# Access to Housing in Urban China

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#### Abstract

Like income inequality, housing inequality in urban China is strongly affected by state policies that give preferential treatment to insiders. In this case, the key policies are related to their residence status, which involves not only their migration history but also their legal position. Using data from the Chinese census of 2000 for eight large cities, this study shows how residence status affects access to various pathways to housing. In addition to the well-known marginal housing situation of the recent 'floating population', it documents surprising advantages for migrants with urban registration status and persistent disadvantages for rural migrants regardless of how long they have lived in the city.

Housing in post-socialist China, once a scarce (but public) resource available at cheap rents, is becoming a consumer commodity for a nation of homeowners. But if a housing market is being created, the most recent data for a national sample of cities (the 2000 census) show that it is a market designed to preserve the advantages of people who were advantaged in the past. Following the lead of scholars who have studied changing class relations (Bian and Logan, 1996; Zhou, 2000) we find more evidence of the persistence of the prior allocation system than of the impact of market mechanisms. Parallel to studies of income inequality, we are especially interested in how different kinds of people are positioned within the system, in who is likely to have what form of access to a place to live in the city. By studying the distributional aspects of housing, we gain another perspective on the transition from socialism in this country.

Some of the forms of a market system are now present in urban China. For example, much formerly public housing is now privately owned, some luxury housing is being built for sale at market prices, and a sector of private rental apartments now exists in every city. We will show that the market transition is incomplete in two ways. First, prices for a majority of people continue to be subsidized. Housing rental or purchase *at a full market price* remain among the least common forms of tenure, while renting from public sources and purchasing *at a subsidized price* are still the most common. Second, the current system relies heavily on ascriptive characteristics of people to determine who will have privileged access to a place to live and who will be thrown to the market. Not surprisingly, therefore, the system maintains insider advantages inherited from the socialist era.

Our analysis gives particular attention to inequalities based on residence status. China's system of household registration (or *hukou*) and related policies designed to

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restrain population movement have become well known for their potential to divide the population into a favored sector with full citizenship rights (people with urban registration in the city where they live) and a marginal sector with fewer and more transient rights (especially people with rural registration from a different province). Like other scholars (Solinger, 1999), we are interested in this phenomenon because it appears to be a major mechanism through which state policy in China magnifies rural—urban inequalities. Our contribution here is to demonstrate how it operates in the emerging housing system. Do migrants face the same disadvantage that outsiders face in most societies? Does it diminish as newcomers stay longer in the city, a question of individual assimilation? What dimension of formal registration counts: is it whether a person is registered as a rural or urban resident, or is the key whether official residence is in another province or in the new place? These details matter because they reveal the dynamics of the system. Depending on the details, newcomer disadvantage could be interpreted as a natural and temporary phase in accommodating a new population or as a durable cleavage in the post-socialist city.

# Housing tenure and its restructuring under market reform

Others have reviewed the housing policy shifts in urban China in detail (Huang and Clark, 2002). The following summary introduces the forms of tenure that coexist at the current time, providing the necessary background for discussion of how residence status and other personal characteristics affect access to housing. This description reveals how difficult it is to place China in a comparative context. There are similarities with other post-socialist countries where tenants of public housing were encouraged or required to purchase their apartments. But China did not add to its pre-war stock of private housing until well into the post-Mao era, unlike East European countries that had experimented with ways to promote private investment in housing under socialism (Clapham et al., 1996). In some countries (Poland, Hungary, Czechoslovakia), 40% or more of housing was private at the end of the socialist period, and in some others like Bulgaria (Vesselinov, 2004) housing had always remained privately owned. Hence the introduction of a true private housing sector with market-based pricing was a new phenomenon in China in the 1990s, and studying this case informs us about the creation of a market system de novo. Although it was typical for socialist countries to attempt to control migration through state policy, no other country had implemented such strong controls on rural-urban migration as China (Wei, 1997), and the policy of restricting the citizenship rights of migrants through the hukou (registration) system sets China apart. The position of migrants in the urban housing system in China has perhaps more in common with the persecution of undocumented immigrants in the West (Wu and Rosenbaum, 2007), with the difference that the disadvantage of migrants in China is implemented more rigorously through state policy and with less regard to the economic resources of individual migrants. In market societies it is common for recent immigrants to face multiple obstacles to social and economic assimilation, but to be able to overcome these over time. As we will show here, becoming more established in the city does make modest changes in the housing position of migrants, but severe barriers remain.

#### Socialist forms

Housing has long played a key role in China's stratification system. As recently as the early 1980s, when incomes were low and relatively equal among urban residents, the more salient dimension of inequality was in the housing system (Logan *et al.*, 1999). The source of inequality was not price but access to public rental housing (and to better equipped and larger units), and this was contingent on political position, work unit authority and education (Walder, 1992). The work unit had primary responsibility in

housing provision, while the municipal housing bureau provided housing mostly to households who did not have a work unit to take care of their housing needs. A considerable fraction of the population still lives in public rental housing as a residual of the old system, though at somewhat higher prices (Li, 2000a). In addition, a very small sector of low-rent housing (*lianzufang*) exists in some cities in the form of housing vouchers. There was a severe housing shortage through the 1980s, and public apartments were allocated according to criteria that included Communist Party membership and higher occupational and educational standing, contingent in large part on firms' capacity to claim housing on behalf of employees.

Self-built housing was common in the socialist period. It was the norm for rural China and for fringe areas around cities where village and township authorities could assign households a land parcel for construction. Some city dwellers built their own shelters in back lots and courtyards, though informally and with insecure property rights (Zhang, 1997). Although self-built housing is typically larger than public housing, it has overall low quality and limited facilities for heating and sanitation. Consequently public housing

was typically preferred over self-built housing (Zax, 1997).

Privately owned housing was an integral part of the housing stock until the socialist revolution in 1949 when the socialist regime took over most of the private housing stock and distributed it to 'working-class families' (Whyte and Parish, 1984). In socialist China, only a small share of owner-occupied private housing was retained and no new private housing was built. From a national survey Huang (2004) estimated an overall 25% private ownership through the socialist period. This number might be smaller in larger cities (Logan *et al.*, 1999), and most of it was subsequently lost through urban redevelopment projects. What remains is now reported in the census as self-built or as privately purchased.

#### Newer forms

Housing reform started in 1979 as rent reform (that is, rent increases). Heavy new investments were made in public housing especially in the 1980s and 1990s, financed largely by work units that offered housing as a welfare good for their workers, and these investments added considerably to the public rental housing stock. The housing reform launched in 1988 was more ambitious, seeking to increase housing consumption by privatizing the housing system and creating a housing market. The current system is a quasi-market situation. It combines an 'internal' market where public housing is sold to sitting tenants at highly subsidized prices and a fledgling 'open' market where market prices have been introduced. A large number of households, accelerating in the late 1990s, have purchased their previously rented public housing with either partial or full property rights (depending on the level of subsidy and contractual constraints on resale). Li (2000b) found that work unit housing was sold at only around half the price of municipal housing in Guangzhou in the early 1990s. Work units varied in the level of subsidy that they offered and also in the pricing preferences they assigned based on job rank and seniority (similar to their prior criteria for allocating rental units).

