

# Urban Housing Stratification: An Analysis Based on CGSS2006 Data

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**Abstract:** The housing situation provides a penetrating view of the issues of social polarization and stratification. This study uses the 2006 Chinese General Social Survey (CGSS2006) data and latent class modeling to describe and analyze the current situation of social stratification of urban Chinese housing resources across three dimensions: housing conditions, property rights, and housing location. The findings show that, in the midst of institutional changes, possession of housing resources and selection of house locations still bear the imprint of social stratification despite complex and multiple housing distribution patterns. This stratification occurs not only among different social classes but also across generations.

**Keywords:** housing, stratification, latent class modeling analysis

## 城市住房的阶层分化:基于 CGSS2006 调查数据的分析

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**摘 要:** 住房是透视社会贫富差距和阶层分化的重要视角。本文依据 2006 年 CGSS 全国调查数据,运用潜类分析方法,从住房条件、住房产权、住房区位三个维度描述并分析了当下中国城市住房资源在阶层间的分化状况。研究表明,在制度变迁背景下,住房资源分配虽然复杂多样,但住房资源的占有及

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住房区位的分布仍被打上阶层分化的烙印。住房条件、住房产权、住房区位的分化不仅表现在阶层之间,同时也表现在代际之间。

**关键词:** 住房 阶层分化 潜类分析

Until now, research of social stratification has principally focused on two areas. One is research on the structure of stratification, exploring what kinds of differences in the distribution of resources bring about what kinds of stratification structures. The other is stratification mechanisms, which involves investigating the rules of resource distribution and how to maintain or change the rules. Lenski proposed that the former is about the results of social inequality, answering “who gets what,” and the latter is to explore reasons for social inequality, explaining “why one gets what he or she gets”. Existing research has tended to focus on the rules and character of stratification mechanisms in the process of “market transformation” but less on the emergence of stratification (social structuralization) and its results, which, in today’s China, is “a more challenging question in both theory and practice” (Liu Jingming & Li Lulu, 2005). The present research seeks to use data from the 2006 Chinese General Social Survey (CGSS2006) to uncover the character of and differences in ownership of housing resources among different members of society.

## THEORETICAL BACKGROUND

Since John Rex and Robert Moore’s 1967 publication of *Race, Community, and Conflict* and their introduction of the concept of “housing class,” housing has been regarded as a material symbol that represents various social classes and becomes a crucial angle from which to view social stratification. Housing has also always been an important material indicator in the study of China’s class structure; under the reallocation system, housing was a universal unit of welfare (Whyte, 1984; Logan, 1993; Bian, 1997). Despite a “de-stratification” structure emerging in the whole of society at that time, housing inequality remained a fact, although it was a fact which only existed between the majority—the masses and the minority—the “reallocation elites”: the latter enjoyed privileges of both housing size and quality (Howe, 1968; Whyte, 1984; Logan, 1993; Bian, 1997; Wang, 2000).

Since the 1978 implementation of the reform and opening-up, Chinese society has always been and still is in the process of transformation from a

reallocation system to a market economy system. This important reform has changed the distribution of interests throughout society and thus the social class structure as well: the three-layered structure of “peasants, workers, and cadres” under the former planned economic system has been radically breaking down and reforming. The emerging of new classes and marginal classes and the changing in status of the former classes has deeply complicated the entire social class structure (Liu Zuyun, 1999). Throughout the thirty years of reform, each class’s social status and opportunities have been tending toward a certain degree of rigidity (Lu Xueyi et al., 2002; Zhang Wanli, 2004). Although there exists different analyses and interpretations of the changes in Chinese social class structure such as “stratification theory” (Lu Xueyi, 2002), “fragment theory” (Li Qiang, 2002), and “fracture theory” (Sun Liping, 2003) etc., the evident division of classes in social class structure has become the common ground for understanding the social structure of contemporary China.

As an important part of economic system reform, housing commoditization and privatization reform has been strongly promoted by the government through various policies since 1979. Housing policy reform has not only changed the structure and character of the urban housing system but, more importantly, intensified housing inequality ((Bian, 1997; Khan, 1998; Logan, 1999; Huang, 2001; Davis, 2003; Pan, 2003; Wang, 2003; Li Ximei, 2003; Li Bin, 2004; Liu Xin, 2005; Bian Yanjie & Liu Yongli, 2005; Hiroshi, 2006). Housing differences between urban residents are an important aspect of class difference (Szelenyi, 1983; Lee, 1988). Existing research on housing inequality in the age of social transformation in China analyzes differences in various occupational classes’ possession of housing resources. The theoretical focus is on the influence of power and market as two different distribution mechanisms. The research shows that public power—whether power to rent-seek or the ability to influence property allocation—directly influences both dwelling space and opportunities for purchase (Liu Xin, 2005). Elite officials are more likely to own housing property than professional elites and have more advantage with dwelling space and housing quality (Bian Yanjie & Liu Yongli, 2005).

Although previous studies have explored the distribution of housing resources from the perspective of social stratification, their analytical focus has tended to be on the influence of power and market on housing distribution results, that is, the mechanism of housing resource distribution. By comparison, less attention has been given to the resulting housing stratification. With a nationwide housing price increase in recent

years, housing stratification has intensified among various classes and generational groups in China. At issue, therefore, is to draw a clear and complete outline of housing resource distribution so as to discover how and to what extent housing resources are stratified among different classes. This knowledge is crucial for a deeper understanding and interpretation of housing stratification and social stratification in contemporary China.

## ANALYTICAL MODEL

The stratification of housing can be explored from many different aspects and using various variables and methods. This study examines stratification of housing across three different dimensions as indicators: housing conditions, property rights, and housing location. Housing conditions reflects housing quality and, while undoubtedly a necessary indicator of housing stratification, do not comprise a sufficient indicator. Under the market economy system, housing has not only a utilitarian value as a necessity for living but also an exchange value as important family property. According to average housing prices released in the *China Real Estate Statistics Yearbook*, in 2006, a 90 m<sup>2</sup> house cost 650,000 to 750,000RMB in metropolises like Beijing and Shanghai, the equivalent of 30 – 40 years of a typical worker's income. Housing property rights are therefore another dimension vital to the measure of housing stratification. In addition, housing location decides housing value and the type of housing. A good location normally includes convenient access to transportation, a comfortable living environment, and all proper facilities for daily life. The location of housing therefore is a decisive factor of housing value. If dwelling space reflects space for living, then housing location reflects the social quality of the area of the dwelling space and is one of the most important manifestations of unequal housing.

This study employs Latent Class Modeling (LCM) as its method of analysis. LCM was first proposed by statisticians Lazarsfeld and Henry in their 1968 “Latent Structure Analysis” and is a probability model developed from Log-Linear Models. LCM is derived from factor analysis; however, it most differs from traditional factor analysis in the form of its variables—LCM deals with category variables (Qiu Haozheng, 2008). From the joint probability distributions of observed variables, LCM can find latent variables composed of identical characteristics. Through the maximum probability likelihood solutions of the joint distributions, response probability of external variables in each latent class can be

reached, and based on this researchers can discover the primary features of the different dimensions of the latent variables.

