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Moving Toward an Inclusive Housing Policy?: Migrants' Access to Subsidized Housing in Urban China

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ABSTRACT

China is rapidly urbanizing, with hundreds of millions of migrants leaving villages for cities. Under the discriminatory Household Registration (*Hukou*) System, migrants have been denied urban welfare benefits. The Chinese government has been promoting inclusive urbanization with significant policy changes in recent decades, yet its impact on migrants is not clear. This article examines whether housing is becoming more inclusive to migrants in Chinese cities. A review of recent policy changes at both central and local levels shows that although central housing policy is becoming more inclusive of migrants, local governments have largely remained exclusionary and exercise selective inclusion—allowing only migrants who meet additional, strict requirements to access subsidized housing. The empirical analyses, using two waves of the China Migrants Dynamic Survey, reveal that few migrants have access to subsidized housing despite the policy changes. Institutional barriers continue to exclude migrants from subsidized housing, although many barriers have become less important over time. It is clear that housing discrimination persists, and housing inclusion remains a distant dream for most migrants in China. This research highlights exclusion based on an important but uncommon birth-ascribed status defined by the government and provides a multiscalar perspective on the inclusion of domestic migrants.

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As the world is becoming increasingly unequal and polarized, social inclusion/exclusion has become a key research and policy agenda. Existing research on inclusion/exclusion has often focused on immigrants in the West, whereas domestic migrants have been largely ignored despite the large number of them. This imbalance is probably because domestic migrants usually enjoy the same entitlements as local residents in most developed countries. However, in countries such as China and India, domestic migrants also suffer institutional discriminations and are excluded from welfare benefits (Bhagat, 2011; Chan, 1996; Kapur, 2007; Solinger, 1999). As the Global South experiences rapid urbanization at an unprecedented speed and scale, there is an urgent need to better understand domestic migrants' inclusion in cities. In the absence of such knowledge, it would be difficult to achieve just and inclusive development.

Housing is central to social inclusion/exclusion, as it cuts through multiple socioeconomic layers of social exclusion, reflects the prevailing patterns in social exclusion, and can both mitigate and reinforce social exclusion (Hills, 2001; Hulse et al., 2011; Somerville, 1998). More importantly, social exclusion can take place both from housing and through housing processes (Cameron & Andrew, 2000). In addition to being excluded from decent and affordable housing, vulnerable groups are often excluded through various housing-related processes. For example, living in poor marginalized

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neighborhoods often leads to exclusion from other social and economic opportunities (Massey & Denton, 1993; Smith, 1989). Research has also demonstrated the importance of housing for health and subjective well-being and for children's education (Dunn, 2000; Easterlow, Susan, & Sara, 2000; Evans, Wells, & Moch, 2003). Thus, domestic migrants' housing inclusion/exclusion offers a unique prism to better understand social inclusion/exclusion and inclusive development in the Global South.

China has been experiencing rapid urbanization in recent decades, with hundreds of millions of rural-to-urban migrants. Because of the Household Registration (*Hukou*) System, established in the 1950s, migrants have largely been considered temporary and illegal in Chinese cities; they do not enjoy the same rights as local urban residents and are denied welfare benefits such as subsidized housing (e.g., Chan, 1994, 1996; Cheng & Selden, 1994). With rising discontent and inequality, social inclusion is emerging as a policy paradigm as the central government shifts from pursuing rapid economic growth to more sustainable and inclusive development. For example, China launched The New Urbanization Plan (NUP) in 2014, aiming for a people-centered and inclusive urbanization with basic welfare benefits covering all urban residents including migrants (State Council, 2014a, 2014b). In its 13th Five Year Plan (2016–2020), the central government created a blueprint for its future development with five principles, one of which is "shared development" (*gongxiang fazhan*) or "inclusive development" (The National People's Congress (NPC) of the People's Republic of China, 2016). However, with China's fiscal decentralization and localized policy design (Huang, 2012; Lin & Liu, 2000), there are significant variations in urban inclusiveness toward migrants across cities, measured by coverage in social security insurance (Hu & Wang, 2019).

