
Privatization, marketization, and deprivation: interpreting the homeownership paradox in postreform urban China

Guo Chen

Department of Geography and Global Urban Studies Program, Michigan State University, 211 Geography Building, East Lansing, MI 48824, USA; e-mail: guochen@msu.edu

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Abstract. The paper examines the nature of the housing predicaments faced by China's urban poor since the advent of pro-ownership housing marketization in the 1990s. It is argued that housing deprivation in today's urban China is a complex problem which is difficult to disentangle based solely on the material outcomes of housing distribution and housing inequalities. Therefore, an integrative framework is proposed to examine the issue from the perspective of structure–agency interaction. Statistical methods are employed to identify the concrete market and nonmarket factors which constrain the housing decisions of Nanjing's poor families, based on census and household-survey data. Qualitative interviews are then utilized to help reconstruct and interpret different storylines of homeownership transition under the identified constraints. Findings suggest that the ownership-based housing model has been promoted among the poor in exploitative ways, which has resulted in profound deprivation—for both poor owners and nonowners. Alternative, nonownership housing options are urgently needed to address the problem.

Introduction

Since the mid-1990s, one area of remarkable progress within China's market-oriented housing reform has been the advancement of private housing ownership. According to the 2005 national One-percent Population Survey, 75.7% of China's urban residents were nominal homeowners by the end of that year. Such a dramatic shift in the urban housing-tenure structure is a key step in China's housing marketization, as it cements the end of the old public housing system and underpins the foundation of the burgeoning private real estate market. Pro-ownership housing marketization has also greatly impacted China's urban poor. The same census data show that, even among China's middle-to-low-income urban population, the homeownership rate exceeded 70% by 2005. Although this official figure may be inflated for various reasons (eg omitting groups such as temporary migrants), it does imply that many of China's urban underclass became nominal homeowners during the last round of housing reform.

How to evaluate the impact of China's pro-ownership housing marketization on the poor's housing prospects is an intriguing question. With the retreat of public housing allocations, urban residents can no longer enjoy the low-cost rental housing offered by the state. Since housing rents are set to rise towards market levels, a privately owned home seems to be a better-than-nothing material benefit for the poor, who are already suffering from considerable economic difficulties (Chen et al, 2006). In reality, however, both nonowners and owners among the poor endure a variety of housing-related predicaments as the housing marketization deepens (Wang, 2000; Wu, 2007). On the one hand, those who cannot afford to own are effectively punished because of the fast-growing housing prices, and their housing prospects keep deteriorating due to the lack of alternative housing options (Hui and Yue, 2006; Mostafa et al, 2006; Yang, 2008). On the other hand, those 'lucky' owners among the poor who have thrown in their limited resources to purchase housing usually find themselves further segregated later due to widening gaps in housing quality and property values (Wu, 2007).

Additionally, their tenure security has become increasingly endangered by the growing pressure of urban redevelopment, as the housing units they have bought were usually low-quality, low-value stocks to begin with (Wu, 2007; Wu and He, 2005). In many cases homeownership has become a paradox for the poor, for it represents an imperative opportunity which often puts them into new difficulties.

Why have the poor elected to purchase their dwellings despite their limited resources? And, how has private housing, which has been billed as social betterment and delivered as partial welfare during China's housing marketization, become a new quagmire for the poor? To answer these questions, I first review the historical background of China's housing reform. I argue that dilemmas such as the homeownership paradox indicate that China's postreform housing problems are not just related to distributive inequalities, but are also dependent on the situations under which certain housing-distribution outcomes have developed. Disentangling these complex problems demands a better coupling of empirical and critical analyses to deepen our understanding of the implications of the reform for the poor. Therefore, in this paper I propose an integrative structure–agency framework, based on Giddens's theory of structuration, to analyze the homeownership transition among Nanjing's poor households. Using census data and household-survey data collected in 2004, I employ quantitative methods, including descriptive statistics and hierarchical linear modeling, to identify the structural constraints regulating housing-tenure outcomes among the poor. Then, I examine the detailed structure–agency interactions under the identified constraints to interrogate the nature of the homeownership transition with the help of qualitative interviews conducted with selected households. Finally, I show that China's current pro-ownership housing marketization has had profound detrimental effects on poor families, and I argue that alternative, non-ownership-based housing options are urgently needed to resurrect the social function of housing in China's urban society.

Background: China's pro-ownership housing reform and its impact on the urban poor

Historically, China's housing reform can be divided into three stages (Li and Yi, 2007). (1) The pilot stage, from 1979 to 1991, during which experiments with preliminary reform measures were conducted in a small number of 'pilot sites' (Wang and Murie, 1996). (2) The transitional stage, occurred from 1991 to 1998, when nationwide housing reform was initialized but housing marketization had not yet formally begun, and measures such as 'double-track' policies were created to allow the coexistence of public housing provision and private housing development (Chandrashekar, 2007; Lee, 2000; Li and Yi, 2007). (3) The rapid marketization stage has been underway since the official termination of public housing allocation in 1998 (State Council, 1998). In other words, the massive pro-ownership housing marketization, which received substantial material aid (eg discounted sales of public housing) and institutional supports (eg policy incentives) from the state, actually happened during the second and third stages of the reform.

Since marketization has been a central theme of housing reform, many of China's housing dynamics can be attributed to market-related forces; for example, growing housing commoditization and broadening personal choices, as well as the widening income gap (Wang and Li, 2004; Wang and Murie, 1999). However, many nonmarket factors, especially those related to China's social and political institutions, remain highly influential regarding housing distribution due to the state-directed, gradualist nature of the reform (Li and Li, 2006; Li and Wu, 2008; Logan et al, 1999). From the perspective of housing differentiation, these factors can be summarized as follows. The first is the succession of distributive inequality, which refers to the fact that housing inequalities from the prereform public housing system have been carried

over throughout the reform (Li and Yi, 2007). During the public housing era (including the 'double-track' period of the 1990s), employees of stronger work units and those with higher sociopolitical rank could usually obtain better housing than others (Logan and Bian, 1993; Logan et al, 1999; Wu, 1996). After public housing was sold to occupiers at heavily discounted prices, these differentiators become substantial economic inequalities that are now extremely difficult to overcome given China's surging property prices.