Suppose three external variables  $A$ ,  $B$ , and  $C$ . The most basic latent class model they can form is shown below:

$$\pi_{ijk}^{ABC} = \sum_{t=1}^T \pi_i^X \pi_{it}^{\bar{A}X} \pi_{jt}^{\bar{B}X} \pi_{kt}^{\bar{C}X}$$

In this equation,  $\pi_{ijk}^{ABC}$  is the joint probability of a latent class model (joint probability being the sum of probabilities of each latent class).  $\pi_i^X$  represents the probability that observation data can be assigned to the specific latent class of some latent variable  $X$ , namely,  $P(X=t)$ ,  $t=1, 2, \cdots, T$ .  $\pi_{it}^{\bar{A}X}$  is the conditional probability of getting response  $i$  to item  $A$  from a respondent in latent class  $T$ , namely,  $P(A=i|X=t)$ ,  $i=1, 2, \cdots, I$ , and so on.

Based on the basic statistical model above, the analytical models in the present study are developed according to the three dimensions of housing stratification, as shown below:

$$\pi_{X_1CTQ} = \pi_{X_1} \Pi \pi_{C_i} \Pi \pi_{T_j} \Pi \pi_{Q_k} \quad (\text{model 1})$$

$$\pi_{X_2CTR} = \pi_{X_2} \Pi \pi_{C_i} \Pi \pi_{T_j} \Pi \pi_{R_l} \quad (\text{model 2})$$

$$\pi_{X_3CTS} = \pi_{X_3} \Pi \pi_{C_i} \Pi \pi_{T_j} \Pi \pi_{S_n} \quad (\text{model 3})$$

Models 1-3 represent latent class models of joint distribution between objective stratification variables and variables for our three dimensions of housing resources.  $X_1$ ,  $X_2$ , and  $X_3$  represent latent classes in each model;  $C_i$ ,  $T_j$ ,  $Q_k$ ,  $R_l$ , and  $S_n$  represent, respectively, the variable groups of social class status, working period, housing conditions, property rights, and housing location. The variables in each group will be explained in detail below.

**C<sub>i</sub> Variable Group: Variables of Class Status**

Variables of this group represent the class status of respondents. Since class status is multi-dimensional, this study employs three common criteria of social stratification: occupation, income level, and educational background.

Occupational class: Occupations of heads of households are grouped into six classes according to their levels of authority and working autonomy: administrative, professional, clerical class, physical labor, self-employed, and unemployed (Li Lulu, 2002). We classify retired staff and workers as unemployed.

Income level: This study measures income level by per-capita family income or average household income. Due to regional disparities in income, income classes are standardized before classification: first, per-capita

income is calculated for each sampling regional layer (nine layers including Beijing, Tianjin, Shanghai, eastern capital- and municipality-administered areas, central capital- and municipality-administered areas, western capital- and municipality-administered areas, eastern county-administered areas, central county-administered, and western county-administered areas) is calculated; income is then grouped into five levels based on the ratio of per-capita income of sampled families to the per-capita income of their corresponding layer. The income level employed in this study therefore represents the relative income position of respondents within their regional layers.

**Educational level:** This research groups educational background into three categories: middle school level and below, high school or equivalent (including technical school, vocational high school *etc.*), and higher education (including full-time and part-time junior college, undergraduate and graduate studies *etc.*).

### **T<sub>j</sub> Variable: Working Period (Start Time of Career)**

Considering that reform policy has had a varying impact on different groups according to when they began their careers, career start time of heads of household owners is applied as a variable to investigate differentiation in housing resources among different generations against the background of system transformation. Housing reform in China was carried out in the process of economic reform. It began in 1979 with the initiation of an experiment of selling housing for full price to residents. In 1991, the General Office of the State Council promulgated *Views About Comprehensively Promoting Urban Housing System Reform*. In 1998, *The State Council on Further Deepening Urban Housing System Reform to Speed Up Housing Construction Notice* was released, which represents the end of direct government provisioning of housing. At that time, the marketization and commoditization of housing was realized, and the main tasks of housing system reform were accomplished. According to this historical backdrop, the career start time of respondents can be roughly divided into three periods: before housing system reform (before 1979), during housing system reform (1979 – 1998), and after housing system reform (after 1999). Due to regional differences in policy-making and execution of housing reform, this categorization is not precise, but, to a certain extent it provides an important indication of generational differences before and after reform.

### **Q<sub>k</sub> Variable Group : Variable of Housing Conditions**

This variable group consists of three variables: dwelling space, dwelling type, and sanitation facilities.

**Dwelling space:** Per capita dwelling space is the area of each household dwelling divided by the number of family members. This variable is also standardized to take into account regional variation: average housing area in each sampling regional layer is calculated first, and then respondent dwelling space per person is separated into five levels according to the ratio of respondents' per-capita dwelling space to the corresponding regional average. The dwelling space variable employed in this research therefore refers to the relative dwelling space level of respondents within their regional layers.

**Dwelling type:** The dwelling type variable is divided into four categories according to the number of bedrooms in the dwelling: one-bedroom, two-bedroom, three-bedroom, and more-than-three bedroom dwellings.

**Sanitary facilities:** Sanitary facilities reflect, to a certain extent, both a dwelling's "completeness" (a "complete" dwelling is equipped with a separate kitchen, bathroom, and bedroom) and its quality. This study separates this variable into three categories: dwellings with no separate bathroom, one separate bathroom, and two or more separate bathrooms.

### **R<sub>i</sub> Variable Group : Variable of Housing Property Rights**

This variable group measures differences in property rights held by respondents. This group consists of two variables: the situation of property rights in the place of residence and that in other places.

**Housing property in current living place:** This variable includes the six categories of private rented dwelling, public rented dwelling (rented from government or work unit), self-constructed dwelling with property rights, dwelling with partial property rights, dwelling with complete property rights (non-self-constructed), and loaned dwelling or other.

**Housing property rights in other areas:** Accounts for whether survey respondents own property rights in housing other than that in which they reside; divided into two categories: with property rights in housing property other areas and without.

### **S<sub>n</sub> Variable Group : Variable of Housing District**

This variable group reflects differences in housing location and neighborhood and includes two variables: location and community type.

**Housing position:** Under conditions of housing commoditization, the

housing price is a key indicator of whether its location is good or bad. The housing price level of a community area of respondents is thus employed to represent the level of their housing location. This variable is divided into five levels according to the average housing price in communities of the respondents compared with the house price in comparable cities of the same province. First, the average urban housing price (RMB/m<sup>2</sup>) of each sampling layer in each sampling province is calculated according to the two layers—directly-controlled municipalities (or capital cities) and counties—in the sampling areas, and then the average housing price in each community (street committee) is calculated. Finally, the ratio of the average housing price in each community district to the average housing price in the corresponding urban layer can be equally divided into five levels. This variable therefore reflects the price sequence of each community within the coequal cities of the same province (Li Jingming & Li Lulu, 2005) and can indicate the quality of respondents' housing location to a certain extent.

**Community type:** In the CGSS questionnaire, there are nine types of urban communities. According to conditions of community facilities and quality of life, the nine categories can be further grouped into three levels and five classes: high-level communities—commercial housing; mid-level communities—work unit-provided housing and economy housing; and low-level communities—shantytowns and old town districts, and official and unofficial migrant communities.