The development of new housing in a market setting began when the state allowed work units to buy apartments in bulk from development companies, typically to be leased to employees. In the 1990s a small share of what was called 'commodity housing' was also sold to individuals, such as overseas Chinese. Recently, in response to the concentration of high levels of wealth and income among Chinese citizens, market-priced suburban villa estates and gated communities are becoming more common. In every city there now exists a private housing market of this type. This is what we call 'market purchase housing'. Initially such housing was not available to people without local registration even at market prices. Some cities have experimented with selling commodity housing in combination with an offer of local urban registration, though in

larger cities this was only done in the suburban townships.

'Economical purchase housing' (*jingji shiyong fang*) is a segment of this market in which state programs provide a land price subsidy to developers, who then are supposed to sell at a discounted price to persons who meet certain criteria of household type and income. Wang (2001) argued that although these are priced lower than market rates, they remain out of reach for most households (see also Duda *et al.*, 2005 and Mostafa *et al.*, 2006). Developers bend the rules to qualify as many potential customers as possible, and the qualification criteria are not strictly monitored.

The legal status of private rental housing is unclear (Zax, 1997). The rental market is building upon the informal exchange networks that had already emerged in major cities before urban residents were officially allowed to rent out their apartments. Now owners are allowed to lease their apartment and (despite rules theoretically prohibiting subleases of public rental housing) there is also some public housing for rent at market prices. A larger source of market rental housing is single family homes or apartment buildings constructed by farmers or former farmers on land allotted to them in rural areas or in 'urban village' neighborhoods within cities (Wu, 2002). Such housing now provides a low-quality rental market for rural-urban migrants (Chan et al., 2003; Zhang et al., 2003).

### Residence status and housing access

This overview of the housing system has already referred to residence status, which has become a more salient factor since economic reforms from the early 1980s allowed the rural population to work temporarily in cities through individual or collective contracts with urban work units. This policy shift has permitted large influxes of migrants in most big cities (Liang and Ma, 2004).

The weak position of migrants in the housing system is well documented, but scholars have used many different terms to identify this category of residents. Some use the term 'rural migrants' to denote people's origin, and others use 'urban migrants' (Mobrand, 2006) to show their destination. Some refer to the 'floating population' (Chapman and Prothero, 1983), meaning those who have the weakest ties to an urban job and home. Some use the term 'temporary' to denote how long migrants have lived in the city (such as Zhao's [2003] use of a 48-month dividing line). But many rural migrants have been living in cities or close to cities for years, long enough to bring their families together and attempt to send their children to city schools (Zhang 2001; Shen, 2002). Recognizing the difficulty of predicting how long people will stay, some scholars have therefore used the term 'temporary migrant' to refer to both a recent timeframe and non-official status (Goldstein and Goldstein, 1991).

These migrants have restricted access to urban housing. Many settle in peripheral zones where low-quality and cheap rental housing is available and native residents are authorized to operate as private landlords (Goldstein, 1993). Not surprisingly, they are unlikely to become homeowners (Knight *et al.*, 1999; Li, 2000b). Solinger (1999: 261–2) describes their situation this way:

Even money-earning outsiders were kept outside the regular housing market. If holding a job with a measure of security, they got a bed in a crowded dorm; if part of an urban village, the average inhabitant could expect to share a cramped, rented workroom with three or four fellow townspeople; and if privately employed, they usually found space at the work site or in a rental. But those without jobs, acquaintances, or possibilities stayed stuck in a scarcely sheltered realm, where rummaging and foraging threatened to become their permanent lot.

Dormitories are built by factories that specifically recruit migrant workers, partly to facilitate long hours of work. Based on data collected in the late 1990s, Wu (2002) found that 75% of labor migrants employed by enterprises live in dorms or temporary housing on construction sites. Knight *et al.* (1999) studied migrants who were hired by the state-owned enterprises, 78.5% of whom lived in accommodations that the employers

provided with a per capita living space of only 3.8 square meters. Alternatively, in order to lower living costs, migrants may share a rental unit with others and/or sleep in shifts. In either of these latter two cases, migrants do not fit into the standard housing tenure categories. Instead they are classified as living in collective (or group quarters) housing. For this reason our analysis treats collective housing as an alternative tenure form.

This contrast between entitled local urban residents and the 'floating population' (or what Goldstein and Goldstein [1991] called temporary migrants) is quite clear. Many people, though, are in neither of these categories. Consider first the question of how long they have lived in the city, a factor that could be associated with housing outcomes in any society. Controlling for other characteristics, do migrants tend to become more established over time, becoming eligible for housing through longer term relationships with employers or benefiting from networking with other city residents? This is an issue

that has not been addressed by previous studies.

Another variation is legal registration status, which has two dimensions: residential location (which we can simplify to local v. non-local) and socio-economic eligibility (Chan et al., 1999). The formal categories of socio-economic eligibility are agricultural and non-agricultural. For greater comparability with issues related to migration in other countries, we will use the terms 'rural' and 'urban' to refer to these categories. Although this study is limited to major urban areas, our sample nevertheless encompasses many people who were born within the city administrative area but with rural registration. These rural natives have unique rights to the use of land in their village or township of origin, which accounts for their ability to self-build housing and often to become landlords to migrants. But they are less likely than urban natives to qualify for public rental housing from a work unit or from a municipal housing bureau.

In contrast, a person born in another province but with urban registration often has potential to be treated as a local. Chan *et al.* (1999) offer a complete list of categories of conversion of household registration through both regular channels and special channels. In principle, a migrant with rural registration could change registration to the new location and therefore legally become 'local'. This happens increasingly in small towns where migrants can convert their agricultural registration to small town non-agricultural (or urban) registration. In major cities like those studied here, the main route to local registration (and conversion to urban registration) is through 'official' migration. The Chinese term is *qianyi* (permanently migrated), different from *zanzhu* (temporarily settled). Persons can gain entitlement to this change if they are recruited by a state-owned enterprise or by enrollment in an institution of higher education, thereby gaining full legal access to all city public resources

Wu (2002) uses these distinctions to create a three-category classification of residents as 'local residents' (locally born), 'permanent migrants' (those with official migrant status), and 'temporary migrants' (everyone else). Recent studies show that in terms of human capital attributes, mobility resources, and labor market entry, permanent migrants defined in this way are, surprisingly, the most successful, followed by urban natives, with temporary migrants at the bottom of the hierarchy (Fan, 2002). Do permanent migrants have equal success in the housing system?

It is surprising that so little is known about the relationship between residence status and housing tenure beyond the obvious polarity between urban natives and 'floating

population' so often invoked in studies of migration.