The second is the institutional division caused by Hukou and related policies. *Hukou* is a long-standing family-registration system which basically ties people to their family origins (Wu and Treiman, 2004). As a basic measure to control China's massive population, Hukou has become a key dimension of social organization because many socioeconomic entitlements and benefits, including job opportunities, child education, social welfare, and, of course, housing benefits, are attached to one's Hukou status (Chan, 1994; Chan and Zhang, 1999). Hukou's impact on housing is profound. On the one hand, it is a direct denominator of housing policies, as many important policies implemented during the reform, including the housing provident fund, the affordable housing program ("*JingJiShiYongFang*"), and low-priced public rentals ("*LianZuFang*"), are available only to local urban Hukou holders (Wang, 2000; Wu, 2002). On the other hand, since Hukou has been so important for so long, it has also become an effective proxy for other important aspects of socioeconomic life (Wu and Treiman, 2004), which may indirectly affect one's housing prospects.

The third nonmarket factor is the weakening of housing welfare provision. China's prereform public housing distribution was essentially a welfare system (Chen and Gao, 1993; Szelenyi, 1983). Since its retreat, however, a new mechanism of housing welfare has yet to be successfully established to take over the social responsibility previously handled by public housing (Lee, 2000). Although the importance of housing the poor has been recognized by central government (State Council, 1998), the implementation of new welfare measures, such as the affordable housing and low-priced rental programs, has been constantly faltering due to corruption and the lack of enforcement at the local level (Tu, 2007; Zhang, 2001).

Given the context created by these market and nonmarket forces, what is the role of homeownership in reshaping the poor's housing prospects? In housing and related urban studies, the social implication of ownership-oriented housing models is a subject under constant debate (Harkness and Newman, 2002; Hays, 1993). On the positive side, dweller-owned housing is considered an important aspect of material well-being (Moser, 1998), and homeownership has been hailed by some as a catalyst for social stabilization and poverty reduction (see Pacione, 2005). On the other hand, there are plenty of examples where an ownership-oriented housing model has failed to improve the living conditions of disadvantaged groups (Saegert et al, 2009; Shlay, 2006). Critics argue that the privatization of welfare housing in many countries essentially serves as a first step for big capital to seize desirable urban space, which eventually leads to more severe segregation and exploitation (Harvey, 2003; 2005). These conflicting roles of homeownership are further complicated by the special context of China's housing reform, which is characterized by the drastic restructuring of the urban landscape (Ma and Wu, 2005) and the continued capitalization and reproduction of urban space (Lin, 2009). Although the distributive inequalities within China's housing system have been well recognized, in this paper I argue that China's housing problems in general, and the deprivation related to homeownership in particular, contain elements beyond housing inequalities. As shown by the homeownership paradox faced by China's urban poor since the homeownership transition, the pros and cons of homeownership cannot usually be explained solely by the material outcomes of housing distribution, or by who

has access to what housing. The significance of homeownership to the poor is highly subject to the situations under which homeownership has been realized and, depending on the situation, owning a home may have a positive or negative impact on a household. Therefore, a more in-depth and critical approach must be adopted to evaluate the processes underlying China's homeownership transition from the perspective of the poor.

Framework of analysis

In this paper I propose an analytical framework that takes an integrative structure–agency approach to interpret the impact of the homeownership transition upon Nanjing's poor. I attempt to operationalize the conception of structure and agency defined by Giddens's (1984) theory of structuration in the analyses, where the market and nonmarket forces driving China's housing reform constitute the main structural properties that enable and constrain the poor's housing decisions. Reflexively, the collective act of housing transition among urban Chinese (including the poor and nonpoor) shapes the system-level change known as 'housing marketization'. The reasons to take this approach are as follows. As China's housing reform has been frequently studied in recent literature, many hypotheses related to this subject—for example, those concerned with urban housing tenure structure and the homeownership transition—have already been tested [eg Huang and Clark (2002), Li (2000), and Li and Yi (2007), to list just a few]. I am not interested in rediscovering well-known facts in yet another case study but, rather, seek to unravel the deeper implications of these conditions for the urban poor. The merit of the structuration theory, therefore, is that it allows us to deconstruct the subject of inquiry into detailed threads of structure–agency interactions, so that we can examine what has actually happened to the poor and evaluate its impact from the perspective of the poor. Note that I do not propose to use the theory as a new analytical tool to replace existing methods: my intention is to harness the conceptual framework outlined by the theory to bridge empirical analyses and critical interpretation, which I believe is the key to understanding China's postreform housing deprivation.

One weak link of Giddens's theory, about which critics constantly complain, is that it is too metaphysical to apply at the empirical level and, as a result, the intended structure–agency integration can easily degenerate into disconnected dualism in attempted applications of the theory (Gregson, 1989). In this study I adopt a perspective that I believe is useful in applying the structuration theory to the analyses, in which the concept of scale is used to consolidate empirical accounts of structure and agency. As explained by Archer in her defense (2003) of 'analytical dualism', at any time point existing structures constrain or enable the actions of agents to generate results that will affect their future actions. Compared with individual behaviors, structural changes with an observable impact normally take a series of events and a longer period of time to develop. Therefore, focusing on structure and agency in empirical studies can be regarded as essentially a matter of different time scales. From an analytical point of view, it is possible to isolate relevant structures and actors to construct a context and examine how the specific structure–agency interactions evolve in a given context. This logic can easily be extended to geographical space–time, where the intersection of structure and agency has been embraced and discussed in the conception and reconception of places, regions, and landscapes (Kellerman, 1987). For geography and social sciences in general, such a structure–agency reconciliation reflects a trend to (re)appreciate the notion of practice in theoretic and empirical works (Gregory, 2009; Lorimer, 2005); for example, by emphasizing how social conditions are enacted, instead of what is produced (Thrift, 2007). For studies on China's urbanism in particular, this approach resonates with the call to go beyond traditional empiricism

and put more focus on the rights of those who are suffering (Ma, 2007). Under this framework, the concept of structure–agency interaction in the housing system has two interconnected meanings: (1) relevant actors' constrained housing decisions, which are regulated by factors originating from the structural context, and (2) the significance of such decisions both on the actors and on the context, which becomes part of the transformation of social norms and institutions (Clapham, 2005). In other words, it is not only concerned with structural constraints, but also emphasizes the social meanings of the constrained actions, which provides a way to situate the larger impact of social processes and offers the ground to discuss broader societal issues such as the collective good, rights, and justice.

