodically since 2015. However, the stimulus policy caused an unprecedented rise of housing prices in the first-tier

cities. Four cities, Beijing, Shanghai, Guangzhou and Shenzhen, all saw house price increases of more than 40 per cent in 2016, and each set new records for year-on-year growth (Tsai, 2017). However, the housing stock surplus remains in the third and fourth tier cities. It was in July 2016, when the Central Political Bureau meeting first declared its intention to “curb the asset price bubble” (PD 16#3). In October, the politburo emphasized the importance of reducing financial risk (PD 16#6). In December, the Central Economic Work Conference declared that the policy goal will shift from “steady growth” to “risk prevention” (PD 16#7). This marks the turning-point of housing regulation from stimulus back to restraint.

3.7.2 POLICY FORMATION AND EXECUTION, MID 2016-2017

In October 2016, the direct administrative control returned. During the seven national holidays from 1st to 7th October, 19 cities (mostly second-tier cities), issued a revised Housing-Purchase Restriction Order. Mortgage financing would no longer be available for non-local residents or for second or third housing buyers or would be strictly limited in these regions. At this point, the easy mortgage policy introduced by “930 New Deal” and “330 New Deal” was abolished in almost all first and second -tier cities.

At the Central Economic Work Conference held in December 2016, the state council proposed the idea of “a long-term mechanism to promote healthy and sustainable development of the housing market.” This mechanism would permanently replace the Housing-Purchase Restriction Order to curb the real estate bubble and prevent fluctuations; regulate macro scale capital flows; and support a reasonable level of home purchases.

In October 2017, President Xi Jinping made a speech at the 19th National Congress of the Communist Party of China. He reiterated official recognition of the importance of residential housing: housing is intended to provide homes for people, it is not a financial instrument to create windfall gains for speculators (*fangzishinalaizhude, bushinalaichaode*). He further declared that the goal of current housing regulation is to establish a housing system featuring multi-suppliers (*duozhutigonggei*), multi- security channels (*duoqudaobaozhang*) and combine both rental housing and purchased housing (*zushoubingju*). This could be the starting point of the central state’s endeavor to establish the “long-term mechanism” to reduce the housing bubble market.

3.7.3 POLICY IMPACT AND AFTERMATH: MID 2016-2017

Direct administrative order was back to the center stage. Amidst the extending regional differentiation, decentralized housing regulation became the “new normal.”

Table 3-11 Summary of housing policies, 2016-present

#	Policy type					S-D structure	
	Administrative measure			Market measure		Demand	Supply
Land policy	Public housing policy	Other administrative order	Mortgage & monetary policy	Tax & fiscal policy			
16#3			-				
16#4				-		-	-
16#5★			-			-	
16#6			-				
16#7			-				

In 2016-2017, tight money policy and Housing-Purchase Restriction Order had an instant impact on housing market. As is shown in Figure 3-16, the volume of commodity housing transactions has rapidly declined since the introduction of Housing-Purchase Restriction Order in October 2016.

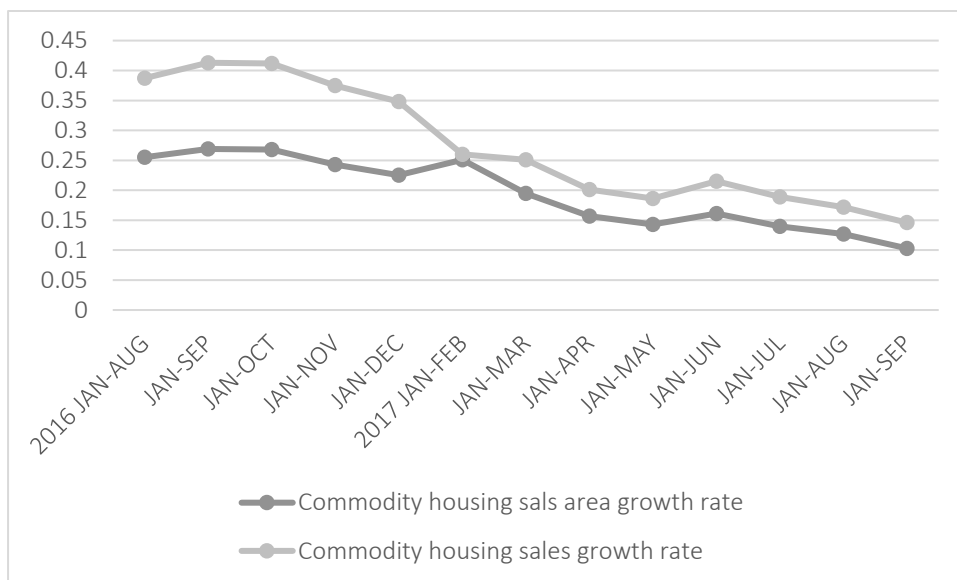


Figure 3-16 Housing sales trend, August 2016- Sept 2017

Data Source: Wind Economic Database

3.8 CONCLUSION AND DISCUSSIONS

Table 3-12 summarized housing regulations from 1998 to present. The general housing regulation in China followed a zigzag path swinging between stimulus and restraint. During the process, China's central government implemented various policy tools including mortgage, taxation, land and administrative order to achieve its goals. Amidst these different relations, China's housing prices have increased steadily since 2003 (Figure 3-17). Many previous studies have argued that China's efforts to regulate housing prices, especially in the last decade, have not been successful (Chen et al., 2011; Yang and Chen, 2014a). However, by reviewing the policy initiatives in detail, we found that most of the goals of proposed policies were achieved in whole or in part (Table 3-12).

Table 3-12 Summary of housing regulation, 1998-Present

	Main direction	Main policy tools	Policy goal	Reality check	Housing market feedback
1998-2002	Encourage	Administrative order, land policy	1, launch the housing market, promote housing commodification, make housing sector a pillar of economic growth 2, establish a multi-level housing distribution system	Achieved Unfinished	Housing price maintained at a reasonable level
2003-2004	restraint	Land policy	1, cool down overheat housing market	Partially achieved	Housing price rose rapidly
2005-2007	Further restraint	Mortgage policy, land policy	1, control housing price, promote the sustained and healthy development of housing market	Failed	Housing price stabilized temporarily, then rebounded and rose rapidly
2008-mid 2009	stimulus	Mortgage policy, taxation policy	1, stimulus housing consumption, reverse the downward trend of economic growth	Achieved	Housing price and sold volume first decreased, then rose at an unprecedented speed
2009-2013	Strongest restraint	Mortgage policy, administrative order, taxation policy	1, control roaring housing price; meet the housing needs for the masses	Partially achieved	Housing price continued to rise; however, the overall rising trend has been controlled
2014-2016	stimulus	Mortgage policy	1, housing market de-stocking; keep the steady growth of housing economy	Partially achieved	Housing price and sold volume increased rapidly, housing investment was restrained, housing stock level was still high
mid 2016-2017	restraint	Administrative order, Mortgage policy	1, curb the asset price bubbles; establish a long-term mechanism	ongoing	Sold volume has rapidly declined

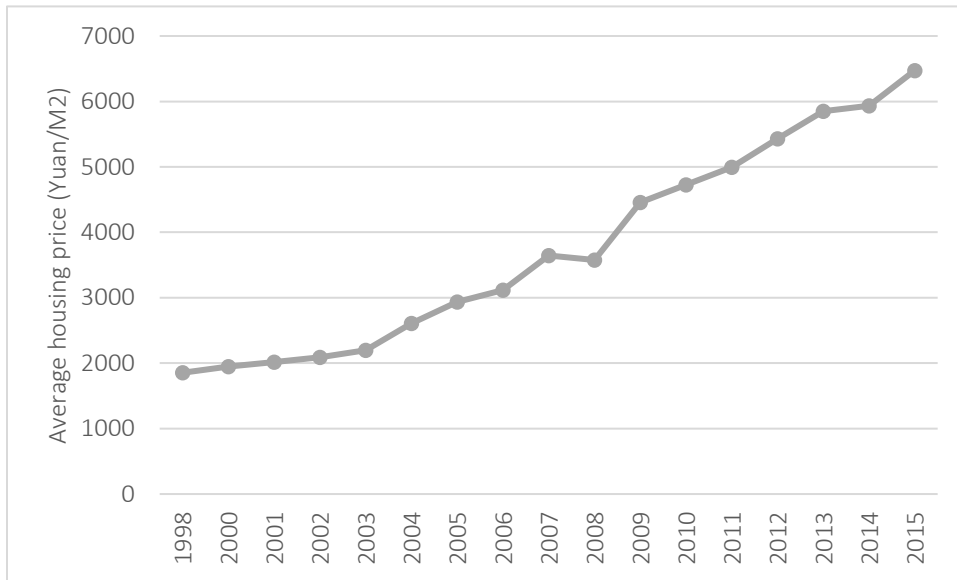


Figure 3-17 National average housing price, 1998-2015
 Data Source: China Real Estate Yearbook 1998-2015

3.8.1 POLICY STARTING LOGIC AND POLICY GOAL

In central government work reports from 1998 to 2002, the justification for housing market regulation were: “to make the residential housing sector a new growth point” (PD 98#0), “to support more residents to purchase housing on the market” (PD 99#0), “to make the housing sector a pillar of economic growth” (PD 00#0), “to encourage residents to purchase housing from both the primary and secondary housing markets, to cultivate new consumption hot spots” (01#0), and “to develop a consumer-oriented real estate industry” (PD 02#0). Thus, the starting logic of housing regulation by the central government in 1998-2002 was the single-minded goal of promoting economic growth.

In 2003, the housing market started to show signs of overheating. To address this issue, the central government's housing regulation shifted to "cool down the overheated housing market in certain regions" (PD 03#0, PD 04#0). At the same time, the central government issued a programmatic policy on housing regulation PD 03#3, officially declaring the housing sector to be a pillar of the national economy. The function of real estate was to "promote consumption, expand domestic demand and stimulate economic growth." These conflicting objectives demonstrate the central government's struggle with housing regulation. Concerns about the overheated housing market and the determination to promote the national economy through housing consumption co-existed in housing regulation and became the main preoccupation at a time when there was no coherent policy framework.

In 2005, the soaring housing prices and unbalanced demand-supply structure motivated the central government to shift to a more specific goal of controlling the exorbitant housing prices. In 2006, China's central government made significant progress in housing regulation. For the first time since 2003, the central government developed a coherent and dynamic policy logic that can simultaneously address the need for economic growth and the risk of an overheated housing market and to promote the healthy and sustainable development of the housing sector (PD 06#6). In the following years, the central government implemented and kept improving this over-arching framework. In 2007, the central government brought back the long-absent public housing policy (PD 07#3). The core logic was to increase the supply of affordable housing. In 2008-2009 and again in 2014-2015, economic recession prompted the central government to emphasize the economic-stimulus function of the housing sector. In 2016, the central government focused on preventing the housing bubble. In 2017, the central government sought to upgrade the regulatory

framework by proposing a long-term mechanism, as in PD 06#6, to promote healthy and sustainable development of the housing market.

3.8.2 POLICY SELECTION LOGIC AND IMPACT

To launch the housing market, the central government chose mostly enabling policies in 1998-2002. By allowing residents to buy and sell public housing that was previously owned by the state, to apply for a housing mortgage in any Chinese city and allowing land use rights to be traded more transparently and effectively, housing demand and investment both increased rapidly. Thus, the primary policy goal was fulfilled.

The central government struggled to form consistent policy goals in 2003-2004 which were reflected in policy selection logic. To cool down the overheated housing market, the central government strictly restrained the land supply and limited housing investment. However, policies to restrain market forces were limited to the supply side. To continue promoting economic growth through housing consumption, the central government encouraged the housing market with a continuation of mortgage and taxation policies from the previous period. The supply of housing on the market was successfully controlled. On the other hand, housing demand kept growing. The policy goal was achieved; however, the unbalanced housing regulation pent-up demand which would create an enormous challenge for the future housing market.

In 2005, the central government fully recognized the issue of exorbitant housing prices and took direct aim. Housing demand was reduced through a tight money policy. Unfortunately, these policies failed to curb the housing price growth. Previous studies showed that easy money policy normally has a direct and instant effect on housing demand and increasing housing prices (Liu et

al., 2017). On the other hand, the effects of tight money policy on the price of housing is indirect and much slower. Particularly, if general demand remains high, monetary and mortgage policy is arguably ineffective to control the soaring housing prices.

In 2006, the central state's housing policy starting logic shifted from a single-directional process (economic growth or cool down the housing market) to a multi-directional process (healthy and sustainable development of housing). This shift posed two major changes in the central state's housing policy formation. First, due to the growing regional gap in the housing sector, the central government adjusted the previous one-size-fits-all policy scheme. A more dynamic and localized policy formation logic was adopted. Local states in certain regions were authorized to issue direct Housing-Purchase Restriction Order on housing consumption. Housing-Purchase Restriction Order has become a frequently used policy tool to curb exorbitant housing price. It proved to be very effective. However, it has also been widely criticized as superficial and short sighted (Liu et al., 2017; Tsai, 2017). Second, since 2007, the central government has radically increased the investment in affordable housing to increase the strictly limited housing supply to meet the basic needs of the housing market. This new measure symbolizes the shift of the long-standing one-way demand-side regulation scheme to a multi-directional scheme addressing both demand and supply. President Xi's speech in the 19th National Congress of the CCP is the latest evidence showing the determination of the central government to deepen the reform of the supply side.

In conclusion, the central state's housing policy formation has evolved from a single-dimensional (limited to certain policy types), single-directional (focusing on suppressing housing demand) and one-size-fit-all logic to a multi-dimensional, multi-directional and dynamic logic.

3.8.3 ROLE OF THE STATE AND THE NEOLIBERALISM DEBATE

The evolution of housing policy from 1998-2017 has been a progressive but path-dependent process. Those seemingly conflicting policy goals in the process all served an overarching goal: to increase the government legitimacy through the maximization of governance performance (Blecher et al., 2003; Holbig and Gilley, 2010). Tuo (2004) argued that the economic growth has always been prioritized in Chinese central state's consideration. Our research supports this argument. Over the past two decades, China's housing market has experienced three major price surges: a frenzy in which demand for commodity housing was first unleashed in 2003, a sudden stimulus of the ¥4 trillion (4.0×10^{12}) program in 2009, and a wave of home purchases brought by the destocking policy in 2015. Our study found that these surges in housing price were undoubtedly affected by path-dependent cyclical adjustments in the housing market; however, it was the central government's response to the economy downturn that determined the timing and extent of the three surges. This shows that the commodification and marketization of housing has never been the final goal of the central government; the real estate industry is an important, even primary, means used by Beijing to boost domestic demand and promote economic development. This conclusion is in line with the views of some of the neoliberal theory supporters. Walker and Buck (2007) argued that "China's push into private housing is likely to undergird the shift to a mass consumer society," which can be seen as a vehicle of transition to "a more liberal state and market economy," an argument echoed by Li (2009b) who obtained more evidence on China's capitalist development from an urban development perspective. Wu (2010a) studied the policy process of China's land market and confirmed that there was a process of neoliberalization in China and it is "a necessary fix" to the socialist system. However, he also claimed that the

dominance of the market should be viewed as a governing mechanism, not the other way around. He and Wu (2009) further pointed out that neoliberalism in China “works in a pre-mature market system and involves strong state intervention” and that a state which “possesses very powerful tools to effectively regulate market operations” creates an institution to “cope with the contradictions and imbalances produced by neoliberalism itself.” A similar viewpoint can be found when Peck and Zhang (2013) attempted to incorporate China’s experience into the “varieties of capitalism” framework. These studies, though focused on different subjects, all point to the possibility that, under a strong central state, the market mechanism, with its many neoliberal features, is a powerful tool to attain the economic aspirations of the regime. The result is a mixture of liberal elements and authoritarianism. Our research further consolidates this view.

We would, however, argue that in exploring the relationship between the state and the market, these studies exaggerate the importance and universality of economic growth needs ignore the role of other factors in the policy process, and fail to reveal the full picture of the entanglements between the Chinese government and the market. Such a failure is particularly conspicuous in a study of housing. Housing is a special commodity; its particularity is reflected in its duality: it can be both the means of economic development and the result of it. In many cases, it is the social consequence of the externality of economic growth. In China, the housing boom generated huge economic benefits, but it also caused acute affordability issues which could lead to spiraling social unrest. Such a scenario is all too familiar to China's urban residents, who have experienced three house price surges in 2003, 2009 and 2015. China's central government, of course, is aware of the problem, and since 2005 has made controlling housing prices a top priority for government policy. So, when the Chinese government declared war on high housing prices, what exactly was the

situation they face? Strong demand for residential housing, massive capital trying to enter the real estate sector, an established housing market and a decentralized land supply system. Now, if all goes according to neoliberal and developmental state advocates, the solution to this problem will be simple and straightforward: under the regulation of central state, increase the supply of land / housing through market mechanisms to balance supply and demand. This solution has obvious benefits, both for the local economy and for consumers in desperate need of housing. However, aside from Premier Jiabao Wen's rare statement in 2009 to increase the effective supply of commodity housing by improving the land supply (which was soon to be forgotten), the central government has never formally considered this option. Instead, it has consistently focused on curbing housing demand as its primary means of regulation, even though, demand for housing, which has been restrained by short-term policies, will always find a way to be unleashed again, leading to a new surge in house prices. Why does the Chinese government pursue this doomed “anti-market” strategy even at the expense of the economy? At the central state level, the Chinese government has always upheld the fundamental principle of “controlling the size of large cities and promoting the development of small and medium-sized cities,” a principle that most certainly will be violated by liberalizing housing supply in areas where housing demand is most acute, typically in the megacities. As for the logic behind this principle, researchers often attribute it to the need for maintaining social stability (*weiwen*) and controlling regional inequality (Lu, 2017). At the local state level, due to the lack of property tax, even though local governments can obtain significant off-budget revenue from land auctioning for commodity housing, such revenue is one-off; while using land for industrial purposes can generate a stable and sustained stream of tax revenue. The latter has a much more significant effect on local GDP, the main indicator for appraising the performance of local officials. Therefore, local governments of large cities are

understandably hesitant to increase the supply of residential housing (Zhu, 2000). This finding suggests that, contrary to the neoliberal argument, economic development is not always a priority for the Chinese government in formulating and implementing policies. Economic prosperity is an important, but by no means the only consideration for the CCP to enhance its governing legitimacy. This study has demonstrated that central government decision-making is also constrained by inner-party political struggles, personal preference of state leaders, the image of government, the balance of regional development, and public sentiment. And at the local government level, the cadre appraisal and promotion system are closely linked to the economic performance of the local state, which further increases the unpredictability of the result of the implementation of central policies.

From an empirical perspective, China's housing policy making is in constant flux, shaped by both internal and external forces. In the early years of marketization (1998-2002), faced with the impact of the Asian Financial Crisis, Beijing urgently needed to develop an effective housing market. Learning from the experience of Singapore and other capitalist countries, it quickly inserted several neoliberal elements into the practice of the Chinese housing system. As a result, the nascent Chinese housing market had a distinctly neoliberal character. However, in later policy formulations, those neoliberal elements were adjusted and altered according to the changing external environment and domestic needs. Such policy swings have become particularly striking since President Xi came to power in 2012. He has since vigorously promoted public housing programs, weakened the commodity nature of housing, used unprecedented administrative measures to intervene in the housing market, and focused on supporting the long-neglected rental market. His policy scheme is a significant departure from neoliberalism or any variant of neoliberal practice. That being said, we believe it is incorrect to jump to a conclusion based on Xi's recent

left-wing movement and to declare that neoliberal practice in China has ended, and been replaced by some kind of “social policy,” a view shared by many (Wang, 2008; Horesh and Lim, 2017; Su and Tao, 2017). By reviewing three decades of housing policy making, we agree with Pow (2009), He and Wu (2009) and Lin and Hu (2011) that China’s housing reform has never followed any universal or established neoliberal model that is based on normative principles to begin with. Instead, we argue that it is a spontaneous, self-motivated, fortuitous and continuous process which never ends, nor is it replaced by any foreign forms, and certainly fits no orthodox Western stereotype. During this process, the market was, is and will be an important means, not the end, for the Chinese government to maintain its governing legitimacy and realize its political aspirations. The operation, adaptation and manifestation of the market solely depends on Beijing's timely judgment of domestic demand & external environment and feedback from the last policy cycle. In this sense, the radical marketization strategy in 2003 is not fundamentally different from the return of the socialist approach since 2012. They are, after all, just two of the many experiments conducted by China’s rulers in their quest for long-lasting peace and stability.

CHAPTER 4: PROBLEMATIZING CENTRAL-LOCAL DYNAMICS IN LOCALIZING CHINA'S LOW-INCOME HOUSING POLICY

4.1 INTRODUCTION

The political discourse on China's "economic miracle" over the past four decades, boils down to two contrasting narratives. Some celebrate the decisive role played by a highly centralized, powerful and determined central government (Shirk, 1993). Others are convinced that such a critical ideological breakthrough is impossible in a gigantic and indecisive central state in which the factional balance triumphs over anything else. Instead, it is argued that the unshackling of China's economic vitality results from the continuing policy innovation and entrepreneurship of China's local states (Teets and Hurst, 2014; He et al., 2018). In fact, these two ostensibly contradictory views could be expositions of separate periods in China's economic reforms. The former illustrates the fact that the central government was the architect and executor of emerging-market institutions in the early years of economic reforms from 1978 to 1994. The latter reveals neoliberal-like rescaling processes and mechanisms of decentralization of administrative power and the rise of local states marked by the 1994 Tax Reform, the 1998 Housing Reform, and the 2002 Land Reform. However, both theories have been challenged, if not completely outdated, by the co-evolution of central authoritarianism and local autonomy in China's politics over the last decade (Xia, 2017). In other words, these two streams of theories, each focusing on one extreme end of political spectrum of states, are insufficient to understand the increasingly diverse and complex reality. More recently, researchers start to depart from the top-down or bottom-up dichotomy and instead take a multi-scalar approach to examine the actions, relations and implications of different agents amidst various state rescaling processes (Chien and Zhao, 2015;

He et al., 2018; Song et al., 2019; Xu, 2020). As Harding and Sidel (2015) indicate, the important task is not to examine the operational mechanism of any particular political institutions, but to understand how the central-subnational-local dynamic functions and how multiple agents across scales react amidst the forces of globalization and the authoritarian state.

To this end, this paper advances the debates over how central-local dynamics, amidst the co-evolution of central authoritarianism and local autonomy, have played out in China and how the cross-scale dynamics shape the local implementation of low-income housing policy. In so doing, this research examines localization processes of China's low-income housing policy in two major cities: Shanghai and Chengdu. After 20 years of neoliberal-like reform, market-based transactions have become a dominant instrument in housing markets. Housing and land reforms from the late 1990s to the early 2000s have been recognized as the major causes initiating the neoliberal-like decentralization process in the last two decades (Wu, 2010a). The localization process of low-income housing policy provides an excellent window to understand how the central housing policies are downscaled and how the locals respond to policy implementation challenges through local policy experimentations in public housing provision. Chinese housing policy is both a means for promoting national and regional economic growth and for maintaining financial and social stability. By dissecting the implementation process of housing policy, we can enhance our understanding of how the state agencies balance and compromise between different, sometimes contradictory, policy goals and societal needs.

In the following section, we review related theories and empirical studies on central-local dynamics and central policy localization processes with the goal to develop a series of theoretical propositions that underpin our understanding of the policy localization process. The empirical

approaches are then outlined. Section 4 is the main part of this paper. It will extensively review and synthesize three cases of the localization of low-income housing policies. In each case, we will start by an introduction of the national policy scheme, and then proceed to demonstrate how it has been localized in Shanghai and Chengdu. Section 5 summarizes the empirical findings and discusses the implications of this research.

4.2 CENTRAL-LOCAL DYNAMICS IN CHINA: A THEORETICAL FRAMEWORK

China's "loose hugs" with global neoliberal capitalism (Harvey, 2005; Liew, 2005; He and Wu, 2009; He et al., 2018) have surely subjected its dynamics of central-local relation to the tendencies of state rescaling observed widely in Western capitalist economies where state rule regimes are being rearticulated from the Keynesian Welfare Regime to the Schumpeterian Workfare Post-national Regime (Jessop, 1999; Peck, 2002; Brenner, 2009a). The theory of state rescaling argues that the neoliberal capitalism coupled with globalization has demanded a new scalar relation to facilitate global capital accumulation. The traditional state is "hollowing out" (Jessop, 1999). The global scale economic integration produces the new international division of labor and dominates global capital accumulation, a scale that TNCs transcend the state regulation regimes in knitting pieces of global production networks together (Peck, 2002; Coe et al., 2004). Local states on the other hand are becoming magic scalar sites optimal to compete for global capitals and adapt to global market fluctuations (Swyngedouw, 1997; Peck, 2002; Brenner, 2009a; He et al., 2018). As a result, the state power and authority are reshuffled upwardly to the global and downwardly to the local, the parallel processes of state rescaling coined as glocalization under the contemporary neoliberal capitalism (Swyngedouw, 1997; Jessop, 1999; Peck, 2002; Robertson, 2018). It is pointed out, however, that state rescaling is not unidirectionally confined (Storper,

1997; Peck, 2002). State powers can be decentralized and recentralized over time. The hollowing out of the state or destatization in the process of political decentralization may be met by a process of political recentralization through which the state regains its power and authority in public policy making and state governance (Li et al., 2014). One prominent feature of Chinese reforms involves the reshuffling of political power and authority as well as social responsibilities between the central and local governments. Some scholars believe state power decentralization and market expansion have dominated the state rescaling process during China's reform period, responsible for its remarkable economic success (Wei, 2001). Others argue that China's state rescaling witnesses the co-existence of political decentralization and recentralization (Li et al., 2014; Li, 2015; He et al., 2018). Both destatization featured by an excessive market expansion and statization easily observable in rule-making processes and regional governance projects are essential features throughout China's economic development processes (Li et al., 2014; Li, 2015). Because scale is socially constructed and hence fluid, it is "both the result and the outcome of social struggle for power and control" (Swyngedouw, 1997: 140). The inter-scalar struggle for power and control is particularly imperative to how state rescaling is unfolded (Peck, 2002). It is hence fundamental to understanding the dynamics of the central-local relation that penetrates the process of state rescaling in China. Rather than develop an explanation on how state rescaling is unfolded in China, the following discussion contributes to the political economic theorizing on the mechanisms governing the inter-scalar dynamics of the central-local relation that is so prominent in the implementation and localization of low income housing policies in China, a story to be told in the empirical part of this paper.