In order to address different research aims LCM can be divided into two approaches: explorative and verifying. The explorative approach does not limit numbers of latent classes and relevant parameters, and it purely uses the composition of the data to determine the appropriate model. The verifying approach tests the acceptability of hypothetical models by comparing prior models to observed data. This study utilizes the exploratory approach. Based on a primary model with one latent class, more latent classes are added gradually, and the fit of each model against observed data is tested sequentially from which an optimal model is selected. Model 3 best fits latent class 5. Models 1 and 2 have the optimal fit for latent class 6; however, they also reach a good standard for latent class 5 ( $p > 0.05$ ). For ease of analysis, these three models are grouped into five latent classes. The fit test results of the 5 latent class models in the three dimensions are shown in the following table (see table 1).



Table 1  
Fit Test of 5 Latent Class Models in the Three Dimensions

|                         | G <sup>2</sup> | P     | BIC       | df     | Para |
|-------------------------|----------------|-------|-----------|--------|------|
| Housing Condition       | 6 763.42       | 1.00  | 66 243.25 | 16 069 | 114  |
| Housing Property Rights | 3 932.26       | 0.999 | 71 160.65 | 3 138  | 99   |
| Housing Location        | 6 051.99       | 1.00  | 86 080.65 | 6 640  | 109  |

DATA ANALYSIS

This research investigates the objective consequences of stratification of class positions and housing resources through a latent class analysis of three dimensions: housing conditions, housing property rights, and housing location. The results are explained in detail below.

Class Status and Housing Conditions

Using model 1, we used LCM to estimate the joint distributions of objective class status variables and living condition variables, with the results shown in Table 2. The samples are grouped into 5 categories, and the data indicate the distribution of each group in reference to occupation, education, income, career starting time, dwelling space, housing type, and sanitary facilities. Strictly speaking, the data represent the response probability of each observation variable in a specific latent class; however, this may be regarded as percentage to help in the understanding and explanation of the data without influencing its nature.

*Latent class 1: 10.2% of the whole sample—self-employed individuals and senior administrative staff with the best housing conditions.*

Class status: From the perspective of occupation type, the members of this group are mainly self-employed (36.6%) or are senior administrative staff (21.3%). With regard to household income, they are situated in the middle level. Their educational background is relatively low; however, 17.8% of them have undergone some form of higher education. In addition, most of them took their first job during the housing reform period between 1979 and 1998. Thus, this group mainly consists of the middle-aged who when young switched to private-sector commercial careers and became self-employed early during the reform period as well as some middle-aged senior administrative staff.

Housing conditions: This group holds the best housing conditions among the whole sample. Nearly sixty percent (59.5%) live in the largest category of dwelling place; only 5.3% possess housing in the middle or smaller

Table 2  
Latent Class Analysis of Class Status and Housing Condition

|                                     |  | Latent Class 1 | Latent Class 2 | Latent Class 3 | Latent Class 4 | Latent Class 5 |
|-------------------------------------|--|----------------|----------------|----------------|----------------|----------------|
| <b>Head of Household Occupation</b> |  |                |                |                |                |                |
| Class Status                        | Senior Administrative Staff              | 21.3* (.038)   | 21.4** (.021)  | 5.5* (.022)    | 3.5(.020)      | 1.8* (.008)    |
|                                     | Professional Technician                  | 12.0* (.043)   | 46.9** (.025)  | 7.3(.049)      | 5.1(.032)      | 6.8** (.017)   |
|                                     | General Administrative Staff/Clerk       | 10.1** (.030)  | 21.1** (.021)  | 10.1* (.039)   | 11.0** (.030)  | 12.8** (.018)  |
|                                     | Physical Worker                          | 10.3** (.055)  | 8.7** (.023)   | 57.9** (.052)  | 47.7** (.038)  | 49.1** (.028)  |
|                                     | Self-Employed                            | 36.6** (.034)  | 1.0(.009)      | 12.6* (.055)   | 6.3* (.031)    | 16.2** (.022)  |
|                                     | Unemployed                               | 9.7* (.037)    | 0.8(.007)      | 6.6** (.018)   | 26.4** (.068)  | 13.3** (.030)  |
|                                     | <b>Head of Household Education Level</b> |                |                |                |                |                |
|                                     | Middle School and Below                  | 45.3** (.049)  | 0.0(.000)      | 39.6** (.080)  | 87.7** (.071)  | 55.9** (.049)  |
| Household Income Level              | High School or Equivalent                | 36.9** (.040)  | 26.7** (.075)  | 54.8** (.061)  | 12.1(.068)     | 37.6** (.041)  |
|                                     | Higher Education                         | 17.8** (.078)  | 73.3** (.075)  | 5.7** (.028)   | 0.2(.007)      | 6.5** (.018)   |
|                                     | <b>Household Income Level</b>            |                |                |                |                |                |
|                                     | Highest 20%                              | 23.2* (.075)   | 43.2** (.037)  | 17.8* (.052)   | 4.3(.047)      | 9.3** (.048)   |
|                                     | Higher 20%                               | 27.9** (.034)  | 27.7** (.018)  | 24.7** (.025)  | 11.1* (.040)   | 12.3** (.025)  |
|                                     | Middle 20%                               | 18.1** (.028)  | 18.1** (.023)  | 25.9** (.037)  | 19.8** (.050)  | 18.3** (.022)  |
|                                     | Lower 20%                                | 15.0** (.032)  | 8.4* (.017)    | 21.9** (.032)  | 28.8** (.029)  | 20.2** (.022)  |
|                                     | Lowest 20%                               | 15.7* (.061)   | 2.6* (.008)    | 9.7* (.030)    | 36.0* (.018)   | 39.9** (.048)  |

Table 2 (Continued)

|                             |                                |               |               |               |               |               |
|-----------------------------|--------------------------------|---------------|---------------|---------------|---------------|---------------|
| CST▲                        | Before Housing Reform          | 24.9* (.047)  | 24.9** (.035) | 26.0(.161)    | 75.2** (.094) | 31.8** (.037) |
|                             | During Housing Reform          | 56.5** (.041) | 45.2** (.022) | 60.9** (.122) | 23.5* (.076)  | 49.9** (.028) |
|                             | After Housing Reform           | 18.6** (.027) | 29.9** (.032) | 13.0* (.045)  | 1.3(.023)     | 18.3** (.028) |
|                             | Average House Area Per Capita  |               |               |               |               |               |
|                             | Largest 20%                    | 59.5* (.048)  | 25.1** (.029) | 13.5* (.061)  | 16.8** (.044) | 2.3(.011)     |
|                             | Larger 20%                     | 24.0** (.031) | 22.6** (.018) | 21.9** (.027) | 16.9** (.021) | 2.2(.016)     |
|                             | Middle 20%                     | 11.2** (.031) | 23.9** (.018) | 31.1** (.024) | 24.9** (.025) | 4.1* (.018)   |
|                             | Smaller 20%                    | 3.9* (.021)   | 18.0** (.019) | 24.2** (.040) | 26.7** (.028) | 14.9** (.032) |
|                             | Smallest 20%                   | 1.4(.010)     | 10.5** (.016) | 9.2* (.035)   | 14.7* (.050)  | 76.5** (.046) |
|                             | Dwelling Type                  |               |               |               |               |               |
| House Conditions            | 1 Bedroom                      | 0.5(.007)     | 13.9** (.020) | 10.9** (.025) | 10.5** (.028) | 65.6** (.056) |
|                             | 2 Bedrooms                     | 7.1(.160)     | 60.8** (.034) | 77.0** (.028) | 59.1** (.075) | 29.0** (.043) |
|                             | 3 Bedrooms                     | 49.3** (.073) | 24.3** (.034) | 12.2** (.030) | 22.3** (.029) | 3.7(.020)     |
|                             | More than 3 Bedrooms           | 43.1* (.132)  | 0.9(.009)     | 0.00(.000)    | 8.1(.043)     | 1.7(.013)     |
|                             | Sanitation Facilities          |               |               |               |               |               |
|                             | No Separate Bathroom           | 4.8(.034)     | 3.7** (.009)  | 4.2* (.015)   | 16.1* (.065)  | 53.1** (.041) |
|                             | 1 Separate Bathroom            | 62.0** (.071) | 94.8** (.016) | 95.5** (.021) | 83.0** (.069) | 46.9** (.028) |
|                             | More than 2 Separate Bathrooms | 33.3** (.063) | 1.5(.017)     | 0.3(.012)     | 0.9(.010)     | 0.0(.000)     |
| Probability of Latent Class |                                | .102          | .230          | .297          | .227          | .144          |