### Other predictors of position in the housing system

Besides residence status, several other characteristics have been found to be important in past housing research (in both the socialist era and the reform period). Two institutional variables not included in the census and necessarily omitted in this study are party membership and work unit rank. Party membership has repeatedly been found to be associated with living in bigger and better housing (Logan *et al.*, 1999; Li, 2000a; Pan, 2004), and living in public sector (or former public sector) housing rather than in the

private market or self-built homes (Zax, 1997). People in work units of higher rank (hence with more authority and access to resources in the socialist period) have also been shown to live in larger apartments (Logan *et al.*, 1999), to live in public rentals rather than private rental housing (Li, 2000b; Huang and Clark, 2002; Huang, 2003), and at least in the pre-reform period to be less likely to purchase than remain in their public rental (Huang, 2004). But being in higher-rank work units does not affect whether people rent public housing or purchase their former public housing.

A key predictor from a market perspective is income, also not available in the census. Past studies have had mixed results. Huang and Clark (2002) found that household income had very little effect on renting versus owning, and Huang (2004) found no impact on making the transition from renter to owner in either the pre-1988 or post-1988 panels of her retrospective study. Li (2000b; 2003) suggests that income does increase

the chances of buying on the free market.

In lieu of income, this study examines the effects of education and occupation. Several studies (Li, 2000b; Huang and Clark, 2002; Huang, 2004) found no effect of education on tenure type, though there might have been effects if controls for income had not been included. However, Li and Li (2006) report that the higher his or her level of education, the more likely a person is to become a homeowner. These same scholars (Li, 2000b; 2003; Huang, 2003; 2004; Li and Li, 2006) report small or mixed effects of occupational standing, though not surprisingly Bian and Liu (2005) found that households headed by managerial and professional elites attain more space and higher-quality homes.

Several demographic variables are included here as control variables: age and household size, gender, and marital status. Unlike research in Western market societies where older and larger households are more likely to be homeowners, findings on these attributes in China are mixed (Li, 2000b; 2003; Huang and Clark, 2002; Huang, 2003; 2004;). These same studies show that — perhaps because married persons had preferred access to public housing in the socialist period — being married is negatively associated with making the transition to ownership. However, Li and Li (2006) found that newly married couples are now more likely to purchase.

# Research design and preliminary results

This study is based on the 2000 Chinese Census of Population. Despite the sampling problems in the long-form Census dataset (Wang, 2003), the census is the most reliable and recent nationwide source of information about the population, and its large sample size and coverage of all major cities partially compensates for its limitations. Although without longitudinal data we cannot directly analyze housing transitions (as do Li, 2003; Huang, 2004; Wu, 2004b; and Li and Li, 2006), the census provides a more detailed classification of forms of housing tenure than has been used in previous survey research.

Our data are from a 0.1% sample of the population enumerated in the census. They include residents of eight of the largest cities: Beijing, Chongqing, Guangzhou, Harbin, Nanjing, Shanghai, Tianjin and Xi'an. There are significant regional differences in housing tenure across the eight cities. Huang and Clark (2002; see also Li and Wu, 2004) found in a national housing survey that nearly half of the total variation in tenure choice is between cities. We acknowledge such differences by presenting descriptive data for individual cities and including city dummy variables in the multivariate models where cases are pooled across cities. We have also estimated separate models for each city (not shown here), and although we found some variation in coefficients the main results are consistent across cities.

Our purpose is to study the urban housing market, and therefore we have attempted to remove residents of rural areas from the sample. The Census does not provide detailed location information but does provide two useful indicators. One variable divides a province into several regions. We select only persons living in the region where the urban

center is located. For municipalities including Shanghai, Beijing and Chongqing, this removes households living in remote rural townships. The other variable describes location in terms of three administrative categories: city, town, or village. We select only persons in the 'city' category. Nevertheless many rural residents remain in the sample because they live within city boundaries that are rapidly expanding.

In the following analyses we treat the unit of analysis as adult (age 18 and above) 'housing decision makers'. This means for people in family households we treat each household as a case and we use data about the household head (and spouse, if there is one). In order to encompass dormitory living and other collective forms in the analysis, we include all adults living in collective housing, treating each person in a collective household as a separate case. The assumption here is that every one of these residents has made an independent decision about where to live, although our findings will suggest that their 'decisions' are greatly constrained by institutional regulations. This is the appropriate approach for the multivariate analysis, but it has implications for the frequency distributions of some key variables. For example, we present a figure on the distribution of housing decision makers (labeled as 'household heads and collective housing residents') that shows a high proportion of the population living in collective housing. If we had counted all members of family households, not just the household heads, we would have reported a smaller though still high share in collective housing. For similar reasons, rural migrants are a smaller share of the total population than they are of the cases in our analysis. In this section we provide information on the distribution of persons across tenure types in each city, together with information on the overall characteristics of housing in each tenure category that bears on assessing its desirability. We then describe the composition of the population by categories of residence status for each city. Finally, pooling data from all eight cities, we examine the bivariate relationship between residence status and tenure.

### Composition of the housing stock by tenure

The 2000 Census identified six modes of housing tenure for family households. Of these two are rental categories: renting from the public sector (municipalities or work units), and renting in the private market. Ownership falls into four categories, distinguished by the way in which the home was acquired: self-built housing, purchase of former public rental housing, purchase at market prices, and purchase at discounted ('economical') prices. Private rental and purchase at market prices represent new market-based pathways to housing. 'Economical' purchase and public purchase represent privatization at preferential prices that are available only to some people — those who were eligible for public housing under the old system and those who meet newly legislated criteria for a discounted price. Continued public rental at less than market prices and self-built housing are holdovers from socialism. Another holdover is collective housing for those who are unable to establish an independent home in the city.

Figure 1 shows the distribution by tenure for the eight cities and the pooled sample. There are some clear differences across cities. Guangzhou is the city with the largest share of collective housing residents in the sample, more than 40%; this share is under 20% in Shanghai, Chongqing, Harbin and Tianjin, and averages just above 20% in the pooled sample. Comparing the main socialist form, public rental, with the main new form, public purchase, we find that public rental outweighs public purchase in Tianjin; these two sectors are of about the same size in Beijing, Chongqing and Shanghai; and public purchase is the larger sector in Guangzhou, Xi'an, Nanjing and Harbin.

There are also important similarities. Market purchase and economical purchase, combined, comprise only a tiny share in Beijing and Nanjing, and even where it is most prevalent, in Tianjin and Harbin, they are still greatly outweighed by public rental and public purchase. The other market-based form, market rental, is also a relatively small category. It ranges from almost nonexistent in Tianjin to fewer than 10% in Guangzhou.