It is widely believed that the formation of central public policies is tightly embedded in

local policy experimentation and localization processes. Sebastian Heilmann (2008b) attributes the norms of decentralization and localization of China's policy-making to the cycle of administrative centralization and decentralization, a pattern of experimental policymaking toggling between bottom-up and top-down processes, in addition to the revolutionary history institutionalized into China's administration and international theory of pragmatic policymaking (Heilmann, 2008a). Therefore, the cross-scale dynamics of bottom-up and top-down policy process provide a critical lens to explore how public policies in China influence regional development. In particular, how central policies are localized represents an imperative angle to the linkage of central policies and local development.

In explaining the cross-scale interaction between the central and local state arising in the process of policy formation and implementation, two distinct approaches have emerged to tackle the cycle of these two policymaking processes, reflecting contradicting views about the roles of the state in market-oriented economic reforms. According to the top-down school, it is thought that China's economic reform has thoroughly followed a rigorous script delicately composed by the central state (Sachs and Woo, 1994). Under such a structure, a local state is simply an extension of the central government, functioning in a local context with a strong central supervision. It will always prioritize the will of the central state in its jurisdiction with a minimum level of *ad hoc* local adjustment. This approach has been used to explain the State-owned Enterprise Reform (Lo, 1996) and the Tax-sharing Reform (Wong, 2000).

When explaining the predominant decentralization and localization process in China's policymaking of last three decades, Heilmann proposes a theory of "experimentation under hierarchy" (Heilmann and Perry, 2011). The theory explains how central policy-makers encourage

local states to innovate in response to governance challenges and then halt undesired local experiments and re-integrate optimal local experiences back into national policy scheme, such that “national policymakers wishing to change central policies often use the local experimentation to overcome opposition from defenders of the old policies in the central state” (Teets and Hurst, 2015: 3). Accordingly, the localization of central policies has been abstracted to a “centrally-designed, purposeful and coordinated activity geared to producing novel policy options that are injected into local context, and then replicated on a large scale, or even formally incorporated into national law” (Heilmann, 2008a: 12).

The top down cross-scale theory of “experimentation under hierarchy” offers illuminating insights into several significant local housing policy experimentations such as sharing-ownership housing policy in Huaian. However, it provides little help to understand most of the local policy innovations or alterations that do not diffuse upwards to the center but remain in subnational levels such as land ticket policy in Chongqing and its variation in Chengdu (see Zhang and Wu, 2017). It also fails to explain the localization process rooted in informal settings, which could yield suboptimal outcomes. In fact, Mei and Pearson (2014) find that these kinds of local innovations often are remarkably resistant to the central sanction.

The market transition theory criticizes the top-down approach, arguing that it exaggerates the role of the central government in economic transformation. In turn, It emphasizes the market mechanisms that lead to power struggles between the central and local states and argues a constantly diminishing role of the state along with the marketization process (Nee, 1989). The theory stresses the increasingly important roles of local developers, financial institutions, entrepreneurs and other economic actors in shaping the policy localization process. However,

many scholars argue the roles of both central and local states have not diminished during the course of market transition in China (Li et al., 2014; Li, 2015; Shen and Xu, 2017). On the contrary, their involvements as both macro-regulators and micro-intervenors have dramatically increased (Li et al., 2014; He et al., 2018). Local states, in particular, have been motivated and enabled by gaining unprecedented authority and financial power (Oi, 1995; Lin, 1999; Xu, 2020).

In order to understand the role of local states in China's transition to a market-oriented economy, Walder (1995) proposes an alternative market transition theory of "local state corporatism." The theory holds that the success of China's economic reform is rooted in the fact that fiscal decentralization provides sufficient impetus for local governments to manage and revitalize local state-owned enterprises. It is argued that economic and political incentives for local governments play a decisive role in promoting local development. While Walder's notion of local state corporatism is largely limited due to its sole focus on state-owned-enterprises, Oi (1999) extends the idea further to explain rural development in China, arguing that village cadres form a coalition with peasant entrepreneurs that accelerates rural industrialization.

Theories of economic transition focus on local actors and bottom-up approaches as the narrative to examine the central-local cross-scale dynamics that shape the trajectory of public policies and regional development. Similar arguments can also be seen in discussions of China as a developmental state in the literature. Ostensibly at least, China's economic reform and development resembles some of the key characteristics found in the developmental states in East Asia, in which "the state itself led the industrialization drive, that is, it took on developmental functions" (Johnson, 1982: 12). Developmental states regard economic development, productivity and regional competitiveness as paramount objectives. In addition to their traditional functions of

management and regulation, developmental states tend also to be deeply involved in the establishment and cultivation of market institutions and will do everything within their power to promote local economies (Woo-Cumings, 1999). Some recent studies argue that “China's local state is a developmental state of its own kind” (Nee et al., 2007). There is substantial evidence demonstrating that local states in China are no longer a simple extension of the central government at the local level. Rather, they are fully responsible for the prosperity of the local economy. Accordingly, they have been empowered by unprecedented authority and capacity to promote local economic growth and regional development. This has led to a shift from subservient local states to autonomous ones. With the ultimate goal of maximizing local revenue and the determination to exploit all possible means, local states have all the characteristics of a developmental state, that is, a local developmental state (Zhu, 2004). Critically, local developmental state theorists argue that the effectiveness, with which a local state and its agents seek and deliver development goals, is largely determined by its endowment of authority, autonomy and discretion to act in the institutions within which local players interact based on their own interests and constraints (Oi, 1995; Xu and Tan, 2001; Zhu, 2004; Liu et al., 2012b; Xia, 2017). The local developmental state theory enlightens that local states act to achieve local developmental goals by considering the wider array of means (both formal and informal) that are available to them. As a result, China's local states become an economic entity with independent political agendas in interacting with central policies and central governmental agencies (Su and Tao, 2017; Xu, 2020).

Theories like state corporatism and the developmental state are based upon an assumption that local economic growth and maximization of local revenue are the ultimate determinants of local policy agenda and execution. Such assumption has been challenged recently in the literature.

For example, Ding (2009) finds that main factors shaping the policy localization process are persistent local problems linked to political promotion criteria, central consensus and dominant factional support. Kennedy and Chen (2014) examine a case in Buyun, Sichuan and argue that political factors are central and economic growth goals play a secondary role in the willingness of local officials to adopt new policy innovations. Therefore, the policy localization process is much more strongly rooted in common governance problems and complex relations among various local actors than anything else, largely because the cadre promotion system links these problems to the success of individual local government cadres. Additionally, the literature on fragmented authoritarianism indicates that power struggles among government agencies at the local level might also play a role in local policymaking and innovation (Mertha, 2009). For instance, some studies suggest that economic considerations are no longer the sole concern of local officials. Rather, cadre promotion systems and complex local networks play an increasingly important role in local policy formation and implementation. It can be argued that distinct policy preferences and political authority at the local level fundamentally shape the localization process of central policies. China's local states have become independent interest groups with their own political and thus policy agendas.

The existing literature on the China's cross-scale governmental interconnectedness whether following a top-down or bottom-up reasoning logic all recognizes that since the late 1970s, the institutional arrangements, once congruent at the national level, have been destabilized, dispersed and rescaled into a multi-level structure highlighted by international regimes, nations, and cities (Huang, 1996; Lin, 1999; Heilmann, 2008a). However, the existing understanding on why and how public policy localization in China unfolds in such intricate cross-scale dynamics

still lacks theoretical clarity and consensus. The majority of early studies on this topic focus on fiscal relations and tax policies (Wong, 1991; Huang, 1996). We have no intention to belittle the fundamental impact of the 1994 tax sharing reform on China's central-local dynamics. However, mounting evidence suggests that cross-scale dynamics and rescaling processes are no longer constrained by a singular social function but are results of diverse social-political-economical processes (see Brenner, 2009b). On a more sensitive matter, these early studies based on fiscal relations had a strong assumption that the local responsibility and obedience to central state is axiomatic and absolute (Wong, 1991). Such a notion has been increasingly challenged in recent studies. It is argued that economic development needs, governance barriers, and institutional networks are all parts of the local-scale specificity (Xu, 2020). These place-embedded factors will induce local states to develop diverse political agendas which will often be implemented in an informal setting and eventually lead to "institutional inconformity" (Wedeman, 2001; Liu et al., 2012b). Based on these debates, we argue that institutional conformity between the local state and the central authority and regulation reflected by the cross-scale consistency in policy goals as well as local-central political obligation is essential in understanding the localization of central policies. We propose that institutional conformity acts as a changing filter that decides the rooms for central policy manipulation at the local level. The level of institutional conformity depends largely upon the consistency of local development priorities with central policy goals, political obligation/pressure and incentive for local states to comply with the central state.

In the discussions of China's local states dynamism, policy innovation is often at the center of the debates. Heilmann (2008a: 29) attributes it as the origin of the "distinctive process of central-local interaction in policy generation" and is one of China's core strengths in its stunningly

successful economic reform, a notion echoed by many. However, debates remain on why local states or local officials initiate these policy innovations when the outcomes are uncertain and risky. From a top-down perspective, Heilmann (2008a) argues that the central state designs and dictates these innovations through the “experimentation under hierarchy.” The bottom-up school contends that factors like local political needs for governability (Fewsmith, 2013) and concerns about party-state reputation and legitimacy (Chen and Yang, 2009) drive these policy innovation behaviors. We believe that, in addition to institutional conformity theorized above, local state entrepreneurship and local contingency are the key to understand these critical questions.

The idea of state entrepreneurship focuses on government investment behaviors and describes a role where state participates in the market system as a sagacious investor that follow the rules of market economy (Kao et al., 2002). This narrow definition is revisited in recent political discourse to incorporate a wider array of state activities in which the government participates or initiates a series of market-driven actions to “maximize the return of investments and to guarantee the interests of investors” (Templin, 2009: 54). The officials who peruse state entrepreneurship are incentivized by the future return that “might come to them in the form of policies of which they approve...or even personal aggrandizement in the form of job security or career promotion” (Kingdon, 1984: 123). In investigating local state entrepreneurship, Li (2010a: 180) recognizes “development efficiency” and “career advancement” as critical incentives for local officials in shaping the central-local dynamic in China. While institutional conformity regulates overall political behaviors and actions of local states, variegated local state entrepreneurship differentiates local policy innovations and development paths among local states. For examples: Zhu (2013) investigates housing policy localization in Guizhou and argues that by

“reshuffling” the central “housing cards,” Guizhou successfully developed a so-called “Guizhou model.” He attributes the success of such a local policy model to the vital role played by one key policy entrepreneur: Guo Shuqing, the vice governor of Guizhou in charge of housing reform at that time. He concludes that local policy entrepreneurs (local officials) serve as agents of change in central policy plan by generating local ideas, designing workable program and legislating the local implementation. In this study, we propose that local development priorities are configured along the line of local state entrepreneurship favoring fiscal responsibility, economic efficiency, and economic growth. The actual policy alteration and implementation is shaped by local cadres’ capacity to act, administrative transparency and bureaucratic structure of the local state.

Another category of mechanisms that determine the rescaling process embedded in the central-local dynamism are contextual and locally contingent factors. It is well recognized that locally contingent factors such as “urban economic base, social structure, political organization, tax and other regulations, institutions and competing interest groups exert a powerful influence on urban change” (Pacione, 2013: 11). In studying China’s urban and regional development, mounting evidence suggests that the cross-scale policy localization is very much context-based and geographically contingent (Chen, 2009; Liu et al., 2012b; Zhu, 2013; He et al., 2018). For example, the incipience of rural reforms was first experimented in places with severe rural poverty (see Lin, 1987). A lack of political and physical resources triggers the emergence of private-owned enterprises in Wenzhou (Zhang and Li, 1990). The existence of personal connections with overseas investors proves to be instrumental to the growth of urbanism in the Pearl Delta (Lin, 2018). These local contingent factors are not only critical to the local policy innovation and implementation, but also contextualize how institutional conformity and local state entrepreneurship are played out

locally. Therefore, we propose that place-based factors are imperative in deciding policy localization processes and outcomes. In particular, the political positionality of a place may decide political obligation of a local state to the central state. The severity of housing problems and the availability of financial and other resources at a locale can alter local development priorities and social and political obligations of the local states and in turn create unique localization processes and outcomes of central low-income housing policy. Based on this proposed theoretical framework, the empirical case study will interrogate the central-local relation by investigating localization processes and outcomes of three low-income housing programs in China in the post-1998 housing reforms era.

4.3 METHODOLOGY

To test the validity of the proposed theoretical constructs, a case study approach is adopted to investigate the localization processes of three national low-income housing policies: Economic Comfortable Housing (ECH), Low-Rent Housing (LRH) and Public-Rent Housing (PRH). Chengdu and Shanghai are selected as the study sites because of their critical differences in institutional arrangements with the central state, local state entrepreneurship, and local housing conditions. Chengdu is one of the regional centers in southwestern China. As the capital city of Sichuan province, Chengdu reports directly to Sichuan provincial government. Shanghai is a national gateway city and an important landmark on the globalization horizon. As one of four state designated municipalities, it is subject to direct central supervision. As shown in Table 5-1, Shanghai's urban population and economy are almost twice as large as Chengdu's. The comparison of housing-related indicators shows that there is a huge difference in the scale of real estate industry between two cities. In Chengdu, more than half of total investment was resulted from private

sectors as of 2017. A strong private economy may imply a strong local state-industry connection that may influence significantly the formation of local political agenda (Breslin, 2012). In contrast, Shanghai as a global city requires a much more open and transparent regulation regime with a levelling play field. Officials in Shanghai are two or three ranks above their counterparts in Chengdu in political ladder. In China's political context, this means that the administrative ability and authority of Shanghai officials are significantly greater than those of Chengdu officials. Further, indicated by the huge difference in the fiscal revenue, Shanghai and Chengdu are associated with different levels of economic development and prosperity. These differences between two selected cities will allow us to understand how the localization processes of central state housing policies are shaped by intuitional conformity, entrepreneurship, and local contingent factors.

The first principle for case study data collection proposed by Yin (2009) is to use multiple sources of evidence, primarily for the purpose of data triangulation (see Patton, 1980). In this research, we employed three types of data sources to address the validity and reliability issues of case study, including government documentations, news archives and interviews. In total, 15 major low-income housing policy documentations of the central government and 42 local policy documentations including 12 state conference memos have been reviewed and analyzed. In addition, we also collected a large number of media reports related to the issues of low-income housing. After screening, 13 media reports from reliable sources were analyzed in depth and included in this study as an important supplement to the policy review and interview data.

One of the most important sources of data in case study is interview (Whitehead, 2003). In this research, we interviewed three groups of people closely related to China's low-income housing

sector: housing bureau officials, real estate industry insiders, and bank staffs. The interviews took place in Shanghai and Chengdu in the summer of 2016 by a project team led by the authors. Both in-depth interview and focused interview were conducted. In-depth interviews were mostly conducted in a semi-structured way, and in some cases, open-ended questions were also adopted. We asked our respondents their experiences and views about the detailed process of localizing low-income housing policies. Following a snowball sampling method, interviewees were also asked to recommend other suitable persons for our interviews. An in-depth interview normally lasted for 2-6 hours and was usually completed in multiple sittings. We utilized the in-depth interview as our main data source. The focused interview was conducted in a structured manner for a short period of time, normally between half to one hour. The main goal was to corroborate the theories or stories that have been established in the previous interviews. It was a form of theory triangulation (see Patton, 1980) to increase the validity of findings in this research. Eventually, a total of 17 interviews were conducted (Table 4-1).

Table 4-1 List of interviews

ID	Interviewee	Format
I01	Housing bureau officials in Chengdu 1	In-depth
I02	Housing bureau officials in Chengdu 2	Focused
I03	Housing bureau officials in Chengdu 3	Focused
I04	Housing bureau officials in Chengdu 4	In-depth
I05	Housing bureau officials in Chengdu 5	Focused
I06	Anonymous insider of real-estate industry in Chengdu 1	In-depth
I07	Anonymous insider of real-estate industry in Chengdu 2	In-depth
I08	Bank staff of Chengdu commercial Bank 1	Focused
I09	Bank staff of Chengdu commercial Bank 2	Focused
I10	Vice president of Chengdu Ding Xin real estate company	In-depth
I11	Department manager of Chengdu Vanke real estate company 1	In-depth
I12	Department manager of Chengdu Vanke real estate company 2	Focused
I13	Department manager of Chengdu Vanke real estate company 3	Focused
I14	Anonymous insider of real-estate industry in Shanghai 1	In-depth
I15	Anonymous insider of real-estate industry in Shanghai 2	In-depth
I16	Housing bureau officials in Shanghai	In-depth
I17	Housing bureau officials in Shanghai	In-depth

Following the standard procedure of case study (Hartley, 2004; Yin, 2009), we transcribed all interviews into text in Chinese, and then applied three common techniques in studying the data of three policy cases in two cities (see Yin, 2009: ch 5). First, we adopted the pattern matching logic to identify patterns between the proposed theoretical constructs and policy localization outcomes. Second, we employed the explanation building technique to find elements from narratives of interviewees that can explain, justify or disapprove the patterns identified in the previous stage. By doing so, the “patterns” become “models” which enable us to unravel the detailed mechanisms behind policy localizations. Third, we utilized cross-case synthesis technique by comparing and cross-referencing the models we identified in each case between two cities in order to build explanations towards differentiations and synthesize the similarities. The final goal is to generalize theoretical models that validate the research propositions, and eventually to provide a unique interpretation of the mechanisms of the central housing policy localization in China.

4.4 LOCALIZATION OF NATIONAL LOW-INCOME HOUSING POLICY

This section examines the localization processes of three major low-income housing programs that the central government has introduced to improve housing affordability for low-middle income urban households in China: the Economic and Comfortable Housing (ECH) program, the Low-Rent Housing (LRH) program, and the Public Rental Housing (PRH) program. While many other low-income housing projects have been proposed by the central government over the past three decades, none of them are comparable to these three policies in terms of geographic coverage and social impact (Huang, 2013). Table 4-2 shows the basic characteristics of these three housing policies and their implementation details in two cities selected for this study.

Table 4-2 Overview of the three major low-income housing policies and their application criteria in Shanghai and Chengdu, 2016

	Economic and Comfortable Housing (ECH)	Low-Rent Housing (LRH)	Public Rental Housing (PRH)
Housing tenure	Owned	Rental	Rental
Target group	Before 2007: low- and middle-income urban residents; After 2007: low-income urban residents with housing difficulties	Low-income urban residents with housing difficulties	Low- and middle-income urban residents and qualified migrants with housing difficulties
Major eligibility criteria⁴	<p>Shanghai</p> <ul style="list-style-type: none"> • Have Shanghai urban hukou for at least three consecutive years • Per capita floor space is less than 15 square meters • Annual disposable income per capita is less than 60,000 yuan and the property per capita is less than 150,000 yuan (family of three or more persons). The annual disposable income per capita is less than 72,000 yuan and property per capita is less than 180,000 yuan (family of two or less persons) <p>Chengdu</p> <p>For local residents who have an urban hukou in Chengdu:</p> <ul style="list-style-type: none"> • Per capita floor space is less than 16 square meters • Annual household income up to \$50,000 <p>For migrant workers who have a rural hukou in Chengdu:</p> <ul style="list-style-type: none"> • Per capita floor space is less than 16 square meters • Annual household income up to \$50,000 • Urban workers' social insurance is paid in Chengdu for at least three years • No owner-occupied housing (including housing in the "New Housing Project") or housing for other purposes 	<ul style="list-style-type: none"> • Have Shanghai urban hukou for at least five years • Per capita floor space is less than 7 square meters • Monthly family income does not exceed 570 yuan per person and has received continuous low-income assistance from city for more than six months <ul style="list-style-type: none"> • Have Chengdu urban hukou for at least five years • Per capita floor space is less than 12 square meters • Monthly family income does not exceed 960 yuan per person 	<ul style="list-style-type: none"> • Have an urban hukou in the city and have signed a labor contract with an employer in the city for more than one year, or • Hold the Shanghai Residence Permit for more than two years, have paid social insurance continuously for more than one year, and have signed labor contracts with local units for more than one year, or • Holders of Shanghai Residence Permit who have paid social insurance, have signed a labor contract with an employer for more than two years, and have rented public rental housing from the employer • Per capita floor space is less than 15 square meters • Not receiving the City's LRH or shared ownership housing policy. <ul style="list-style-type: none"> • Have Chengdu urban hukou for at least three years. If the applicant is a single resident, he or she must be 35 years of age or older, or • Have a Chengdu urban hukou and sign a labor contract with the employer, or • Hold a residence permit in Chengdu; sign a labor contract with the employer and pay urban workers' social insurance for at least one year • Annual household income of \$100,000 or less, or \$50,000 or less for an individual • The applicant and family members do not own their own property in Chengdu and do not receive any public housing benefits.

Source: Data compiled by author from various government policy documents

Note: All data reflect the situation in 2016 (year of data collection) only

⁴ Only the application criteria relevant to the discussion in this paper are included.

4.4.1 LOCAL DEPOLITICIZATION OF LOW-INCOME HOUSING PROGRAMS

The ECH project was first introduced in 1998 as an ownership-based program to encourage low-middle income households to own homes in cities. The *2004 Measures on the Administration of Affordable Housing* stipulates the ECH program as the primary source of public housing supply. In 2007, seven central state departments jointly issued its revised version as *New Measures for the ECH program*, which significantly lifted the income eligibility criterion for applying the ECH housing. Consequently, the share of the ECH housing in the national public housing provision has declined. Today, it is no longer regarded as the primary venue of public housing provision.

A close examination of government documents and interview materials lead us to conclude that the localization process of the ECH program is first shaped by the consistency in policy goals between the central and local states. At the national level, the policy aims at providing an option for low-income households who cannot afford commoditized urban housing (State Council, 1998a). The long-term policy goal is to promote the acceptance of "housing ownership" by all urban residents, cultivating the consumptive purchase habits of low to middle income groups, and further stimulating urban housing marketization (Song et al., 2005). For local states, these housing development goals are not fully consistent with local development interests. For years, local governments are heavily incentivized to pursue economic growth and become a de facto "entrepreneurial state" (Nee et al., 2007). The growth in local GDP has long been an essential criterion of local officials' performance appraisal (Saich, 2010).

Right from the beginning of the ECH program implementation, the ECH program goals are in conflict with local economic development goals. When the ECH policy is enacted, local governments are required to take full responsibility for the allocation of urban land and the

provision of the ECH development funds (State Council, 2003; State Council, 2004). As a social housing program, the local governments are not provided with any positive financial incentive for its implementation. “We [local governments] are asked to provide land for the ECH programs. In the meantime, we are also required to set a price cap on the ECH unit in the market and regulate its sales” (I03). This means local governments need to allocate the land below the market price for ECH projects that could be sold for a significantly higher price in the secondary land market; and the administrative order of the price cap of the ECH unit further prevents local governments from benefitting from the fast-growing real estate market. Further, the ECH housing units cannot enter the commodity housing market for resale within five years of the initial purchase transaction (State Council, 2007b). As one of the informants from shanghai states that “the fact is we cannot afford to prioritize the ECH project and everyone tries to protect the local real estate market because the land revenue was crucial to us” (I16). Essentially, the ECH housing was imposed upon local states as a political task.

A lack of economic incentive means that local states must implement, while unwillingly, the ECH program due to political obligation. This political economic contradiction is considered as a primary reason for local policy alteration (Florini et al., 2012). For the entrepreneurial local states, the political task of delivering the ECH program has to be manageable economically (Chen and Yang, 2009). The exact nature of policy local localization will however depend on the rooms for policy manipulation and the capability of local governments. In the case of the ECH program, “it was set to be monitored and supervised by the provincial-government. There is no direct responsibility link between the central state where the policy is made and local municipalities where the policy is executed” (I07). This mean the political obligation to implement the ECH is

tied merely to the provincial government. However, “the provincial government often depends on the regional leading-cities [such as Chengdu] to help complete its planned economic growth targets and quotas; so, as you can imagine, the provincial government will not embarrass the local government for the ‘thankless’ matter of public housing” (I07). A source from Shanghai offers a similar remark: “The central government has delegated great autonomy to local ECH projects. Many provisions including source of the land and duration of the project are all subject to local discretion” (I14). This implies that officials of local governments will not be subject to any substantial political penalties for unsatisfactory implementation of the ECH project. This loosened political obligation provides substantial rooms for manipulation in implementing the ECH project at the local level.