Housing inclusion is an essential component of social inclusion. The central government has called for the inclusion of migrants in the subsidized housing system since 2010 (MHURD, 2010, No. 87). Yet subsidized housing is ultimately a local issue, with local governments shouldering the majority of the financial and logistic responsibility (Huang, 2012). Correspondingly, there are large variations among cities, with some being more inclusive of migrants than others. For example, the city of Chongqing offers migrants the same access to subsidized housing as local residents (Chongqing Municipal Government [CMG], 2010), whereas others exclude migrants or require them to meet additional, strict eligibility criteria (e.g., Shanghai Municipal Government [SMG], 2019). Meanwhile many local governments offer heavily subsidized talent housing (*rencai fang*) to attract skilled migrants (e.g., SMG, 2010, 2011). However, it is not clear whether and how these recent policy changes, at both central and local levels, have affected migrants' housing access and their inclusion in cities.

There is a growing body of literature on migrants' housing conditions in Chinese cities (e.g., Fang & Zhang, 2016; Huang & Tao, 2015; Huang & Li, 2014; Jiang, 2006; Lian, 2009; Wang, Wang, & Wu, 2010; Wu, 2002). The overall picture is that migrants have extremely poor housing conditions, mostly living in factory dorms, illegal basements, and self-built informal housing in urban villages on the outskirts of cities, and few own homes in cities. The *Hukou* System and the lack of affordability are often cited as the main reasons. Research has also demonstrated the prejudice and stigmatization that migrants experience in their daily interactions with local urban residents (Gu, Nielsen, Shachat, Smyth, & Peng, 2016; Huang & Yi, 2015; Liu, Huang, & Zhang, 2018; Liu, Tan, & Chai, 2020; Liu, Wang, & Tao, 2013), which can have significant impact on their well-being and integration in the city (Chen, 2013; Jia, Wang, & Fan, 2018; Tse, 2016). Despite various reforms in the *Hukou* System in recent decades, it remains a major divide between the urban and rural population and an obstacle to migrants and even China's quest to become a modern nation (Chan, 2009; Chan & Buckingham, 2008).

However, existing studies are often cross-sectional analyses of one or several cities, giving snapshots of migrants' housing conditions at various time points. It is not clear how migrants' housing conditions have changed over time, and how recent policy changes have affected their housing access. Although many studies emphasize the housing exclusion migrants face, few examine inclusive housing policy, or the linkage between housing policy and housing experience. As China

enters a new stage of urbanization, the focus has shifted from massive housing development and rapid economic growth to the inclusion and well-being of vulnerable populations such as migrants. Yet the impact of the recent paradigm shift and policy changes on migrant housing is not clear.

To fill the research gap, this article asks the following sets of questions: (a) Is housing policy in Chinese cities becoming more inclusive for migrants? Have institutional barriers in housing access declined over time? Are there policy differences between the central and local governments? and (b) How has migrants' actual access to subsidized housing changed over time? Have they benefited from recent policy changes?

A mixed method is adopted in this article to study the post-2010 era, a period that features significant changes in housing policy, an increasing focus on social inclusion, and massive development of subsidized housing (Huang, 2012). To answer the first question, we will review and assess housing polices of both the central and local governments, and we expect that whereas the central government has become more inclusionary over time, local governments remain largely exclusionary despite large regional variations. To answer the second question, an empirical analysis of migrants' housing over time will be conducted, and we expect to find that migrants' access to subsidized housing remains very limited, and that the institutional barriers they face remain significant. This would demonstrate that despite the goal of inclusive urbanization and shared development by the central government, migrants have benefited little in housing access. We argue that, at most, selective inclusion is adopted in China, and most migrants continue to suffer housing exclusion.