With these perspectives in mind, the case study of Nanjing's poor is organized into two analytical parts composed of contextualization and interpretation. (1) 'Contextualization' is the step in which the structural context for the homeownership transition among Nanjing's poor is constructed. Specifically, I use descriptive statistics to characterize the poor's overall housing structure and employ the method of hierarchical linear modeling (HLM) to identify major structural factors affecting the poor's housing-tenure outcome, using census and household survey data. (2) 'Interpretation' is the step in which specific storylines of structure–agency interactions are evaluated based on the constraints and actors identified in the contextualization. The analyses in this step are mostly qualitative and hermeneutic, as semistructured personal interviews, collected from selected households, are used to reconstruct and interpret individual storylines. The analyses in these two steps are connected based on the notion of 'modality'; that is, the possibility and necessity of given actions under certain structural configurations. Giddens has described three basic types of modalities, related to structures of (1) domination, which is primarily facilitated and powered by resource control; (2) legitimization, which is sanctioned by laws, regulations, and other prevailing norms governing the society; and (3) signification, which is accomplished through language and communicative networks. In China's housing reform, these three types of modality are exemplified, among other things, as (1) the government and private interest groups' monopoly of crucial resources such as land and housing provision; (2) the state and local authorities' institutional regulations, including those asserted by Hukou, urban planning, and urban housing policies; and (3) the propaganda voiced by the media and other communication tools controlled by the government and private interest groups at multiple levels. Note that these modalities themselves are not part of the statistical analyses in the step of contextualization; rather, they are the leads that help us make sense of the analysis results, and the bridge that links the quantitative findings with qualitative and critical interpretation. They are used to map out the relations between structural constraints and agent actions, and to examine how these relations are manifest in different situations to facilitate and/or enforce homeownership transition. For example, suppose in the statistical analyses we find that a household's work-unit affiliation can significantly increase its chance of homeownership (ie work-unit affiliation is a significant constraint factor), but the quantitative analyses cannot tell us whether the work-unit factor drives the poor's housing decision in a beneficial or undesirable way. Whereas financially sound work units can provide their employees with improved housing on highly discounted sales terms, it is a completely different story for failing work units which are eager to get rid of their dated housing stocks. Understanding such details underlying housing marketization, as well as different storylines through which relevant modalities have led to the homeownership transition among the poor, is essential for us to answer why and how private homeownership has often become a problem for the poor.

Data collection and descriptive summary

Nanjing is the capital city of Jiangsu province and an important central city in the Yangtze River Delta. At the the end of 2004 the city of Nanjing administered an area of 6598 km², comprised of 11 districts and 2 counties, and containing 5.84 million people in total. According to a survey in 1999, 9.5% of the permanent local residents and 29.0% of migrants in Nanjing were living on an income under the poverty line of 2972 yuan per year (Hussain, 2003). The city's housing-price:income ratio has remained among the highest in urban China, recently approaching 15:1 (*Xinhua Daily* 2010).

Two types of data are used in this study. The first are census datasets from 2000 and 2005, which include variables aggregated over 62 *Jiedao* areas within the 11 districts of the whole of Nanjing city proper. The second type of dataset contains variables collected from a household survey conducted in 2004. The three-stage stratified cluster sampling strategy we adopted in the survey was as follows. First, 19 *Jiedao* units were selected out of all 62 units ($P_1 = 30\%$). Second, 37 areas managed by different residents' committees were selected from a total of 193 such areas within the 19 selected *Jiedao* units ($P_2 = 20\%$). It is notable that poor households may be unevenly concentrated in different parts of the city. So the selection of *Jiedao* units and residents' committees was stratified based on poverty concentrations (regions with severe or low poverty rates were identified) and geographical distribution (areal units were divided into inner/outer city strata, as these are known to attract different groups of poor). There are no accurate statistics about the actual distribution of poor households, so the stratification is based mainly on local knowledge and experience from previous work. Finally, households were randomly selected at a fixed interval from household address registries (including both local and registered-migrant households) provided by offices of the residents' committees ($P_3 = 4\%$). Overall, a total of 1984 households were selected ($P = P_1 \times P_2 \times P_3 = 0.24\%$).

After the initial sample selection, a set of criteria was used to screen for poor households, which were defined as (1) families with per capita incomes lower than half the average individual income in the city (ie 425 yuan/month), or (2) families with per capita incomes between 425 and 850 Yuan/month and satisfying one of the following two conditions: (a) the household head or spouse is unemployed or without a source of income, or (b) the household head or spouse was born with a rural Hukou. In total 269 households satisfied the criteria, and 256 of them completed the survey. Among the surveyed households, 64% have an income below 425 yuan/month, 85% have unemployed family members, and 45% have rural origins. Their geographical distribution can be seen in figure 1.

The average total and per capita housing floor sizes in the sample are 43.6 m² and 13.3 m²/person, respectively, which are well below the figures of 65.1 m² and 22.7 m²/person for Nanjing's overall population (Nanjing Bureau of Statistics, 2005). Table 1 provides summary statistics about the tenure structure and housing sources among the sample. There are five major sources of housing. (1) Housing managed by the municipal housing bureau, which includes various types of public housing, such as welfare housing and housing for (former) members of small or dissolved work units which are unable to provide housing to their employees. (2) Work-unit housing, which refers to public housing allocated to work-unit employees. (3) Housing from private parties, which consists of rentals and privately owned housing purchased on the open market, including new commodity housing and second-hand housing. (4) Self-built private housing, which represents a special type of property ownership, mostly comprising housing built before 1949. These units are usually considered as privately owned, but the legal basis of such ownership, especially the landownership right, is unwarranted. (5) Housing purchased under the affordable-housing program.