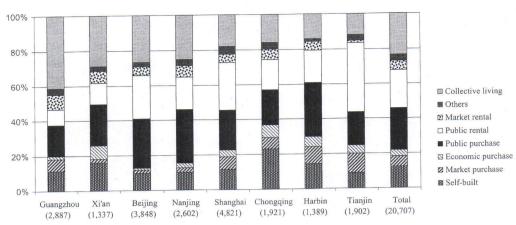


Figure 1 Housing tenure of household heads and collective housing residents (18+) in eight cities (city sample size is under each city's name)

Table 1 Average space, quality and cost of housing by tenure (family households)

	Per Capita Living Space (m²)	Quality Index	Own/ Rent Cost	Cost per Square Meter
Self-built	25.0	60	25,000°	278ª
Market purchase	27.5	93	150,000ª	1,875ª
Economical purchase	21.0	93	40,000ª	559ª
Public purchase	20.0	93	15,000ª	325ª
Public rental	14.0	80	35 <sup>b</sup>	1.3 <sup>b</sup>
Market rental	10.0	60	150 <sup>b</sup>	8.3 <sup>b</sup>
Others	12.5	60	_	_

<sup>&</sup>lt;sup>a</sup> Yuan

Although our sampling procedure attempted to exclude most non-urban areas where peasants build their own homes, self-built housing is generally more common than market housing, accounting for 10–20% of our sample in most cities, and over 20% only in Changing

In order to interpret the following analyses, it will be useful to know more about what kinds of housing these categories represent, especially in terms of desirability for residents. The census provides measures of the size, quality and cost of housing only for family households. Table 1 shows the median values for housing of each tenure type, pooled across the eight cities. Size is the total floor space in square meters divided by the number of residents. Quality is an index ranging from 0 to 100 based on five aspects of housing characteristics: with or without kitchen, energy source for cooking (gas is treated as the favorable type), with or without tap water, bath facilities and individual toilet. Housing cost (purchase price or construction cost or rent) was recorded in categories in the Census. The averages presented in Table 1 are based on assigning each case to the midpoint of its category (and at the lower bound for the top category). Cost is also calculated per square meter.

The table reveals significant differences across tenure types. Self-built housing is generally large, cheap, but poor in quality. Market purchase housing has the highest per capita living space, best quality, and the highest price. For those who can afford it, it is

b Yuan/month

a good option. However public purchase housing almost equals the quality of market purchase and at a small fraction of the cost. Typically it is less spacious, but in light of its low cost many people would view it as more desirable than market purchase. Economical purchase (the slightly discounted version of market purchase housing) is lower-quality than public purchase, about equally spacious, and much more expensive.

Both the rental options yield considerably lower quality than any owner category. In most market societies there is a rental sector covering a wide range of housing types and prices. Although there is a small luxury market sector in major cities, often intended for foreigners, the typical market rental in urban China (as noted above) is intended for migrants, and we show here that it is of lower quality and offers less space than public rentals, and at a much higher lease cost. Such market rental, then, may represent the least desirable of all tenure options.

The census data do not provide information on housing location within cities. Knowing a home's location, even whether it is found in the city center or suburb, would add considerably to this evaluation. Because most were built in the socialist period, public rental and public purchase housing is more likely to be found in city neighborhoods, which usually offer the best access to jobs and services. Self-built and market rental housing is most likely to be found in peripheral zones, which adds to its disadvantages. Market purchase may be found in either city or suburban locations, and we suspect that its price varies accordingly.

#### Residence status and its relation to tenure

Having clarified the types of housing, we now turn to a closer examination of residence status. As noted above, the terms 'native' and 'migrant' do not fully capture the meaning of residence status, and 'migrant' does not necessarily mean belonging to the 'floating population'. One of our contributions here is to provide a more systematic classification of people by residence status, based on three kinds of information. The first is whether the person was born in the current city of residence (to distinguish migrants from natives). The second adds an institutional status, whether the person has a rural or urban household registration (i.e. agricultural or non-agricultural eligibility). The third is related to length of residence in the city among migrants. A person who was living in the current city before 1995 is treated as an 'established' resident; someone who has arrived within the last five years is 'recent'. Combining these three criteria leads to six categories of residence status. These are illustrated in Figure 2.

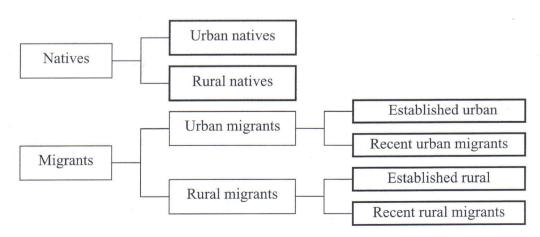


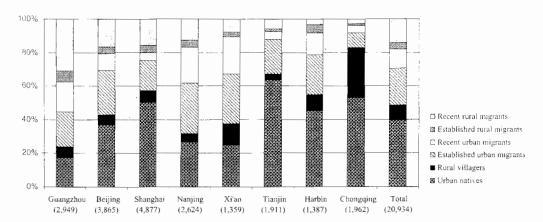
Figure 2 Categories of residence status

Taking the case of Beijing as an example, an urban native is a person born in Beijing with urban registration. A rural native is born in Beijing, but has rural registration. Urban migrants are persons born outside Beijing who have urban registration status, and these are further categorized as established or recent. Rural migrants are persons born outside Beijing who have rural registration status. They are also further categorized as established or recent. Urban natives are the category most often treated as the advantaged insiders; recent rural migrants are the category closest to what the literature refers to as the 'floating population'. Established urban migrants are an important and underrecognized category. Several scholars have noted that urban 'permanent' migrants have mostly moved to cities where they were assigned to a specific job. In cities like Beijing many of them moved to the city in early adulthood (although the census does not provide a more precise date of migration), and if they have gained urban registration their position is similar to that of urban natives. In fact other studies have shown that they tend to have overall high socio-economic status and access to resources (Wu, 2004b), higher human capital and mobility resources and better patterns of labor market entry and mobility than urban natives (Fan, 2002).

This approach does not include the more commonly used 'local or non-locally registered' distinction (Wu, 2002). Using urban versus rural registration reflects our discovery that the urban–rural divide is still the most important institutional factor that creates differences in opportunities. These classifications partly overlap; for example, established urban migrants mostly have local registration. Preliminary analyses showed that the urban–rural dichotomy has more impact than the difference between local and non-local. Making this distinction also allows us to measure the difference between urban and rural natives. Where the local/non-local grouping seems to make a difference is among *recent* urban migrants. Liang and Ma (2004) found that 15% of inter-provincial migrants hold urban but not local registration. Those with local urban registration are truly 'official' migrants. The 'unofficial' urban migrants, nevertheless are more educated and have more opportunities than rural migrants. To capture this effect, we will introduce the local v. non-local registration dichotomy as a separate dummy variable in the multivariate analysis.

Figure 3 shows the distribution of population by residence status in each city. The cities are listed in the order of decreasing percentage of recent rural migrants. Recent rural migrants are the single largest category in Guangzhou, more than 30% of sample cases. They are 10–20% in Beijing, Shanghai and Nanjing, and below 10% in Xi'an, Tianjin, Harbin and Chongqing.