The actual alteration of the central state policy varies across localities depending upon entrepreneurial zeal of local states in their pursuit of urban economic development as well as local conditions (Zhu, 2013; Teets, 2015). In Shanghai, to direct local implementation, the central state has assigned a compulsory quota of ECH unit construction for local implementation (Ministry of Construction, 2004). However, “the two [ECH] documents⁵ are vague on issues such as land allocation, financing and approval criteria of the ECH program” (I07), according to one interviewee. The Shanghai municipal government apparently took full advantage of the autonomy of the ECH policy regarding the preparatory phase of the project. As one informant revealed, “Shanghai did not officially launch the ECH project until the end of 2009, which is the latest among the major cities in the nation. Their (local government) rationale is also clichéd, such as the

⁵ These two documents are: ECH Price Management Measures issued by Ministry of Construction in November 2002 and Administrative Measures on ECH issued by Ministry of Construction another department in May 2004.

complexity of the situation in Shanghai, the strict land management and the time needed for policy perfection” (I15). It is also possible for local states to take advantage of the ECH land development quota for commodity housing projects because of the dis-jointed supervision and monitoring system. One insider from a real estate company of Chengdu indicates, “[t]hey [local governments] often listed those irrelevant projects, such as old town renovation projects as part of the ECH project, and it is easy to meet the quotas required from above” (I07). He further pointed out that Chengdu listed its urban renovation mega-projects as the solution to meet the EHC quota requirement using this reporting tactic:

Funan River Renovation Project is one of the biggest urban renovation programs. It is designated as a national project, so they could bypass the provincial government, and obtain demolition and land development quota directly from the central government. In this project, there were three huge old run-down neighborhoods to be renovated into brand new commercial-residential districts. All of them have been reported to the central state as the ECH projects (I07).

Later, we managed to verify his story. All three neighborhoods he mentioned are indeed ECH projects according to Chengdu Urban and Rural Real Estate Bureau's official website, two of which are ranked the 2nd and the 5th (area-wise) in the top ten ECH projects in Chengdu as of 2017 (CURREAB, 2017).

The local states tend to exploit any available opportunity for economic gain when implementing the ECH program. Before 2007, the central state did not provide a universal standard for the ECH applicant. Instead, the local governments were authorized to set up their own standard (Ministry of Construction, 2004). This surely left ample rooms for the local governments to manipulate standards to suit their own economic growth needs. One informant from Chengdu indicates that the local state would deliberately loosen the selection criteria for the ECH applicants: “They surely loosen the criteria [for ECH applicants] [...] if you want to apply for an ECH unit,

all you need is to claim your income and submit a so-called proof of earnings which can be easily faked. They say they will verify it, but they never did” (I09). After 2007, however, there was a change in the selection process for the ECH applicants in Chengdu when the “*New Measure*” was issued (State Council, 2007b). “We took the ECH application procedure much more seriously than before,” said a housing bureau official of Chengdu. “We assign the responsibility of filtering applicant to street residents’ committee. It proves to be much more effective than the old ways” (I09). This innovation in policy implementation apparently overcomes the limited administrative capability problem mentioned above. The above cases illustrate the nature of entrepreneurial behavior of the local state and the strengthened central regulation can significantly affect the process of policy localization.

On examining the process of the ECH policy localization, it is found that local development need, economic development model and administrative capacity also matter. The central policy stipulates that each ECH unit must not exceed 60 square meters with a limited standard for housing facility (Ministry of Construction, 2004). The local response to such requirement varies. “[A unit of] 60 m² looks pretty on paper, but in reality, low-income households still cannot afford it, and middle-income families won’t consider it because it is too small. By increasing the standard, even only a little bit, more people would like to consider [buying] these ECH housing units,” explained by one Chengdu housing bureau official. “We need to recoup our ECH program investment, and we also need to guarantee the interest of our developers” (I03). In Shanghai, we heard an opposite story from the housing bureau officials: “[A floor area of] 60m² is the red-line we wouldn’t cross. The ECH project units you can find in our district (Changning District) are mostly smaller than that.” We later learn that “the floor area per person for low to middle households is smaller in

Shanghai in comparison to the national average. Even the ECH unit with around 40 m² is still attractive to ECH program applicants” (I17). More importantly, local state officials in Shanghai are unwilling to violate the central state requirements according to our interviews: “Land quota for the ECH construction is strictly controlled by the higher-level governments. If we go beyond 60 m² for one apartment unit, the number of units qualified for the ECH project will decline. Then, we will not be able to meet the annual requirement for the ECH program” (I17). In this case, in the face of the same central regulation, Shanghai and Chengdu show two contrasting attitudes and responses in implementing the ECH program. It is the pressing housing shortage, expensive housing price and land value, and a large displaced population from urban renewal projects in Shanghai that shape the local implementation of the ECH projects. As a provincial level city, Shanghai, unlike other municipalities with a lower position in China’s political hierarchy, is under much tighter political control and stricter political conformity with the central state.

The implementation of the ECH program demonstrates the localization process of the central public policy is very much configured by institutional conformity and local state entrepreneurship. The consistency in policy goals determine whether and to what extent the central policy will be altered. Political obligation and conformity requirement on other hand will decide how the loopholes in the central policy will be created and exploited. Institutional conformity only serves as a pre-condition for local alteration of the central public policy. The entrepreneurial appetite of the local states actualizes the direction and magnitude of central policy alteration. Prioritizing revenue generation, blending market mechanism, and pursuing economic efficiency can all effectively convert the social housing program into a moneymaking machine. However, both institutional conformity and local state entrepreneurship are contingent upon local conditions.

Local economic conditions such as social housing needs, housing prices, political distance in terms of the central supervision vary significantly and differentiate the implementation process of the central low-income housing policy.

The combination of these factors produces some unexpected outcomes of the ECH program: the ECH unit is often far beyond the reach of its target population, a situation also observed elsewhere in the literature. The ECH program “benefits upper-income households rather than low-income ones” (Zou, 2014: 9). Many middle-to-high-income families seek to purchase the affordable housing for the pervasive speculation in the ownership-oriented affordable housing program. “Most of them [middle to high income families] bought those ECH units, not for self-dwelling, but for re-selling in the market after the five-year ban expires,” indicated by one interviewee in Chengdu (I06).

To curb these speculative activities, the Chengdu Municipal Government has undertaken two measures (Chengdu Municipal Government, 2010). First, after the five-year ban expires, the government will have a priority to buyback the ECH units at a below market price, and second, a special ECH tax will be applied due to the market appreciation of the ECH units. It should be noted that these two measures are not unique to Chengdu. They are the local implementations of “2010 Guidance” stipulated by the central governments. The policy has had some positive effects on curbing speculation in the affordable housing market, but some scholars have criticized this policy for depriving the ECH unit owners from gaining benefits from housing value appreciation, leading to new kind of social injustice (see Zou, 2014).

To balance the suppression of speculation with the interests of the ECH owners, the Shanghai government has applied a more innovative approach to overcome the drawbacks of

Chengdu's approach. In Shanghai, the local government and the ECH homeowners can jointly own the ECH unit, with a 30-70% or 40-60% ownership arrangement. Households can buy a greater ownership share from the government over time. They can also sell their property rights back to the state. The price is based on the current market value (Shanghai Municipal Government, 2008). In this case, the governing capacity of the local states, especially their policy innovation capability, significantly effects the outcomes of local policy. At the meantime, the central state also learns from the local implementation of low-income housing policy, as evidenced by the introduction of the "New Measures" and "2010 Guidance." Given the difficulties of implementing the ECH program, the central government gradually shifts the focus from the ownership-based housing programs to the rental-based programs to meet the needs of low-income people in Chinese cities.

4.4.2 "NO POVERTY! NO MARKET?": THE FALL OF THE LRH POLICY

Launched by the central government in 1998, the LRH policy is a rental-based low-income housing program. As a poverty reduction program, it was designed to address the problems of the urban poor whose housing needs are heavily jeopardized during the course of housing commodification process (Ministry of Construction, 1999).

Similar to the ECH program, the local governments are required to allocate the land and finance the LRH construction. The policy stipulates that the rent for LRH units is set by local governments based on maintenance and management fees and the LRH unit must meet a series of construction codes set by the central state (Ministry of Construction, 1999). The central government requests public financial institutions to provide with ease the financial loans required by the local states to develop the LRH projects. The land transfer fees for the LRH project are

waived (Ministry of Construction, 1999). While the goals of the LRH program contradict local economic development goals, the development of the LRH program represents important part of social responsibility and political obligation of the local states (Ministry of Construction, 2003).

The implementation of the LRH is very much in the hands of the local states. Similar to the ECH program implementation, the central state did not provide a clear policy implementation protocol nor a functional accountability system for supervising and monitoring the program implementation (Zou, 2014) . However, it indicated the local states should set aside 10% of the land sale revenue for the LRH program implementation. Unlike the ECH program, the constructed LRH housing cannot be sold on the market (Ministry of Construction, 1999; Ministry of Construction, 2003). As part of anti-poverty campaign, local governments must charge ECH tenants the rent at a rate well below the market, or even waive it completely (Ministry of Construction, 1999). The economic cost to the tenants enrolled in an LRH program unit is almost negligible compared to the construct cost of an ECH unit. If local governments and developers invest in developing the LRH units, it will take a long time for rent collection to recoup their initial investments (Shi et al., 2016). Consequently, an LRH project can be a huge financial burden for any developers involved. For example, in 2010, Chengdu Ding Xin was entrusted by the Chengdu municipal government to develop an LRH project. The total project cost was 20.6 million yuan. However, the annual gross profit from the project is only about 50,000 yuan. “[The LRH project] was faced with huge deficit,” said one informant from Ding Xin Industrial. One of the major developers for low-income housing programs in Sichuan admitted, “so far, we have not been able to find a way to make a sustainable profit from public housing projects, and often it is difficult even to recoup costs” (I10).

Because of the possible financial drain, any large-scale implementation of the LRH would surely create a formidable financial burden given the policy stipulation by the central state. With little room of blending market incentives into the program, the only choice left for the entrepreneurial local states that prioritize economic growth and land sale revenue is to limit the scale and scope of the LRH program (Fan and Yang, 2018). One way to achieve this is to set extremely stringent eligibility criteria for an LRH applicant. In 2001, the LRH program in Shanghai was confined to the registered local households whose individual monthly income was below 280 yuan (monthly disposable income per person of Shanghai was 1,073 yuan in 2001) and had received government supplemental income for 6 months and lived in a room with a floor area below 5 m² per person (Zhang, 2001). The criteria were relaxed a bit over time. In 2011, a year before merging the LRH program into the PRH program, the bar of monthly income was increased to 1,600 yuan (monthly disposable income per person of Shanghai in 2011 was 3,019 yuan). However, the criterion for floor space per person remained to be as small as 7 m² in 2011 (Zhang, 2011b). The candidate selection criteria are conditioned by the local context. In Chengdu, the eligible LRH applicants of 2011 were those who earned less than 775 a month and lived in a room with floor area below 16 m² per person (CURREAB, 2011) . The difference in criteria is because the income level in Chengdu is significantly lower than in Shanghai, but its housing congestion is much less severe. Despite the regional difference, the LRH program in both cities targets at the most vulnerable urban population. Because of the stringent eligibility criteria, the implementation scale of the LRH program was very limited and application procedures were tightly controlled. From 2001 to 2006, cumulatively, there were only 22,397 households eligible for the LRH program in Shanghai (Shanghai Municipal Government, 2007).

Providing urban land for the LRH program represents another major challenge to the budget conscious local states because the construction land is limited and is a major source of local extrabudgetary revenue (Cai, 2017). Accordingly, local governments are reluctant to allocate land to the LRH programs. One official explains, “85% of the taxes go to the central state. We rely on the land transfer fee from housing development to pay for the local services” (I04). The situation is even more critical in Shanghai. An informant in Shanghai notes that “Shanghai's land management has always been the tightest. For a long time, Shanghai's LRH projects have mainly relied on the conversion of existing housing sources, because there are no new residential land quotas allocated for new projects” (I17). Apparently, instead of building new LRH units, local states identify and collect existing housing units throughout the city and convert them into the LRH units. In practice, the LRH project has a wide variety of housing sources, including old public housing and allocation housing (*peijianfang*). The majority of LRH units are sporadic, dilapidated houses, with extremely low commercial value and high maintenance costs, and are often detrimental to the surrounding communities, phenomenon also observed in the literature (Chang and Tipple, 2009).

Since 1999, in both Chengdu and Shanghai, the local governments assigned the least commercially attractive land for those constructed LRH projects (Shun, 2012; Liu and Zhu, 2014). As a result, the early LRH projects are all in remote suburbs where public services are inaccessible and often lack necessary infrastructure such as public transport, hospitals and schools (Chang and Tipple, 2009). As one official puts it, “[the LRH] is just a new form of ‘urban village’ within the city boundary” (I04). Evidently, local governments have neither enough motivation nor the

capability to bypass the central restrictions to improve the quality of the LRH units through a feasible "localized" approach.

The concerns over the long-term fiscal viability combined with the scarcity of urban land make the local states hesitate to promote the construction of the actual LRH units. To comply with the central LRH policy, the local states create a particular coping mechanism to address the needs of eligible LRH candidates. First, a cap of LRH floor area per person is identified. Then the area differential between the capped LRH floor area and applicant's existent living floor area is calculated. The rental to cover the area differential is estimated according to the rental market price. A majority of the eligible households are given cash subsidies to cover the rental differentials. Between 2002 and 2006, out of 22,397 eligible LRH households in Shanghai, 89 percent of them only received cash payments instead of actual LRH units. A mere 374 households were given chance to move into the designated LRH units (Shanghai Municipal Government, 2007). In Chengdu, the localized LRH policy stipulates that the eligible households with a housing floor area of 16-24 m² per person can apply for monetary subsidies for low-rent rentals, while only those households with a housing floor area less than 16 m² will be assigned to an actual LRH unit (CURREAB, 2011). In practice, even such stringent policy is not fully implemented. One informant told us that "those who are eligible for a physical LRH unit are denied due to the limited supply of LRH units" (I07).

Under the institutional arrangement of the LRH program, local officials would not be held accountable even when the LRH project was poorly implemented: "There's nothing for us to worry about [implementing it]. Even the central government doesn't have a clear map for the LRH program" (I05). The situation was not different in Shanghai. "Shanghai is one of the first cities in

the country to implement LRH policy, and many details of the policy were unclear, so there was no way to hold people accountable. The improvement of this policy relies on us pioneers exploring it bit by bit” (I16). The policy framework rejects any form of “market behavior” and absolutely detaches itself from blending into local economic development projects. We believe that the anti-market tendency, the absence of an effective accountability system, and a viable and coherent financial and land arrangement scheme is responsible for the ineffective implementation, if not a failure, of the LRH program as a national public housing policy. At the end of 2012, the Ministry of Housing along with other two ministries issued a policy to merge the LPH program with the PRH program. In other words, due to unsatisfactory local implementation, LRH as a standalone policy was terminated by the central state. At this point, the LRH program officially withdrew from the national stage.

4.4.3 CENTRAL RE-POLITICIZATION OF LOW-INCOME HOUSING PROGRAM

The PRH program was released in June 2010. It aims to solve the housing problems for middle and lower-middle income urban families who are not eligible for the LRH program but are unable to solve their housing problems through the commodity housing market (MHURC, 2010). After it was merged with the LRH program in 2012, the PRH extends its coverage to the entire low- and middle-income urban population and has gradually become the primary form of low-income housing provision in urban China.

Learning from various low-income housing programs experimented since 1998 when the housing commodification started, the central state attempts to make the PRH program a locally executable and adaptable policy (Chen et al., 2013). Before 2007, the central government was extremely cautious about any forms of “localization” of low-income housing policies. Many

experiments initiated by local governments to introduce market elements into the system were halted because they “crossed the red line” (Min, 2003; Liu and He, 2005). The situation changed in 2007 and the phrase “depending on local circumstances” has begun to appear in low-income housing policy (State Council, 2007b). After 2012, wordings such as “local policy innovation (*bendizhenchexuangxing*)” and “adaptation to local condition (*yindizhiyi*)” were frequently seen in the central policy papers on housing regulation (see State Council, 2013; Ministry of Land and Resources, 2015). In 2016, the central government work report officially established “Policy Adaptation to City Conditions (*yinchengshice*)” as the national guideline for housing regulation (State Council, 2016). After rounds of policy iterations, many areas of policy innovation are enacted in the PRH program based on the previous experience in implementing ECH and LRH programs. For the first time, the central government changes the previous one-size-fits-all policy framework and delegates authority over matters such as land allocation, housing sources and building standards to local governments.

To ensure the proper implementation of the PRH program, the central state issued an accountability mechanism pressuring the compliance of local states to the requirement of the PRH program. According to the PRH scheme, the provincial government is asked to sign the agreement with the central state in which the “indispensable and demanding work requirement (*yingrenwu*)” is assigned to the corresponding provincial level bureau (MHURC, 2010). Each province will allocate appropriate PRH unit quotas to the local governments in the province. This rigorous chain of command eventually creates a system in which the delivery of the PRH housing is directly linked to the appraisal and promotion of local cadres (Chen et al., 2013). While the construction of the PRH projects is not in the best interest of entrepreneurial local governments, these policy

measures enforce the political conformity between the central and local states, leaving little room for local manipulation in implementing the PRH program.

It is well recognized that local states prioritize revenue generation over the provision of public housing (see Zhu, 2004). To facilitate the implementation of the PRH program, the central government indicates that the central state budget will directly support the implementation of the PRH projects in some districts (MFSAT, 2010). However, such a top-down fiscal scheme has never been the main solution for the PRH projects, because the state budgetary funds “have never been guaranteed and often come with very harsh restrictions” (I01). Apparently, the central state has recognized the magnitude of this issue. One of the major components of the “indispensable and demanding work requirement (*yingrenwu*)” is how to finance the PRH projects. The corresponding local bureau is required to sign the implementation agreement to ensure that local governments will provide significant funds for the PRH program. The central government also encourages local governments to adapt and carry out policy innovation according to local conditions (MHURC, 2012).

The mounting political pressure and obligation coupled with a clear accountability system forces local states to implement the PRH program swiftly and innovatively. Local governments are pressured to explore their own ways to carry out these central state mandates. As indicated in one of the interviews: “We have to be creative [on financing the PRH program] or be ready to be fired” (I03). In Chengdu, where the local government has long established a strong tie to local housing industries, it seeks entrepreneurial solutions by cooperating with real estate developers. One of the solutions is to use land sale for commodity housing to compensate for the PRH projects: “We have set a cap on the land auction price, and once that the cap is reached, developers can no

longer increase tender prices in monetary terms; what they can do is to continue to bid with the add-on promises to build units of public housing,” said one local official (I02).

In another case, a real estate developer even directly invested in a PRH project in Chengdu. Vanke, one of the country's leading real estate developers, launched the Corporate and Social Responsibility Fund in 12 cities across the country. The foundation is led by Vanke. Local developers can participate in the investment, and all the funds raised are used to support the construction of local public housing. One insider from Chengdu Vanke explains, the Responsibility Fund can help Vanke break the deadlock and promote relations with local governments.” In another word, the motive behind these "selfless" acts of private enterprises is to establish closer political and industrial relations with local governments. In Chengdu, such an attempt clearly sees some fruits. A strong local state-industry tie, in turn, enables the land auction policy innovations that help the local government to identify lands and funds for the PRH program, alleviating the financial burden of the local government.

The local contingency factors are important in channeling solutions for solving the problems of low-income housing delivery. The "Chengdu model," with a strong local political and industrial tie at its core, becomes less desirable solution in Shanghai in implementing the PRH program. Because of its top position in Chinese urban hierarchy, Shanghai municipal government is subject to tighter political control by the central government (Chen, 2009). The expensive land price can generate abundant extrabudgetary revenue, making the construction finance of the PRH program lesser a concern in Shanghai. In late 2010, Shanghai municipal government announced that part of the annual local bond revenue would be allocated to public housing projects (Si, 2010). Shanghai's special position in China's urban hierarchy also enables it to adopt innovative way to

address the public housing issue. Under China's current land law, the use of land by rural collectives for commodity real estate development is strictly forbidden. However, owners of such land often ignore the ban and secretly sell or lease housing built on the land. These houses, which have no legal title, are called “small property-rights housing” (*xiaochanquanfang*). In later 2011, confronting the mounting pressure of insufficient public housing supply, the central state started to explore the possibility of using collectively-owned land for the PRH programs (State Council, 2011). However, this experiment may cause the legalization of existing “small property-rights housing,” which in turn leads to massive loss of collective land. To control this risk, the central state decided that only Shanghai and Beijing could pilot test such an experimental policy (the policy later expanded to 13 cities in 2017, and 18 cities in 2019) (Meng, 2019). In this case, Shanghai’s special position in China’s urban hierarchy acts as a key enabler of successful policy innovation.

The above examples demonstrate that the central government’s gradual acknowledgement and acceptance of local state innovation and entrepreneurship in public housing domain. It is this official and formal recognition that provides political security and prospects for ongoing local policy innovation in the process of PRH policy localization and stimulate the implementation of the PRH program. In the meantime, under the rule of “administrative accountability to the person in charge,” regional leaders are required to bear the direct political consequences of the unsatisfactory local-implementation of the low-income housing policy. This key change has forced local officials to consider the potential political risks associated with the “ostensible conformity” (normally informal) of central policy, and eventually to provide an endogenous incentive for local officials to genuinely conform with central policy. As a result, the completion of the PRH project

quota has been impressive. In Chengdu, more than eight million square meters of the PRH housing have been delivered in the first year (2012) of the project alone. One official in Chengdu stated, “the scale of the PRH program is unprecedented [...] It exceeds any prior low-income housing programs” (I04). Likewise, one housing official in Shanghai commented, “The PRH programs in Shanghai will be speeded up, and the coverage of the program will be higher than the national level” (I16).

4.5 DISCUSSION AND CONCLUSION

This paper investigates the localization of the central state policy by exploring the implementation of three low-income housing policies in Shanghai and Chengdu. This is by no means a comprehensive analysis nor a historical review of China’s low-income housing policies. What is nevertheless surfaced is that local policy implementation paths and outcomes are vastly different from what is expected in the original central policy and the influencing mechanisms of local policy implementation differ across localities. Importantly, the empirical results show that the localization of low-income housing policy is neither a top-down process nor a completely spontaneous from-below model. It is the constant central-local interaction that characterizes the central-local dynamics and influences the policy localization process. The empirical investigation validates the proposed theoretical framework that stresses the imperatives of institutional conformity, local state entrepreneurship and local contingency and their interactions in explaining the local implementation processes and outcomes of the centrally initiated low-income housing policy in China (Figure 4-1).

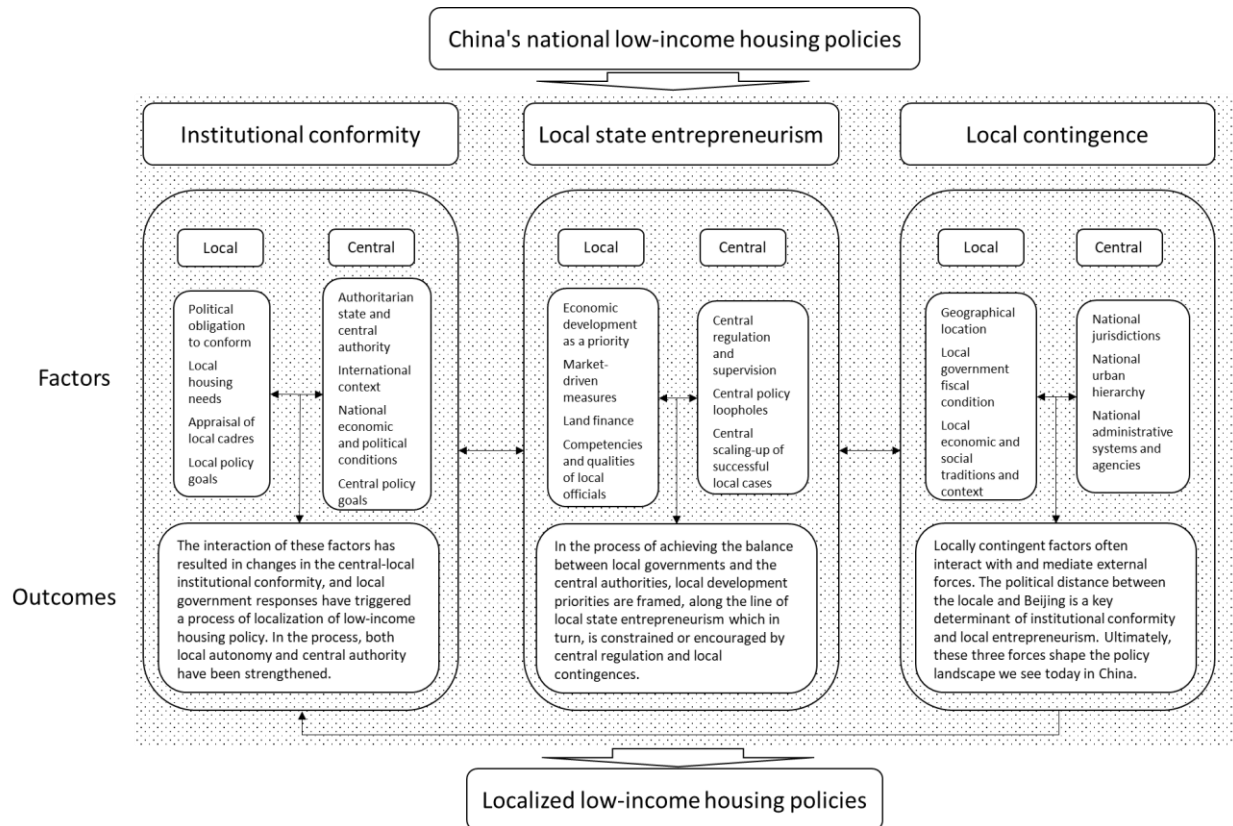


Figure 4-1 Localization process of China's national low-income housing policies

In the context of low-income housing policy, the institutional conformity manifests in cross-scale consistency in policy goals, political obligation of local states to conform to the central, and balance between local incentives and central state sanctions. Top-down theorists portray China's local governments act as an extended hand of the central state (Shirk, 1993; Sachs and Woo, 1994). Our study refutes such a claim. In contrast, in the process of exploiting loopholes in central policies, or “probing policy red lines” as indicated by one of our informants, local states show a strong sense of local will and determination towards local economic development, characterizing an emerging local developmental state. The goal of the central low-income housing policy has often undergone down-scale alteration in the process. The original single-scale (national), single-dimensional (social security) policy is transformed into multi-scale (provincial-

municipal), multidimensional (social security and local development) policy tools which are utilized by local states to achieve their developmental goals and economic needs. However, acknowledging increasing local autonomy and discretion does not mean that China's local governments are developing into this fully self-motivated and independent political entity as some recent literature on the local developmental state would imply (Xia, 2017). In fact, we find that the political obligation of the local state to conform to the central authority has been strengthened over time. Notably, Beijing has adopted two measures to facilitate this trend. First, to eliminate local ostensible conformity by installing a strict accountability system. Second, to formalize and integrate the fragmented policy localization practices into a national policy protocol by acknowledging, encouraging and codifying local policy innovations. Under such a framework, it is neither the central will that is stressed in top-down theory (Shirk, 1993; Sachs and Woo, 1994) nor the local dynamism praised in the bottom-up literature (Liu et al., 2012b), but the balance between local incentives and central state sanctions that ultimately determine rooms and forms of central policy manipulation and alteration at the local level.