Note: 1. Standard deviations in parentheses, \* P<0.05, \*\* P<0.001;

2.▲ : CST= Career Start Time.

categories. 92.4% of them live in large houses with 3 or more bedrooms, and the percentage of houses with 2 and more bathrooms reaches 33.3%.

*Latent class 2: 23.0% of the whole sample—white-collar class with middle and above middle level housing conditions.*

**Class status:** With regard to occupation, this group mainly consists of professional technicians (46.9%), senior administrative staff (21.4%), and general administrative staff/clerks (21.1%)—the “white-collar” class. Their household income level is the highest among all the classes. Almost half (43.2%) of them cluster in the highest income group. They also have a clearly advantageous educational background: those with higher education constitute 73.3% of the whole sample. Regarding career start time, 45.2% of them are the middle-aged who started their careers in the midst of the housing reform process. Thus, this latent class mainly consists of those middle-aged professional technicians and administrative staff with higher incomes and a better educational background.

**Housing conditions:** The dwelling space of this group is generally above the average level; those with lower-than-average dwelling space constitute only 28.5% of the group. With regard to housing type, 60.8% of them have 2-bedroom dwellings; but still near a quarter (25.2%) of them live in large dwellings with 3 or more bedrooms. Most (94.8%) of the relatively large dwellings in this group, however, are equipped with only 1 separate bathroom. Accordingly, based on the age of this group, it can be assumed that most of these large houses were likely constructed before the mid-1990s. Despite the large dwelling area, the sanitary facilities were designed only for primary needs.

*Latent class 3: 29.7% of the whole sample—middle-aged technicians with middle level housing conditions.*

**Class status:** Occupationally, this group is comprised mainly of physical laborers (57.9%). 25.9% of them have a mid-level household income. 54.8% of them have a high school level education and thus a relatively higher cultural level among physical laborers. 60.9% of these heads of household took their first job during the housing reform period of 1979 and 1998. This latent class therefore mainly represents middle-aged technicians with middle-level incomes.

**Housing conditions:** With respect to dwelling space per capita, this class tends to cluster in the middle level (31.1%). The percentages in both smallest group and largest group are much smaller, and its whole distribution in this respect appears in the shape of a rugby ball. With regard to dwelling type, 77.0% of the respondents from this group live in

dwellings with 2 bedrooms; in addition, the percentage of complete dwellings in this class is comparatively high: 95.8% live in houses equipped with a separate bathroom. However, many fewer heads of household from this class live in large dwellings; those residing in 3-bedroom dwellings constitute only 12.2% ; additionally, no one lives in a dwelling with more than 3 bedrooms.

*Latent class 4: 22.7% of the whole sample—middle-aged and elderly retirees and the unemployed living in below-average-level housing conditions.*

Class status: This class mainly consists of physical laborers (47.7%) and the unemployed (26.4%). 75.2% of the respondents from this group started working before the 1979 housing reform. The cultural level of this group is the lowest of all: 87.7% of the heads of household in this class have a middle school education or lower. Also, the household income of this group is much lower; 36% of them are from the lowest income families, and 28.8% are from the lower income families. Accordingly, this class is comprised mainly of retired workers and the elderly unemployed who have lower incomes.

Housing conditions: In terms of dwelling space per capita, this class falls in a below-average level. Altogether 41.4% of the heads of household in this class occupy a below-average amount of dwelling space. In respect to dwelling type, 59.1% of them live in 2-bedroom dwellings. 16.1% of this group's members do not live in houses with a separate bathroom.

*Latent class 5: 14.4% of the whole sample—the self-employed and older physical laborers living in the worst housing conditions.*

Class status: Occupationally, 49.1% of this group are physical laborers; the self-employed constitute 16.2%, and the unemployed 13.3%. The heads of household in this class have a much lower educational level: 55.9% of them have only middle school backgrounds or lower. Besides, 81.7% of them took their first job before 1998. Among classes, they have the lowest family incomes: 39.9% of them belong to the lowest level and 20.2% to the lower level. Accordingly, this class consists mainly of the self-employed and the middle-aged and old physical laborers who have the lowest incomes.

Housing conditions: Among all groups, this one has the worst housing conditions. Nearly eight tenths (76.5%) belong to the group with the lowest amount of dwelling space, and 14.9% in the group with lower dwelling space. This group lives primarily in small dwellings: 65.6% in one-bedroom dwellings and over half (53.1%) do not have a separate

bathroom.

## **Class Status and Housing Property Rights**

Employing model 2, the joint distribution of class status and housing property rights variables were evaluated through latent class analysis, and the results are shown in table 3.

*Latent class 1: 14% of the whole sample—middle-aged administrative staff and professional technicians possessing multiple housing properties.*

**Class status:** Occupationally, this latent class consists of professional technicians (43.4%), senior administrative staff (30.7%), and clerks (20.3%), the “white collar” class. The heads of household of this group have good educational backgrounds. All of them started their careers before the end of housing reform. Their income level shows that this class’s economic situation is very strong: 39.8% of them belong to the highest income group. This group is comprised mainly of middle-aged professional technicians and administrative staff.

**Housing property:** Of all classes, this class contains the highest percentage (68.9%) of members who reside in non-self-constructed commercial housing or public housing from work units. By comparison, only 17.5% of the heads of household in this group live in rented dwellings. Additionally, 15% of them possess housing property in other places in addition to their current residences, constituting 23% of all households who have extra housing property.

*Latent class 2: 12.5% of the whole sample—young white-collar class residing in commercial houses and rented houses.*

**Class status:** Occupationally, this group is comprised mainly of professional technicians (44%) and general administrative staff/clerks (22.6%). The educational background of this class is the highest among all latent classes. With respect to age, this group mainly consists of young people who started their careers after 1998 when welfare-oriented housing distribution was cancelled. Judging by average household incomes, this class is situated in the highest economic level with almost half (48.2%) belonging to the highest income group. This latent class is comprised mainly of the high-income young white-collar class who grew up in the era of housing commoditization.