Recent rural migrants typically outnumber established rural migrants (only about 5% of the pooled sample). This imbalance has several sources. One is a byproduct of who we



**Figure 3** Distribution of household heads and collective housing residents (18+) by residence status in eight cities (city sample size is under each city's name)

are counting. Established rural migrants are more likely to live in family households, and regardless of household size they are only counted as one case in this analysis. Recent rural migrants are more likely to live in collective households, and all of them are counted. Counting all adults regardless of household type, recent rural migrants still outnumber established rural migrants by a ratio of about 2.5:1. The number of established rural migrants is also limited by the fact that migrants often return home within five years, or (less often) they gain access to urban registration.

Compared to the numbers of rural migrants, there are much larger shares of migrants with urban registration, and more of these are established (more than five years) than recent arrivals. This finding contradicts a common image of migration patterns in China that focuses on the 'floating population'. Even in the early socialist period many people were assigned to jobs in a distant city, and it has been common for students to be granted urban registration in the city where they attended college (and where they were often then assigned to work). In three cities there are even more established urban migrants than urban natives (Guangzhou, Nanjing, Xi'an). If we combine recent and established urban migrants, we find that migrants are close to half of 'urban' residents in Beijing and Harbin. Urban natives are, nonetheless, by far the largest category in the majority of cities studied here. These results suggest that prior studies that investigated more simply the effect of being a native or migrant, or having a rural or urban registration, may have missed some important variations. 'Urban' does not necessarily mean 'native' and 'migrants' are not predominantly 'rural' in these cities.

Having identified categories of residence status, it is now possible to see how they are related to housing tenure. Table 2 shows the relationship based on the pooled data for all

eight cities.

Because it is natural to interpret the table in terms of which group has access to better opportunities, let us be clear about our assumptions. We begin with the less desirable forms. Collective housing is the least tenable on a long-term basis. Isolating people from family members and offering little privacy, it is practical on a temporary basis for single persons but not desirable. Market rental offers low quality at a high price, clearly disadvantageous. Self-built housing is low-quality but at a low cost and with the advantage of an ownership interest.

In contrast, public rental offers good shelter at low cost and with no investment for those privileged to be allocated such housing, while public purchase at a discounted price is a reasonable investment for good housing for those who were able previously

**Table 2** Distribution of household heads and collective housing residents (age 18+) by residence status and housing tenure in eight cities (pooled data)

	Natives		<b>Urban Migrants</b>		<b>Rural Migrants</b>		
	Urban	Rural	Established	Recent	Established	Recent	Total
Self-built %	10.2	75.8	4.2	0.1	12.1	1.4	12.4
Market purchase %	9.3	4.1	4.5	4.7	2.9	0.9	5.8
Economical purchase %	5.9	1.5	4.2	1.1	1.9	0.1	3.7
Public purchase %	31.0	0.9	48.8	6.3	0.1	0.2	24.1
Public rental %	32.3	2.5	29.6	7.3	11.4	6.4	21.9
Market rental %	1.4	5.1	2.2	6.3	25.6	17.1	5.5
Others %	2.6	3.4	2.6	2.7	10.0	5.9	3.4
Collective %	7.2	6.7	3.9	71.5	36.0	67.8	23.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	8,261	1,827	4,565	2,348	753	2,844	20,598

to rent a public unit. We perceive both of these to be very desirable alternatives. On the other hand, market purchase and economical purchase yield good housing — and probably also greater choice in location and style, which accounts for its popularity among the new rich — but at a higher price. Whether it is more or less desirable than public housing, especially public purchase, depends on factors such as location and potential resale value that we cannot assess. Market purchase is a more expensive option for persons who have the means to buy, for example, people who may be renting out their public housing unit as a source of extra income if they were qualified to buy one.

Although Table 2 has many fine variations, some broad differences stand out sharply. If public rental and public purchase are the most desirable types, then surprisingly it is established urban migrants who are most advantaged — nearly 80% of them are in these tenure types, especially public purchase. Close to two-thirds of urban natives are in public housing or former public housing. This share is limited by the fact that urban natives are somewhat more likely than established urban migrants to be in self-built and collective housing (probably a negative outcome) and also more likely to do market or economical purchase. Hence being a native is outweighed by having urban registration and entitlements that seem to come into play only after some time of city residence.

Recent migrants fall at the extreme inasmuch as they live, for the most part, in collective housing — around 70% regardless of whether they have rural or urban registration. Some of these are students living in dormitories; a larger share are probably living in quarters provided by their work unit (and in the case of construction workers, this is often temporary on-site shelter). This suggests that recent arrival is an important factor. Among recent migrants, if there is a small advantage for those with urban registration, it is that they are less likely to be in market rentals and more likely to have some form of purchase.

The passage of time in the city plays a strong role in housing adjustments by migrants. The very strong position of established urban migrants was noted above. Established rural migrants follow a less favorable trajectory, but nevertheless experience improvement — a shift from collective housing to market rental, to self-built housing, and to a smaller degree into public rentals.

Finally rural natives are shown to be in a sense outside of the public and private housing market. More than three quarters of them live in self-built housing — their special legal status as local villagers gives them unmatched access to land on which to build. Some parlay this advantage into revenue as landlords, but in most cases self-built homes are substandard.

The census questionnaire states that 'all housing sources that can't be categorized in the previous six groups are "others" '. We note that it most often involves rural migrants. Wu (2002) suggests unconventional dwellings for migrants could include living in a boat, in a hotel or inn, on the street or in a hallway, and staying in hospital rooms, all of which are as marginal as (or perhaps more marginal than) collective housing. The 'other' category is not included in the following analyses.

## Multivariate models

Finally, we turn to multivariate models. Our purpose is to determine how residence status affects housing tenure after controlling for other demographic, socio-economic and institutional factors. Besides residence status and city of residence, the census provides information on several other relevant predictors. Table 3 provides average values for all of these variables for the pooled sample, along with the minimum and maximum average values for specific cities.

We interpret some of these as *institutional predictors*, by which we mean factors whose impact depends on public policies. We have already mentioned the inclusion of

**Table 3** Means for pooled sample and maximum/minimum city average values for household heads and collective housing residents (18+)

	8-City Maximu Mean Me			Minimum City Mean	
Institutional variables			7		
Residence status		8		şi = -	
Urban native %	39.7	Tianjin	63.7	Guangzhou	17.3
Rural native %	8.9	Chongqing	29.9	Tianjin	3.6
Established urban migrant %	21.9	Nanjing	30.0	Chongqing	8.8
Recent urban migrant %	11.3	Xi'an	22.3	Chongqing	4.4
Established rural migrant %	3.9	Guangzhou	6.7	Chongqing	1.0
Recent rural migrant %	14.3	Guangzhou	31.0	Chongqing	2.9
Local registration %	76.8	Chongqing	94.2	Guangzhou	52.7
Marital status		·			
Living with no spouse %	44.3	Guangzhou	59.2	Tianjin	30.9
Spouse, urban registration %	43.8	Tianjin	63.0	Guangzhou	28.7
Spouse, rural registration %	11.9	Chongqing	21.0	Tianjin	6.1
Recent mover %	16.4	Chongqing	23.8	Guangzhou	9.0
Socio-economic variables		9			*
Education (years)	10.3	Beijing	10.9	Chongqing	9.6
Spouse education (years)	9.8	Beijing	10.5	Shanghai	9.5
Occupation		0			E
Head of work unit %	3.6	Beijing	4.7	Chongqing	1.9
Professional/technician %	8.4	Beijing	10.9	Guangzhou	6.5
Staff or other personnel %	8.1	Shanghai	9.2	Guangzhou	6.8
Commercial or services %	14.4	Guangzhou	17.1	Harbin	11.1
Manual worker %	23.5	Guangzhou	33.9	Xi'an	14.8
Agricultural laborer %	3.4	Chongqing	13.1	Beijing	1.0
Retired %	19.9	Shanghai	24.3	Guangzhou	12.5
Unemployed %	10.2	Harbin	14.4	Beijing	7.4
Student %	8.5	Xi'an	21.0	Shanghai	4.8
Demographic variables	D			41	
Age (mean years old)	42.4	Tianjin	45.9	Guangzhou	37.8
Gender (1=male) %	69.2	Tianjin	75.3	Xi'an	64.0
Family household size	2.8	Guangzhou	3.0	Shanghai	2.8
Family household %	74.9	Tianjin	86.3	Guangzhou	57.6