In the process of achieving the balance between local governments and the central authorities, we find that the local development priorities are framed, as we state in the second proposition, along the line of local state entrepreneurship favoring fiscal responsibility, economic efficiency, and economic growth. The "local state corporatism" portrays local governments as a sizable independent corporation and local officials as the owners. Local states promote private firms in their jurisdiction and become a stakeholder with local enterprises (Oi, 1995). The theory further identifies Chinese local state as a developer and highlights its determination to be directly involved in the operation of the market in order to promote local economic growth (Zhu, 2004).

In a similar vein, the “fragmented authoritarianism” focusing on the decentralization of administrative power holds that local states in China become authoritarian governors in their jurisdiction. They are competing with each other and are entangled in the constant power struggles within China’s political hierarchy (Mertha, 2009). In this study we find that local governments in two cities are a compound body of those roles. With the entrepreneurship at its core, they are willing to break any existing boundary of local governance and pragmatically switch roles. Such a local dynamism has been widely praised by “bottom-up” school as the motor of China’s impressive economic growth (Oi, 1995). However, we find it can produce both optimal and negative policy outcomes. Under the pressure of central regulation and local problem, local governments have innovatively adapted market-driven approaches to overcome the obstacles in promoting low-income housing programs. In those cases, the original policy goal is arguably achieved. However, we also demonstrate that local states treat public housing as a market strategy and would prioritize the return of their investments over the interest of low-income households, which leads to an ineffective distribution of public housing. A similar observation has been made by Qian (2015) in the study of Hangzhou’s land policy guided by the idea of “managerial city” in which the central land policy gives way to the city’s pursuit of short-term high return on investment. The cases of Chengdu and Shanghai further reveal that cadre capability, administrative transparency and bureaucratic structure of local states determine whether the local state entrepreneurship generate optimal or negative outcomes. Noteworthy, in above discussion, we indeed observe strong state entrepreneurial trend in both case cities and evidently linked them to the local implementation of central policy. However, we also demonstrate in the earlier discussion that local political agenda is formed upon much wider social and political fabrics which go beyond simple revenue maximization. Thus, we reject the notion that all Chinese local states are entrepreneurial in nature

and acting as revenue maximisers. We argue that the role of the local government will constantly change along with the local development, the cross-scale dynamics and the horizontal competences.

Furthermore, we find that locally contingent factors often interact with and mediate external forces and have a significant impact on localizing low-income housing policies. Under China's current bureaucratic structure, the position in political hierarchy often determines the capability and authority of local cadres deployed by the central government that directly link to local policy implementation. Shanghai's unique policy solutions on the ECH and PRH programs are a solid testament to this mechanism. This finding seems to echo Heilmann's notion of "state-led hierarchical development" where various resources, including human resources, are deployed by the central government both vertically and horizontally to maximize national welfare. In this process, due to the various mechanisms like scale effect and path dependence, increasing regional gap will further exacerbate (Heilmann and Perry, 2011). However, a critical process was overlooked by Heilmann's model: the political positionality of a place also decides the political obligation of a local state to the central state, and the level of central sanction from the central to the local. As a result, the city receiving superior resources like Shanghai in this study also subjects to higher level of central regulation and political obligation. The city ranking lower in urban hierarchy, while receiving fewer resources, also enjoys greater political freedom. The local authority may grow stronger and embed more with local networks, shaping the emergence of a form of fragmented authoritarianism that battles against the central will. These practices often go beyond the economic-centric "top-down and bottom-up debate" and are related to concepts such as informal politics, social capital, nepotism, clientelism and corruption (Fei, 1992). These two

compensating processes are found to be co-existed across space and hold the key to understand the geographical differentiation of policy localization.

As we discussed above, the central-local dynamics and policy localization are products of three theoretical constructs: institutional conformity, local state entrepreneurship, and local contingency. These three mechanisms connect to and are intertwined with each other. For most of the time, local autonomy allowed within the central policy framework provides a prerequisite for local state entrepreneurship, which is in turn a critical driving force for the formation of local political scheme. On the other hand, local cadres' capability and authority, vital variables to local state entrepreneurship, are largely subject to its position in urban hierarchy. Meanwhile, the political distance between the locale and Beijing often determine the level of institutional conformity. Ultimately, these three forces shape the policy landscape we see today in China. Accordingly, we argue that the increasingly complex central-local dynamics calls for a more sensible and subtle approach that goes beyond economic and structural determinism and focuses on the motivation, action and interaction of agents in the context of institutions and places. Only through close attention to these specific processes can we advance our understanding of Chinese central-local enigma.

It is necessary to emphasize that the three theoretical constructs presented in this paper are both the outcome of political economic theorizing on the mechanisms of central-local dynamics and are supported by the empirical findings of localization practice of low-income housing policies. They are crucial for understanding the state rescaling process experimented in post-reform China. However, these mechanisms do not exhaust all possible central-local interactions and relations. More future research is needed to reveal central-local dynamics in different policy

settings under which different state rescaling logics might surface. Due to the constraints of funding and time, there is an imbalance in the allocation of the interview samples between Shanghai and Chengdu. Attempts made to compensate for this imbalance by using government documents, news reports and other sources of information. The effect of imbalanced interview cases between two cities may remain. In future studies, a more balanced-structured interview and even larger scale quantitative analysis are all possible ways to advance our understanding on the ever-changing central-local dynamics in China.

CHAPTER 5: DETERMINANTS OF HOUSING MOBILITY OF URBAN LOW- AND MIDDLE-INCOME RESIDENTS IN CHINA

5.1 INTRODUCTION

The investigation of residential mobility and moving intentions has long been a major focus of urban and housing studies (Rossi, 1955; Heaton et al., 1979; Clark et al., 1984; Kendig, 1984; Burrows, 1999; Clark and Huang, 2003; Cui et al., 2015). Arguably, the process of residential relocation in the city is among the fundamental factors shaping urban morphology and social ecology (Wolpert, 1966), and the mobility of individuals and households is of great importance to understand urban growth and dynamics (Li and Wu, 2004). On the other hand, housing purchasing, especially family relocation, often signifies a milestone event in an individual's life course, which is crucial to well-being, career progress and domestic development (Clark et al., 1984). For both the middle class and the wealthy, home-moving often reflects an improvement of housing and neighborhood conditions or a reunion with relatives and friends (Clark et al., 2006). However, for low-income people with scarce economic resources, urban home-moving activities may reflect their vulnerability to health, employment and housing problems (Westen, 1995; Katz et al., 2001). For those people, being forced to move or moving too frequently may jeopardize the established social and employment network, and even worse, disrupt children's education and mental health (Phinney, 2013). However, if their residential mobility is too low, it might suggest that they are trapped in a severely segregated and stratified housing market where it would be difficult for them to improve their housing conditions in city (Wu, 2010b). Therefore, there is a need to understand the nature and determinants of residential mobility among the urban poor in order to address their housing needs in cities.

Housing mobility may be theorized as a spatial equilibrium process, “through which a household adjusts its housing consumption—location, size, type, and tenure—to changing circumstances,” throughout its housing career (Li and Wu, 2004: 1). Housing career is primarily defined by the household's life-cycle and major life course events (Rossi, 1955; Clark and Huang, 2003). However, scholars are far from reaching consensus on the role of major life course events. For example, there are conflicting views in the literature about the effects of marriage (Roisman and Botein, 1993; Green, 1997), income (Abramsson et al., 2002; Kronenberg and Carree, 2010) and tenure (Clark et al., 1984; Li and Li, 2006) on residential mobility. More recently, increasing attention is being paid to the psychological basis of the housing decision-making process. According to social psychologists, housing is regarded as lived experience. Studies have focused on cognitive assessment and affective attitude of individual housing occupants about their housing conditions and neighborhood characteristics. The social psychological perspective provides an approach to understanding the different characteristics of housing mobility that distinguish different population groups (such as the urban poor or the upper class) at the same life-cycle stage. However, most studies using this approach have not established a clear link between cognitive and affective factors and housing mobility (Speare, 1974; Parkes and Kearns, 2003; Diaz-Serrano, 2006).

Geographers have long studied the effect of place on housing mobility (Wolpert, 1966; Brown and Moore, 1970). The impact of neighborhood effects or their proxies on housing mobility has been critically examined (de Souza Briggs, 1997; Coulton et al., 2012). There seems to be a consensus that neighborhood effects play a significant role in the housing decision-making process (Kling et al., 2007). However, housing relocation itself is a multi-scalar spatial process that

operates beyond the neighborhood scale. Geographical factors such as urban morphology and the spatial mismatch between work and home are very likely to have a significant impact on home-moving intentions and behavior at multiple scales. From a geographic perspective, both housing life-cycle and perceptive housing experiences are embedded in places. Therefore, it is imperative to understand how housing experiences, life course events and place-based variables interact to influence housing mobility of the urban poor.

This paper explores housing mobility among low-income urban residents using a dataset collected in Chengdu and Shanghai in the summer of 2015. It investigates how life-cycle factors, human capital, housing experience, place-based factors, and their interactions together shape individual moving intentions. The analysis contributes to a growing body of research exploring housing mobility for marginalized social groups in cities (Li, 2010c; Wu, 2010b; Yang et al., 2016). This article consists of six parts. This introduction is followed by an in-depth review of the literature aiming to build a theoretical framework that guides empirical undertakings. The third part describes the data collection and methods employed in this study. The fourth part is the descriptive analysis of the characteristics of survey respondents. Part five reports findings from regression modeling. The paper concludes with a discussion of the findings in relation to the extant literature and speculates possible future research directions.

5.2 LIFE-CYCLE, LIVED EXPERIENCE AND PLACE: THEORIZING RESIDENTIAL MOBILITY

Housing mobility refers to intentions, decisions, and actions connected with a permanent move from one dwelling to another (Coulton et al., 2012). Accordingly, housing mobility has been examined in terms of moving intentions (Heaton et al., 1979; Fang, 2006), moving decisions

(Rossi, 1955; Clark et al., 1984) and tenure choice (Li and Li, 2006; Cui et al., 2015). Numerous attempts have been undertaken to theorize housing mobility and unravel the mechanisms behind the family decision of moving intentions from one neighborhood to another, housing relocation and housing tenure choice between ownership and renting (de Souza Briggs, 1997; Burrows, 1999; Clark and Huang, 2003; Coulton et al., 2012). Three distinctive approaches can be identified in the literature. The first is to interpret housing mobility as a result of an equilibrium process through one's "housing career," focusing on life-cycle-related factors (Kendig, 1984; Clark and Huang, 2003). The second is to understand housing decisions as part of lived experiences, examining social psychological factors related to one's stress and satisfaction (Michelson et al., 1973; Fang, 2006). Lastly, housing mobility studies may examine the role of "place" in housing relocation process, highlighting the significance of neighborhood creation and transformation.

5.2.1 LIFE-CYCLE AND HOUSING CAREER

According to Rossi, who first proposed the life-cycle concept, housing mobility is "the process by which families adjust their housing to the housing needs that are generated by shifts in family composition that accompany life-cycle change" (Rossi, 1955: 9). The housing career is viewed as an equilibrium process of searching for the quantity and quality of housing that matches the needs for certain stages in the life course (Rossi, 1955). It is argued that housing demand evolves along the life-span of household aging (Abramsson et al., 2002; Li and Li, 2006). Changes in household composition through life course events such as marriage, child-bearing, child-care, and aging inevitably alter housing needs and housing consumption and behavior that together characterize one's "housing career" (Clark and Dieleman, 1996). The early applications of life-cycle theory have often employed the event-history approach which focuses on describing life-

course events themselves, measuring the intervals between events, and assessing their impacts on housing career (Rossi, 1955; Kendig, 1984). Lately, researchers have moved beyond the static event-based approach. Housing mobility is viewed as a function of life-cycle characteristics, quantifying the role of age, education, marital status, income level and housing tenure in configuring residential mobility (Clark et al., 2003, 2000; Clark and Dieleman, 1996).

Age and marital status are the primary indicators of one's stage in their housing career. The relation between age and housing mobility is a complex one because one's probability of moving increases when one's housing career begins but declines as one ages. Little debate exists on this inverted U-shape relation. Because housing mobility of young adults is significantly affected by marriage status. On the other hand, a majority of studies demonstrate that aging reduces housing mobility (Green, 1997), because aging decreases occupational mobility as well as the mental and physical capacity to relocate (Robison and Moen, 2000). In life-cycle theory, the effect of marriage on housing mobility is critical because it is one of the major life-cycle events and alters demand for housing. Earlier studies show that marriage, similar to the death of a spouse and childbirth tends to increase a household's housing mobility because housing characteristics, such as number of bedrooms, may no longer meet family needs. When such a mismatch occurs, families may plan to move (Clark and Onaka, 1993; Deane, 1990). However, some recent studies offer quite different findings on the marriage effect on moving intentions. For example, Li (2010c) argues newlyweds tend to buy housing soon after marriage but after that time, their employment mobility is significantly reduced and the relocation costs (both economic and psychic) increase, leading to a decrease in their housing mobility.

The relation between human capital and housing tenure is frequently investigated in life cycle research. The accumulation of financial or human capital, measured by income or educational attainment, is considered to be one of the fundamental enabling factors for improving housing quality in one's housing career (Saunders, 1978; Thornes, 1981). Wealthier and better educated residents are more mobile (Li and Li, 2006; Kronenberg and Carree, 2010). However, some recent studies on housing mobility of minorities contend that the effect of income should not be over-simplified. It is argued that the effects of income on housing mobility should be investigated by taking other household needs into account (e.g., food and transportation), which have to be met from a limited budget. Wu (2010b) argues that low income urban migrants tolerate poorer housing conditions in exchange for being closer to more economic opportunities. Income level might also be expected to affect both the quality of housing that a household can afford and its willingness to tolerate inferior housing conditions (Yang et al., 2016). There are conflicting views about the effects of education as well. In a study on the housing mobility of Netherlanders, Kronenberg & Carree (2010) find that residents with higher educational attainment appear to be more likely to move. Cellini (2007) indicates, mental and social costs of home-relocation are reduced by the availability of skills. In contrast, several studies on life course and housing career show that higher education level has a positive impact on settlement intentions, but its impact on overall housing mobility is unclear (Murdie, 2002; Clark and Huang, 2003). Some recent studies on China's rural-urban migrants further reveal that their training in the cities has no positive correlation with their migration intentions (Yu et al., 2014).

Clark and Huang (2003) note that the transition from renting to owning is the most important milestone in the housing career. Home homeownership exerts great impact on housing

mobility, as owners are less likely to relocate than renters (Clark et al., 1984). It can be expected that the attachment—both psychological and financial—to the present dwelling is higher for homeowners. However, there are variations in ownership-induced home attachment among households at the same stage of their life cycles. For example, Forrest and Kennett (1996) find that the owners of single-family dwellings have significantly lower housing mobility compared to owners of units in multifamily dwellings (e.g. apartments).

The literature reviewed above sheds much light on the effects of life-cycle factors on housing mobility. To guide the empirical part of the study, the following hypothesis is proposed:

Hypothesis 1: Life-cycle variables significantly shape the likelihood of housing relocation among low- and middle-income urban residents. More specifically, older households, wealthier individuals, and renters are more likely to move than their counterparts.

5.2.2 HOUSING AS LIVED EXPERIENCE

Critics of the life-cycle approach point to the arbitrary articulation of life-cycle concepts in housing mobility research (Fang, 2006). Researchers contend that it is misleading to interpret residential mobility merely as the result of the equilibrium processes of housing demand and conditions during different life-cycle stages (Blunt and Sheringham, 2019).

One alternative to the life-cycle approach is to view housing as lived experience and to examine how this experience shapes moving intentions. As Rosenberg and Hovland (1960) indicate, “home” is not simply a physical shelter for most of its occupants, but a social-psychological object with enormous affective, cognitive and behavioral implications. Resident moving behavior follows the affective and cognitive responses to their residential condition and

environment (Robison and Moen, 2000). Housing mobility is hence often investigated from the perspective of housing preferences and (dis)satisfaction (Heaton et al., 1979) and the impact of community interaction and social integration (Coulton et al., 2012).

Miller (1977) argues that changes in housing preferences account for the importance of non-economic determinants of urban-rural migration. However, the bivariate relationship between housing preferences and mobility overlooks an important aspect of the housing decision-making process: satisfaction with current housing. When residents like their current housing and neighborhood, they are less likely to intend to move out. As a result, residential satisfaction can be seen as an endogenous variable affecting housing mobility (Speare, 1974; Marans, 1976).

An increasing body of literature underscores the relevance of neighborhood characteristics in understanding both moving intentions and actual moving behavior (Clark et al., 2006; Kearns and Parkes, 2003). Parkes and Kearns (2003) find that people who are dissatisfied with and disconnected from their neighborhood (e.g., poor neighborly relations, less community interaction) are more likely to intend to move than people who are satisfied and actively engaged. Social belonging and sense of pride are the established indicators of one's community attachment and neighborhood connection in housing relocation studies (Taylor, 2015; Zontini, 2015). Firey (1945) long ago reminded us that sentiment and symbolism are important urban ecological variables. Since a stronger sense of belonging normally indicates closer neighborhood ties, stronger community involvement, and deeper emotional commitment, it is expected that it may decrease low-income residents' intentions to move away from their current home. For example, Zontini (2015) finds that social belonging among Italian migrants in the UK is a significant predictor for the intention to move when other socio-demographic variables are controlled.

In summary, the social psychological approach provides important insights into how housing mobility decision is influenced by lived experiences of individuals. Accordingly, a second working hypothesis is proposed to guide our empirical research:

Hypothesis 2: The cognitive assessment of housing conditions and the sense of belonging may be directly related to the intention to move. When cognitive assessment of housing conditions or sense of belonging declines, a resident's intention to move tends to increase.

5.2.3 THE EFFECT OF PLACE AND SPACE ON HOUSING MOBILITY

Both the classic life-cycle theory and the later life-course approach treat place as the spatial environment of the equilibrium process within which place and space are expected to be completely exogenous and mostly static (Kendig, 1984). More recently, ideas such as “place matters” (Dreier et al., 2001) lead to a rise in the housing mobility literature highlighting the causal power of place (Bruch and Mare, 2006; Coulton et al., 2012). Numerous studies show how the importance of place-based neighborhood characteristics, e.g., community reputation (Parkes and Kearns, 2003), neighborhood race structure (South and Deane, 1993), neighborhood safety (Huang, 2005), and neighborhood poverty rate (Coulton et al., 2012), in affecting housing mobility. These works greatly enrich our understanding of how the housing (dis)equilibrium process is shaped: it is not just the mismatch of the individual housing characteristics but the place characteristics and their perception as a whole that prompt decisions to move (Bruch and Mare, 2006; Clark and Ledwith, 2006).

However, these studies fail to establish a clear and comprehensive linkage between “place” and housing mobility for two reasons. First, these studies tend to reduce the role of “place” to “neighborhood effects” (de Souza Briggs, 1997; Coulton et al., 2012). One reason might be that

the spatial scale of housing mobility research is mostly fixed: moving between communities within cities. Mobilities below this scale are normally not considered as home-moving, while those beyond the city scale are typically the subject of migration studies. Thus, the spatiality of housing mobility is naturally assumed to be a community-scale spatial process. However, there is evidence suggesting that housing mobility in cities is also influenced by place-based factors at different scales.

The spatial mismatch hypothesis (SMH) was proposed to capture the mismatch problem of the suburbanization of jobs and serious limitations on residential choice of blacks who tend to cluster in the inner-city neighborhoods of US cities (Kain, 1968). Inspired by Kain's work, numerous empirical studies over the past decades have examined the causal relationship between the spatial segregation of employment and its adverse labor market outcomes for minorities (Gobillon et al., 2007). Inner-city black households are no longer the sole focus of study; the analysis is extending to understand how the process of spatial mismatch varies by ethnic group (Raphael and Stoll, 2002), by gender (Blumenberg, 2004) or income level (Hu, 2015). Horner and Mefford (2007) find a growing trend of home-work separation in China's mega-cities (e.g., Beijing). They further indicate that this mismatch has fractured the original community structure, resulting in a phenomenon called "spatial fragmentation" (Liu et al., 2009). Although their research does not directly address relations between home-work separation and housing mobility, their findings on the adverse impact of such a spatial mismatch seem to be inherently related to the causes of housing stress, one of the main causes of housing disequilibrium discussed in life-cycle theory. The above discussion on home-work separation demonstrates the effect of distance on housing mobility at a residential-employment scale. The existing findings on hukou status in

China, on the other hand, signify how institutional constructions affect housing mobility at a larger, rural-urban scale. The general consensus is that local hukou has a significant positive impact on housing ownership. However, the effect of hukou on general housing mobility is not as clear. Huang and Yi (2009) find that non-local hukou holders move more frequently in cities than their counterparts. However, Cui et al. (2015) indicate that hukou has no significant effect on housing mobility of skilled labor in Nanjing.

Other than the scale issue, some previous studies also suffer from a fixation on the “push and pull” analytical framework. They typically focus on how different community attributes (cognitive or physical) promote or constrain housing mobility (Kronenberg and Carree, 2010; Coulton et al., 2012). This simplistic approach overlooks a crucial aspect: place acts as a medium, through which all human activities are carried out and interwoven with the environment. Thus, many of the influences of the place interact with other factors (Dreier et al., 2001). South and Deane (1993) examine the interaction of immigration status and community dissatisfaction and its correlation with housing mobility. They find that neighborhood dissatisfaction is a significant predictor of moving intentions of local Americans and UK immigrants, but it is insignificant for African immigrants. This evidence demonstrates how geographic differences ultimately affect moving intentions by influencing community perceptions.

To guide the empirical exploration of the role of place in shaping the housing mobility, a third working hypothesis is proposed:

Hypothesis 3: Place-based factors and their interaction with life-cycle and cognitive factors have an impact on housing mobility. Longer commuting distance increases housing mobility, and non-locals will be more mobile than local residents.

5.3 METHODOLOGY

5.3.1 DATA COLLECTION

Chengdu and Shanghai were selected as the study areas for this empirical investigation of housing mobility of low-income residents in China. Chengdu is the capital of Sichuan and one of the major regional centers in southwestern China, while Shanghai, one of four state-designated municipalities, is a national gateway and world city (Table 5-1). While the two cities each have unique socio-economic features, they were chosen to show the spatial variation in housing mobility of urban residents in China. In 2017, for example, Shanghai had 8.14 million more residents than Chengdu and its economy was almost twice as large. As for residential real estate, the market in Shanghai is also roughly twice the size of Chengdu, and the price per square meter of a new home is 14,311 yuan higher (Approximately equivalent to C\$2,000), while the average housing floor area in Chengdu is 10.6 square meters larger than in Shanghai (Table 5-1).

Table 5-1 Major differences between Chengdu and Shanghai, 2017 if not specified

Selected indicators	Chengdu	Shanghai
Population (million)	16.04	24.18
GDP (100 million yuan)	12,170	28,179
Average monthly income in 2015 (yuan)	5,110	6,502
Geographic location	Western inland city	Eastern coastal city
Local Fiscal Revenue (100 million yuan)	1,175	6,406
Real estate investment (100 million yuan)	2,639	3,709
Sales of commodity residential housing (100 million yuan)	2,421	5,233
Housing floor area per urban resident (m²)	47.3	36.7
Average sales price of commodity residential housing	9867	24178

Data source: 2018/2016 Statistics Yearbook of Chengdu and Shanghai, 2018 Annual report on the real estate market of Shanghai and Chengdu

A housing mobility questionnaire survey was conducted in both cities in the summer of 2015. Respondents were 18-60-year-old urban residents with a monthly income lower than the

city-wide average. The survey followed a geographically stratified sampling process so that low income residents across different parts of the cities were included. A combined total of 420 interview questionnaires were completed. After careful review and screening of the survey results, 41 questionnaires were eliminated as unusable due to missing data and other data quality issues. The final data set consisted of 379 valid responses: 171 from Chengdu and 208 from Shanghai.