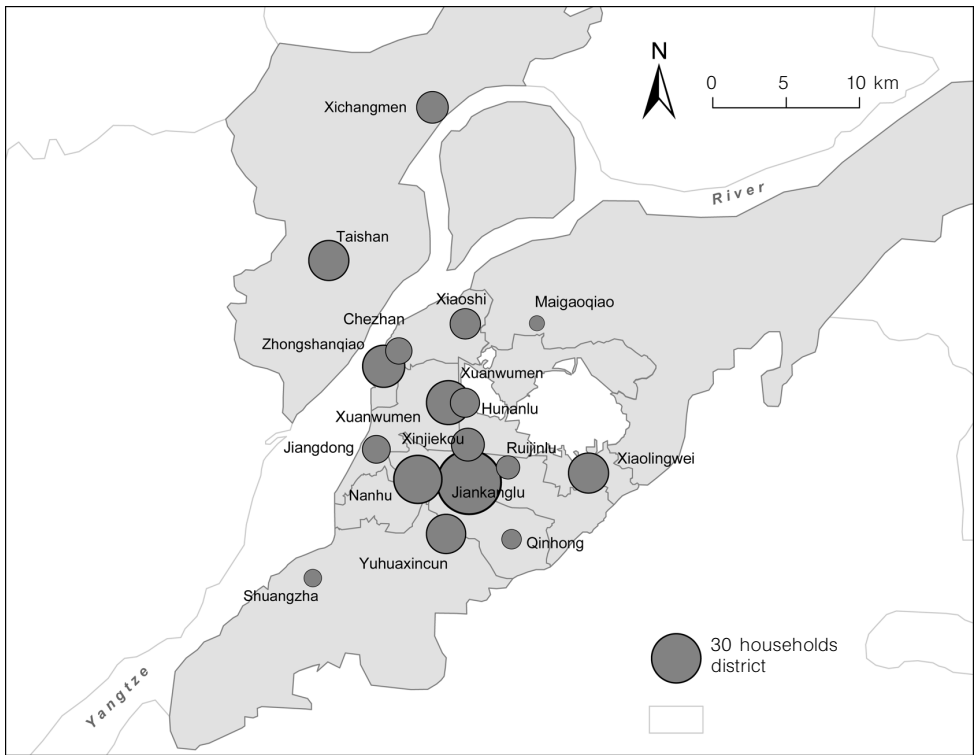


Figure 1. Geographical distribution of the survey sample.

In terms of housing tenure, we can see that more than half of the households in the sample (59.0%) are renters, 32.4% are owners of non-self-built housing, and 8.6% are owners of self-built housing. The rate of total nominal homeowners (41%) is significantly lower than the official figure of about 70% for the whole country. Based on the data, self-built private housing units have the largest average floor size (60.4 m²) but, as stated previously, they are mostly substandard rural housing or aged historical private housing, which is reflected in their median building type (single-story cottage). Compared with renters, owners of purchased housing live in larger units and better buildings, but there is no significant difference in the self-rated housing quality.

Table 1. Housing characteristics and tenure structure of the sampled households.

Housing characteristics	Rent	Own	Self-built
Household number (percentage)	151 (59.0)	83 (32.4)	22 (8.6)
Average floor space (m ²)	36.0	52.6	60.4
Source of housing (%)	100	100	100
housing bureau	51.0	19.3	na
work units	29.1	59.1	na
private market	18.6	16.8	na
self-help and others	1.3	1.2	100
affordable housing	na	3.6	na
Median housing type	apartment— under 6 stories	apartment— ≥ 6 stories	cottage/ single story
Housing quality (self-rated, from 1–7)	3 (bad)	4 (average)	3–4

Note: na—not applicable.

The cross-tabulation between housing tenure types and housing sources shows that a significant proportion of renters (51.0%) are concentrated in housing provided by the housing bureau, reflecting an early urban renewal effort in the 1980s which converted a large amount of aged private housing to public housing in old inner-city districts. Most of the remaining renters either rent from their work units (29.1%) or from private parties (18.6%). Very few nonowner families (1.3%—2 cases) had resorted to self-help strategies because self-built housing and ‘squatting’ have been strictly controlled in Nanjing since the 1980s. On the other hand, most (59.1%) owners of non-self-built housing had purchased their homes from work units, and a smaller portion of them (19.3%) had obtained housing from the housing bureau. Additionally, 16.8% of the owners had purchased housing from private parties in the second-hand or commodity housing markets. Only a small number (3.6%) had purchased properties from the affordable-housing program.

Modeling the structural constraints of homeownership attainment

In order to identify the structural constraints particularly relevant to home ownership transition among the poor, a two-level hierarchical linear logistic model was used to test the relationships between homeownership and various market and nonmarket factors.

Model specification

Generally speaking, HLMs allow us to perform more robust analyses on clustered data (Luke, 2004). The main reason that HLM, rather than standard linear regression, was used in this study was due to the potential clustering effects in the household survey caused by our sampling strategy, and/or existing ‘community effects’ on housing-tenure outcomes. The model specification is similar to the one used by Huang and Clark (2002), which can be expressed as follows:

Level 1:

$$Y = \text{prob}(\text{tenure} = 1|\beta) = \varphi,$$

$$\ln\left(\frac{\varphi}{1-\varphi}\right) = \eta,$$

$$\eta = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_i X_i.$$

Level 2:

$$\beta_0 = \gamma_{00} + \gamma_{01} Z_1 + \gamma_{02} Z_2 + \dots + \gamma_{0i} Z_j + \mu_0.$$

The level-1 model is a linear logistic regression of homeownership on household-level variables. The dependent variable Y denotes the probability of a household owning their housing (1) or not (0), and η is the logit transformation of the probability. Since we are mainly interested in the impact of homeownership transition, the definition of homeownership included only those who had purchased their housing; that is, it did not include nominal owners of self-built or historical private housing. On the right-hand side of the level 1 equation, X_i denotes the household-level independent variables, β_i represents regression coefficients, and β_0 is the intercept. A preliminary analysis with a null, unconstrained model over the data sample showed a moderately high intraclass correlation coefficient of 0.20, which means that the variability at the Jiedao level accounts for about 20% of the total variability. This statistically confirms the necessity for a two-level model. The model at level 2 is a linear model that explains the intercept from the household-level equation based on Jiedao-level variables (Z_j) and a random effect (μ_0). The coefficients of the level-1 model are specified as fixed effects because no strong evidence suggesting they should be random was found.