local v. non-local registration. Another related variable is the spouse's registration status. Marital status itself can vary within tenure categories, although we expect married persons to be more likely to live in public rental or public purchase housing because marital status was previously a criterion of housing allocation. Married persons are also less likely to live in collective housing. But, as recently as 1982, Goldstein *et al.* (1997) found that 53.4% of residents of urban collective households were married. This number

dropped significantly as housing became more readily available. By 2000 our data show that the proportion of collective household members who are married ranges from as low as 7.3% in Harbin to 34.3% in Shanghai. Probably the higher share in Shanghai reflects the exigencies of living as a migrant and leaving one's spouse behind. In such cases what matters is not whether people are married, but whether they live with a spouse. And in order to pursue our interest in registration status, we further distinguish whether the spouse has an urban or rural registration. Does the registration status of one spouse compensate for that of the other? In 1998 a reform of the *hukou* system made it easier for an urbanite's migrant spouse to apply for urban registration. However, the process is not easy, and there remained many households in 2000 where spouses had different types of registration.

Another variable reflecting housing institutions is recent relocation within the city (within the last five years), which likely has consequences for housing tenure. Those who have recently moved are less likely to live in public rental housing, because it is being phased out, and therefore they are more likely to move to a form of market tenure. In this data set moves are recorded only if the person changes neighborhood (street district). We define 'recent movers' as persons who moved between neighborhoods in the past five years. A case could be made that the decision to move after 1995 was made with full awareness of what the likely tenure options were at that time, so that in a sense moving and tenure outcome were jointly determined. To assess whether inclusion of the recent mover variable has affected estimates of the effects of other predictors in the model, we have replicated the analysis with and without this variable. There were only two instances where a coefficient switched between significant and not significant, one involving a single occupation category and another involving the age-squared term. Therefore we feel confident in retaining the recent mover variable in the model, using it to show how the range of tenure options has changed in the last few years.

The socio-economic variables available from the census include education, spouse's education (for those living with their spouse), and occupation. Education is measured as years of schooling. Occupation is a set of dummy variables ranging from work unit heads and professionals/technicians at the top to agricultural laborers at the bottom, with separate categories for persons who are retired, unemployed or students.

Following the precedent of other studies of housing tenure in China, we introduce gender, age (treated as a possible non-linear effect) and household size (not defined for those in collective housing) as *demographic control variables*.

Multivariate results for the pooled sample are provided in Table 4. To model a dependent variable with seven categories, we use a series of logistic regressions. In each regression the public rental group is treated as the reference category and compared in turn to each other tenure category. Public rental was the modal category in socialist urban China, and it remains an important reference point. A series of logistic regressions using the same reference category is similar to a multinomial logistic regression, but it gives us more control over model estimation. The analysis involves some comparisons where there are very few cases, and we avoid unreliable estimates of coefficients based on such comparisons by re-estimating the model without the corresponding predictor variable. For example, the predictor category 'rural natives' was removed from the logistic regression in which public purchase is compared to public rental, because almost no rural natives live in public purchased housing. In order to confirm that the use of logistic regressions yields similar results to a multinomial logit, we conducted the following comparison. First we removed from the analysis all of the variables that would prevent estimation of the multinomial model because of the small numbers of cases in certain categories. Then we estimated the effects of the remaining variables using a series of binomial logits and a single multinomial model. Coefficient estimates were almost identical, and significance levels were not affected.

**Table 4** Multiple logistic regression models predicting housing tenure: odds ratios and significance levels<sup>a</sup>

	Public Purchase	Economical Purchase	Market Purchase	Market Rental	Self-built	Collective
Institutional variables						
Residence status (reference =	Urban nativ	res)				
Rural native	b	2.318**	4.623**	12.357**	35.025**	8.892**
Established urban migrant	1.308**	.895	.586**	1.337	.342**	1.015
Recent urban migrant	.867	1.281	2.273**	5.151**	b	6.027**
Established rural migrant	b	1.186	.668	6.474**	2.811**	3.423**
Recent rural migrant	b	b	.463*	7.210**	1.152	9.106**
Local registration	1.953**	1.370	.739	.197**	6.941**	.150**
Marital status (reference = Liv	ving with spo	ouse with urba	ın registratio	on)		
Living with no spouse	.990	.448**	.683	.463**	.521**	c
Spouse – rural registration	.438**	.988	1.031	1.036	2.171**	C
Recent mover	.898	2.449**	5.526**	3.376**	.078**	2.845**
Socio-economic variables			2			
Education	1.078**	1.02	1.044**	.954*	.884**	.962*
Spouse education	1.053**	.983	1.017	.936**	.922**	C
Occupation (reference = Manu	al workers)		l¥			
Head of work unit	1.595**	.940	3.686**	.959	1.514	.366**
Professional/technician	1.337**	1.079	1.710**	.835	.750	.942
Staff or other personnel	1.451**	1.079	1.778**	.726	.874	.561**
Commercial or services	.977	.697*	1.369*	1.203	.783	.350**
Agricultural laborer	b	2.611*		1.359	8.491**	.813
Retired	1.185	.911	1.244	.999	.845	.160**
Unemployed	.647**	.976	1.062	.988	1.299*	.203**
Student	1.556	b	b	.919	b	32.487**
Demographic variables	w.					
Age (18 and above)	1.107**	1.099**	.975	.943**	1.022	.745**
Age squared	.999**	.999**	1	1	1	1.003**
Gender (1=male)	1.011	.95	.976	1.465**	1.231*	1.258*
Household size	1.063**	1.147**	1.137**	.883*	1.102**	С
City (reference = Beijing)	e					
Chongqing	1.401**	7.612**	4.988**	1.651*	.792	1.024
Guangzhou	2.089**	4.520**	14.799**	2.942**	2.742**	2.006**
Harbin	2.006**	5.889**	10.381**	1.522	1.164	.289**
Nanjing	1.688**	2.851**	2.456**	1.507*	1.411**	.844
Shanghai	.885	2.478**	3.203**	.536**	.995	.580**
Tiạnjin	.457**	1.965**	3.714**	.298**	.591**	.420**
Xi'an	1.659**	13.566**	3.584**	4.004**	1.476*	1.790**