5.3.2 RESEARCH DESIGN

Both descriptive and quantitative modelling methods are employed to examine housing conditions and housing mobility of the urban low-income earners. The questionnaire contained some multiple-choice and ranking questions. Several questions included multiple answer choices. Respondents were first asked to select the three best answers and then to rank these answers in their response. For those questions, a weight conversion approach was adopted to recode multiple responses according to the ranking assigned by the respondents. The final result is a weighted score for each response. The greater the value, the more important the response is to low-income residents (Wang et al., 2009; Zhao, 2014). To explore the major factors influencing the moving intentions of urban low-income residents, a binomial logit regression (BLR) model is estimated to test the hypotheses developed in the study. The binary dependent variable measures the moving intention (Yes=1/No=0) from the current dwelling of respondents. Four groups of independent variables are included in the regression model: life-cycle and human capital, housing and social experience, place-based factors and interactions. Table 5-2 presents variable information in detail.

Binary logistic regression (BLR) explores how a change in the independent variables affects the likelihood of belonging in the “has moving plan” group relative to the “no moving intention” group. The function form of BLR model in this study can be written as:

$$\log \left[\frac{P_i}{1 - P_i} \right] = \alpha_0 + \beta_{1j}x_{1i} + \beta_{2j}x_{2i} + \beta_{3j}x_{3i} + \beta_{4j}x_{3i}x_i + \varepsilon_{ij}$$

where P_i denotes the probability of an observation falling in the “has moving plan” group. The parameter α_0 is the model intercept, x_{1i} denotes life-cycle and human capital variables, x_{2i} denotes housing and social experience variables, x_{3i} are place-based factors, $x_{3i}x_i$ denotes interactions between place-based factors and other variables, and ε_{ij} represents a set of random errors.

Table 5-2 Independent variables in BLR model

	Variables	Description
Life cycle and human capital	Age	Age in 2015 (years)
	Gender	1 if male, otherwise 0
	Marital status	1 if never married, otherwise 0
	Years of schooling	Years of formal education
	Family monthly income_5000 yuan and below	=1 if household monthly income less than 5000 yuan, otherwise 0
	Family monthly income_5001-9000 yuan	=1 if household monthly income between 5001-9000 yuan, otherwise 0
	Family monthly income_above 9000 yuan	Reference group, household monthly income above 9000 yuan
	Housing tenure_owner of private housing	=1 if owner of private housing, otherwise 0
	Housing tenure_renter of public housing	=1 if renter of LRH or PRH, otherwise 0
	Housing tenure_renter of private housing	Reference group, renter of private housing
Housing and social experience	Floor area per person	Unit: m2
	Housing area evaluation_Unsatisfied	=1 if housing area evaluation is unsatisfied, otherwise 0
	Housing area evaluation_Neutral	=1 if housing area evaluation is neutral, otherwise 0
	Housing area evaluation_Satisfied	Reference group, housing area evaluation is satisfied
	Sense of belonging_weak	=1 if sense of belonging is weak, otherwise 0
	Sense of belonging_neutral	=1 if sense of belonging is neutral, otherwise 0
	Sense of belonging_strong	Reference group, sense of belonging is strong
Place-based factors	Hukou status_local hukou	=1 if hukou status is local agricultural or non-agricultural, otherwise 0
	Hukou status_non-local hukou	Reference group, hukou status is non-local agricultural or non-agricultural
	Commuting time_40 minutes or more	=1 if commuting time above 40 minutes, otherwise 0
	Commuting time_less than 40 minutes	Reference group, commuting time less than 40 minutes
	City_Shanghai	=1 if surveyed city is Shanghai, otherwise 0
	City_Chengdu	Reference group, surveyed city is Chengdu
Interactions	Hukou X Sense of belonging	Interaction between variables "Hukou status" and "Sense of belonging"
	Commuting time X Sense of belonging	Interaction between variables "Commuting time" and "Sense of belonging"
	City X Floor area per person	Interaction between variables "City" and "Floor area per person"

5.4 DESCRIPTIVE ANALYSIS

5.4.1 SOCIOECONOMIC PROFILE AND HOUSING CONDITIONS FOR LOW-INCOME URBAN RESIDENTS

The major socioeconomic characteristics of our respondents are reported in Table 5-3. The gender ratio is close to 1:1, with slightly more males than females. The average age is 30. Half of the respondents are married. About 48 per cent of total respondents are local urbanites and 52 per cent of them are migrants. The large majority, 84 per cent, of our respondents have a monthly income lower than ¥5000. Twenty percent of the sample had higher education (university or above). The majority (71.5%) of respondents have no political affiliation (*qunzhong*). In terms of occupation, 37.5 per cent of respondents are technical personnel or office workers, and 34.6 per cent of them are service workers.

Table 5-3 Profile of respondents in Chengdu and Shanghai, 2015

Gender (%)	Male	53.3
	Female	46.7
Age		30
Marital status (%)	Never married	46
	Married	51.6
	Divorced or widowed	2.4
Hukou status (%)	Local agriculture	3.4
	Local urban	44.9
	Nonlocal agriculture	33
	Nonlocal urban	18.7
Personal income	lower than 1000 Yuan	11.9
	1000-3000 Yuan	30.7
	3000-5000 Yuan	41.5
	5000 Yuan above	15.9
Education (%)	Primary school or below	9.8
	Junior high school or equivalent	26.9
	High school or equivalent	20.3
	Technical school or college	18.2
	Bachelor's degree or above	24.8
Political status (%)	CPC	16.4
	CYLC	11.1
	Folk	71.5
Occupation (%)	Head of government department or owners of private business	5.7
	Technical personnel	18.9
	Office workers	18.6
	Service workers	34.6
	Transportation equipment operators	10.1
	Others	12.2

As shown in Table 5-4, the average floor area per person for urban low- and middle-income residents in our survey is 28.1 m². Eight housing facilities are recorded including four basic facilities: separate kitchen, private toilet, private shower, and natural gas line and four advanced facilities: air conditioning, internet access, cable television, and private balcony. The average

facility index (FI) of homeowners is 0.78 (FI=1 indicates that the housing unit possesses all eight facilities in our survey). Overall, respondents' households are quite well equipped and 57 per cent of respondents report that their current housing is better than their last residence which also means that 43 per cent of them failed to improve their housing conditions by moving.

Some previous studies find that the urban poor tend to live in dilapidated and isolated "urban villages," often alienated from modern urban facilities such as parks and malls, and suffering from excessive daily commuting times (Yuan and Xu, 2008; Wu, 2010b). In this project, we surveyed low- and middle-income residents' walking times to various community facilities (Table 5-4). The results show that more than half of our respondents live more than 15 minutes walking time from the nearest hospital, supermarket, shopping mall, park or subway station, and around 20 per cent have a walking time of over 30 minutes to access to these community facilities. However, our study also shows that, while low- and middle-income residents are moderately distant from these modern facilities, there seems to be a localized workaround dependent on community-based commercial agglomerations and public transportation. More than 70 per cent of our residents have access to a farmer's market or community grocery store within a 15-minute walk; and more than 90 percent can reach a bus stop within a 15-minute walk. In terms of commuting time, our study finds no evidence supporting excessive commuting time, one of the major indicators of "home-work separation." More than 70 per cent of respondents report a commuting time of less than 30 minutes, and the proportion of respondents with severe home-job separation (greater than one hour of commuting) is only 7.8 per cent.

Table 5-4 Housing profile of respondents in Chengdu and Shanghai, 2015 (all figures are averages)

Basic features	Per capita housing area (m2)		28.1	
	Facility Index		0.78	
Location accessibility	Walking Accessibility: walking time (%)	Hospital	15 minutes or less	39.6
			15 to 30 minutes	36.9
			Over 30 minutes	23.2
		Famer market and grocery stores	15 minutes or less	72.5
			15 to 30 minutes	23.5
			Over 30 minutes	4
		Supermarket or mall	15 minutes or less	40.2
			15 to 30 minutes	42.3
			Over 30 minutes	17.2
		School	15 minutes or less	53.2
			15 to 30 minutes	35.4
			Over 30 minutes	11.4
		Park	15 minutes or less	40.7
			15 to 30 minutes	36.7
			Over 30 minutes	22.3
		Subway	15 minutes or less	29.3
			15 to 30 minutes	28.1
			Over 30 minutes	42.6
		Bus stop	15 minutes or less	90.8
			15 to 30 minutes	7.4
			Over 30 minutes	1.8
	Commuting time (%)	Within 30 minutes	74.3	
		31 to 60 minutes	18	
		Over 60 minutes	7.8	

5.4.2 HOUSING DECISION AND MOBILITY

The respondents were asked whether they had long-term moving intentions. About 63 percent of respondents had no plan to move, while 30 per cent intend to move, and the remaining 7 percent intend to move in the near future. Many studies have found that the housing relocation intentions of urban low-income earners are mainly affected by restrictive factors (Li, 2010c; Cui et al., 2015; Yang et al., 2016). Our analysis shows a more complex mechanism in which external constraints (e.g., job change, urban gentrification) and family factors have an important impact, but the desire for “a better life” still dominates their housing relocation decisions. When asked about the reasons behind their moving intentions, the most common reason is “to improve my living conditions.” The second and third most common reasons are two work-related factors: "job change" and "convenience to work" respectively. Family reunification and children’s education are ranked fourth and fifth.

To examine restrictions on housing mobility, we asked respondents “if you ever considered moving, what factors held you back?” The responses rank “Moving is too expensive and I do not have enough money” first, followed by “Moving is too troublesome, I do not have the energy or the time” and “My current residence is closer to my workplace.” These results indicate that the moving intentions of low-income people are inhibited by economic, time, and energy limitations and excessive home-work separation.

Finally, we asked respondents to indicate their major considerations in making their housing decisions. The three most important considerations for all respondents were: housing location, price and community living expenses, and the number of rooms and floor area. It seems that housing location is a primary consideration for both renters and homeowners and that

proximity to the workplace is at the core of housing decision-making for low- and middle-income earners.

Table 5-5 Housing moving intentions and mobility of respondents in Chengdu and Shanghai, 2015

Moving intentions (%)	Has short-term moving plan	6.9
	Has long-term moving intention	29
	No plan to move	64.1
Why do you plan to move? (weight<rank>) [valid N:138]	To improve living conditions	154<1>
	For the convenience of work	68<3>
	For children schooling	50<5>
	To save rent or living expense	45<7>
	To live closer with families	57<4>
	Job change	90<2>
	Spouse requirements	26<10>
	Marriage	26<10>
	Safety reason	48<6>
	Planning to buy a housing	44<8>
	Other	28<9>
If you ever planned to move, what factors held you back? (weight<rank>) [valid N:167]	It's on the drawing board	87<3>
	Moving is too troublesome, have no energy and time	113<2>
	Moving is too expensive, does not have enough money	178<1>
	It's closer to work now	85<4>
	Current rents and living cost are too low to move	61<6>
	Got used to the current place	71<5>
	Other reasons	31<7>
Compared to your last residence, is your current housing better or worse? (%) [Valid N:343]	Better	57.1
	Worse	13.7
	Similar	29.2
Major considerations in housing decision (weight<rank>)	Number of rooms and floor area	305<3>
	Building quality and facility	242<5>
	Housing Location	562<1>
	Price and community living expense	352<2>
	Neighborly relations	73<7>
	Community safety	260<4>
	Surrounding environment	44<9>
	Education resource	92<6>
	The overall reputation of the neighborhood	52<8>
	Other	31<10>

5.5 LOGISTIC REGRESSION ANALYSIS

The logistic regression analysis with moving intention as the binary dependent variable uses four different model specifications⁶. Model 1 includes only the life cycle and human capital variables. We add housing and social experience variables in Model 2, place-based variables in Model 3 and the interactions between places and other variables in Model 4. Table 5-6 reports the coefficient estimates and test statistics of the independent variables employed, as well as the overall test statistics. All models are statistically significant. From Model 1 to Model 4, the -2log likelihood gradually decreases, indicating decreasing model deviance and increasing estimation accuracy. The Nagelkerke's R^2 statistics show that the moving intentions of urban low- and middle-income residents are increasingly responsive as the experience and place-based factors are incorporated into the model as independent variables. Since Model 4 has the lowest -2 log likelihood and the highest Nagelkerke's R^2 , it forms the basis of the discussion below.

5.5.1 LIFE CYCLE AND HUMAN CAPITAL

Age and marital status have significant effects on moving intentions of urban low- and middle-income residents. As expected, age has a significant negative effect on moving intention. Each additional year of age decreases the odds of our respondents intending to move by 3.9 per cent. Marriage status also shows a significant effect on moving intentions. The results indicate that unmarried low-income residents are 27.6 per cent more likely to have moving intentions compared to married residents. This result implies that marriage as a major life course event shows a great

⁶ The software used for the model estimation was IBM SPSS 20.

“anchor effect” that significantly reduces housing mobility of low- and middle-income residents (Li and Li, 2006).

Some life-cycle and housing career studies also use housing tenure as an indicator of housing mobility. Switching housing status from rental to ownership has often been recognized as a milestone in one’s housing career and is expected to significantly reduce urban residents’ future housing mobility (Kendig, 1984; Roisman and Botein, 1993). However, in our model, the effects of owning housing (compared to renting) on moving intention has a positive effect. The result indicates that low- and middle-income homeowners are more likely to move than home renters. Two explanations are possible for this apparent anomaly. First, planning to move in cities is often perceived as a troublesome and time-consuming process. Therefore, planning to move would require a relatively stable and relaxing environment which is what home ownership is likely to provide. In other words, low- and middle-income home renters may not have the “luxury” to plan for moving. Second, the moving intention is closely related to housing expectations (Heaton et al., 1979). Home renters tend to have much lower housing expectations compared to homeowners. These reasons might explain why they are less enthusiastic about planning home-moving in cities.

In discussing the impact of housing tenure on housing mobility, existing studies often focus on the owner-renter dichotomy, ignoring intra-group heterogeneity (Kendig, 1984; Böheim and Taylor, 1999). To address this, the variable "renters of public housing" was included as a binary variable in the model. Compared to renters of private housing, renters of low-rental-housing (LRH) or public-rental-housing (PRH)⁷ have a much stronger commitment to their current housing.

⁷ Low-rental-housing (LRH) is a rental-based low-income housing program. As a poverty reduction program, it was designed to address the problems of the urban poor whose housing needs are heavily jeopardized during the course of

Tenants in public rental housing are 43.9 per cent less likely to have moving intentions than private housing tenants. The application and approval process for LRH and PRH is lengthy and difficult. Because it normally requires an extensive investment of time, energy, and sometimes, special connections to housing officials (*guanxi*). Therefore, it is not surprising that successful LRH and PRH applicants are less likely to plan to move away from their hard-won homes.

The gender of the survey respondent reflects the impact of family factors and social norms on moving intentions. As expected, male residents show greater intent to move, with an odds ratio of 1.827. Two reasons might explain such gender differentiation. First, social psychology holds that women, as a group, tend to be more conservative than men in major life decisions and are more inclined to maintain the status quo (Burke, 1996). Second, numerous studies on social integration and place perception show that women are normally responsible for household chores, which often involve local community-based activities. Therefore, compared to their male counterparts, they tend to be more closely integrated into the local community (Zemore et al., 2012), which decreases their intention to move.

Conflicting views exist on whether education has positive or negative effects, and whether the effect is significant (Kronenberg & Carree, 2010, 2012). Our results show that the education variable “years of schooling” is insignificant and unstable across all four models, indicating that among low-income urban residents, an increase in educational attainment will not significantly increase their potential housing mobility.

housing commodification process. Public-rental-housing (PRH) aims to solve the housing problems for middle and lower-middle income urban families who are not eligible for the LRH program but are unable to solve their housing problems through the commercial housing market.

The relationship between income level and housing mobility is often considered to be linear. That is, residents earning higher salaries are more likely to move (Li and Li, 2006; Kronenberg and Carree, 2010). This research, on the other hand, contends that the relationship between income and moving intention may not be that simple. The results show that compared to the higher-income group (monthly family income greater than 9,000 yuan), residents in the lower-income group (monthly family income less than 5,000 yuan) are 96.2 per cent more likely to move. Even though this variable is not significant in Model 4, it is significant in Models 1 and 2, and the signs remain unchanged across all four models. Compared to the higher-income group, middle-income respondents (monthly family income between 5,001-9,000 yuan) are 17.2 per cent less likely to move. This result indicates that there might be a U-shaped relationship between moving intention and income level. The middle-income group has the lowest probability of moving intention.

5.5.2 HOUSING AND COMMUNITY PERCEPTION

To examine the effects of housing and social experience on moving intentions, we include five independent variables in the binary logistic regression (Table 5-6). The first variable, “floor area per person” is a general measure of crowding, which is one of the key indicators of the housing quality. Surprisingly, it is not statistically significant suggesting that residents’ moving intention is not related to the quality of their current housing. One explanation for this is that the residents might have already factored their current housing conditions into their moving consideration given their housing needs and budgetary constraints.

The actual housing conditions may have little impact, but their perceptions of housing, on the other hand, may have a considerable effect on moving intentions. Compared to respondents

who are satisfied with their current housing space, those who are unsatisfied are 160 per cent more likely to move ($p < 0.001$). This result indicates that the expectations and tolerance of low-income earners towards inferior housing conditions are by no means unconditional or absolute. They are constantly molded by their lived housing experiences.

To investigate the effect of social experience on moving intentions, two dummy variables measuring “sense of belonging” are included in the model. The reference group is those with a “strong sense of belonging.” The result confirms our hypothesis 2: social integration has a negative effect on moving intentions. Compared to the reference group, low-income residents with an extremely weak sense of belonging are six times more likely to have a moving plan. The odds ratio for the “neutral” groups is 2.3 ($p < 0.01$). Home-making and residential mobility of urban residents involve a much broader and affective process than the changing physical attributes of the shelter. Residents experience housing at the community and domestic scales, shattering the boundary between them, and in turn, these constructed affective social attributes, filtered through the perception and experience of individuals, shape their housing careers.

5.5.3 PLACE-BASED FACTORS

To examine the effect of “place” on housing mobility, we include three variables in our model (Table 5-6). They measure geographic effects at three different scales: “commuting time” measures the effect of commuting distance on moving intentions within a city. “Cities” reflects the influence of different urban characteristics at the inter-city scale. Finally, hukou status of respondents reflects the impact of the dichotomy in “local-non-local” residency on their willingness to move. Among these three variables, only the “city” variable shows a significant impact. The insignificance of the “hukou” variable indicates that even though hukou status shows

significant impacts on the housing tenure of urban residents in many existing studies (Cui et al., 2015; Yang et al., 2016), its direct impact on low-income urban residents' moving intentions might be very limited. The very fact of being local (or not), no longer seems to play a decisive role in their moving decision-making process.

Based on previous research reporting the severity of home-work separation among China's urban working-class, we expected "commuting time" to have a significant effect on respondents moving intentions. However, this variable is not significant in our model, which could be attributed to two possible reasons. First, in our survey, the majority of respondents (75%) report that their commuting time is less than 30 minutes. Only 18 per cent of them spent 30 minutes to one hour on commuting, and only 7.8 per cent spent more than one hour. In the literature, the separation of workplace and residence is most common among the urban wage-earning class who typically work in the crowded city center and live in remote peri-urban areas to save rent (Liu et al., 2009). In our study, half of the respondents worked in the service industry, implying that, unlike the middle-tier urban working-class, low- and middle-income residents in our study are more likely to work as community service providers, and it is quite easy for people to find nearby low wage jobs in the sampled cities. Thus, the separation of workplace and residence is much less severe. Second, as shown in previous research, urban low-income residents are more likely to tolerate long commuting times compared to upper-income groups (Kronenberg and Carree, 2010).

Although two of the three place-based variables are not significant, the interactions between these explanatory variables have a more complex and nuanced geographic effect on moving-intentions. The interaction between hukou and sense of belonging variables is significant in our model. The impact of community belonging on moving intentions shows significant

differences between locals and non-locals. The tendency to relocate due to a weak sense of belonging is stronger for local residents, that is, the sense of belonging has a stronger impact on housing mobility for urban local residents. The interaction between commuting time and the sense of belonging is also significant in our model. Social perception is influenced by the degree of home-work separation in the city, and ultimately shapes the intentions to move. Interaction between the city dummy variable and floor area per person is not significant in our model. However, the city dummy variable has an intriguing effect on the “floor area per person” variable. In Models 2 and 3, without the interaction of the city variable and floor area per person variable, “floor area per person” has a positive influence on moving intentions, implying that residents with higher floor area per person are more likely to move. This counterintuitive result contradicts the findings in the existing literature (Kronenberg and Carree, 2012; Cui et al., 2015). In Model 4, when the interaction of city dummy and floor area per person is controlled, the symbol of the “floor area per person” coefficient becomes negative and conforms to our theoretical expectations. A possible explanation of this result is that there is a noticeable difference in floor area per person between Chengdu and Shanghai (Table 5-1). Thus, when the interaction between city dummy and housing area is not considered, the variable "floor area per person" cannot correctly predict the moving intention of low-income residents. These results suggest that, when examining the impact of current housing status on housing mobility, the findings may be misleading if differences in the structure of the housing market between places are not taken into account.

The above analysis of place-based factors and their interactions with other factors in our model suggests that “place” should not simply be reduced to mere neighborhood effects. Our result indeed confirms the significant impact of community-related variables on housing mobility, but more importantly, it shows that “place” significantly influence residents' intention to move at

multiple-scales. Second, “place” should not simply be recognized as an external factor in residents’ moving decision-making process either. “Place” is a medium. Not only does it provide space for economic and social activities, but its characteristics and structures affect these activities, and ultimately shape the way people think and perceive the external world.

Table 5-6 Regression results

		Model 1			Model 2			Model 3			Model 4			
		B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)	
Life cycle and human capital	Age	-0.027*	0.012	0.974	-0.026*	0.014	0.975	-0.042**	0.015	0.959	-0.04**	0.015	0.961	
	Gender													
		Male	0.61**	0.257	1.84	0.671*	0.287	1.956	0.592*	0.297	1.807	0.603*	0.303	1.827
	Marital status	Never married	0.671**	0.255	1.956	0.675*	0.286	1.963	0.24**	0.333	1.341	0.173*	0.339	1.276
	Years of schooling		0.053	0.035	1.055	0.027	0.039	1.027	-0.025	0.043	0.976	-0.011	0.044	0.989
	Family monthly income [Reference group=above 9,000 yuan]	5000 yuan and below	0.949*	0.402	2.583	0.906*	0.447	2.474	0.711	0.476	2.036	0.674	0.482	1.962
		5001-9000 yuan	-0.195	0.339	0.823	-0.372	0.377	0.689	-0.147	0.41	0.864	-0.189	0.415	0.828
Housing tenure [Reference group=renter of private housing]	Owner of private housing	-0.059	0.306	0.942	0.543	0.354	1.721	0.596	0.402	1.814	0.617	0.405	1.857	
	Renter of public housing	-0.869*	0.414	0.419	-1.032*	0.483	0.356	-0.557*	0.516	0.573	-0.578*	0.518	0.561	
Housing and social experience	Floor area per person				0.01	0.008	1.01	0.001	0.008	1.001	-0.006	0.011	0.994	
	Housing area evaluation [Reference group=Satisfied]	Unsatisfied				1.116**	0.411	3.054	0.924*	0.426	2.519	0.956*	0.432	2.602
		Neutral				0.526	0.33	1.692	0.337	0.347	1.401	0.272	0.353	1.313
	Sense of belonging [Reference group=Strong]	Weak				2.107**	0.411	8.226	1.98**	0.426	7.243	1.807**	0.466	6.091
Neutral					0.75**	0.333	2.117	0.765*	0.347	2.149	0.832*	0.547	2.298	
Place-based factors	Hukou status [Reference group=non-local hukou]							0.248	0.373	1.281	0.146	0.432	1.157	
	Commuting time [reference group=40 minutes or less]							0.017	0.336	1.017	0.049	0.498	1.05	
	City							-1.503**	0.64	0.222	-1.847**	0.548	0.158	
Interactions	Hukou X Sense of belonging										0.312*	0.35	1.366	
	Commuting time X sense of belonging										1.663*	1.262	5.277	
	City X Floor area per person										0.014	0.14	1.014	
Intercept		-0.954			-2.169**			0.371			0.436			
		371.404			321.155			302.714			297.376			
Pseudo R-Squared		Cox & Snell	Nagelkerke		Cox & Snell	Nagelkerke		Cox & Snell	Nagelkerke		Cox & Snell	Nagelkerke		
		0.13	0.178		0.258	0.353		0.3	0.413		0.312	0.432		
N		379			379			379			379			

Dependent variable: moving intention (Yes=1/No=0)
Significance level: *p<0.1; **p<0.05; ***p<0.001

5.6 CONCLUSIONS

This article contributes to understanding the mechanism of residential-relocation intention among low-income urban residents in two large cities in China. The respondents in our sample have a relatively low-level of housing mobility. Less than 10 percent of respondents show an imminent intention to relocate, and only 30 percent have a long-term intention to move. One reason for the lower mobility estimated in this study, compared with other studies that focus on the actual relocation behavior (Westen, 1995; Phinney, 2013), might be the selection of the dependent variable. Compared with actual relocation behavior, the intention to move may underestimate the impact of unexpected and forced relocation on housing mobility. However, the results still indicate that low- and middle-income residents, due to limited economic and social resources, are “trapped” in dwellings that are suboptimal and relatively isolated from modern urban facilities. It is worth noting that some studies tend to attribute the housing dilemma faced by disadvantaged groups to “lack of motivation” (Bolt and van Kempen, 2002; Murdie, 2003) and suggest that it is primarily the structural factors that shape their moving intentions (Phinney, 2013). This study does not support this view. Rather, it is found that an active desire for a better quality of life remains the dominant factor in shaping the willingness of low- and middle-income earners to move. However, such a “desire” seems to be a wishful thinking for some, with just slightly over half of the respondents desiring to improve the quality of their housing by moving, while the rest are stuck between the same or even worse housing and community conditions.