Selection of independent variables

The selection of variables was based largely on past studies and our prior knowledge about the case-study city. The central purpose was to identify the best set of proxies which can meaningfully reveal the market and nonmarket forces underlying the homeownership transition. Generally speaking, three categories of independent variables were considered: (1) household characteristics, including household size and household income, as well as the household head's age, gender, education, income, political attachment (eg whether he or she is a member of the Chinese Communist Party), and duration of residence;

Table 2. Results of the two-level hierarchical linear logistic regression.

Fixed effect	Coefficient (<i>P</i> -value)		Variable description
<i>Household-level variables</i>			
Household income	0.72	(0.03**)	Total monthly household disposable income in yuan
Household income ²	-0.390	(0.09*)	Household income squared
Household size	-0.17	(0.35)	Number of household members
Formal workers	0.02	(0.94)	Number of workers in the family formally employed
Informal workers	-0.30	(0.19)	Number of workers in the family in the informal economy
Age	0.20	(0.54)	Age of the household head
Age ²	-0.11	(0.45)	Age of the household head squared
Gender	0.12	(0.77)	Gender of household head: male = 1; female = 0
Education	-0.37	(0.13)	Years of education the household head has received
Education ²	-0.26	(0.04**)	The years squared of education of the household head
Party membership	0.54	(0.33)	Whether the household head is a member of the Chinese Communist Party: yes = 1; no = 0
Self-employment	3.57	(0.002***)	Whether the household head is self-employed: yes = 1; no = 0
Formal employment	-0.07	(0.86)	Whether the household head has stable employment: yes = 1; no = 0
State employment	2.12	(0.02**)	Whether the household head is or was an employee of a state-affiliated work unit: yes = 1; no = 0
Employer rank	0.045	(0.82)	The state-designated rank of the household head's employer: central state level = 6; provincial level = 5; city level = 4; county level = 3; jiedao level = 2; residents' committee level = 1; all others = 0
Local Hukou	2.48	(0.03**)	Whether the household head has a local Hukou at the time of housing transition: yes = 1; no = 0
Length of local residence	-0.14	(0.69)	Household head's total years of stay in the local city
Jiedao-level terms (for intercept β_0 at the household level)			
Share of low-price housing	0.08	(0.07*)	Housing stock with costs between 10 000 and 100 000 yuan per unit as a percentage share of total stock in each community
Constant γ_{00}	-0.92	(0.009***)	Intercept of the level-2 model

***—Significant at the 1% level; **—significant at the 5% level; *—significant at the 10% level.

(2) employment-related variables, such as employment status, work-unit affiliation, and rank of employer (if a state-affiliated work unit); and (3) institutionally related variables, such as whether the household has a local urban Hukou.

The model was run multiple times to refine the variable selection. After each run, the statistical significance of the regression coefficients was examined and the overall fitness of the model was evaluated to determine whether some variables should be added or removed. The goal was to minimize the chance of overfitting and, using human knowledge, to determine the variable selection—rather than letting an algorithm automate the process (eg in stepwise regression)—to ensure that the final model contains a meaningful combination of variables. The final selection of variables and the regression results are shown in table 2.

Results of the regression

As is shown in table 2, at the jiedao level, the proportion of inexpensive housing stock shows a significant positive effect on homeownership, which indicates that housing provision is an important factor of ownership transition among the poor. At the household level, factors with significant positive effects include household income (0.72; $p < 0.05$), state employment (2.12; $p < 0.05$), self-employment (3.57; $p < 0.01$), and the household head's local urban Hukou status (2.48; $p < 0.05$). These effects generally agree with results of previous studies on China's housing-tenure formation. Specifically, the importance of household income reflects the economic aspects of housing-tenure decisions, although the positive effect tends to decrease as income increases. The effect of state employment confirms the role of state-affiliated work units in China's homeownership transition, as dwellers in public housing have often been offered and persuaded to purchase their homes at discounted prices. Self-employment, on the other hand, is most likely another proxy of financial capacity, as some of the self-employed households are small business owners backed by certain amounts of savings or assets, which gives them more power in housing decision making (although their monthly incomes are not necessarily high). Finally, the effect of Hukou suggests a greater chance of homeownership for local urban Hukou holders, which can be a complex result from multiple factors. (1) First, it is evident that almost all (former) employees of state-affiliated work units also hold a local urban Hukou. Correlation analyses show that the two variables are indeed strongly correlated, although it seems that Hukou does not significantly correlate with most other independent variables. (2) Hukou also reflects native residents' advantage in accessing housing benefits offered by the local government; for example, those related to the housing provident fund and various local housing-welfare programs, all of which are only available to local Hukou holders. (3) A local urban Hukou normally indicates stronger local connections—for example, with parents, relatives, and friends—and therefore it is also a proxy for social capital, which can play an important role in a family's housing decision making.

On the other hand, there are remarkable differences between these results and findings from past analyses. Some important factors in other studies, including household size, work-unit rank, party membership, and most demographic variables, are not significant in the present model. This is mostly due to the 'bottoming effects' among the poor population: the poor are usually distributed towards the lower end of the socioeconomic conditions measured by those variables, which eliminates covariability potentials in the general population. For example, household size can reflect the impact of family structure on housing decisions. But this is possible only when the family has the economic capacity to support more choices, which is not the case for most poor households. Age is sometimes a useful proxy of seniority advantage, which is an

important characteristic of China's work-unit system. However, in the present sample, the eldest people are those without a consistent employment history, who demonstrate little senior advantage. Similarly, the sampled poor's educational level is mostly equivalent to or lower than high school, and the party members in the sample include people ranging from disabled army veterans to long-term underemployed, and laid-off, workers. As a result, both variables contribute little to a family's housing prospects, although the squared education level shows a significant negative effect.

In summary, these results confirm the effects of relevant market and nonmarket forces on the poor's homeownership attainment, including those manifested in income differentiation, work-unit housing distribution, private assets, and various factors underlying Hukou. But the poor's housing choices are restricted due to the limited resources they have. It would be interesting to compare the present results with those obtained modeling the general population. However, as was mentioned above, the primary goal of this model is to construct the context of structure–agency interactions for further interpretation. The main interest of this study is to find out why and how the homeownership transition, under the structural forces identified by the model, has become a problem for the poor. Therefore, in the rest of this paper I move on to answer these questions, while more in-depth investigation of housing tenure could be performed in a separate study.