Table 4 Continued

	Public Purchase	Economical Purchase	Market Purchase	Market Rental	Self-built	Collective
Constant	.006**	.003**	.037**	3.904*	.163**	1218.556**
N	8,989	4,986	5,594	5,594	6,747	9,290
Model statistics		-				
Cox and Snell	.138	.097	.207	.381	.446	.621
Model Chi-square	1330.10	510.75	1297.18	2679.15	3990.80	9009.74
df	26	28	28	30	28	26
Goodness of fit	62.94	10.60	22.62	21.51	12.62	17.40
р	0	.225	.004	.006	.126	.026

a In all models 'public rental' is the reference category

<sup>b</sup> Variable is omitted in the model because there are too few cases in the sample

<sup>c</sup>Variable is omitted in the model because it is not applicable in this model

\*p < .05; \*\*p < .01

Some other variables cannot be included in the model for collective versus public rental housing. Because residents of collective housing are almost exclusively persons living without other family members, their spouse's education and spouse's registration status cannot be measured, and household size does not have the same meaning as it does for persons in family households.

#### Effects of Institutional variables

The key institutional variable is residence status. We treat 'urban native' as the reference category. We compare them first to established urban migrants, the category shown above to have a relatively advantaged position in the housing system. Controlling for other characteristics, established urban migrants are more likely than urban natives to have made a change from public rental to public purchase. (Change is implied here, not directly measured.) They are less likely to complete a market purchase, and especially less likely to live in self-built housing. Overall, it would be difficult to argue that established urban migrants are advantaged or disadvantaged by these differences. Our view is that they and urban natives have comparable positions.

Recent urban migrants, on the other hand, are clearly at a disadvantage. They are much more likely than urban natives to live in collective housing or market rentals, and more likely to purchase at market prices than to have access to public rental housing.

Disadvantages are still clearer for rural migrants. Whether established or recent, they are more likely than urban natives to live in collective housing or market rentals. They are not found in public purchase housing, so they are omitted from the public purchase v. public rental model. Established rural migrants are more likely than urban natives to live in self-built housing rather than public rentals. Recent rural migrants have even less chance of market purchase.

Finally, rural natives are not found in public purchase housing, so they are omitted from the public purchase v. public rental model. They are more likely to be found in any of the remaining housing types than in public rentals, and especially in self-built housing. Economical and market purchase are a positive option for those who can afford it. Self-built housing is a satisfying option, cheap but poor-quality. To the extent that they are steered toward market rentals and collective housing, this represents a concrete disadvantage.

Note that these differences are not readily attributable to differences in education or occupation. Income is unmeasured, but certainly access to public housing and highly subsidized public purchase does not have a high wealth threshold, and market rental is more expensive than public rental despite being of lower quality. Therefore, we emphasize that what are shown here are mainly institutional effects — consequences of the lower citizenship rights of rural migrants and the 'different' rights of rural natives who have more control over the use of property but do not have access to public housing.

In addition to this main measure of residence status, Table 4 shows a test for the effects of a respondent's own local v. non-local registration (where 'local' means registration in the city of residence) and spouse's (rural v. urban) registration. Persons with local registration are more likely than those with non-local registration to live in public purchase housing (compared to public rental housing), less likely to be in market rental or collective housing, and more likely to live in self-built housing. Generally these results show an advantage for urban locals in public sector housing and rural locals (because local registration is a prerequisite for having the legal right to a land parcel to build on) in self-built housing. Compared to people with a spouse who has urban registration, persons living with a rural spouse are less likely to do public purchase but more likely to self-build. The rural spouse is both a handicap and (since self-built housing is low quality) a limited advantage. Persons living alone (controlling for registration status) are less likely even than those with an urban spouse to live in self-built housing, and are also less likely to be in any market sector. Of course they are largely living in collective housing.

We treat recent intra-city moving as an institutional variable because those who moved recently are most likely to participate in the newer forms of housing tenure, and this association is due to the institutional changes that are currently underway. And indeed recent moving has a positive effect on economical purchase, market purchase and market rental. Recent movers are also more likely to be in collective housing (perhaps reflecting in this way the 'floating population'), and less likely than more

locally rooted people to build their own homes.

#### Socio-economic variables

Socio-economic variables (education, spouse's education, and occupation) may indirectly reflect both institutional position and financial resources. We find that higher position on all three predictors is positively associated with public purchase. We note that higher-status persons were more likely to be allocated public rental housing to begin with; Table 4 shows that they are also more likely to make the transition to ownership.

These predictors are not much associated with economical purchase, perhaps because the regulations for economical purchase are supposed to favor people with below average means. But people with higher education and those with higher status occupations (in comparison with the reference category of manual workers) are more likely to do market purchase. Higher education (both head and spouse) is associated with a lower likelihood of living in market rental, self-built or collective housing.

One specific occupational category, agricultural laborer, is linked with self-built housing, reaffirming that this is a more common form in rural zones. Manual workers are more likely than any other occupation to be in collective housing — except students, who

typically live in college dormitories.

### Demographic variables

Demographic variables include gender, age (with a squared term to test for nonlinearity), and household size. We did not have strong hypotheses about their effects, and we simply report them here. Men are more likely than women to be found in market rental, self-built and collective housing. Because other characteristics such as residence status that could have helped explain this result have been controlled, it is unclear what the source of the

gender difference is. There are some significant age differences in housing tenure. Older persons are more likely (though the effect declines at higher ages) to live in public purchase or economical purchase housing rather than public rentals. They are less likely to live in market rental housing and especially less likely to live in collective housing. We suspect some of these differences reflect normal lifecycle changes or a process over time that allows people to find routes to better housing choices. In the socialist period, as noted above, older age was a qualification for being allocated public housing. Finally, larger households are more likely to be found in public purchase, economical purchase, market purchase or self-built housing than in public rentals. This relationship may be due to the small apartment size of public housing built during the socialist period. (We saw above that public rental housing is relatively large size per resident, but it nevertheless has smaller absolute size than newer housing stock.) Larger households are less likely, however, to live in market rental housing, which generally is much more crowded.

### City differences

Table 4 also includes dummy variables representing cities (with Beijing used as the reference category). The model assumes that the effects of other variables are uniform across cities, and separate analyses conducted for each city confirm this with few exceptions. There are many significant intercity differences in the composition of the housing stock, even after controlling for differences in measured characteristics of residents. These do not follow a simple pattern. Tianjin, a city with a history of many state-owned enterprises and often perceived as slow to adopt market reforms, is the one city where the odds of public purchase v. public rental are significantly lower than Beijing. As the most market-oriented city in the sample, one might have expected Guangzhou to have strong positive coefficients (compared to Beijing) for all of the ownership types, and the results bear this out. Guangzhou residents also are more likely to live in self-built and collective housing. What is missing in this city, apparently, is public rental housing. But several other cities also have positive coefficients for various forms of owner-occupied housing: Chongqing, Harbin, Nanjing and Xi'an. Rather than attempt to interpret city differences, we prefer to treat them — like personal demographic characteristics — as necessary control variables.