**Housing property:** Regarding rights to occupied housing property, 41.5% of the respondents in this class live in non-self-constructed commercial housing with property rights; 26% of them rent private dwellings, and 14.4% rent public housing. Altogether the percentage of this class living in rented dwellings is 40.4%, nearly equal to the percentage of those possessing

Table 3  
Latent Class Analysis of Class Status and Housing Property

| Item                               | Latent Class 1 | Latent Class 2 | Latent Class 3 | Latent Class 4 | Latent Class 5 |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| <b>Occupational Class</b>          |                |                |                |                |                |
| Senior Administrative Staff        | 30.7** (.029)  | 11.3** (.019)  | 3.1(.059)      | 4.1** (.008)   | 1.7* (.006)    |
| Professional Technician            | 43.4** (.037)  | 44.0** (.030)  | 8.4(.087)      | 5.2** (.009)   | 3.7** (.010)   |
| General Administrative Staff/Clerk | 20.3** (.035)  | 22.6** (.021)  | 14.1* (.066)   | 12.1** (.014)  | 3.1* (.010)    |
| Physical Laborer                   | 4.7(.029)      | 14.8** (.026)  | 62.7** (.176)  | 50.7** (.027)  | 36.9** (.029)  |
| Self-Employed                      | 0.9(.015)      | 3.9* (.014)    | 5.0(.042)      | 5.4** (.012)   | 43.9** (.022)  |
| Unemployed                         | 0.0(.000)      | 3.3* (.012)    | 6.7* (.022)    | 22.5** (.018)  | 10.8** (.017)  |
| <b>Educational Background</b>      |                |                |                |                |                |
| Middle School and Below            | 4.9(.027)      | 0.0(.000)      | 13.9(.167)     | 79.6** (.066)  | 70.0** (.039)  |
| High School or Equivalent          | 32.8* (.122)   | 25.3** (.049)  | 76.4** (.123)  | 19.0* (.060)   | 27.5** (.036)  |
| Higher Education                   | 62.3** (.130)  | 74.7** (.049)  | 9.7(.056)      | 1.4(.008)      | 2.5* (.010)    |
| <b>Household Income Level</b>      |                |                |                |                |                |
| Highest 20%                        | 39.8** (.088)  | 48.2** (.035)  | 13.6* (.040)   | 6.8** (.011)   | 20.7** (.024)  |
| Higher 20%                         | 32.0** (.023)  | 22.1** (.020)  | 23.1** (.022)  | 13.6** (.013)  | 23.2** (.018)  |
| Middle 20%                         | 16.7** (.040)  | 16.3** (.020)  | 29.8** (.025)  | 20.0** (.014)  | 17.3** (.019)  |
| Lower 20%                          | 8.7* (.044)    | 10.1** (.020)  | 22.5** (.036)  | 24.7** (.014)  | 19.5** (.019)  |
| Lowest 20%                         | 2.7* (.011)    | 3.3** (.013)   | 11.0** (.032)  | 34.9** (.022)  | 19.1** (.026)  |

Table 3 (Continued)

|   |  |               |               |               |               |               |
|---|--|---------------|---------------|---------------|---------------|---------------|
| CST▲  | Before Housing Reform  | 44.4** (.068) | 0.0(.000)     | 21.1(.114)    | 69.2** (.034) | 11.7** (.030) |
|   | During Housing Reform  | 55.6** (.068) | 31.1* (.110)  | 65.6** (.095) | 28.8** (.030) | 64.4** (.028) |
|   | After Housing Reform   | 0.0(.000)     | 68.9** (.110) | 13.3** (.031) | 2.0* (.009)   | 23.9** (.023) |
| <b>Property Rights in Current Residence</b> |  |               |               |               |               |               |
| House<br>Property<br>Rights                 | Rented Private Dwelling                                      | 3.4(.021)     | 26.0** (.036) | 0.0(.000)     | 1.4(.010)     | 45.2** (.053) |
|   | Rented Public Dwelling                                       | 14.1** (.023) | 14.4** (.019) | 16.4** (.035) | 12.6** (.011) | 7.3* (.028)   |
|   | Self-Constructed Dwelling with<br>Property Rights            | 5.6* (.020)   | 11.8** (.021) | 11.6** (.042) | 29.0** (.019) | 24.9** (.041) |
|   | Dwelling with Partial Property Rights                        | 5.9** (.011)  | 4.8** (.010)  | 8.0** (.016)  | 4.5** (.007)  | 0.7(.007)     |
| House<br>Property<br>Rights                 | Dwelling with Full Property Rights<br>(not Self-Constructed) | 68.9** (.038) | 41.5** (.029) | 63.1** (.031) | 50.9** (.020) | 16.9* (.052)  |
|   | Loaned Dwelling and Other                                    | 2.0* (.008)   | 1.6* (.006)   | 0.8(.008)     | 1.6* (.005)   | 5.0** (.011)  |
|   | <b>Property Rights in Other Housing</b>                      |               |               |               |               |               |
| House<br>Property<br>Rights                 | No Other Housing Properties                                  | 85.0** (.038) | 93.7** (.017) | 97.2** (.013) | 95.3** (.008) | 78.2** (.024) |
|   | Holding Housing Properties<br>in Other Places                | 15.0** (.038) | 6.3** (.017)  | 2.8* (.013)   | 4.7** (.008)  | 21.8** (.024) |
| <b>Probability of Latent Class</b>          |  |               |               |               |               |               |
|   |  | .140          | .125          | .184          | .354          | .195          |

Note: 1. Standard deviations in parentheses, \* P<0.05, \*\* P<0.001;

2. ▲ : CST= Career Start Time.



commercial houses. In addition to current residence, only 6.3% of this group also possess extra housing property in other places. Despite its high income level, a low proportion of this group holds multiple housing properties.

*Latent class 3: 18.4% of the whole sample—middle-aged technicians who are mainly owner-occupiers.*

Class status: Occupationally, this group is comprised mainly of physical laborers (62.7%). The educational background of this class is mostly high school or an equivalent (76.4%). The majority of this group started their careers during the period of housing reform between 1979 and 1998. With regard to household income, this class occupies a middle level; 29.8% of them have middle-level average per capita household income, and the class's income distribution produces a clear rugby ball shape. This latent class mainly represents middle-income middle-aged technicians.

Housing property: Looking at property rights relevant to current residences, 63.1% of the respondents in this group possess complete property rights for their non-self-constructed work unit dwellings or commercial houses, and 8% hold partial property rights, the highest percentage of partial property rights holdings among all latent classes. Other than the 16.4% of them living in rented public houses and 0.8% lodging with others, 82.8% of this group own property rights in their dwellings, which is the highest rate among all classes. However, only 2.8% of them possess housing properties in other places aside from their residences, the lowest rate among all latent classes. Clearly, the advantage of this class is only in the aspect of owner-occupancy.

*Latent class 4: 35.4% of the whole sample—old workers with work unit dwellings and self-constructed houses.*

Class status: With regard to occupation, 50.7% of the respondents in this group are physical laborers, and 22.5% of them are unemployed. Unlike the physical laborers in latent class 2, this class has a much lower cultural background: almost 80% (79.6%) have a middle school or lower education. 69.2% of them took their first job before housing reform in 1979. By income, this class is situated in the lowest level among the 5 latent classes, with 34.9% belonging to the lowest group of average household income per capita, and 24.7% belonging to the lower group. This class mainly represents the retired or unemployed low-income workers who started their careers before reform.