Housing privatization, contested urban space, and ownership-related deprivation

Based on the above analyses, figure 2 presents a pictorial description of the relations between the structural constraints and agency actions related to homeownership transition among Nanjing's poor. First, the structural constraints in the present context, as shown in figure 2, are represented by state employment, household income, self employment, Hukou, and other underlying market and nonmarket factors. Their influence over agency interactions, including those among dwellers, work units, developers, government, and other relevant players, are empowered, legitimized, and promoted by modalities shaped by the structures. Second, the organization of figure 2 aims to reflect two interrelated processes of structure–agency interactions. The first is the privatization of public housing. As depicted by the arrow on the left-hand side of the figure, this is an institutionally directed process mostly involving interactions among work units, the government, and dwellers in public housing. The second process is described by the arrow on the right-hand side, which is related to the housing transition

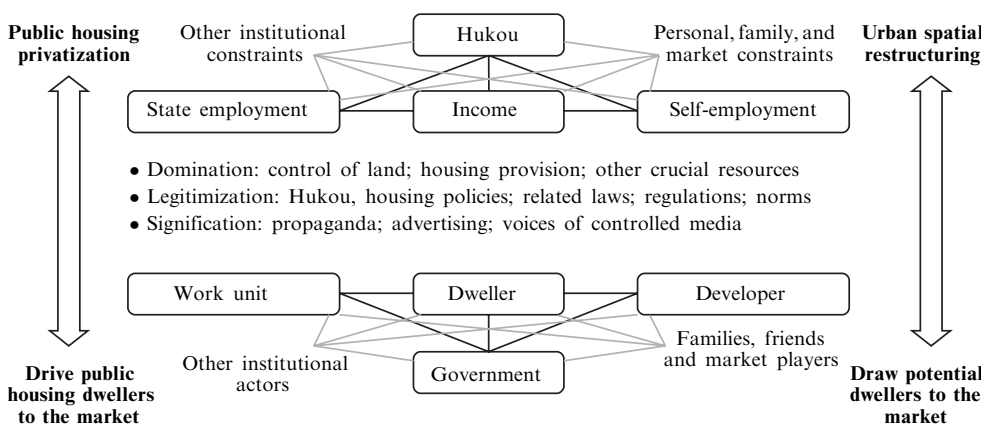


Figure 2. The structure–agency interactions behind the homeownership transition among Nanjing's poor.

necessitated by the urban spatial restructuring following the economic and housing marketization. The major players in this process include dwellers, the government, and private developers. Note that, although these two processes are discussed separately for the convenience of interpretation, in reality they are tightly coupled. It is their coordinated functioning that has produced complicated situations of housing deprivation.

Housing privatization: benefit or dumped responsibility?

On the structure side, the story of China's housing privatization started with the central government's resolution to rejuvenate the failed urban housing system which was plagued by financial stagnancy and shortages (Tong and Hays, 1996). The logic of housing privatization is based largely on the neoliberal premise of growth, which assumes that a market takeover of housing provision will result in sustained housing development and improved living conditions (He and Wu, 2009; Lee and Zhu, 2006). On the agency side, however, the implementation of this policy has undergone several rounds of back-and-forth changes. Scattered experiments in public housing sales during the 1980s were put on hold by the central government in the early 1990s because decision makers at the time feared that the heavily discounted sales might lead to a severe loss of state assets. In 1994 the central government published a milestone document in an effort to accelerate China's housing reform, which reasserted the priority of housing privatization and cleared doubts over discounted sales of public housing (State Council, 1994). But the massive implementation of this policy did not occur without resistance. Ms Liu, a 43-year-old former worker in a collectively owned print factory affiliated with Nanjing Heavy-Cargo Transportation Company (NHTC), told us about her reluctance when asked by the factory's management to purchase her dwelling unit in 1994. "They said our housing units were relatively inexpensive, which could be a 'breakthrough point' of the reform." But the true reason, according to Ms Liu, was that the factory's parent work unit, NHTC, did not want to allocate new housing to them: "They basically picked us as the easy target", said Ms Liu, because NHTC's own employees were not as motivated to follow the reform and give up their good share in the public housing system. It turned out that none of the workers responded to what the cadres had called for: "If we were to buy, we would rather buy newly allocated housing instead of the old unit", explained Ms Liu.

The government, which was much more determined and better prepared the next time, quickly dissipated such resistance with measures from three directions. The first was the continued implementation of land reform, which kept up the transformation of China's urban land distribution from a public granting system into a land-leasing market (Lin, 2009). Although the government no longer awards land to work units for housing construction, private developers can obtain the use rights to land for commodity housing development and then transfer those rights after paying a certain amount of fees. For ordinary workers such as Ms Liu, the direct consequence was that access to construction land was stalled, which disrupted housing development by small work units and made self-building of housing more difficult. The second measure involved legitimizing and encouraging public housing sales through policies such as the 'double-track' housing provision. Since large work units, such as NHTC, could still use previously granted land blocks to build housing for their employees, these policies quickly divided the resistant camp among work units. According to Ms Liu, soon after 1994 cadres and many in the factory's management started to receive newly built public housing which they happily purchased later with substantial discounts. "They said they were counted as formal NHTC employees and we were not", said Ms Liu. This added to the pressure for housing privatization on Ms Liu and her coworkers. Third, the government escalated its efforts in persuasion and advocacy at the local and

work-unit levels. Beginning in 1995, in Nanjing dedicated committees were created in the municipal government and work units to handle the matter, and cadres and propaganda officials were mobilized to push for privatization. All of these efforts resulted in significant progress in public housing privatization among work units, both in Nanjing and across the whole country. The central government then officially announced the end of public housing allocation in 1998 (State Council, 1998). In an ensuing document published in 1999, the government further urged that all public housing in work units that meet the minimal resale conditions should be sold to tenants on the grounds of mutual agreement (Ministry of Construction, 1999).