### Change of chi-square

The core question in this analysis is how residence status and related institutional variables influence housing tenure outcomes. In order to assess the relative importance of these variables compared to other predictors, we calculate the increment to chi-square that each set of variables uniquely contributes. This is the difference in the chi-square (measuring the model's goodness of fit) between the full model and the reduced model without one set of variables. This approach is analogous to calculating increments to explained variance in a multivariate regression model.

These chi-square analyses reveal that socio-economic differences are the most substantial predictors of public purchase v. public rental housing. The block of socio-economic variables alone accounts for more than a quarter of the total model chi-square. Institutional variables, on the other hand, are much more important for economical purchase (accounting for more than 20% of the model fit) and market purchase (close to half of the total chi-square). In both these cases, though, it is not residence status (self or spouse) that makes the largest difference. Rather it is by far the effect of recent moving within the city. As the institutions change, recent movers are pulled into purchase at or near market prices. Institutional variables are also key to living in market rental housing (about a third of the model chi-square), self-built housing (nearly half), and collective housing (more than a quarter). In these cases, the critical component is residence status

of the respondent; the analysis picks up the strong effects of being a rural migrant on living in market rentals or collective housing, and of being a rural native on living in self-built housing.

### Conclusions

Studying the housing system in urban China offers a new perspective on how market reform is affecting the lives and opportunities of residents. Like inequalities in income, differences in housing tenure represent profound disparities in how people can lead their daily lives. This analysis is only part of the story of housing inequality, because it has only very broadly demonstrated that different forms of housing tenure carry with them unequal quality, size and price, and the multivariate analysis has not controlled for how much people pay for their homes. This is not a simple account of better or worse, but rather of pathways to shelter. It is as if, in a study of income inequality, one were to focus primarily on sources of income, asking who works for a wage, whether it is by the hour or a fixed annual sum, seasonal or year-round, whether there is income from investments or pension payments or public assistance. There are certainly implications of better or worse in such categories, but asking about the source of income is more about qualitative differences in class position than about dollar amounts.

This sort of question is especially pertinent in countries that are undergoing a transition from socialism, where the emergence of new forms, potentially in the long run displacing the older ones, is at the heart of social change. Who, we have asked, continues to have better access to more advantaged forms of housing tenure from the old system, and who is making the transition to more advantaged forms in the new one? From the core socialist era in urban China the main holdovers are public rental housing (the most desirable type at that time but now declining), self-built housing (possibly declining in rural zones), and collective housing (growing with migration). From the early years of market reform, market rental housing has emerged as a rapidly growing mechanism to shelter people with the fewest options, but not yet as a major factor for people with more means. More recently, new forms of purchase — public purchase of former public rental housing (often very desirable) and purchase of commodity housing at market or nearmarket prices (desirable but at greater cost) — have been established.

Who, we ask, is in a position to make what choice? Again there is a parallel to studies of income inequality. In that literature, scholars have debated the importance of new bases of social stratification (such as education and job skills) that might become more salient in a market-oriented system versus the persistence of older ones (such as party membership and the political position of one's work unit) that have carried over from socialist allocation. The consensus in the Chinese case is that there has been some change

in stratification mechanisms but no wholesale restructuring up to this time.

We have posed the same question about housing. How strong are the demographic and socio-economic factors that have been found to determine housing tenure choice in market societies, and how powerful are the institutional forces — especially the categories of residence status imposed by state policy — that have been carried over from the socialist era? Even more strongly than in the domain of income inequality, we find that institutional factors are predominant. Natives with rural registration face a very different set of options than those with urban registration. Migrants with rural registration are severely disadvantaged. And this result is not simply the usual uphill struggle of newcomers, because it moderates only partly for those with longer duration of time in the city and it does not affect migrants with urban registration.

Documenting this pattern required a nuanced treatment of both housing tenure (where a simpler dichotomy between rental and ownership is still common) and residence status (where distinctions are often based only on urban v. rural or local v. non-local registration, or vague notions of temporary v. permanent migrants). There is room for continued effort to specify in a more theoretically informed way the proper categories of both variables; especially because these are susceptible to change as state policy

inevitably evolves.

The patterns found in 2000 are time-bound, and at the current pace of change our conclusions will need to be reframed by continuing research on this system as it makes its way toward the future. The last several years have witnessed an expansion of the private market and the emergence of housing as an investment vehicle for the growing middle class who can afford it. Tabulations that have been made available from the 2005 mini-census show that market purchase housing has risen from 9.2% to 16.3% of total housing units in Chinese cities. Market rentals increased from 7.4% to 12.2%. Corresponding declines have been registered in public rentals and purchase of former public rentals. Price inflation has been intense, and at this time — although there are signs of overheating and some privately constructed buildings sit empty in major cities while the owners wait for the right moment to cash in — housing purchases seem to be

paying off.

Policy makers under the leadership of Hu Jintao, current General Secretary of the Communist Party, have made social harmony a central concern, recognizing that deepening social inequalities that were promoted by marketization are a potential source of instability. Changes in registration policies (the hukou system) continue to be discussed, with the possibility of reforms that will give more options to migrants. Yet, while acknowledging the potential for fundamental changes in a short period of time, we also recognize that the current system has emerged step by step since the announcement in the early 1980s of the intention to privatize the housing sector. The most substantial change so far has been the rapid expansion of the housing stock after 1980, only a small part of which still is based on market purchase by individuals, and the transfer of ownership to sitting tenants of public housing, which has had important effects but has up to now kept most occupants in the same home. There are strong constituencies in support of the current system that favors local villagers who now operate as landlords and urban natives who have had the inside track in the emerging housing market. Our best guess is that when more recent data become available for scholarly use (such as the 2005 mini-census that included a measure of income for the first time) they will document the persistence of housing inequalities based on long-standing institutional policies alongside the continued gradual emergence of social class as a determinant of position in the urban system.

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### Résumé

Comme l'inégalité de revenu, l'inégalité de logement dans les villes chinoises est nettement affectée par les mesures étatiques qui privilégient les résidents en place. En l'occurrence, les politiques déterminantes s'attachent au statut de résidence, ce qui recouvre à la fois l'historique migratoire des individus et leur situation juridique. À partir des données du recensement chinois de 2000 dans huit grandes villes, l'étude montre comment le statut de résidence influe sur l'accès aux différents canaux conduisant à un logement. Outre la condition de logement marginale bien connue de la «population flottante» récente, sont exposés les surprenants atouts des migrants qui sont enregistrés comme urbains, et les inconvénients persistants que rencontrent les migrants ruraux quelle que soit la durée pendant laquelle ils ont vécu dans la ville.