Housing property: 50.9% of the respondents in this group own property rights in their non-self-constructed commercial houses or work

unit houses where they currently live. In addition, around 30 percent (29%) of them reside in self-constructed housing in which they have property rights. The percentage of rented houses is quite low (14%) in this class, of which those living in rented public houses constitute 12.6%. Despite a worse economic situation, the respondents from this class are not obviously disadvantaged in the area of housing property rights ownership. Finally, few from this class possess extra housing properties, reaching a rate of only 4.7%.

*Latent class 5: 19.5% of the whole sample—middle-aged and young self-employed workers and physical laborers living mainly in rented houses.*

**Class status:** By occupation, this class consists mainly of self-employed workers (43.9%) and physical laborers (36.9%). The cultural level of this group is very low: 70% of respondents from this group only have a middle school or lower education. 64.4% of them started working during the course of housing reform between 1979 and 1998. With regard to household income, 43.9% of them lie in an above-average level. By comparison, 38.6% of them occupy a below-average level; the income divide is obvious. This latent class mainly represents the middle-aged and young self-employed workers and physical laborers.

**Housing property:** 45.2% of the respondents in this class reside in rented private housing, and 24.9% live in self-constructed houses with property rights. Among all latent classes, this class holds the highest percentage of rented dwellings (52.5%). In contrast, it's rate of purchase of non-self-constructed commercial or work unit housing is the lowest among all classes at 16.9%. Clearly, this class is much disadvantaged in the holding of property rights in dwellings of residency. However, this class has the highest percentage of households owning extra house property in different places at 21.8%, comprising almost half (46%) of the total who own extra housing properties. It can thus be inferred that this latent class is comprised mainly of migrant physical laborers or self-employed workers who still own houses in other places (like their hometown) but rarely have housing properties in cities where they live.

### **Class Status and Housing Location**

Utilizing model 3, the joint distribution of the class status and housing location variables was evaluated through latent class analysis, with the results displayed in Table 4.

Table 4  
Latent Class Analysis of Class Status and Housing Location

|              | Item                               | Latent Class   |                |                |                |                |
|--------------|------------------------------------|----------------|----------------|----------------|----------------|----------------|
|              |                                    | Latent Class 1 | Latent Class 2 | Latent Class 3 | Latent Class 4 | Latent Class 5 |
| Class Status | <b>Vocational Class</b>            |                |                |                |                |                |
|              | Senior Administrative Staff        | 20.8** (.017)  | 2.5(.023)      | 5.7** (.012)   | 3.0* (.014)    | 1.4** (.012)   |
|              | Professional Technician            | 45.0** (.023)  | 7.1(.038)      | 8.2** (.013)   | 1.1(.016)      | 3.7** (.012)   |
|              | General Administrative Staff/Clerk | 21.3** (.016)  | 14.5** (.032)  | 10.8** (.014)  | 0.0(.000)      | 7.5** (.022)   |
|              | Physical Laborer                   | 9.7** (.021)   | 65.6** (.085)  | 58.0** (.019)  | 43.3** (.035)  | 38.3** (.039)  |
|              | Self-Employed                      | 1.6(.016)      | 2.9(.050)      | 2.1(.014)      | 47.5** (.053)  | 12.9** (.036)  |
|              | Unemployed                         | 1.5* (.006)    | 7.5* (.025)    | 15.1** (.021)  | 5.0** (.036)   | 36.1** (.043)  |
|              | <b>Educational Background</b>      |                |                |                |                |                |
|              | Middle School and Below            | 0.6** (.011)   | 0.0(.000)      | 69.6** (.029)  | 68.4** (.095)  | 75.0** (.038)  |
|              | High School or Equivalent          | 27.3** (.037)  | 89.4** (.055)  | 29.6** (.027)  | 27.0** (.064)  | 22.1** (.032)  |
| CST▲         | Higher Education                   | 72.1** (.040)  | 10.6(.055)     | 0.8(.009)      | 4.7(.043)      | 2.9* (.012)    |
|              | <b>Household Income Level</b>      |                |                |                |                |                |
|              | Highest 20%                        | 43.1** (.021)  | 17.4** (.047)  | 11.2** (.017)  | 29.8** (.054)  | 0.2(.042)      |
|              | Higher 20%                         | 27.6** (.015)  | 22.9** (.030)  | 19.3** (.019)  | 30.6** (.032)  | 4.9(.038)      |
|              | Middle 20%                         | 16.7** (.014)  | 29.6** (.037)  | 25.5** (.022)  | 19.7** (.025)  | 10.6** (.029)  |
|              | Lower 20%                          | 9.3** (.012)   | 23.0** (.034)  | 24.0** (.016)  | 13.8** (.032)  | 26.5** (.031)  |
|              | Lowest 20%                         | 3.2** (.007)   | 7.1* (.028)    | 20.0** (.039)  | 6.2** (.051)   | 57.8** (.083)  |
|              | Before Housing Reform              | 23.3** (.017)  | 0.0(.000)      | 63.6** (.028)  | 11.8(.061)     | 49.9** (.046)  |
|              | During Housing Reform              | 45.7** (.018)  | 72.8** (.038)  | 32.4** (.025)  | 64.6** (.044)  | 44.0* (.036)   |
|              | After Housing Reform               | 31.1** (.017)  | 27.2** (.038)  | 4.0** (.011)   | 23.6** (.035)  | 6.1* (.021)    |

Table 4 (Continued)

| Housing Location            |                                      |               |               |               |               |               |
|-----------------------------|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Housing Area                | Highest Priced Areas                 | 24.0** (.014) | 18.3** (.031) | 18.4** (.014) | 24.9** (.026) | 17.5** (.021) |
|                             | Higher Priced Areas                  | 22.4** (.013) | 23.0** (.034) | 22.7** (.016) | 18.2** (.039) | 10.3* (.032)  |
|                             | Middle Priced Areas                  | 20.9** (.013) | 22.8** (.035) | 25.2** (.014) | 11.9** (.021) | 13.2** (.033) |
|                             | Lower Priced Areas                   | 17.7** (.012) | 20.7** (.030) | 21.2** (.014) | 15.3** (.022) | 23.2** (.027) |
|                             | Lowest Priced Areas                  | 14.9** (.013) | 15.2** (.035) | 12.6** (.018) | 29.7** (.048) | 35.8** (.062) |
|                             | Community Types                      |               |               |               |               |               |
| Housing Area                | Low Shantytown and Old Town District | 14.1** (.012) | 17.4** (.032) | 21.1** (.019) | 29.8** (.036) | 44.2** (.037) |
|                             | Level Unofficial Migrant Community   | 2.1** (.005)  | 3.6(.020)     | 0.0(.000)     | 20.2** (.036) | 17.6** (.042) |
|                             | Middle Work Unit Community           | 31.6** (.017) | 31.0** (.047) | 38.6** (.022) | 8.7** (.025)  | 17.8** (.032) |
|                             | Level Affordable Housing Community   | 17.1** (.012) | 14.3** (.030) | 14.8** (.021) | 11.0** (.027) | 9.0* (.045)   |
|                             | High Level                           | 35.1** (.015) | 33.8** (.032) | 25.5** (.017) | 30.4** (.041) | 11.4** (.029) |
| Probability of Latent Class |                                      | .265          | .136          | .329          | .115          | .156          |

Note: 1. Standard deviations in parentheses, \* P<0.05, \*\* P<0.001;

2. ▲ : CST= Career Start Time.