In 2001 NHTC decided to close the print factory permanently because of financial troubles, which resulted in new pressure for Ms Liu's family to purchase the unit. "Cadres from the factory and NHTC talked to us many times, and they told us that the work unit would no longer exist and we might have nowhere to live should we not buy the housing." The future of the housing was unclear, but NHTC certainly did not want to retain it because of its poor condition. The most likely plan was to sell the property to a private developer. Eventually, in 2003, Ms Liu's family paid about 10 000 yuan to NHTC to transfer the unit into their names, based on discounted terms which would ban the family from reselling the unit for five years. She described the bitter sense of extortion still haunting the family: they had been living there for nearly two decades without any major housing overhaul (ie new housing allocation or even remodeling of their existing unit), and suddenly they needed to pay out money, of which they did not have much, simply in order to stay in their home. Not every family in her situation surrendered, according to Ms Liu: "Today there are still some people [in her situation] who simply ignore NHTC. They refuse to surrender anything and they are ready to fight. And in fact NHTC can do nothing to them." This is not because of mercy on the part of the work unit, make no mistake: it is simply because the value of such housing did not motivate NHTC enough to take further measures. If a private development plan were under way, then there certainly would be a lot of fighting. As for Ms Liu's family, "we don't have that energy", she explained, "we have a daughter who is still in college and we don't want to distract her... basically we paid the money for peace."

Although different routes to privatization were observed with different interviewees, a common characteristic of their stories is the lack of choice and the fear for housing security after the termination of public housing allocation, which was a weapon constantly wielded by their work units to persuade (or threaten) them into purchasing. It is notable that, compared with its counterpart in the work-unit system, the public housing managed by the housing bureau has a much lower ownership rate. We conducted multiple *t*-tests to compare the housing conditions and dweller characteristics of these two types of public housing and did not find any significant differences between them. Consequently, the push from work units who were eager to shed their unwanted housing stocks was likely the key differentiator here. For work-unit renters who have not bought their housing, although in some cases we can observe the fighting spirit described by Ms Liu, more often the reason for not buying is simply either because the renters are too financially limited or because the conditions of housing are too bad. In other words, those who are still renting represent the most disadvantaged families disposed of by the work-unit system. Given the numbers and conditions of the poor renters, we can conclude that there is still a huge demand for low-cost public rentals, especially among the most disadvantaged groups; and the fact that most cheap rentals are from unprivatized public housing indicates a severe lag in the implementation of the low-priced rental program proposed by the central government. As a result, the most disadvantaged have to continue to live in the worst conditions because they have no other option.

Urban restructuring, contested urban space, and homeownership

Since the economic and housing reforms, Nanjing's urban space has been drastically restructured under various urban renewal and redevelopment plans. This has created an immense demand for private housing due to the elevated role of private property rights in remaking the urban space. For example, many of our interviewees mentioned the importance of homeownership in resettlement situations, because owning a dwelling normally allows one to negotiate better compensation. Nanjing's urban restructuring demonstrates common characteristics of the structural shifts driven by the production and reproduction of urban space in most Chinese cities (Lin, 2007). But the repercussion of these changes on Nanjing's poor has been firmly grounded in the specific development trajectory of the city.

As China's capital city under the Nationalist Party, Nanjing's municipal development had been relatively slow during most of the time after the communist takeover in 1949, especially considering the prominent economic status of the surrounding Yangtze Delta River. This situation gradually changed after the economic reform in 1978, as Nanjing was listed as one of the earliest 'open cities' in the coastal area. Although large-scale urban renewal efforts started in the 1980s, the real takeoff for Nanjing's municipal development occurred in the 1990s—after China's city planning law, enacted in 1989, and tax reform launched in 1994, gave the local government unprecedented legal and economic power to redesign Nanjing's urban space. Although these policy changes also brought similar impacts to most other Chinese cities, the momentum they produced in Nanjing was particularly explosive due to the preceding long years of underdevelopment and the prowess of Jiangsu province's economy. This thrust resulted in accelerated urban redevelopment cycles and rapidly rising housing prices, which keep driving Nanjing's poor families to the edge.

Many of our interviewees mentioned their experience of or concerns about recurring resettlement. One example is Ms Jiang, a 48-year-old housewife and former employee of a now closed work unit. Luckier than most employees of struggling work units, Ms Jiang's family was able to avoid the dilemma following the retreat of public housing thanks to the old private housing her husband obtained from his parents, in which the family lived after Ms Jiang's work unit failed. In the mid-1990s an inner-city renewal plan relocated her family to another neighborhood in the city. The family was granted ownership rights to a new apartment in a modest building constructed in the 1980s, which was assigned to them through an in-kind match. In 2000 a commodity housing development project placed the family on the resettlement list again. The negotiation had been quite reasonable, Ms Jiang said, and the case was settled after the family agreed to the compensation of about 100 000 yuan, an amount significantly higher than the original level suggested by the government and the developer. The family soon reinvested this small fortune into a nearby second-hand housing unit, where they were living at the time of interview.

As the family does not have a stable income, we were quite curious about the logic of their using all their money on housing. The main reason, as Ms Jiang explained, was the surging housing prices and their concern about future resettlement: "Housing prices have almost doubled [since they purchased the home], and our compensation would not be able to afford this unit at today's price." She mentioned the lack of rental stocks with adequate tenure stability, as most rentals which the family could afford were facing or would be facing similar uncertainty due to numerous rapidly approaching redevelopment plans. "Imagine what if we did not buy the home", said Ms Jiang, "We would have to move around without any chance of settling down in the city once they decided to redevelop this area." Ms Jiang told us that settling down in the city had been a top priority for the family, not only due to the convenience of daily life, but also

because it offered a stable environment for their daughter, who was still in high school when they purchased their home. Now that they owned their dwelling, whose value had also been increasing with the rise of local housing prices, they could rely on it as a key resource to find a new unit in the city in case of further resettlement. Many of our interviewees shared a similar sentiment and recognized the privilege of living in the city, which was at great risk due to the widespread and rapid urban spatial restructuring: “We don’t want to move out. Once you moved out, it would only be ten times more difficult to move back [to the city] in the future”, said one of the interviewees.