This study finds that, the moving intention of low- and middle-income people is significantly influenced by basic life-cycle transitions. Both age and marriage significantly reduce

their housing mobility, just like the general population (Kendig, 1984; Clark and Huang, 2003). However, when it comes to human capital, low-income residents start to show some differences. First, education attainment, a positive predictor for housing mobility of general population (Kronenberg and Carree, 2010; Kronenberg and Carree, 2012), shows no significant or stable effects on their moving intentions. Kronenberg and Carree (2010) holds that a higher education-level leads to a wider range of job opportunities, thus expanding skilled laborer's potential housing options and increasing their housing mobility. However, for low-income people, the increase in education or training may not necessarily free them from severe labor market segregation (Xu and Tan, 2006), and when education fails to improve their employment opportunities, it may not have any significant impact on their housing mobility. Second, the evidence in this study refutes a simple linear relationship between income level and moving intention; instead, it shows considerable heterogeneity among low- and middle-income urban residents. Within them, the lowest income earners show the strongest willingness to move, followed by the higher end, while the middle part shows the lowest mobility. These results suggest that extremely poor residents are more likely to suffer from excessive relocation and an unstable living environment.

The study finds no significant correlation between moving intentions and current housing conditions. On the other hand, moving intention has a strong correlation with the experience of current housing. The disconnect between moving intentions and existing housing conditions may be attributed to a tendency of the urban poor to factor poor housing conditions into their housing strategies. Some research suggests that disadvantaged groups in cities (e.g. migrant workers) not only exhibit a high tolerance for poor housing and community conditions, they actually use it as part of a simple urban survival strategy: to improve employment opportunities at all costs (Li et

al., 2013). However, the tolerance of low-income earners towards inferior housing conditions is not unconstrained, it is subject to their everyday experience. As this paper shows, their level of satisfaction with current housing has a strong influence on their moving intentions, even after controlling for their current housing conditions and other social-demographic variables in the model. And their social experience with living community shows even stronger effects. In fact, the “sense of belonging” is the strongest of all the factors significantly associated with their willingness to move. These results suggest an important direction for future research to understand housing mobility based on the life-course paradigm. Instead of fixating on the physical housing and community during different life-courses, the social-psychological needs during life-course transitions deserve greater scrutiny.

Finally, this article also examines the role of an important and underexplored factor of housing mobility: place. The first finding is that the location, or more specifically, proximity to the workplace is at the core of urban low-income residents’ housing-decision making. Their housing mobility is largely determined by their employment mobility in the city. This finding is hardly new. Abramsson et al. (2002) and Wu (2010b) have all made similar claims. However, other two findings on the role of “place” are rarely seen in the housing mobility literature. As stated in hypothesis 3, we demonstrate that the influence of place-based factors is not limited to the community level. The neighborhood effect is undoubtedly an important factor in the moving intention, but place-based factors at other geographical scales, such as differences in housing markets between cities, are also significant predictors for moving intentions. In addition, this study also shows that place acts as a medium. It is found that sense of belonging, the strongest predictor in the model, interacts with various place-based factors at different spatial scales, and through

these interactions, moving intentions of low-income residents are ultimately formed and molded. These findings mean that “place” should not be reduced to a fixed community-scale, nor interpreted as an exogenous condition. “Place” represents a wide array of multi-scalar factors, attributes and structures (e.g., home-work distance, city characteristics, migration origins) that may directly shape individual housing mobility, in most cases, by interacting with other factors. Without recognizing the “multi-scalar” and “mediated” aspect of place, analyses of housing mobility may generate misleading results. It is crucial to examine the impact of place-based factors at various geographical scales and combine them with wider social-demographical and social-psychological processes in future housing mobility studies.

CHAPTER 6: THE LIVED HOUSING EXPERIENCES OF THE URBAN POOR IN CHENGDU

6.1 INTRODUCTION

Low-income housing has long been a focus of urban and social-political research, especially when social disparity grows rapidly. In China, millions of low-income earners are struggling to find dwellings and concerns over their livelihood are growing. The literature on low-income housing in China tends to focus on particular empirical issues such as rural migrant housing in urban villages (Wu, 2010b; Kochan, 2016), their specific tenure events (Li and Li, 2006) or spatial manifestation of urban poverty (Liu and Wu, 2006). The lived experiences of low-income earners as human struggles in urban housing markets of China are rarely investigated.

This study draws heavily on the concept of “housing career,” defined as a history of residential change triggered by a series of life events and other household changes (Rossi, 1955). This concept is widely seen in studies on housing mobility, focusing on the changes in these life course events and their ramifications (Ward, 1976; Kendig, 1984; Li and Li, 2006). The housing career is viewed as an exogenous outcome of changes in the life course, a projection of the occupant’s life history in the housing market. This study challenges this perspective. We contend that this research paradigm ignores the continuity and dynamism inherent in one’s housing career and neglects factors shaping the experiences and choices, and subsequently knowledge, of an individual’s housing career. By unravelling the complex and evolving nature of housing careers, this study will reflect the lived experiences and choices of low-income earners as renters, buyers, and owners, and how they may switch from one role to another.

Another critical concept of this study is a phenomenology idea, “lived experience,” first coined by Wilhelm Dilthey (1883/1989). He claims that phenomena should be examined from the person’s own view without designating it either materialistically or consequentially. This philosophical thinking provides a different approach to understand complex and variegated human phenomena. As opposed to the positivist paradigm, in which the aim is to verify causation, this phenomenological approach examines the expressions, perceptions and reactions of individuals within a given context, with human experience at its core.

This study engages with this line of thinking to address the perplexing urban affair, low-income housing, by focusing on the housing experiences of low-income earners at different periods of their housing careers. The majority of existing low-income housing studies adopting a positivist approach aim to quantify the extent of the low-income housing problem and to identify the major factors using macro level surveys and statistical modelling (Katz et al., 2001; Li, 2010c; Phinney, 2013; Yang et al., 2016; Park et al., 2019). The positivist approach taken by these studies has been increasingly criticized as “being divorced from everyday life,” as it “isolates economic decision-making from wider everyday dynamics” (Longhurst and Hargreaves, 2019: 2). Murdie (2003: 22) recognizes another strategy, though much less common, in which “in-depth interviews using a life history approach have been used to track the housing path of households, the strategies and resources they use, the obstacles they face, and the outcomes achieved” (see Phillips and Karn, 1992; Murdie et al., 1999; Soederberg, 2018; Longhurst and Hargreaves, 2019). A major implication of the second strategy is the recognition that the housing experience of urban low-income residents is distinctively personal, deeply emotional, and often associated with other aspects of their lives. To date, the personal, emotional and intertwined aspects of housing

experienced by low-income earners have been largely perceived as contingent on and by-products of wider urban housing issues, and thus receive little direct attention. This study aims to advance the debate on how lived experience shapes low-income people's housing careers in cities by drawing on phenomenological concepts such as "stress response" (Eastmond, 2007). In doing so, the empirical part of this study will focus on the problems experienced by low-income residents in the urban housing market, their strategies and the outcomes achieved.

The study selects Chengdu as a case to investigate housing experiences of low-income residents in China. Chengdu is the capital of Sichuan and one of the major regional centers in Southwest China. Over the past 20 years, benefiting from China's Western Development Plan, Chengdu has been one of the fastest growing economies in the world (Bouchet et al., 2018; LaSalle, 2019). Because of the massive inflow of rural migrants and a rigidly segmented labor market, the levels of economic and social inequality in Chengdu have also skyrocketed. This provides an excellent opportunity for the study of urban low-income housing issues. Extensive field research was conducted in 2015 and our research team interviewed numerous housing authority officials, developers, bankers, and enterprise managers. A total of 12 low-income urban residents were interviewed. They were 27-67-year-old urban residents with monthly earnings lower than the city average. The investigators conducted in-depth interviews with the interviewees for 2-4 hours in a face-to-face format, with questions structured to explore their housing careers. Based on the interview data collected in 2015, this research will adapt a life history approach to track low-income residents' housing careers and their housing experiences in each housing period. The next section aims to develop a conceptual and analytical framework by synthesizing the relevant literature. This framework will then guide our analysis of interview data to reflect upon

the housing experience of low-income earners in a Chinese city. We conclude by comparing our findings to the literature and presenting future research opportunities.

6.2 HOUSING CAREER FOR LOW-INCOME URBAN RESIDENTS

6.2.1 FROM HOUSING CAREER TO HOUSING EXPERIENCE

The “housing career” concept describes the sequence of transitions of housing status in an individual’s life cycle or life course (Clark and Huang, 2003). Initially, the housing career was strictly linked to life cycle theory. According to Rossi (1955: 9): the housing career is “the process by which families adjust their housing to the housing needs that are generated by shifts in family composition that accompany life-cycle change.” Over the life course of an individual or household, the equilibrium between their current housing and housing needs would be disrupted periodically, forcing residents to take distinct measures to improve their housing conditions and achieve a new equilibrium (Clark and Dieleman, 1996). This theory breaks down a person’s life history into stages based on changes in age, income and family composition, each stage leading to a new housing arrangement. Michelson (1977) used the concept of “progressive course” to describe this process of improvement, whereby housing conditions move incrementally towards an ultimate ideal home. This view of an upward housing mobility pathway is challenged as there are many housing possibilities in one’s housing career. For example, housing quality could conceivably become worse not better (Morrow-Jones and Wenning, 2005).

Life cycle theory has been critiqued as viewing the housing career as a pre-defined, static and linear progress of life cycle stages. This has led to a more dynamic life course approach to examine the housing career (Robison and Moen, 2000; Clark and Huang, 2003; Li and Li, 2006).

While retaining the classic approach of applying “life history to housing history,” life course theory adopts an event-based life course model. The main argument is that changes in the personal and family characteristics, intertwined with a series of psychological and external factors, collectively constitute what is called a major “life event.” These events will eventually cause transitions in an individual’s housing experience, forming one’s housing career. Unlike life cycle theory which views one’s housing career as a simple reflection of their household changes, life course theory ought to stress importance of structural and psychological factors in understanding an individual’s housing career. As Mulder (1993: 133) indicated: “Housing careers are parallel to and interwoven with family, employment, and other ‘life careers’ which structure experiences over the life course. They, of course, are shaped by prevailing market conditions, including the influence of public policies, and by internal cognitive factors such as housing preference.”

Because of its flexible and multi-layered conceptualization, life course theory is adopted widely in the contemporary research on housing mobility and housing careers. However, it shares one major theoretical limitation with its predecessor, an inherent theoretical logic linking the life career to the housing career. The latter is perceived as a projection of the former in the housing market. While life course theory recognizes the dynamism and randomness of a housing career, it is still a reflection of these dynamic and random life events. Some researchers suggest this widely accepted research protocol may lead to the neglect of some nuanced but critical junctures and processes in the housing career. Murdie et al. (1999) assessed the housing experiences of recent immigrants in Toronto and found that rental housing search processes and the associated filters are of great significance in understanding their housing trajectories. Meeus and De Decker (2015) analyzed the interview data obtained from 67 young Belgians, revealing that two national policies,

one on housing ownership and the other on commuting, play a crucial role in forming renters' housing-purchasing motivations. These studies, while not overthrowing life cycle and life course theories entirely, provide an alternative, clearer and more effective way to examine changing housing careers. They view housing experience as the single explanatory variable in the equation, and assess how a combination of factors, including life events, form and shape those housing experiences.

Both life cycle theory and life course theory provide rich conceptual and theoretical insights into how the housing careers of low-income residents can be understood, albeit with limitations. First, the housing careers of urban low-income earners can be conceptualized as linked housing periods. These housing periods comprise home search period, home rental period, home buying period, and home owning period. These periods are not necessarily arranged in a linear progression. Second, two critical choices link these periods: the decision to rent a dwelling and the decision to buy a home. Third, low-income individuals may experience difficulties during each housing period as life course events emerge. Fourth, the housing experience of low-income people in cities is influenced by multiple factors across different scales. Institutional arrangements, housing policy, and economic growth at a macro level contextualize housing accessibility and opportunities available to each individual. Societal perception, housing agents, and neighborhood development operate at a meso scale to enmesh low income individuals into local housing markets. Finally, personal and household characteristics and other life course events shape the lived housing experience and choices of low-income earners in urban housing markets.

6.2.2 THE HOUSING EXPERIENCE OF URBAN LOW-INCOME RESIDENTS

The home search process consists of the actions of low-income earners who initially look for housing information in order to find a place to live in a city (Murdie et al., 1999). The basic steps in the home search process are to find, acquire and apply the information required to make a housing decision (Brown and Moore, 1970: 1046). Both the availability and quality of housing information are imperative to housing experiences and choices of low-income earners. It is believed that the access to information is closely linked to the quality of housing information and consequently to housing search outcomes. Both formal and informal channels exist in the rental housing market although the housing sales market is dominated by formal channels (Zhang, 2011a; Wang and Zhang, 2014).

Most low-income earners are clustered in the rental housing market given their limited purchasing power, especially those newly arrived in cities. As Wright and Lam (1987) noted, it is often the initial entry of these disadvantaged groups into the urban housing market. They often have limited capital with no access to mortgage financing, little understanding of local housing markets, precarious employment which leads to unstable living arrangements, and they are often under pressure to find a place in a short period of time (Westen, 1995; McIntyre et al., 2003; Phinney, 2013). Low income groups often resort to pre-existing social networks and informal sources to obtain housing information (Farley, 1996; Wu, 2010b). For example, Piazzesi et al. (2015) found that access to housing information for ethnic minorities is highly segmented in the San Francisco Bay Area. New rural migrants in Suzhou often rely on informal rental housing agents for information in addition to their families and townsfolk (Huang et al., 2017).

Informal housing search channels and bounded rationality limit the scope of housing search. As a result, low income earners may receive low quality or incomplete housing information and suffer from information asymmetry. New migrants in China's urban rental housing market have little information and what information they do have is often biased or even incorrect, constraining the scope of their search (Keung Wong et al., 2007). Farley (1996) has made similar observations for African Americans in American housing markets. Low-income earners are vulnerable to fraud and they are often targeted by scammers, forcing them to live in suboptimal housing conditions and further aggravating their deprived situation (Freedman and McGavock, 2015). It is critical to know how low-income earners experience informal housing search channels and how their social networks, living conditions, and other rental market factors shape their housing search.

Living in rental housing represents the typical experience of low-income earners in urban housing markets. Studies have shown that low-income rental housing is widespread in developing cities (Mwangi, 1997; Kemp, 2011). The majority of low-income earners rent in less privileged, more deprived and isolated locations in the city (Eriksen and Rosenthal, 2010; Eriksen and Ross, 2015). The lived experience in rental housing is critical to understanding the problems and difficulties of low-income earners who struggle to make their life choices and survival strategies (Soederberg, 2018). Some studies indicate that low income groups, especially rural migrants in China, often need to deal with precarious and informal rental housing arrangements and they are easy victims of urban renewal and gentrification projects in the urbanization process (Wu, 2004a). Other scholars suggest that flexibility, affordability and informality of rental housing could be an advantage for those low-end laborers who require ready access to the urban housing market (Liu

et al., 2015). The question of how individual characteristics and life course events shape the home rental experience of low-income earners and how they respond to the opportunities and constraints imposed by neighborhood development and urban renewal projects have not been addressed in the literature and will be investigated in this study.

The third housing career period is the home buying period that ends when a home is purchased. This period can be long or short depending on individual situations but starts when the idea of buying a first dwelling emerges. The literature is prolific on the formation of housing purchasing motivations and decision making. Both life cycle theory and life course theory state that first home buying behaviors are inextricably connected to an individual's life cycle events and family characteristics that progress through life cycle stages (Rossi, 1955; Roisman and Botein, 1993). For example, marriage and childbirth are two major life events that may motivate renters to buy a home among general population (Bourne, 1981). However, given limited social and financial resources, the behaviors of low-income consumers may not conform to this expectation. Based on data collected in urban Saudi Arabia, Opoku and Abdul-Muhmin (2010) found that childbirth in low-income families has a significant impact on housing preferences, while marriage plays a negligible role. In South Africa, Gilbert et al. (1997) discovered that both marriage and childbirth have little to contribute to housing purchasing propensity among low-income tenants.

Home buying behaviors of low-income earners may also be a function of individual and family characteristics and macro level factors. For example, based on survey data from Guangdong, Li and Li (2006) concluded that more educated urban tenants have a significantly higher probability of owning a home compared to their less educated counterparts. When income is controlled, institutional factors such as hukou play a significant role in home buying decisions.

On the other hand, in England and Australia, Kemp (2011) observes that the role of personal and household characteristics is diminishing due to the growing influence of public housing policies. Studies on first homeownership behaviors of low-income earners guided by life cycle or life course theories often adopt multivariate analysis approaches using survey data (Clark and Huang, 2003; Li and Li, 2006; Kronenberg and Carree, 2010). While they provide invaluable generalization about how purchasing decisions are associated with various factors operating at different levels, these studies neglect the lived experiences from which difficulties and struggles encountered in the daily lives of housing consumers may induce home buying desires. Home buying behaviors may develop as an evolutionary process through which low income earners strategically adapt to personal struggles, living environments, institutional constraints and societal barriers.

Classic life cycle theory views homeownership as the end of the housing career (Rossi, 1955; Foote, 1960), and therefore, it is little concerned with the ensuing home owning period. Life course theory, on the other hand, takes a more flexible view. The theory holds that housing purchase is not the end of a housing career and that a series of life events, such as having more children and retirement, are likely to occur after the purchase of a home that can affect continued housing consumption (Clark et al., 2006). Yet, this theory is less concerned with life history and lived experiences between those major life events after people become homeowners. An explanation for this oversight is that many empirical studies have demonstrated that homeowners have significantly reduced housing mobility (Roisman and Botein, 1993; Robison and Moen, 2000). However, new empirical evidence shows, for example, that the duration of home ownership is significantly related to daily commuting time according to the work of Morrow-Jones and Wenning (2005) on the housing ladder among repeat home-buyers in US. Also, home ownership

may not warrant a smooth assimilation and integration into the wider community of low-income homeowners. Studies on gentrification and social integration in major cities find that urban home ownership fails to increase the social integration of rural migrants as much as expected (Wang, 2004). With an influx of rural migrants, the urban cohesion and identity of the original neighborhoods fade away and the neighborhoods decline into a new isolated urban island (Keung Wong et al., 2007). However, it is unclear how low-income homebuyers are able to cope with these emerging problems and it is the goal of this article to fill this gap in our understanding.

6.3 CHENGDU CASE STUDY

Based on the conceptual framework developed in Section 2, the housing experiences of surveyed low-income residents in Chengdu will be examined in four periods (Figure 6-1). It is important to note that Figure 6-1 is an abstract and generalized representation of the housing careers of low-income residents. Individual housing careers often do not progress so smoothly. The duration of each period may vary greatly from one person to another. Second, housing careers don't necessarily progress in that order. Individuals may skip some periods or may return to previous ones.

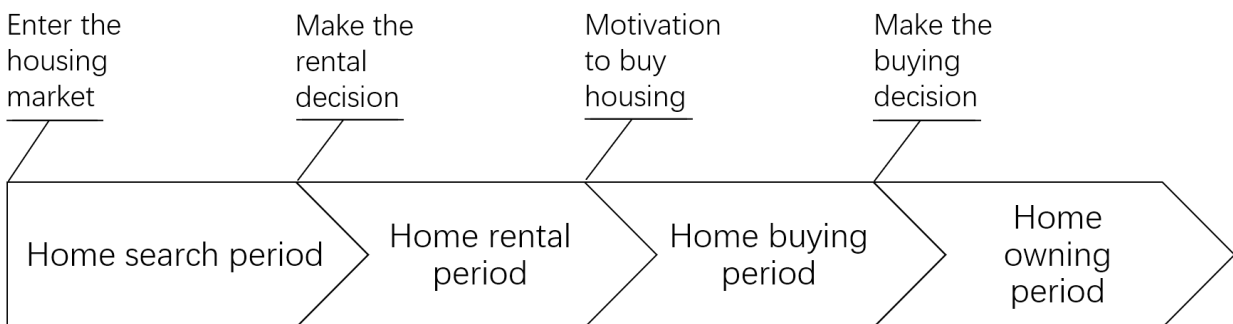


Figure 6-1 Housing experience of urban low-income people: a four-periods model

6.3.1 HOME SEARCHING PERIOD

Low-income owners utilize both informal and formal housing search channels. Two primary informal channels are existing social networks and informal housing agents. The existing urban social network, such as previous landlords and employers, represents the first and preferred source of housing information. We find that obtaining future housing information from current landlords is a very common practice and has proved to be quite effective. “We got that apartment information from our previous landlord,” as one respondent indicated to us, “They (rental housing owners) often play Mahjong together, and he has a lot of information” (I03). It seems that because of their own rental businesses and local networks, landlords are quite familiar with the local rental situation. Also, for those new migrant workers, their landlords are often among the earliest social contacts in the city. Many of the interviewees had lived with their landlords for years before they decided to change residency. This mutual trust and acquaintance also play important roles in their home-moving decision. “We will certainly seek advice from her (previous landlord), as you can see, we didn’t know many locals from here...At the end of the day, they (previous landlord) are our best bet” (I07). This was echoed by another respondent: “I need a lot of space for parking those huge trailers, so a lot of dwellings don’t fit. They (previous landlord) knew this very well and helped me to find this current place” (I06).

The second informal channel is through a housing agent. Wang (2006) indicates that the widely distributed housing agents in Chinese cities increase the housing access for urban low-income households. Unlike the trained, licensed, and regulated real estate agents of Canada and the United States, the housing agents of China are often considered to be less reliable. The credibility issue of housing agents is one of the most frequently mentioned themes at this period

of their housing career. One respondent further explained to us why the informal housing agent issue is so hard to avoid: “If you walk around in this neighborhood, you can find a lot of ads for rental housing. Many of them indicate that it is the homeowner who has posted this ad. But if you call the number on the ads, 9 out 10 times, I guarantee you, you will find that the person on the other end of the line is an [informal] agent” (I10).

However, our interviews indicate low-income renters have learned over time from the past bad experiences with informal housing agents. People have started to shy away from informal housing agents. Technological advancement and societal informatization help housing seekers to replace the traditional housing agents. Many low-income renters have smart phones and they can consult rental apps or housing information websites, which have become the third most used housing search method. Thus, search channels have become more formal. One interviewee commented, “I found my current apartment on 58.com (a Chinese version of Craigslist or Kijiji)” (I05). According to another young respondent: “I just moved out of a Beike apartment.⁸ It is essentially a phone app, you download it, check the info on your phone, make an appointment, and they send someone to bring you to the place” (I11). It seems that a growing number of renters are searching internet-based housing information in the comfort of their own homes these days. The housing information from websites also seems to be more reliable. “The information on the website covers a much wider geographical area. There are pictures, owner’s history and other users’ comments. So, it is more transparent and safer compared to traditional housing agents” (I05), according to one respondent. Evidently, the advancement of technology has contributed greatly to

⁸ Beike means seashell, it’s the name of a real estate company and the app. It is one of several companies that emerged in the wave of “using internet mindset to transform the traditional housing services.”

expanding the access to housing information for urban low-income households. However, the effect is not universal. It is mostly the younger generation who adopts these new technologies. In our interviews, none of those older than 35 mentioned online housing websites or smart phone apps. The generational gap in internet access is apparent among low income renters.

The older generation continues to use informal channels to seek housing information but attempts to avoid informal housing agents. To cope with all the false rental information, house owners now share their rental information with neighborhood security guards to ensure the prompt and successful rental of their apartments. One low income renter said, “These security guards are more reliable than many housing agents and charge lower fees” (I07). However, not all residential neighborhoods are gated communities. Urban enclaves and old run-down residential blocks are often un-guarded but offer cheap and informal rental housing. These housing units are normally built by peasants on collectively owned agricultural land (*chengzhongcun*). Due to their extremely low-rent and relatively large floor area, these rental units are the preferred housing choice for many low-income households (Tong et al., 2020). For potential tenants of this kind of housing, there seems to be a much simpler way to access the required information. “First, you need to know where these communities are, and then you just go to the places” (I06), one interviewee explained to us. “These peasant dwellings are very cheap; the owners will not pay an agent to rent it for them and all the ads you see in these neighborhoods are posted by owners themselves. You don't need to deal with agents” (I06). These housing-information-searching tactics are developed over time to avoid possible predatory and deceptive traps by informal housing agents.

6.3.2 HOME RENTAL PERIOD

Of the many problems experienced by low-income renters in the home rental period, over-crowding was the most frequently cited by our interviewees. As indicated by the life cycle theory, the problem of over-crowding is especially acute when the composition of a household changes. This study supports this argument. The split household has been a primary family strategy employed by rural migrant workers in urban labor markets in China (Fan, 2011). This family arrangement changes during the family life cycle, as indicated in our interview evidence: “Our two children used to live in our hometown. When they grew up, their grandparents couldn’t take care of them anymore, and our apartment is already very small. It was extremely crowded when the kids came” (I03). The shared living conditions are a common form of rental housing for single urban renters. Such housing arrangements are often very crowded. As one interviewee indicated: “Our apartment is only around 70 square meters and houses, like, 10 people. It was a bit crowded, but I am used to it now” (I11).

The reactions of low-income renters to the over-crowding issue is much in line with what life-course theory predicts. For single renters, over-crowding is the cost for cheap rents and hence is tolerated. They will suffer through their individual coping strategies. Tenants whose household composition has changed recently are forced to search for a larger rental unit or even to buy a home. For example, one interviewee who rented a converted garage, small but just enough for the couple, told us: “When our oldest girl came, it became rather crowded ...[and] in 2013, our younger son joined us. I bet you can’t even imagine how chaotic it was when four of us crowded into one room. That’s why we decided to purchase our current housing” (I07).