*Latent class 1: 26.5% of the whole sample—middle-aged and young white-collar class residing in expensive high-level communities.*

Class status: Occupationally, this latent class is comprised mainly of professional technicians (45%), senior administrative staff (20.8%), and general administrative staff/clerks (21.3%). They belong to the “white-collar class.” This group is situated in the highest cultural level, with 72.1% of members having an educational background including higher education. 45.7% of them began their careers during the course of housing reform. In terms of household income, this class has the best economic conditions: 43.1% of the families in this group belong to the highest income group. This latent class represents mainly the high-income middle-aged and young white-collar class.

Housing location: The members of this group mainly cluster in high-price communities: 24% of them reside in the most expensive neighborhoods, and 22.4% of them live in the more expensive neighborhoods. As far as community type, 35.1% of the group members live in high-level commercial housing communities, and those residing in middle-level work unit communities and economical housing communities constitute 31.6% and 17.1% respectively.

*Latent class 2: 13.6% of the whole sample—middle-aged and young technicians residing in middle-level and high-level communities.*

Class status: By occupation, this latent class consists mainly of physical laborers (65.6%) and general administrative staff/clerks (14.5%). It has a mid-level cultural background. All the members of this group started their careers after housing reform. With regard to household income, this class is in the middle level, and there is little class income disparity. This class mainly represents the middle-aged and young technicians with middle-level incomes.

Housing location: This class's members mostly reside in areas of slightly above average price; many fewer live in areas classified as most and more expensive, 18.3% and 15.2% respectively. 33.8% of the class resides in high-level commercial communities, and 31.0% lives in middle-level work unit communities.

*Latent class 3: 32.9% of the whole sample—the middle-aged and old unemployed or retired workers residing in middle-level communities with middle-level prices.*

Class status: This class is the largest of all 5 latent classes. By occupation, it is comprised mainly of physical laborers (58%) and the unemployed (15.1%). The cultural level of this class is relatively low: 69.6% of members have an educational background of only middle school

or below. The majority (63.6%) started working before the 1979 housing reform. By household income, the majority (69.5%) are situated below average. This class mainly represents the low-income middle-aged and old unemployed and retired workers.

**Housing location:** From the perspective of housing location, social polarization is not obvious in this class: 25.2% of members reside in mid-price neighborhoods; those living in more expensive and cheaper areas constitute 22.7% and 21.2% of members, respectively. By community type, among all latent classes this class has the largest proportion of members residing in middle-level work unit communities at 38.6%. Otherwise, 25.5% live in high-level commercial housing. Another 21.2% from this class live in low-level shantytowns or old town districts.

*Latent class 4: 11.5% of the whole sample—middle-aged and young self-employed and industrial workers living in significantly stratified districts.*

**Class status:** By occupation, this class is comprised mainly of the self-employed (47.5%) and physical laborers (43.3%). Their education level is relatively low: the majority (68.4%) have only a middle school or lower education. Most (89.2%) of them took their first job after housing reform began. In terms of household income, this class is at an above-average level: 30.6% of families from this class belong to the higher group of average income per capita. This class consists mainly of the middle-aged and young self-employed and industrial workers who have comparatively high incomes.

**Housing location:** This class displays significant social stratification in terms of housing location. Those residing in the most expensive neighborhoods constitute 24.9% of members; another 29.7% of them live in the cheapest neighborhoods. However, the percentage of those living in middle-level-price neighborhoods is only 11.9%. By community type, 30.4% of class members live in high-level commercial communities, and nearly 30 percent (29.8%) reside in low-level old town districts. Other than those, 20.2% of class members live in migrant communities. Clearly, despite a fairly decent economic situation, this class on the whole does not have a satisfactory living environment.

*Latent class 5: 15.6% of the whole sample—the middle-aged and old retirees living in the cheapest and low-level communities.*

**Class status:** Regarding occupation, this class consists mainly of physical laborers (38.3%) and the unemployed (36.1%). The unemployment ratio in this class is much higher and the education level much lower than in latent

class 3. Its income level is also lower: more than half (57.8%) of the class members belong to the lowest group of household income. This latent class mainly represents low-income retired workers and the middle-aged and elderly unemployed.

Housing location: Members of this class mainly cluster in cheap districts: 35.8% live in the cheapest areas, and 23.2% reside in the cheaper areas. Additionally, the majority (61.8%) reside in low-level areas, of which those living in shantytowns and old town districts constitute 44.2% and those in migrant communities 17.6%.

## PRELIMINARY CONCLUSIONS

In the above discussion, differences in results from distribution of housing resources are explored from the perspectives of housing conditions, housing property rights and housing location. By comprehensively comparing the latent class analyses of the above three dimensions, this study reaches two conclusions based on the joint distributions of class status and variables of housing resources.

*(1) There exist clear differences in the possession of housing resources based on social class status.*

Comparing the extent of stratification in each of the three dimensions, housing conditions and area show the clearest evidence of stratification. Ownership of property rights in multiple housing properties also shows distinct social stratification; however, this phenomenon is not clear among owners of property rights of current residences. The authors believe that this can be understood by taking into account the relatively high ratio of homeownership brought about by housing commoditization reform. As CGSS2006 data show, among 6,013 residents in the survey, 72.5% possess complete or partial property rights in their residences. Class stratification in this area is therefore not as evident as that occurring in other dimensions.

First, stratification in housing resources occurs differently among different social classes. This study shows that the occupational class is in direct correlation to conditions housing its property rights, and location: compared to physical laborers such as industrial workers, transformation period power-elites (senior administrative staff) and technical elites (professional technicians) are evidently advantaged in the possession of housing resources.

From the perspective of housing conditions, power-elites occupy much larger dwelling spaces and hold the highest ratio of complete dwellings; most importantly, they exhibit a clear difference from other

classes in their holdings of multiple housing properties. These findings support the conclusions of other scholars (Liu Xin, 2005; Bian Yanjie & Liu Yongli, 2005). The present research also shows that not all out-of-system non-elites remain in the lower levels of the housing distribution structure. The self-employed who left the state system to pursue commercial careers at the start of reform still have the best housing conditions despite not having access to work unit- or government-provided housing benefits or purchasing advantages. They enjoy large dwelling space and a higher proportion of complete dwellings and multi-bedroom dwellings. There are at least two reasons for this. First, the members of this group entered the market at the beginning of reform and benefited first and foremost from the market in the prosperous early reform period, and they were able to use their economic strength to obtain further housing resources during the course of ongoing housing commoditization. Second, this group's dwellings are mainly self-constructed. According to previous research (Pan, 2003) and the data from the present study, the dwelling space of self-constructed housing is, on average, larger than that of other types of housing.