As shown in Ms Jiang’s case, native residents can exploit local connections to cope with urban restructuring. Other interviewees also mentioned the importance of material support from relatives and friends in major housing decisions such as home purchase. This echoes the effects of Hukou identified in the regression. Migrant families, in contrast, often need to rely on their own resources. One of our interviewees was Ms Zhang, a self-employed rural migrant from Hubei province who used almost all the family’s past savings to purchase a home in order to obtain local urban Hukous for her two children, exploiting a policy effective since 1995 in Nanjing that awards ‘blue seal’ Hukous (which can be converted to permanent ones after several years of residence) to qualified homebuyers. Although the paths to homeownership are different between the Jiang and Zhang families, one common characteristic is that both families have to live a materially limited life style because their precious resources became locked up in housing and eventually digested by the capital accumulation cycle. The Jiang family has been without a stable income for years and mostly relies on squeezing the government’s welfare pension to support her daughter’s high school and college education. Ms Zhang and her husband used to be modestly successful individual business owners, but now have to support their family of four by selling food on the street. These situations are ironically in contrast to the value of the housing assets they own on paper.

To summarize, the homeownership transition necessitated by the capitalization and reproduction of urban space, along with Nanjing’s accelerated urban development since the 1990s, has resulted in a special type of housing deprivation marked by high housing prices, high asset values, low consumption, and de facto poverty. Given the current pro-ownership model of housing reform and the continued growth of the local economy, in which the real estate sector is an important contributor, such difficulties will persist among poor owners for years to come. Some of the government’s institutional stimulants for the private housing market, such as awarding Hukou to home buyers, are also intrinsically problematic. For example, although the policy gives families such as Ms Zhang’s a chance to ‘buy into’ the city, it also leads to a social norm of negligence since it has actually commoditized Hukou while forgetting that such institutional discrimination should be unconditionally abolished by civil society. During the interview, we were under the impression that, besides its obvious role in urban population control, the current Hukou-based discrimination had been effectively used by the state as leverage to promote the private housing market, so that migrants who could not or chose not to buy continue to be punished and exploited due to unfair restrictions imposed by their Hukou status. The most appalling housing situation we have observed during our interviews was that of a migrant couple from Anhui province, who were informally hired as street sweepers by nearby residents. Living in a shelter made of waste wood, they told us that local residents brought them there and provided them with the shelter under the tacit approval of the residents’ committee, because the couple “work hard and demand little”. Informal sheltering like this had been banned by the city years before, but as long as it was not reported to higher authorities, no one would care. What is most disturbing is that nobody, including the poor couple themselves, thought such a condition of quasi-slavery was unacceptable.

Local residents took advantage of the cheap labor for their own good and, in exchange, the couple were able to stay in the city with some income. “We couldn’t afford a home”, said the husband, “the local residents were already nice enough to allow us to stay.” All seems fair in today’s highly marketized city, where everything has a price tag. But deep inside, this logic of the ‘free market’ is distorted when it is built on unjust terms defined by Hukou, which effectively turns those deprived of basic rights into objects of exploitation. And injustice like this, which exemplifies the worst case of capitalist exploitation, can hide so easily behind ‘legitimate’ market terms.

Conclusion: is homeownership a dream or delusion for the poor?

In summary, these analyses reveal that the homeownership transition since the advent of pro-ownership housing marketization has been a highly constrained process for the poor. Particularly in Nanjing, the poor’s housing-tenure decisions are affected mainly by income, work units, Hukou, and their private assets. These structural constraints are manifested in two interrelated processes of the homeownership transition: one related to public housing privatization and one to urban spatial restructuring. Both processes have resulted in concrete deprivation for the poor, as public housing privatization has been utilized by work units to ‘dump’ unwanted housing units and shed housing responsibility, while urban restructuring has put many poor owners into de facto poverty by absorbing their precious resources into the reproduction cycle of urban space. The ownership-based housing model in China’s current reform is not designed and executed to ensure the poor’s basic rights to the city, and the homeownership paradox occurs because both ends of the current ownership path (whether or not to own) cannot provide sustainable housing solutions for the poor. To own a housing property, for many poor families, is not a better choice, but only a ‘less bad’ arrangement among the limited options open to them. So is it really sensible and socially justified to push every aspect of the urban housing system into the private market without giving the poor an alternative? This is the main question I wish to raise against China’s current pro-ownership housing marketization.

Although our empirical analyses have been focused on Nanjing, the framework I proposed can be applied to the analysis of other Chinese cities, and I believe that the integrative view of structure and agency is crucial to understanding China’s postreform housing problems, many of which cannot be explained by distributive inequalities alone. What we can learn from Nanjing’s case is that the social function of the current housing reform has largely been a failure from the poor’s perspective. Whether the root fault lies in the ownership-oriented housing model itself or is due to the reckless execution of housing marketization remains a question that cannot be answered without further evidence. But, given the nature of China’s transitional urbanism, in which the new housing welfare system and social assurance networks are still under development, it is reasonable to argue that at this time we need more flexible housing policies and more alternative housing options to curb the injustice and deprivation accompanying housing marketization. These may include five components: (1) reviving the low-priced rental program, which has been greatly marginalized at the local level in past years. It seems that this has been recognized by China’s top decision makers, as the government has recently issued several documents to strengthen the development of the low-priced rental program (Ministry of Construction, 2010; State Council, 2008). (2) Reforming the affordable-housing program which up until now has been plagued by corruption and poor distribution efficiency. This reform should include lowering the qualification threshold and establishing a more strict and transparent channel of housing distribution for the program. (3) Enacting more flexible alienation rules over subsidized housing. For example, in fast-growing cities

such as Nanjing, the 5–10 year alienation restrictions can lock up too much of the poor's resources in housing for too long. In some situations, it makes more sense to put restrictions on resale prices and to target buyers rather than resale time, which would offer more flexibility for owners and create more sustainable housing sources for potential buyers among the poor, as the housing can then continue to be resold at low prices. (4) Reforming the Hukou system. While I am not against awarding Hukous to home buyers, the bindings between Hukou and other important socio-economic entitlements should be relaxed: for example, by allowing migrant children to go to local schools and providing basic housing to migrant families. (5) Finally and most importantly, it is necessary to establish a mechanism to ensure the implementation of housing welfare policies because in China's increasingly decentralized institutional environment, it is usually policy execution, rather than policy making, that really counts.

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