The second common problem experienced by low-income renters is the precarious tenure and living arrangements. In some cases, this issue is related to the informal housing agents discussed above. But it is more common among residents living in informal housing in old run-down neighborhoods or urban villages. One renter who had already moved twice in the past six months complained, “My current rental unit will be torn down sooner or later due to a massive nearby urban revitalization project. We will need to move again” (I06). Tenants in informal housing are vulnerable to rapid urban renewal processes (Zhang et al., 2014). Some claim that low-income earners live in these places because they are cheap. However, our findings suggest that the story may not be so simple: “The peasant house is not necessarily cheaper than regular high-rising apartments nearby. But for doing what I do, I need these two huge trailers. I need space to park them. I have no choice but to choose these informal housing units” (I06). It means renting is part of a survival strategy in labor and employment markets for low income earners. Another case involves a household of fishmongers: “We can be quite smelly after coming back from work. Owners of informal peasant housing do not have many rules, and neighbors are normally more tolerant” (I03).

In both of these cases, informal housing attracts tenants by providing not only lower rent but also a more flexible and tolerant living environment which seems to be essential for tenants in some industries. These advantages make these informal housing units irreplaceable for some low-income urban workers. Faced with the instability, low-quality and other defects of the informal housing units, the residents seem to have no better choice but to accept and adapt. “The landlord usually gives us notice in advance (in the case of urban renewal projects), we’ll find a new place, and move. We are used to that hardship in life” (I03).

Rising rents is another frequently cited problem. The residential housing price in Chengdu doubled twice in five years, once in 2010-2012, and again in 2014 (Chengdu Bureau of Statistics, 2015), a year before our interview. “When I first came to Chengdu in 2005, the rent was only just over 200 yuan, and now for a similar housing unit, the rent has gone up to around 800 yuan” (I09), according to one interviewee. Coupled with rent hikes, other housing surcharges such as community cleaning fees and security charges have heightened the rising living costs for low-income households (I09).

Many low-income earners are rural migrants and they dream of returning home after making some money in cities. That dream sustains them through the hardships of urban life in a tenement slum. Some may not be able to survive this hardship and will be displaced. According to one respondent: “My brother in-law used to be a street shoe cleaner (in Chengdu). But then there were fewer customers and the rent just kept on rising. He tried several other jobs, but eventually, he went back to his countryside home with his wife” (I04). Others chose to stay on as drifters, making some “easy urban money” while dealing with rising anxiety and uncertainty about the future. And some, as discussed in the next section, are able to ride this raging wave, make themselves a fortune, and eventually settle down in the city.

6.3.3 HOME BUYING PERIOD

Multiple reasons motivate home buying behaviors of low-income earners and the home purchase decision is not a smooth and straightforward process according to our interview evidence. Life events such as childbirth and marriage play an important role in the process. As indicated in our interviews: “I started to think about housing-purchasing in Chengdu when our second child came to the city to live with us. But at that time, our plan was still to save money to build a better

house in our hometown” (I03). According to another respondent: “I met Mei, we dated for two years. We started to talk about marriage, and the lack of our own housing became embarrassing, you know, a real problem. So, we started to make plans, and to keep an eye on the housing market” (I08). While in both cases, life events are triggers prompting renters to think about buying a home, there are other factors too. “After the earthquake, some people were talking about buying an apartment because housing prices were declining at that time. Suddenly, buying a house in Chengdu was no longer a pipe dream for me,” one female homeowner pointed out to us (I03). In the second case, it was a change in the central government’s housing policy that triggered the home buying decision: “In 2009, the mortgage policy was suddenly relaxed. Some banks even offered discounts for down payments. We bought our home at the end of 2009” (I08).

In addition, the sense of place also seems to play an important role. Several interviewees highlighted the importance of community familiarity, integration and nearby employment opportunity in their decision process. As indicated in one interview: “We had this grocery shop for nearly ten years, and we know everything about this community, including the housing market. When I saw the ads for our apartment, I immediately knew it was a good bargain” (I04). In another case, the interviewee opened a tailor shop in a rented space: “We’ve rented in this neighborhood for years,” and “when the landlord mentioned he wanted to sell the place, I thought it was very suitable for us” (I07). The couple bought the house, turned the second floor into a living space and kept the first floor as their tailor shop.

The most frequently mentioned problem of buying a home for low income earners is affordability. Housing purchasing is always a financial drain, particularly for low-income households. They often have precarious employment, limited income, and the growing expenses

of urban life. Many rural migrants feel an obligation to remit a monthly allowance to support their family at home. It needs to be pointed out that neither housing mortgage nor affordable housing programs help to address housing affordability issues. Most low-income people believe that they are not eligible for mortgage financing through commercial banks, even if this is false impression. “Mortgage? We never thought of it. I think they wouldn’t even allow us, rural hukou holders, to apply” (I03). We also heard a similar remark from another interviewee (I04) about how they are not eligible for a housing mortgage as a non-local resident. Unfortunately, even for those who understand mortgage policies, applying for a home mortgage appears to be a dubious proposition. “We went through several banks (to consult about the mortgage). But it didn't go so well,” according to one interviewee (I10) who was frustrated by numerous official documents and fees that are required for a mortgage application. On paper, there appear to be no restrictions on home mortgages for non-local hukou holders in Chengdu; however, there are still hidden institutional barriers in practice. Without access to mortgage financing, low income people depend on social networks to borrow money and often have to wait for a good bargain with someone who needs cash desperately to get a good deal. As indicated by one respondent: “The previous owner needed cash badly for his business. But even so, we were still short about 100,000 yuan, and ended up borrowing from relatives and friends” (I04).

Most low-income earners cannot afford to buy formal housing due to its high price. Some of them are driven to buy informal housing through some loophole in an illegitimate arrangement. “The property right of this house is rather troublesome,” said one interviewee (I12) who bought a converted garage as an apartment. Officially, the garage was attached to the main building and could not be sold separately. A housing agent who knew how to manipulate property records was

hired to obtain a certificate indicating the attachment of the garage to a pseudo-property so that the unit could be sold in the housing market. This case exemplifies the kind of informal solutions that are required to address the legitimacy issues that arise in the absence of a well-developed system of land registry. Garage-homes such as this are far from ideal; however, they may be the only feasible option for some low-income households.

While public affordable housing programs are supposed to help low income earners in the city, our interview revealed neither rural migrants nor urban locals benefit from such programs. One interviewee said: “We never even consider ‘public housing’. It’s just impossible. I couldn’t even understand these lengthy policy documents for eligibility application. I haven’t heard of anyone applying either, let alone living in one” (I04). There are many problems associated with public housing units. As one respondent observed, “When the units are in a good location, there are simply too many applicants, it’s almost like a lottery; while for those remote units, they are too far away from our workplace” (I10). Also, because most of public housing units need to recover the construction costs, the housing unit price could still be higher than what low income earners can afford (I10).

In addition to the affordability issue, many family factors also shape the home buying decisions of low-income earners. For example, long term intentions to return to countryside can cause migrants to reconsider their home buying intentions: “He just wanted to go back to his hometown. He is loath to leave his parent’s land and old house at home” (I03). The elderly care problem is an important factor in the housing-purchasing decision of rural migrants, as indicated by one interviewee: “Both of our parents live in a rural home. They can take care of themselves for now, but what about ten years from now? They are too old to come to Chengdu, and to be

honest, it is impossible for us to buy an apartment that can accommodate that many people. That's why I won't buy an apartment in Chengdu" (I09).

6.3.4 HOME OWNING PERIOD

"Not so much has changed, I think. We still live in the same community, work at the same place, and our children still go to the same school...I think I am too busy to think about anything else other than completing my work every day" (I07), a respondent said to us when asked about changes in her livelihood after purchasing a home. Another interviewee (I04) gave a similar response. Further analysis reveals that these respondents (I04 and I07) were all from self-employed households, providing community service in the city. They had lived in the local community with their families for many years before buying a home, and in some cases, they purchased the rental unit in which they had previously been tenants (I07). It is not surprising, therefore, that the housing-purchase brings little change to the mundane affairs of everyday life.

For other respondents, the answers were quite different. It is common to see some renters perceive significant improvements in their daily lives and housing experiences, as evidenced in one interview: "My quality of life has certainly improved across the board. After all, I used to rent a house in such bad condition. My new neighborhood is also a much better environment now than my previous neighborhood, without a lot of migrants, you know" (I03). In another case, an interviewee shared his sense of satisfaction with his new home: "There are big differences, of course. Before I bought my current apartment, I lived in a dormitory and had no privacy at all. My current house isn't too big, but it sure feels a lot better not having to share it with someone else" (I08).

We also surveyed the emotional impacts of housing tenure on respondents. The responses seem to be divided by whether they bought the housing units with mortgage financing or not. For those who bought their home without taking out a mortgage, “relieved” and “proud” are the words that appear frequently in their responses. One interviewee commented, “I think I feel relieved, because we do not need to move around anymore” (I03). In another case, buying a home changed the respondents’ reported sense of self-worth, value, and identity: “In our first few years in Chengdu, we felt inferior because our dialect and consumption habits are very different from those in the city. Not anymore, we all eat the same food and live in the same house; what difference does it make” (I07)? Urban housing ownership in both cases shows mostly positive impacts on their self-assessment and identity.

However, for those who bought housing units with a mortgage, the emotional impact of owning a dwelling in the city could be full of joy and misery at the same time: “When I first bought the housing, I was probably happier; now I am more stressed. Before buying the house, if the job didn’t work out well, I could just quit and find another one. Now, under the pressure to pay the mortgage, I have no such freedom anymore. I worry a lot more these days” (I08).

The post home purchase experience creates new difficulties and worries among low income earners, especially among rural migrants. One particular challenge is associated with the issue of the split household. Four out of six homeowners in our interview were rural-urban migrants, some of whom have already obtained an urban hukou, but all of them indicate that splitting their households posed challenges for them at some point (I03, I04, I07, I12). As one respondent indicated: “Both of our elderly parents live in our hometown. They are getting older each day. All of my husband’s siblings migrated out to cities, and he is the oldest in the family, so he has been

feeling very guilty about leaving the elderly at home” (I03). In another case, a couple was too busy making a living in the city to care for their son. He was injured as a result of their inattention and had to be sent to their elderly parents to receive childcare in the countryside (I12). The response, “My biggest worry now is still my son” (I12), captures the widespread family concerns of low-income migrants. They are deeply troubled by the problems created in split households whether they leave elderly parents unattended in their hometowns or must be separated from their sons and daughters. This problem is often exacerbated by a previous decision to buy a home in the city. First, spending funds to buy a home in the city means that there are no financial resources left for home renovations at their origins (I03), further worsening the living conditions of left-behind family members. Second, urban home ownership often signifies a change in migrants' original intentions to “return to their roots,” often implying that they have now chosen to settle permanently in the city. This physiological shift can lead some rural migrants to feel guilty about “abandoning their family members at home” (I03, I09). Third, the dwellings that these low-income rural migrants bought in the city are often small in floor space or in poor condition and they are not in a position to bring their families to live together with them in the city.

The second problem that low-income owners may encounter after purchasing a home in the city is the decline of community amenity and security in their new neighborhood, a phenomenon observed elsewhere in both the western and Chinese literature (Downs, 1999; Wang, 2004; Jones, 2008). One interviewee complained: “When we first came here to open the grocery store, this neighborhood was one of the earliest garden-style communities in Chengdu and, it was very well regulated at that time. It's getting much worse these days. Anyone can come in, no questions asked” (I04). In another case: “Neighborhood security is a real issue. With so many rural

migrants moving in these days, the population has become increasingly mobile. There are very few original owners here, it's all rentals now" (I10). Further analysis of their responses to the problem of perceived community decline indicates that this pernicious positive feedback cycle is not likely to be broken by an upward movement on the housing ladder. In this study, not a single respondent attempted or planned to improve this situation by relocating from the current community. They tend to rely on local authorities to intervene or simply increase their own vigilance.

6.4 DISCUSSION AND CONCLUSION

This study argues that the housing career can be broken into four periods, though each of which low income earners encounter distinctly different housing experiences. The lived housing experiences in each period are linked potentially to personal characteristics and structural underpinnings. While life course events may contribute significantly to housing tenure decisions, such a theoretical assertion tends to over-generalize housing experiences of low-income earners and neglects significant variables in play. A more nuanced approach as exemplified in this study proves to be invaluable in revealing human struggles between housing difficulties and tenure choices encountered by the urban poor.

This case study of the home search process in Chengdu indicates technological change and informatization are altering traditional ways of housing information search by low income renters. Openly available rental information online is a force for formalization that enhances market transparency and competition and consequently reduces the possibility that renters might be exposed to the fraudulent and predatory behaviors of informal housing agents, echoing what has been revealed in the literature (Tai, 2007). However, informal housing search channels are still

commonly used by low-income renters, especially by those who are older and incapable of using current information and communication technologies (see also Keung Wong et al., 2007). Many renters still depend on informal channels to find cheap and spacious rental housing which is only available in old and run-down neighborhoods. The owners of these dwellings are often unable or unwilling to upload information online to advertise accommodation for rent. Therefore, informal channels play an important bridging role linking low income renters and informal housing in cities. However, respondents seem unaware that the way they obtained housing information may actually exacerbate the housing difficulties they encounter in the city. When low-income renters find housing through existing social networks like current landlords or highly place-bound and localized housing agents like neighborhood security guards, their housing choices will be significantly constrained at a limited geographical scale and are likely locked into an existing housing distribution. The information through internet platforms may potentially help expand housing choices for renters, but in most cases online information indicates that cheap housing for low income earners is only available in the remote outskirts of the city where job opportunities are scarce. Therefore, the search process as part of the housing career could exacerbate the already segregated pattern of housing inequality in cities. More research is needed to systematically document such housing career links.

Rental housing problems are a common theme in the struggle for survival of the urban poor in cities. As revealed elsewhere (Rossi, 1955; Foote, 1960), overcrowding and poor conditions are complicating the already overstressed lives of low income earners in Chengdu. On the surface, overcrowding is mainly caused by household composition changes, just as life cycle theory predicts. But at a structural level, such human struggles are evidence of a lack of affordable rental

housing in booming Chinese cities where economic growth policies create human suffering. Without access to affordable public housing, low-income residents are forced to resort to the informal housing sector and suffer from unstable housing arrangements that can cause great hardship to low-income earners. Not only are their leases precarious and subject to constant change but informal housing itself is subject to demolition by urban renewal projects. Urban gentrification in the name of city beautification pushes rents and other living costs higher (Zhang et al., 2014). All of these factors are clouding the future of low-income renters in the city, a finding shared by many researchers (Li and Wu, 2004; Coulton et al., 2012; Zhang et al., 2014).

The period of first-time home buying is a popular theme in life course theory in which life events such as marriage and childbearing are viewed as the most important determinants in home buying decisions. Beyond this conventional wisdom, this study reveals that the buying decision of low-income renters is sensitive to housing policy changes such as mortgage policy. Because low income earners are often self-employed and embedded in local communities when they develop their businesses and markets, the sense of place can play important role in motivating their home purchase behaviors and limit the scope of their housing search. Funding issues are the most important obstacle to buying a home in the city for low income people (Logan et al., 2010). Rural migrants with no recourse to family or intergenerational transfers of wealth or access to mortgage financing depend on personal savings and social networks to raise the funds to buy a home. On the other hand, low-income residents with local urban *hukou* tend to seek housing mortgages from banks. This disparity has also been observed by other researchers (Wu, 2004b; Li, 2010b). There is evidence suggesting hidden discrimination against rural migrants in the application of mortgage policies (Li, 2010b). Our extensive interviews and field work also reveal that the motivation of

rural migrants to buy a home is mixed with their ongoing resistance to urban homeownership. This resistance may come from their nostalgic notion of falling back to their roots (*luoyeguigeng*), or from the stress caused by the problem of split-households. Even worse, we found that this resistance sometimes undermines the migrants' family, causing domestic conflict and greatly increasing the uncertainty of their family's financial strategies such as their housing-purchase plan. In our view, this may be one of the fundamental causes of the distinct differences between migrants and local urban dwellers at this period of their housing careers.

The housing career of low-income earners extends beyond buying a home, which is often small in space and not ideal in living conditions. Homeownership represents a significant milestone in one's life, helping bring about a sense of pride, dignity and self-esteem. For low income earners, especially rural migrants, buying a home also means new difficulties and stresses in their housing experience. The split household problem is not lessened as anticipated by some scholars (Fan, 2007) but may be exacerbated if the purchased home is too small to accommodate left-behind family members and whose living conditions can be worsened due to diminishing remittances. While local urban dwellers are less likely to be affected by this problem, they are tormented by the constant stress of repaying their mortgages. Additionally, neighborhood decline is another important problem suffered by low-income homebuyers in the city, a phenomenon already articulated by housing filtering theory (Gray and Boddy, 1979; Myers, 1983). This suggests a further research opportunity to determine whether such decline resembles the pattern of inner-city decay discerned in Western cities and models of urban ecology.

CHAPTER 7: CONCLUSIONS

Starting from the evolution of national housing policies from 1998 to 2017, this dissertation first elucidates the policy logic behind housing market reform, highlighting the changing roles of the central state. It then proceeds to focus on the localization process of low-income housing policies, demonstrating the cross-scale central-local dynamics amidst the state rescaling process. Third, it examines the housing mobility of urban low-income residents, unravelling the effects and interactions of life cycle, housing experiences and place-based factors. Last, it proposes a conceptual framework to understand urban low-income residents' housing careers through their lived experiences. This concluding chapter outlines these four conclusions in greater detail thus identifying the contributions to knowledge achieved by this thesis.

First, national housing policy formation in China has evolved from a one-dimensional (limited to certain policy types), single-directional (focusing on suppressing housing demand) and one-size-fits-all logic to a multi-dimensional, multi-directional and dynamic logic. The development of housing regulation is a progressive and path-dependent process. The seemingly conflicting policy goals all served an overarching objective: to increase the government's legitimacy through effective governance (Blecher et al., 2003; Holbig and Gilley, 2010). Concealed behind several critical junctures of housing market reform is the central government's eagerness to boost economic development. The real estate industry is a critical, and sometimes the primary means used by Beijing to boost domestic demand and promote economic growth. However, in the process of commodification and marketization of the housing market, the central government did not gradually withdraw from it, but rather strengthened its involvement and impact. The result is a mixture of neoliberal elements and authoritarianism. On the other hand, this study

also contends that the importance of economic growth should not be overstated, and that economic development is not always a priority for the Chinese government in formulating and implementing policies. This study has demonstrated that central government decision-making is also constrained by inner-party political struggles, personal preferences of state leaders, the image of government, the balance of regional development, and public sentiment. By reviewing three decades of housing policy making, this study finds that China's housing reform is a spontaneous, self-motivated, fortuitous and continuous process that fits no orthodox Western stereotype. The operation, adaptation and manifestation of the market depends solely on Beijing's timely judgment of domestic demand and the external environment and feedback from the last policy cycle.

Second, this study demonstrates that local policy implementation paths and outcomes are vastly different from what was expected in the original central government policy and local policy implementation differs across localities. The constant central-local interaction influences the policy localization process. Three theoretical constructs have been proposed and validated to explain this complex process: institutional conformity, urban entrepreneurship and local contingency. First, institutional conformity is manifest in cross-scale consistency in policy goals, the political obligation for local states to conform to central government plans, and the balance between local incentives and central state sanctions. In the process of exploiting loopholes in central policies, local states show a strong sense of local will, characterizing an emerging local developmental state. However, the political obligation of the local state to conform to the central authority has been strengthened over time. It is thus, neither the central will that is stressed in top-down theory (Shirk, 1993; Sachs and Woo, 1994) nor the local dynamism praised in the bottom-up literature (Liu et al., 2012b), but the balance between local incentives and central state sanctions

that ultimately determine the form of central policy manipulation and alteration at the local level. Second, in the process of achieving a balance between local governments and the central authorities, local development priorities are consistent with local state entrepreneurship and favor fiscal responsibility, economic efficiency, and economic growth. Local governments in the two study sites were found to combine “local state corporatism,” “fragmented authoritarianism” and the “local developmental state.” With entrepreneurship at its core, they are willing to break any existing boundary of local governance and pragmatically switch roles. Third, locally contingent factors often interact with and mediate external forces with significant impact on localized low-income housing policies. The position in the political hierarchy often determines the capability and authority of local cadres deployed by the central government with a direct influence on local policy implementation. On the other hand, the political positionality of a place also determines the political obligation of a local state to the central state, and the level of central sanction. These two compensating processes co-exist across space and hold the key to understanding the geographical differentiation of policy localization.

Third, this study reveals a relatively low-level of housing mobility for urban low-income people, suggesting that many are “trapped” in dwellings that are suboptimal and relatively isolated from modern urban facilities. An active desire for a better quality of life remains the dominant factor in shaping the willingness of low-income earners to move. However, such a “desire” seems to be wishful thinking for some, with slightly over half of the respondents managing to improve the quality of their housing by moving, while the rest are stuck between the same or even worse housing and community conditions. This study finds that, the moving intention of low-income people is significantly influenced by basic life-cycle transitions, such as marriage and age. Second,

moving intention has a strong correlation with the experience of current housing. Level of satisfaction with current housing has a strong influence on moving intentions, and the “sense of belonging” is the strongest of all the factors associated with willingness to move. Instead of fixating on the physical housing and community during different stages in the life-course, the social-psychological needs during life-course transitions deserve greater scrutiny. Finally, this study also examines the role of an important and underexplored factor of housing mobility: place and space. Proximity to the workplace is found to be the primary consideration in urban low-income residents’ housing-decision making. Their housing mobility is largely determined by their employment mobility in the city. In addition, this study also shows that place acts as a medium, indicating that “place” should not be reduced to a fixed community-scale, nor should it be understood as an exogenous condition. “Place” represents a wide array of multi-scalar factors, attributes and structures that may directly shape individual housing mobility, in most cases, by interacting with other factors.

Fourth, this study argues that the housing career of low-income earners can be broken into four periods, each characterized by different housing experiences. The lived housing experiences in each period are potentially linked to personal characteristics and structural underpinnings. Technological change and informatization are altering the traditional housing information media used by low income renters. Openly available rental information online is a force for formalization that enhances market transparency and reduces the possibility that renters might be exposed to fraudulent and predatory behaviors by informal housing agents. However, informal housing search channels are still commonly used by low-income renters, especially those over age 35. They also tend to rely on existing social networks, or highly place-bound housing agents like neighborhood

security guards to access housing information. As a result, housing choices are significantly constrained at a limited geographical scale and limited by social class. During the renting period, overcrowding and poor conditions are complicating the already overstressed lives of low-income earners. At a structural level, such human struggles point to a lack of affordable rental housing in booming Chinese cities. Without access to affordable public housing, low-income earners are forced to resort to the informal housing sector and endure unstable housing arrangements caused by structural forces such as gentrification. In the first-time home buying period, this study finds that home buying decisions are affected by a wide array of factors including marriage and childbearing, housing policy changes and their sense of place. During this process, a rural-urban disparity has been observed. Rural migrants often depend on personal savings and social networks to raise the funds to buy a home. On the other hand, urban low-income residents tend to seek mortgage financing from banks. Furthermore, the motivation of rural migrants to buy a home is often formed along with their ongoing resistance to urban homeownership which sometimes undermines the migrant's family, causing domestic conflict and greatly increasing the uncertainty of their housing career. The housing career of low-income earners extends beyond owning a home, which is often small in area with less than ideal living conditions. For low income earners, especially rural migrants, buying a home also means new difficulties and stresses in their housing experience. The split households problem has not been meliorated as anticipated (Fan, 2007) but may be exacerbated by home ownership. While urban natives are less likely to be affected by this problem, they are, however, tormented by the constant stress of making their monthly mortgage payments and issues of neighborhood decline.

From the institutional foundations framing China's housing market, to the human struggles and mundane tribulations of low-income owners, this study has provided a multi-dimensional and multi-scale investigation of urban low-income housing issues. The research findings enhance our understanding of the housing dilemma faced by low-income residents in the city. The increasingly complex economic, societal and human milieu calls for a more sensible and subtle approach that goes beyond one spectrum of factors and focuses on the motivation, action and interaction of agents in the context of institutions and places. Only through close attention to these specific processes can we advance our understanding of the enigma of urban low-income housing.