By offering a timely assessment of the progress (or lack thereof) toward inclusion in both housing policy and housing access in China, this article contributes to the literature both theoretically and empirically. Theoretically, by studying migrants' *hukou*-based housing inclusion/exclusion in rapidly urbanizing China, this article expands the debate on inclusive housing policy from the West to the Global South, from immigrants to domestic migrants, and from race to *hukou*. *Hukou* is an unusual birth-ascribed status that is not related to biological features but defined by the government, with few channels to change.[1] Although different from other types of birth-ascribed status such as race and sex, *hukou* status embodies similar institutionalized discrimination and exclusion in housing, labor market, education, and other arenas. This highlights another important but understudied dimension of exclusion based on uncommon birth-ascribed status. In addition, by identifying the divergence between the central and local governments in inclusive housing policy in China, this article contributes to the literature with a multiscalar perspective. Different levels of the government may have different development priorities, and thus different polices on housing inclusion and other types of socioeconomic inclusion. A multiscalar perspective provides a nuanced understanding of inclusion and emphasizes the challenges in achieving inclusion, especially in the Global South where economic growth may dominate the policy agenda. Thus, understanding inclusion of domestic migrants in China enriches theoretical debates on social inclusion, with exclusion based on an unconventional birth-ascribed status and a multiscalar perspective. Empirically, this article provides a longitudinal picture of migrants' inclusion in China from the perspective of both housing policy and their actual housing access, and contributes to a better understanding of the challenges the developing world faces in its pursuit of urbanization and inclusive development.

After a brief review of the literature, the article assesses major housing policies since 2010 at both the central and the local level and examines institutional discrimination in migrants' housing access. Then, an empirical analysis is conducted to understand the patterns and temporal changes in migrants' access to subsidized housing. Findings and implications are discussed in the concluding section.

Literature Review and Research Context

With social inclusion emerging as a policy agenda and the unparalleled importance of housing in social inclusion, inclusive housing policy has been increasingly pursued by governments in recent decades. Inclusion is a multidimensional concept that can mean different things to different people,

from a broader distribution of the fruits of growth to an overall improvement in the quality of life; the World Bank defines inclusiveness using a framework covering 20 dimensions in three broad categories: spatial, social, and economic inclusion (e.g., Ianchovichina & Lundstrom, 2009; Organisation for Economic Co-operation and Development [OECD], 2014). To facilitate discussion, we operationalize inclusive housing policy into three aspects: being inclusive of *whom* and *what*, and *how* to be inclusive.

In terms of whom, with housing as a basic right, the West has focused on the poor and other vulnerable populations such as the elderly and the disabled. Although ethnic minorities and immigrants are usually not the target for housing inclusion per se, they are often the focus because of the history of racial discrimination and the intersections among race, immigration, and poverty. In particular, with the large numbers of immigrants, recent anti-immigrant sentiments, and the perceived material and cultural threats that immigrants pose to native citizens, the inclusion/exclusion of immigrants has gained much attention (e.g., Harell, Soroka, & Iyengar, 2017; Huber & Oberdabernig, 2016; McLaren & Johnson, 2004). According to Milliband (2006), immigrant exclusion is "wide social exclusion" as many people can be excluded because of one or two features, in this case their immigrant status. There have been many policies restricting immigrants' access to welfare benefits, such as the Welfare Reform Act of 1996 and the latest Public Charge Rule (2020) in the United States (e.g., Bernstein, Gonzalez, McTarnaghan, Karpman, & Zuckerman, 2020; Fix, Capps, & Kaushal, 2009; Singer, 2004). In comparison, domestic migrants and their exclusion have been largely ignored in developed countries, as they usually enjoy the same rights and entitlements as local residents.

Despite controversies on and policy changes regarding immigrants' inclusion, the West has generally shifted the focus from being inclusive of whom to being inclusive of what and how to be inclusive. As exclusion can take place both from and through housing (Cameron & Andrew, 2000), there have been several major shifts in housing policy in the West to ensure that the poor have access to decent and affordable housing and can achieve social inclusion. First, the provision of housing subsidies has shifted from the supply side to the demand side, or from providing actual housing to monetary subsides, as the latter is considered to offer households more flexibility/mobility and socioeconomic opportunities, and to avoid problems associated with large public housing projects such as poverty concentration and residential segregation (e.g., Dreier & Atlas, 1995; Massey & Denton, 1993; Schwartz, 2006). For example, in the United States, the Housing Choice Voucher Program has become the dominant form of housing subsidies, providing low-income households with vouchers to cover the difference between 30% of their income and a maximum allowable rent (Schwartz, 2006). The United States even conducted the largest social experiment, the Moving To Opportunity (MTO) program, in the 1990s to test the impact of the voucher program, which has been touted by some as a successful policy intervention (e.g., Comey, Popkin, & Franks, 2012). A similar shift has taken place in Europe and Australia (Ginsburg, 2005; Poggio & Whitehead, 2017; Wood & Ong, 2017).