In terms of housing location, social stratification is manifested in two ways: disparities in community type and housing prices. First, there is clearly stratification by community type: the middle-aged and young white-collar class of better occupational background and higher income mostly resides in high-level (commercial housing) communities. In contrast, most of the urban unemployed live in low-level communities (shantytowns and old town districts). Further, state enterprise workers live mainly in middle-level communities (work unit communities), and the self-employed tend to cluster in low-level communities (old town district, migrant and unofficial migrant communities). Second, housing prices also directly correlate with class status: power-elites and technical-elites mainly reside in higher-price districts. In contrast, the unemployed live mostly in lower-price districts, and physical laborers more frequently appear in middle-price areas. The self-employed primarily live in lower-price districts; however, a certain percentage of them reside in the areas with the highest price. In addition to the typical situations above, there also exist some exceptions: a few below-middle-class residents living in high-price districts and some members of upper classes reside in low-price areas. In urban centers, where average housing prices are generally much higher, old neighborhood communities, obsolete work unit housing, and "urban village" communities can still be found alongside middle- and high-level



commercial communities. This background helps to understand the phenomenon of some below-middle-class workers residing in high-price districts. Also, besides just low-level communities like shantytowns and unofficial migrant communities etc., suburbs often contain comparatively inexpensive middle- and high-level commercial communities that can account for how some of those above middle class live in low-price districts.

In addition to inter-class stratification in housing resources, disparities also exist within each social stratum. Our analysis shows that in the so called “white-collar class” of senior administrative staff, professional technicians, and clerks who are situated in the above-middle level of housing distribution system, internal class stratification is evident. Compared with the rest of the white-collar-class, the senior administrative staff hold a distinct advantage in the ownership of rights for multiple properties. Within the social stratum of physical laborers, notable differences exist between technicians with higher educational background and un-skilled workers with a lower educational level; the former has an advantage over the latter in all the three dimensions of housing conditions, property rights, and housing location. This confirms to a certain extent the housing benefits that accrue to human capital (Bian Yanjie & Liu Yongli, 2005). Among all social strata, internal class disparity is most evident in the class of the self-employed, in which some members are situated in the high level of the housing resource structure—residing in large houses in higher-price districts and owning rights in multiple properties—while at the same time others still dwell in lower-price migrant communities such as “urban villages” or rented houses in old town districts, despite not having bad economic conditions. In comparison to all the other classes, the unemployed class lies in the lowest level of the distribution structure and has a low level of stratification within the class.

*(2) Different career start times account for clear differences in possession of housing resources.*

Until now, previous studies have generally ignored generational disparity in housing resource distribution. This research utilized a work start time variable to mitigate this deficiency. Analytical findings indicate that in the course of incremental reform in which “the old applied old policies and the young employed new strategies”, different generations have different chances to own and ways of owning housing resources due to policy reasons. This further influences the results of housing resource distribution throughout society, specifically with respect to housing property rights and housing location.

In terms of housing property, in all latent classes the ratio of households with partial property rights is very low; rented public housing constitutes a similarly low percentage. Most of those sampled own the property rights of their personal dwellings, which reflects well on the achievements of China's housing system reform. Except for the self-employed migrants and physical laborers, the present disparity in housing property rights within each class results mainly from generational rather than class differences. Those young people who started working after housing reform, whether white- or blue-collar, hold a much higher percentage of rented dwellings than the middle-aged or elderly. By comparison, most of the middle-aged and elderly who have experienced housing reform, both white- and blue-collar, are owner-occupiers despite evident stratification in community type and housing price.

The generational divide in housing resource possession is an interesting phenomenon. The low-income old retired workers have the worst housing conditions: more than half of their dwellings have no separate bathroom, and they mainly dwell in the lower- or lowest-priced areas; however, this group has a higher ratio of homeownership. By comparison, the young residents who started work after housing reform have good economic and housing conditions, and most of them reside in the high-priced districts with convenient living facilities; however, the proportion of owner-occupiers in this group is much lower than that of older retirees. This apparently contradictory phenomenon—"the poor have houses but the rich don't"—can be explained, to some extent, by the time effect on family wealth accumulation. But, more importantly, it is brought about by China's systemic transformation. The dwellings where most of the old retired staff and workers reside are all the old welfare houses constructed before reform. In the course of reform and housing privatization, a great number of public houses were sold at favorable and affordable prices by work units to their worker and staff, who were thus able to obtain these housing properties directly. However, due to the generally low quality of housing during the pre-market era, these dwellings have relatively bad conditions. By comparison, the young and middle-aged white-collar class can only purchase commercial houses at market prices since the across-the-board termination of housing distribution as a welfare benefit. Despite better quality, this new housing is much more expensive. Specifically because of the dramatic increase in housing prices in recent years, the economic cost to acquire a dwelling has greatly exceeded affordability for normal families. Accordingly, even the high-income young

and middle-aged white-collar class has no advantageous ratio of ownership of housing property rights. However, this does not contradict the first conclusion. Although they own housing property rights, the old blue-collar residents do not have houses with good conditions, but the young white-collar class members largely live in quality housing without ownership. In the long run, the capability of the young white-collar class to improve housing conditions and acquire housing property will exceed that of the old blue-collar class.

With reference to housing location, generational disparity manifests itself in community type. Generally, those dwelling in low-level communities (old town districts or shantytowns) are mainly the middle-aged and the elderly with low-incomes. By comparison, most of the middle-aged and young people who started working after housing reform reside in advanced commercial communities and middle-level affordable housing communities and work unit communities. However, there are exceptions: the middle-aged and young self-employed and physical laborers with a lower educational background mainly live in low-level shantytowns, old towns, and official and unofficial migrant communities. This reflects the interaction between class status and generation-community stratification is much more evident within the young generation after housing reform than within the older pre-reform generation.

The community disparity across generations indicates not only the stratification in housing quality but also the transformation of settlement patterns. In the planned economy era, the houses of urban staff and workers were primarily provided by their work units, and living locations mainly centered on the work units. A relatively simple settlement pattern of natural industrial communities in which workers with common occupations or from the same work unit lived together formed accordingly (Liu Zuyun, 2000). Since reform and opening-up, with the extensive renovation of old districts, the reformation of former work unit communities, and the emergence of new commercial quarters, the old living space distribution has changed dramatically. On one hand, the housing system reform has ended the pattern of work units provisioning housing. Residential zones no longer center on work units. On the other hand, with housing commoditization, housing price has become a real barrier for urban residents in the selection and acquisition of housing. People of same or similar economic background tend to live together. The former settlement pattern has therefore transformed into a more complex settlement pattern characteristic of social stratification. The present study shows that the commercial communities have

become the main residential zones of most social classes except for those with the lowest incomes. The overwhelming development of new communities will undoubtedly gradually replace the traditional community patterns like the old neighborhoods and work unit communities.

The housing situation provides a penetrating view of the issues of growing economic disparities and social stratification. Although the distribution of housing resources occurs against a backdrop of ongoing systemic change and presents a complex and multifaceted image, it cannot be denied that the possession of housing resources and the scattering of housing areas has been stamped by social stratification and has become an important indicator of social inequality. This study has presented in detail disparities in housing resources among different social strata and has attempted to answer to the basic question, "Who gets what?" However, in the process of housing stratification research, our study remains at the stage of exploration and description. The other, more important question—housing distribution mechanisms or "why one gets what he or she gets"—will prove to be more intriguing and challenging.

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