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APPENDIX 1: SELECTED CENTRAL HOUSING DOCUMENTATION, 1998 – 2017

Code	Date	Inst.	Title	Component
98#0	Mar 1998	SC1	1998 Government Work Report	<ul style="list-style-type: none"> Promote housing reform, housing commodification Make housing industry a new pillar of economic growth
98#1	July 1998	SC ¹	A Further Step in Extending Housing Reform and Accelerating Housing Construction in Urban Areas	<ul style="list-style-type: none"> Set the guiding ideologies of housing reform: the privatization of previously publicly owned housing and the commodification of newly built housing Aiming at the transformation of the housing industry into a new pillar of economic growth
98#2	1998	CB ²	On strengthening housing credit investment, supporting housing construction and consumption	Strengthen housing credit investment and support real estate development
98#3	May 1998	CB ²	Measures for the administration of personal housing mortgage	<ul style="list-style-type: none"> Personal housing mortgage can be used to purchase private housing. Extend the personal housing mortgage from pilot cities to all urban area.
99#0	Mar 1999	SC ¹	1999 Government Work Report	<ul style="list-style-type: none"> Promote housing reform Support residents to purchase housing
99#1	Feb 1999	CB ²	Guidance on the development of personal consumer credit	<ul style="list-style-type: none"> Increase the proportion of housing mortgage (70%>80%) Encourage commercial banks to provide comprehensive financial services to housing buyers Extend the housing mortgage repayment period lower housing mortgage interest rates
99#2	May 1999	MC ³	Measures for the management of urban low - rent housing	Set a guideline of how local government and Danwei should function in public housing system
99#3	1999	SC ¹	Notice on strengthening the management of land transfer and prohibiting speculation of land	Strengthen the management of state-owned land use and transfer
99#4	1999	MLR ⁴	Idle land treatment approach	Establish the method to deal with idle land
00#0	Mar 2000	SC1	2000 Government Work Report	<ul style="list-style-type: none"> Cultivate housing as new consumer hot spots Make housing sector as an important economic sector

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
00#1	Oct 2000	NPC ⁵ &MC ³	Notice on the charge of real estate intermediary service	Collection of real estate intermediary fees has been clearly defined and regulated
00#2	2000	CB ²	Notice on Regulating Housing Financial Business	Comprehensive regulation on housing finance
01#0	Mar 2001	SC1	2001 Government Work Report	<ul style="list-style-type: none"> • Improve the living conditions • Create all necessary conditions so real estate sector can match the increasing residential consumption
01#1	2001	MF ⁶ & SAT ⁷	Notice on adjusting the tax policy of housing leasing market	For the individual market rental housing, reduce the business tax
01#2	April 2001	SC ¹	Circular of the State Council on Strengthening Administration of the State-owned Land Assets	Emphases the capitalization of land and the marketisation of land-use rights
02#0	Mar 2002	SC1	2002 Government Work Report	<ul style="list-style-type: none"> • Encourage residents to buy housing • Cultivate new consumption hotspots
02#1	May 2002	MLR ⁴	Provisions on bidding, auction and listing of State-owned land use right	<p>Bidding-auction-listing of land transfer (<i>tudizhaopaigua</i>):</p> <p>Since July 1, commercial, tourism, entertainment and commodity housing and other types of operating land, must be bidding, auction or listed for public transactions</p>
02#2	Aug 2002	MC ³ , MF ⁶ & etc.	Opinions on strengthening macro-control of real estate market and promoting healthy development of real estate market	<ul style="list-style-type: none"> • Strengthen the land supply, regulate construction land • Utilize financial tool to regulate housing market
02#3	Nov 2002	MC ³		The first home purchase policy for Low- and middle-income groups
03#0	Mar 2003	SC1	2003 Government Work Report	To be highly vigilant in certain region where real estate investment is overheated
03#1	June 2003	CB ²	Notice on further strengthening the management of real estate credit business	Increase the proportion of down payment for high-end commodity housing and second housing
03#2	July 2003	SC ¹	Circular on cleaning up and rectifying various development zones and strengthening the management of construction land	<ul style="list-style-type: none"> • Strengthen the land supply, limited land supply for high-end commodity housing; • Suspend land supply for villas
03#3	Aug 2003	SC ¹	Circular of the State Council on promoting sustained and	<ul style="list-style-type: none"> • Officially recognized real estate as a pillar industry

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
			healthy development of real estate market	<ul style="list-style-type: none"> Encourage residents to swap housing, emphasizing the revitalization of the secondary housing market
04#0	Mar 2004	SC1	2004 Government Work Report	<ul style="list-style-type: none"> Curb the housing boom, Regulate the land market
04#1	March 2004	MLR ⁴	Notice on the implementation of the law enforcement supervision on the execution of the bidding auction for the operation of the land use right	<p>"Great Deadline 831"(831<i>daxian</i>):</p> <p>After August 31, 2004, local government can no longer use historical legacy as an excuse to transfer land use right through agreement; all land use right transfer must process through "tender, auction and listing"</p>
04#2	April 2004	SC ¹	Circular of the State Council on improving capital ratio of investment projects of fixed assets such as steel	The minimum capital ratio of real estate development projects increased from 20% to 35%
04#3	April 2004	MLR ⁴	Deepening the Improvement and Rectification of the Land Market and Exercising Strict Land Administration	To restrain the overheated investment in fixed assets in local areas by constraining the supply of land.
04#4	May 2004	MC ³	Administrative measures on affordable housing	Improve ECH and LRH policy
04#5	June 2004	SC ¹	Controlling the Scale of Demolition and Relocation of Houses in Cities and Towns and Exercising Strict Administration of Housing Demolition and Relocation	Control the scale of demolition, to ensure that 2004 year-round total demolition is significantly less than 2003
04#6	Oct 2004	MLR ⁴	Circular on the subject of strict land management	Restraining the housing industry through administrative land-control planning
04#7	Oct 2004	CB ²	Raise interest rates	Central bank raises deposit and loan rates for the first time in 10 years
05#0	Mar 2005	SC1	2005 Government Work Report	Curb the housing boom by regulating the land supply and mortgage provision
05#1	March 2005	SC ¹	Notice on feasibly Stabilizing the Price of Housing	<p>"National Eight" (<i>guobatiao</i>):</p> <ul style="list-style-type: none"> To diversify the measures of regulating housing market. Urge local state at all level to effectively take responsibility for stabilizing housing prices: <ul style="list-style-type: none"> Municipal and county governments shall take more responsibilities.

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
				<ul style="list-style-type: none"> ○ Authorize more administrative power to municipal government. In areas where housing prices have risen abnormally, the authorities may take measures such as suspending the land supply ○ Officials failed to maintain the housing price in a healthy range will be held accountable
05#2	March 2005	MC ³ & etc.	Transmitting the Proposals of the Ministry of Construction for Stabilizing the Price of Housing	Gave further details of measures to stabilize house prices.
05#3	March 2005	CB ²	Adjusting the policy of private housing mortgage for commercial banks	<ul style="list-style-type: none"> ● Adjust the lower mortgage interest rate as 0.9 times of to the Benchmark Rate. ● Housing provident fund lending rate increased 0.18%. ● For cities or regions where house prices have risen too fast, the lowest down payment for personal mortgage rose from 20% to 30%.
05#4	May 2005	SAT ⁷ & etc.	Notice on Strengthening the Administration of Real Estate Tax Administration	Selling housing purchased less than 2 years, full business tax shall be charged.
06#0	Mar 2006	SC ¹	2006 Government Work Report	<ul style="list-style-type: none"> ● Continue to restrain the real estate investment ● Be cautious of rocketing housing prices in some cities
06#1	May 2006	SC ¹	Notice on adjusting the Housing Supply Structure and Stabilizing the Price of Housing	<p>“National Six” (<i>guoliutiao</i>):</p> <ul style="list-style-type: none"> ● Update five clauses from 05#1. ● Emphasize on improving the system of real estate statistics and information disclosure.
06#2	May 2006	MC ³ & etc.	Transmitting and Issuing the Proposals of the Ministry of Construction and Other Departments for opinions on Adjusting the Housing Supply Structure to Stabilize Housing Prices	<ul style="list-style-type: none"> ● Provide detailed instruction of how 05#1 and 06#1 would be implemented. ● Further exert the regulative function of tax, credit and land policy
06#3	June/July 2006	SC ¹	Notice on strengthening the macro-control of land; The	<ul style="list-style-type: none"> ● To strengthen the management of land market,

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
			decision on amending the "Provisional regulations on urban land use tax of PRC"; Notice on promoting the conservation of intensive land use	<ul style="list-style-type: none"> Require the approval of land strictly in accordance with the statutory authority, Prohibit the arbitrary decrease of land price Strictly control the transfer of agricultural land to industrial land
06#4	July 2006	MLR ⁴	Restricting/prohibiting land use projects, bidding auctions, listing and selling state-owned construction land use right provisions	Further improve the provisions of land transfer and use
06#5	July 2006	MC ³ & etc.	Opinions on standardizing the access and management of foreign capital in real estate market	Strengthen the management of foreign – investment in housing market
07#0	Mar 2007	SC1	2007 Government Work Report	<ul style="list-style-type: none"> Promote the sustained and healthy development of the real estate industry Curb the rising housing prices, and maintain a reasonable price level
07#1	2007	CB ²	Raising the benchmark rate of RMB deposit and loan and the deposit reserve ratio	<p>Raising the benchmark interest rate and the deposit reserve ratio:</p> <ul style="list-style-type: none"> 1-year deposit benchmark rate raised from 2.52% to 3.87% 1-year loan interest rate raised from 6.12% to 7.29% Deposit-reserve ratio raised from 9% (Jan 07) to 14.5% (Dec 07)
07#2	May 2007	MCFE ⁸	Circular on Further Strengthening the Approval and Supervision of Foreign Direct Investment in Real Estate	Further strengthening the approval and supervision of the foreign investment in real estate industry
07#3	August 2007	SC ¹	Several Opinions on Resolving Housing Difficulties of Low- income Families in Cities	<ul style="list-style-type: none"> More than 70 per cent of land for residential building will be assigned to affordable housing projects Housing the urban poor is the one the major political responsibilities for local government, and the development of the local public housing system shall be included in the appraisal of a local officials

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
				<ul style="list-style-type: none"> Urban public system shall include not only urban residents but also peasant workers
07#4	Sept 2007	CB ²	Notice on strengthening the management of commercial real estate credit	<ul style="list-style-type: none"> Increase the down payment for housing mortgage, especially for second housing purchasing (no less than 40%) Mortgage lending rate must not be lower than 1.1 times of benchmark interest rate at the same time.
08#0	Mar 2008	SC ¹	2008 Government Work Report	<ul style="list-style-type: none"> Promote healthy development of the real estate industry; Prevent housing prices from rising too fast
08#1	second half of 2008	CB ²	Easy-money policy	<p>Easy monetary policy:</p> <p>Four-times reduction of benchmark interest rate, two-times reduction of reserve ratio</p>
08#2	Aug 2008	MHUR ⁹ & MF ⁶	2008 Low-rent Housing Work plan	Increase 2.5 million households of LRH, reaching 3.5 million in total.
08#3	Oct 2008	MF ⁶ & SAT ⁷	Notice on Adjusting Tax Policies for Real Estate Transactions	<ul style="list-style-type: none"> For first housing and smaller than 90m², deed tax rate temporarily adjusted to 1% Temporary exemption from stamp duty on personal sale or purchase of housing Temporary exemption of land value-added tax on personal sales housing
08#4	Oct 2008	CB ²	Expanding the rate of interest on commodity personal housing loans	<ul style="list-style-type: none"> Expanding the lowest rate of interest on commodity personal housing loans from 1.1 to 0.7 times of benchmark interest rate. Lowest down payment decreased to 20%
08#5	Dec 2008	SC ¹	Several Opinions of the State Council on Promoting Sound Development of the Housing Market	<ul style="list-style-type: none"> Strengthen the construction of affordable housing Further encourage commodity housing consumption through financial leverage
08#6	Dec 2008	MF ⁶ & SAT ⁷	Notice on the business tax policy of personal housing transfer	Temporary exemption of business tax on personal sale of housing owned more than two years

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
09#0	Mar 2009	SC1	2009 Government Work Report	<ul style="list-style-type: none"> The main goal of macro-control is to reverse the downward trend of economic growth. Promote the steady development of real estate industry
09#1	May 2009	SC ¹	Circular of the State Council on Adjusting the Capital Ratio of Fixed-asset Investment Projects	Minimum capital ratio of ordinary commodity housing projects decreased to 20%
09#2,3,4	2009		Multiple policies	Many tax policies in favor of housing consumption issued in 2008 were abolished.
09#5	Dec 2009	PM ¹⁰	Speech from National Prime Minister	<p>“National Four” (<i>guositiao</i>):</p> <ul style="list-style-type: none"> Increase the effective supply for commodity housing Suppress investment-speculative purchasing Strengthen market regulation Largely promote affordable housing project For the first time since 2003, real estate industry is not described as pillar industry of national economy
10#0	Mar 2010	SC ¹	2010 Government Work Report	<ul style="list-style-type: none"> Promote the healthy development of the real estate market Curb the rapid rise of housing prices in some cities to meet the basic housing needs of the people
10#1	January 2010	SC ¹	Circular of the General Office of the State Council on Pushing Forward the Stable and Sound Development of the Real Estate Market	<ul style="list-style-type: none"> Control housing speculation through financial measures: the down payment for second housing shall not be less than 40%. Emphasized the responsibility for local states on stabilizing housing price and housing the urban poor.
10#2	April 2010	SC ¹	Notice of the State Council on Firmly curbing the rapid rise in housing prices in some cities	<p>“New National Ten” (<i>xinguoshitiao</i>):</p> <ul style="list-style-type: none"> 1-2. Establish an assessment-accountability mechanism for local housing price regulation and public housing construction

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
				<ul style="list-style-type: none"> 3-4. Inhibit irrational housing needs through financial measures: mortgage policy and tax policy: down payment adjustment: first housing ($\geq 90m^2$) 30%, second housing 50%
				Particularly, the policy notes that local governments may, according to the actual situation, take temporary measures to limit the amount of house one can purchase within a certain period.
				<ul style="list-style-type: none"> 5-6. Reiterated to increase effective supply: increase land supply in certain cities; increase supply of public housing and middle-small commodity housing ($\geq 70\%$)
				<ul style="list-style-type: none"> 7. set an admonitive target for construction of affordable housing: 3 million units
				<ul style="list-style-type: none"> 8-10. Strengthen market regulation
10#3	April 2010	LMG ¹¹	Rules for the Implementation of 10#2 (Beijing)	<p>Purchase restriction order (<i>xiangouling</i>):</p> <ul style="list-style-type: none"> First policy limited the number of homes each family can buy Expanded to more cities later.
10#4	Sept 2010	MLR ⁴ & MHUR ⁹	Notice on further strengthening the regulation and control of real estate land use and construction	Enterprises with unused land for more than one year are prohibited from participating in land auction activities
10#5	Sept 2010	MF ⁶ & SAT ⁷	Circular on preferential tax policies in support of public rental housing construction and operation	Implement preferential tax Policy for Construction and operation of public rental housing
10#6	Sept 2010	CB ² & CBRC	Perfecting differentiated housing credit policy to adjust and guide housing demand	<ul style="list-style-type: none"> Strict implementation of differential mortgage policy Suspension of mortgage for third housing purchasing
10#7	Sept 2010	MHUR ⁹ , MF ⁶ & SAT ⁷	Notice on the adjustment of the preferential policies of the deed and individual income tax in real estate transaction	There will be no exemption of personal income Tax for individuals who sold their houses and purchased a new one within a year
10#8	Sept 2010	MHUR ⁹ & etc.	Notice on further implementation of 10#2	Request that local governments in "hot-zones" should actively implement the purchase-order policy

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
10#9	Oct & Dec 2010	CB ²	Central Bank raised the benchmark interest rates for savings and loans twice this year.	<p>Central Bank raised the benchmark interest rates twice this year:</p> <ul style="list-style-type: none"> 1-year deposit benchmark rate raised from 2.25% to 2.75% 1-year loan interest rate raised from 5.31% to 5.81%
10#10	Jan, Feb, May, Nov & Dec 2010	CB ²	Central Bank raised the reserve requirement ratio five times this year.	<p>Central Bank raised the reserve requirement ratio five times this year:</p> <p>15.5% (17th Jan) to 18.5% (20th Dec)</p>
11#0	Mar 2011	SC ¹	2011 Government Work Report	Curb the rapid rise of housing prices in some cities
11#1	Jan 2011	SC ¹	Notice on the problem of further adjusting and controlling the real estate market	<p>“New National Eight” (<i>xinguobatiao</i>):</p> <ul style="list-style-type: none"> For the housing purchased within 5 years, full tax shall be imposed For second home purchasing, the down payment ratio is no less than 60%, and the lending rate is no less than 1.1 times of the benchmark rate.
11#2	Feb 2011	PM ¹⁰	Conference speech	<ul style="list-style-type: none"> An aggressive plan to build thirty-six million social housing units over the next five years, which would cover 20 per cent of residents Boosting the supply of PRH was given priority in the development of social housing
11#3	July 2011	PM ¹⁰	The speech of Premier Wen Jiabao	Second and third-tier cities where housing price has risen too fast should also take the necessary measures to limit housing purchases.
11#4	Feb, April & July 2011	CB ²	Central Bank raised the benchmark interest rates for savings and loans three-times this year.	<p>Central Bank raised the benchmark interest rates three-times this year.</p> <ul style="list-style-type: none"> 1-year deposit benchmark rate raised from 2.75% to 3.5% 1-year loan interest rate raised from 5.81% to 6.56%
11#5	Jan, Feb, March, April, May & June 2011	CB ²	Central Bank raised the reserve requirement ratio six-times this year.	<ul style="list-style-type: none"> Central Bank raised the reserve requirement ratio six times this year: 18.5% to 21.5% for Large financial institutions, 18% for Small and medium-sized financial institutions (16th June)

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
12#0	Mar 2012	SC ¹	2012 Government Work Report	<ul style="list-style-type: none"> Consolidate the results of previous regulation Promote a reasonable return of housing prices
12#1	July 2012	CB ²	Central Bank reduced the benchmark interest rates for savings and loans.	Central Bank reduced the benchmark interest rates for savings and loans (-0.25).
12#2	Dec 2011-May 2012	CB ²	Central Bank reduced the reserve requirement ratio.	Central Bank reduced the reserve requirement ratio. (-1.5)
13#1	Feb 2013	SC ¹	Circular of the General Office of the State Council on Continuing to Duly Regulate and Control the Real Property Market	<p>“National Five” (<i>guowutiao</i>):</p> <ul style="list-style-type: none"> Reinforce the assessment-accountability mechanism for local housing price regulation. Local states are required to set the target for newly-constructed commodity housing price and to publish it to the public every year. Strengthen the purchasing order; Strengthen the differential housing credit policy; the existing 20 per cent capital gains tax on home sales shall be strictly implemented. Reinforce the plan to increase land supply and housing supply, especially small-medium housing. Reinforce the construction of affordable housing and market regulation.
13#0	Mar 2013	SC ¹	2013 Government Work Report	Establish the long-term mechanism for housing regulation
13#2	April 2013	MHUR ⁹	Notice on doing well the work of 2013 Urban Secure housing Project	Local governments are obliged to boost social housing production
13#3	July 2013	SC ¹	Guidance on financial support for economic restructuring and transformation and upgrading	Differential housing credit policy, strictly control real estate financing risk
13#4	July 2013	SC ¹	Opinions on speeding up the reconstruction of shanty towns	Promoting the renovation of shanty towns
13#5	Dec 2013	MHUR ⁹	Circular on the operation of public rental housing and low-rent housing	LRH and PRH will be combined to one Public Rental Housing system
13#6	Dec 2013	MF ⁶ & SAT ⁷	Circular on the tax policy of squatter reconstruction	For the first-time purchasing of renovation housing under 90m ² , a 1% deed shall be imposed

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
14#1	July 2014	LMG ¹¹	Correction statement	Hohhot abolished the two-year-old housing purchase order policy.
14#2	Sept 2014	CB ² & etc.	Notice on further work of housing financial service	930 New Deal (930xinzheng): <ul style="list-style-type: none"> For first housing purchasing, lowest down payment rate was decreased to 30%; lowest mortgage rate was decreased to 0.7 times of benchmark rate. For second housing purchasing, if the owner has cleared the previous mortgage, then the first housing purchasing policy can be applied. (renfangyourendai =>rendaiburenfang)
15#1	March 2015	CB ² , MHUR ⁹ & etc.	Notice on relevant issues concerning the policy of personal housing loan	330 New Deal (330xinzheng): <ul style="list-style-type: none"> Decrease the lowest down payment rate from 60% (70% in Beijing, Shanghai, Guangzhou and Shenzhen) to 40% Adjust the provident fund mortgage down payment for first purchasing and 90m2 above from 30% to 20%
15#2	March 2015	SAT ⁷	Notice on adjusting the business tax policy of personal housing transfer	<ul style="list-style-type: none"> Adjust the exemption period for second hand-housing business tax from 5 years to 2 years.
15#3	March 2015	MLR ⁴ & etc.	Notice on optimizing the housing and land supply structure	<ul style="list-style-type: none"> Decrease the land supply in certain cities.
15#4	Nov 14- Aug 15	CB ²	Central Bank reduced the benchmark interest rates for savings and loans six times	Reduce the benchmark interest rates for savings and loans six times
15#5	Feb-Sept 2015	CB ²	Central Bank reduced the reserve requirement ratio	Reduce the deposit reserve ratio
15#6	Dec 2015	SC ¹	Central Economic Work Conference	"housing market de-stocking "
16#1	Feb 2016	MF ⁶ & SAT ⁷	Notice on adjusting the preferential policy of business tax in real estate transaction	<ul style="list-style-type: none"> Decrease the deed for housing purchasing. The business tax for selling housing 2 years and older has been exempted. Beijing, Shanghai, Guangzhou and Shenzhen were treated differently.
16#2	March 2016	CB ²	Central Bank reduced the reserve requirement ratio	<ul style="list-style-type: none"> Reduce the deposit reserve ratio
16#3	July 2016	SC ¹	Conference speech	"Inhibition of asset price bubbles"

Appendix 1: Selected central housing documentation, 1998 – 2017 (continued)

Code	Date	Inst.	Title	Component
16#4	Aug 2016	CB ²		To de-leveraging, central bank restarted the 14-days reverse repo, and later 28-days reverse repo, increase MLF Operation strength. These measures effectively increase the cost of capital in the long term.
16#5	30th Sept- 6th Oct 2016	LMG ¹¹	Purchase-order	limit the housing purchase for non-local residents and second housing buyers
16#6	October 2016	SC ¹	Conference speech	"prevent financial risks"
16#7	Central Economic Work Conference	SC ¹	Conference speech	"long-term mechanism"

APPENDIX 2: DATA COLLECTION IN CHENGDU AND SHANGHAI, 2015 SUMMER

Since we adopted the same sampling technique for both sites, we will use Shanghai as an example to demonstrate the sampling procedure. First, ten districts were selected in Shanghai purposefully to make sure the samples are geographically balanced, so we selected two districts in the city center (within the inner ring); four in the inner suburbs (one in each cardinal direction between the inner ring and the outer ring); four in the outer suburbs (one in each cardinal direction outside the outer ring). Second, within each selected district, we randomly selected two neighborhoods. The selection strategy is as follows: first, according to the administrative divisions of the two cities in 2015, the community (village) level units under the selected district were coded. We then used a random number generator to select two communities (villages) as the data collection sites. Finally, we use the same random number generation method to select two more units as backup data collection sites to circumvent problems caused by uncontrollable factors e.g. incorrect administrative division information.

Third, in each selected community (village), we surveyed 10 qualified respondents. Given that the research target was the urban low-income group, the potential respondents were those residents who were 18-60 years old with monthly earnings lower than the city-average. The average monthly income in Shanghai in 2014 was ¥6,502 (Shanghai Bureau of Statistics, 2015), therefore, we regard all adult urban residents with a monthly income of less than ¥6,000 as qualified respondents in our survey. We also included 5-10 per cent respondents with income above average as a reference group. In the case of Chengdu, the only difference in the sampling and survey procedure is that the income selection criterion was adjusted to ¥5,000 to because

average monthly income in Chengdu was about ¥1,000 lower than Shanghai (see Chengdu Bureau of Statistics, 2015; Shanghai Bureau of Statistics, 2015).

The selection of respondents is a mixture of on-field intercept-interview and snowball sampling. Our project team first conducted face-to-face interviews with eligible respondents in public spaces (e.g. non-gated residential community, parks and farmer's markets) of selected communities (village). During the interviews, we also asked interviewees to recommend other potential respondents who meet our criteria. It should be pointed out that due to the restricted access of some gated communities, we were unable to obtain data from these neighborhoods. This limitation may lead to certain selection bias in our analysis. Although we believe that most of these gated communities are middle- and high-end residential areas, the impact on the urban low-income group, the target of this research, is minimal; the interpretations of related findings e.g. depictions of housing conditions, still need to take this limitation into account.

The questionnaire used in both cities was ten pages long and consisted of six parts: (A) questionnaire information, (B) personal information, (C) housing and community status, (D) housing career and housing decisions, (E) housing and community experience, (F) housing policy. The D sections of the questionnaires for home renters and homeowners were different to allow for differences in tenure and housing expenditures.

**APPENDIX 3: A SAMPLE MULTIPLE-CHOICE AND RANKING QUESTION FROM
THE SURVEY QUESTIONNAIRE AND THE DETAILS OF WEIGHT CONVERT**

APPROACH

D11. Why do you want to move? [Choose a maximum of three items and rank them by importance] : [____] [____] [____]

1- Current living conditions are poor	6- Job change
2- The current location of residence is not convenient for work	7- Spouse requirements
3- The current place of residence is not convenient for children to go to school	8- Marriage
4- The rent/cost of living is too high to sustain	9- Safety reasons
5-To live closer to my family	10- Others (Please specify _____)

*The original question is in Chinese, translated by the author.

The weight conversion approach (WCA) was adopted to analyze this type of question. Compared with other common alternatives to analyze multiple-choice & ranking questions, such as simple crosstab analysis or multiple response frequency analysis, the WCA can produce more concise and meaningful results (Wang et al., 2009; Zhao, 2014). First, we coded each of the alternative responses as a separate variable. The encoding method is as follows: ranks 1-3 were assigned numbers 1-3, unselected items were the number 0. Second, we assigned a weight to each ranking, and we then recoded the original variable using these weights. Thus, we assigned a weight of 3 to the first ranked choice, a weight of 2 to the second choice, and a weight of 1 to the third choice. Third, we transposed all recoded variables to generate a new data table. Finally, we summed the data for each row in the new table. The final result is a weighted score for each

response alternative. The greater the value, the more important is the response to low-income residents. In the results table, we report both the final weight score and its rank.