Second, even on the supply side, housing provision has shifted mostly from the public to the private sector through tax incentives and monetary subsidies to developers, such as the Low-Income Housing Tax Credit in the United States (Schwartz, 2006). Planning tools have also been utilized worldwide, with the strategy of inclusionary housing and mixed-tenure/mixed-income housing development, which require private developers to incorporate affordable/social housing as a part of market-driven developments to foster social inclusion (Calavita & Alan, 2010; Jacobus, 2015; Schwartz, 2014). Even physical designs for housing, infrastructure and community have been explored to promote social inclusion (Imrie & Hall, 2003).

Yet empirical findings in both the United States and the United Kingdom have been mixed regarding whether social inclusion has actually been achieved through these changes in housing policy. Whereas social inclusion has been improved in some cases, social polarization and divisions have been reinforced, rather than mitigated, in others (e.g., Ellickson, 2009; Hills, 2001; Joseph, 2006; Markovich, 2015; Schwartz, 2014). In other words, there is an "evidence gap," as certain inclusive

housing policies are being promoted whereas relevant research does not endorse them (Groenhart, 2013, page 96). Despite being extremely important, housing (and neighborhood) are just one factor that potentially can contribute to inclusion. In addition, inclusive housing policy usually only addresses the symptoms rather than the underlying root causes of inequality and poverty (Bolt & Kempen, 2013). This demonstrates the limitations of inclusive housing policy in achieving social inclusion, and a concerted effort from housing policy and other socioeconomic policies is needed.

Although the West struggles with the inclusion of immigrants and the poor through housing policy, developing countries are facing an even larger challenge of providing decent and affordable housing to their massive domestic migrants and ensuring their inclusion in the urban society (Tipple & Willis, 1991). With the rapid urbanization in developing countries, another two billion people are expected to move to cities in the first three decades of the 21st century (UN Habitat, 2003). In countries like China and India, in addition to the massive scale of migrants, existing institutional discrimination against migrants makes the challenge even more daunting. Despite the recent popularity of inclusive development in the Global South, our understanding of housing policies and migrants' inclusion has been relatively limited compared with the large body of literature on immigrants in the West. By focusing on China, this article aims to shed light on inclusive housing policy and social inclusion of domestic migrants in the developing world.

Since the 1980s, China has experienced rapid urbanization along with massive rural-to-urban migration, from a few millions in the 1980s to 244 million in 2018, accounting for more than one third of the urban population (National Population and Family Planning Commission [NPFPC], 2018). However, because of the *Hukou* System, which divides the population into different *hukou* categories with different entitlements, migrants with their *hukou* registered elsewhere have been considered illegal in cities and excluded from welfare benefits (Chan, 1994; Cheng & Selden, 1994). Despite recent reforms to the *Hukou* System, the Chinese government has not completely dismantled the system and accepted migrants as lawful urban citizens (Chan & Buckingham, 2008). Although people can now move easily across the spatial boundaries, migrants still cannot cross the institutional barriers and are still excluded from welfare benefits and many opportunities in cities. For example, migrants are often excluded from state employment, and they are usually restricted to informal, low-paying jobs, much like illegal immigrants in the West (Chan, 1996; Démurger, Marc, Li, & Yue, 2009). Discrimination against migrants was so prevalent in the labor market that the government forbade any indication of *hukou* type in public recruitment in 2006 (Fang & Zhang, 2016). Despite the central government's call for equal treatment in 2001, migrants' children continue to be denied public education in cities, which has a profound and long-lasting impact on their well-being (ACWF, 2013; Chen & Liang, 2007; Chen & Feng, 2013; Huang, Liang, Song, & Tao, 2020; Huang, Song, Tao, & Liang, 2018). Migrants may also be excluded from other social services such as *five insurances and one fund* (*wuxian yijin*) provided by employers,[2] depending on local fiscal capacity and labor demand (Hu & Wang, 2019).

Meanwhile, China is becoming one of the most unequal societies in the world, with its Gini coefficient reaching an alarmingly high level (World Bank, 2013; Xie & Zhou, 2014). With rising polarization and discontent, inclusive development has emerged as a policy paradigm in the last decade. For example, in 2014, China launched the NUP, which for the first time sets up a roadmap for inclusive urbanization and aims to convert 100 million migrants into urban citizens with urban rights and entitlements (State Council, 2014a, 2014b). In its 13th Five Year Plan (2016–2020), the government chose shared development as one of the five principles for its economic development (together with innovative, harmonious, green, and open development; NPC, 2016). There have also been many policy changes in different arenas including housing, education, and the labor market, aiming to be more inclusive. However, it is not clear what the real impacts are of these changes on migrants. In particular, within this inclusive development paradigm, it is not clear whether housing policy is becoming more inclusive, and what kind of impact it has had on migrants.

Existing research has focused on migrants' poor housing conditions. With housing reforms centered on privatization and marketization, China has experienced an unprecedented housing boom in recent decades, and most urban Chinese have achieved significantly improved housing conditions, high rates of homeownership, and massive housing wealth (Clark, Huang, & Yi, 2021; Huang & Yi, 2011; Xie & Jin, 2015). Yet migrants have been largely excluded from this "Chinese Dream," and their *hukou* status has been found to be the most salient and persistent institutional factor that contributes to their poor housing conditions (Huang & Jiang, 2009; Huang & Li, 2014; Huang & Tao, 2015; Li, 2012; Logan, Fang, & Zhang, 2009). Studies have demonstrated that migrants often have no access to subsidized housing and cannot afford formal commodity housing produced by developers; instead, they tend to live in employer-provided dormitories and informal housing such as urban villages and illegal basements (Huang & Tao, 2015; Huang & Yi, 2015; Kim, 2016; Lian, 2009; Liu et al., 2013; Wang et al., 2010; Wu, 2002; Wu & Wang, 2014). Meanwhile, migrants are much less likely to own homes in cities, with homeownership ranging from 4% (Huang & Tao, 2015) to 10% (Fang & Zhang, 2016), compared with 70% in 2010 and 90% in 2015 among urban local households (Huang et al. 2020; Yi & Huang, 2014). Urban migrants with nonagricultural *hukou* are more likely than rural migrants to live in formal housing and become homeowners (Cui, 2015; Fang & Zhang, 2016; Wu & Wang, 2014).

However, most previous studies were empirical, cross-sectional analyses, and lacked a longitudinal perspective on migrants' housing. The existing research also tends to focus on the outcome of housing exclusion, rather than on housing policy and inclusion. Given the recent emergence of an inclusive development paradigm and the profound changes in the *Hukou* System and housing policy (especially since 2010), much is still unknown regarding their impact on migrants' housing access over time. In the following section, we examine the housing policies of both central and local governments and how they have changed (or not) over time, followed by an empirical analysis of migrants' access to subsidized housing.

Housing Policy Changes and Persistent Housing Exclusion

The year 2010 marks a major turning point in housing policy in China. In addition to the return of the state after a decade of retreat (Huang, 2012), the wall of migrant exclusion in the housing system started to crack. In this section, housing policies regarding migrants' access and their changes over time are reviewed (see Table 1).

Subsidized Rental Housing

Significant changes have taken place in the subsidized rental sector since 2010. Before 2010, Cheap Rental Housing (CRH) was the main subsidized rental housing provided by the government targeting low-income households with housing difficulties (Huang, 2012). Migrants, however, were not entitled to CRH, regardless of their income level and housing conditions. Instead, the government encouraged employers to provide shelters and housing subsidies to their migrant employees (State Council, 2006, 2007a, 2007b). Not surprisingly, factory dorms were a main source of shelters for migrants, accounting for more than 35% in 2009 (Huang & Tao, 2015). However, in 2010, the government started to develop Public Rental Housing (PRH) for so-called sandwiched households, the lower-middle income households who cannot afford market housing but are not eligible for CRH (State Council, 2010a). In addition to urban residents with local *hukou*, the central government also encouraged local governments in cities with the economic capability to include new employees and qualified migrants with stable jobs and years of urban residency in the PRH program (MHURD, 2010, No. 87). This is the first time in history that the central government has stipulated that qualified migrants are eligible for subsidized rental housing. At the same time, the government emphasized providing subsidized housing to talents as China implemented the Talent Development Plan (State Council, 2010b). In 2012, the Ministry of Housing and Urban and Rural Development specifically mandated that migrants who have had stable employment for a number of years are qualified for

Table 1. Policies on migrants' access to subsidized housing in Urban China

	Subsidized rental housing	Subsidized homeownership
Before 2010	• Migrants are not qualified for any housing subsidized by the government (e.g., CRH); • Employers are encouraged to provide shelter and housing subsidies to migrants	• Migrants do not qualify for subsidized owned housing (e.g., ECH, PCH)
After 2010	Central government: • Qualified migrants are entitled to PRH; entry criteria are defined by local governments (2010) • Give priority to talents (2010) • Migrants with stable employment for a number of years are qualified for PRH (2012) • All prefecture-level and higher level cities include qualified migrants in their subsidized housing program (2013) • Migrants with a residence permit are entitled to same benefits as local residents, including subsidized housing (2014) • Develop indemnity rental housing for new and young residents with housing difficulties (2021)	Central government: • Give priority to talents (2010) • Migrants with a residence permit are entitled to same benefits as local residents including subsidized housing (2014) • 2014: Experiment Shared Ownership Housing (SOH) • 2019: Develop SOH according to local conditions
	Local government: • Excluding migrants: e.g., Wuhan (2014), Jinan (2018) • Including qualified migrants—i.e., selective inclusion: Beijing (2014), Nanjing (2015): social security payment, *juzhu zheng*, labor contract, no home ownership; Xiamen (2016): labor contract, no home ownership; rental subsidies for qualified migrants (social security, *juzhu zheng*, no home ownership): e.g., Wuhan (2018), Chengdu (2019); Shenzhen, Hangzhou, Wuhan, Shanghai (2015), Beijing (2018): high education, talent housing in rental sector • Migrants have same access as locals: e.g., Xianyang (2013), Chongqing (2010, 2011)	Local government: • Excluding migrants: e.g., Shanghai (2016) • Including qualified migrants: • Shanghai (2019), Chongqing (2020): social security or personal income tax, *juzhu zheng*, married, no home ownership, income limits • Beijing (2017): No less than 30% of SOH is for migrants, and governments of each district establish specific criteria • Shenzhen, Nanjing, Beijing, Xi'an, etc.: talent housing in owned sector • No city is inclusive to all migrants

Note. CRH = Cheap Rental Housing; PRH = Public Rental Housing; ECH = Economic and Comfortable Housing; PCH = Price Capped Housing.

PRH if they meet the same housing and income/asset criteria as local residents (MHURD, 2012, No. 11). In 2013, State Council (No. 17) required that prefecture-level and higher level cities include qualified migrants in their subsidized housing program by the end of the year.

Another important year in terms of migrants' housing access is 2014. The central government launched the inclusive NUP, eliminating the distinction between agricultural and nonagricultural *hukou*, and removing *hukou* restrictions for migrants in smaller cities (State Council, 2014a). NUP aims to convert 100 million migrants into urban citizens by 2020 and to grant them the same entitlements as local urban residents after they apply for the residence permit (*juzhu zheng*) at their destination (State Council, 2014b). Meanwhile, the government invested massively in subsidized housing development, with the goal of producing 36 million units during 2011–2015, including 2.2 million units of PRH (Huang, 2012).

These reforms and new policies by the central government are ambitious, although their impacts have yet to be seen. Although it is encouraging to see the central government gradually remove the *hukou* restrictions in smaller cities, the main magnets for migrants are large cities with more opportunities, which remain restrictive. Furthermore, the elimination of agricultural vs. nonagricultural *hukou* does not mean that the *Hukou* System is fully abolished, as each person still has a *hukou* registration location, and their access to public services continues to be connected to that location (Chan, 2012). In other words, the impact on migrants' access to subsidized rental housing might be limited. Nonetheless, there has been a significant move toward inclusion, and the central government has opened the door for migrants to access subsidized rental housing.

With large regional differences, it is natural for the central government to allow local municipal governments to define specific eligibility criteria for PRH (State Council, 2013). Consequently, there are huge regional variations in migrants' eligibility for PRH, ranging from excluding migrants completely to treating migrants the same as local residents. On the exclusionary end of the spectrum, cities such as Wuhan and Jinan—the capital cities of Hubei and Shandong provinces, respectively—exclude all migrants from accessing PRH (Jinan Housing and Urban Rural Development Bureau [JHURDB], 2018; Wuhan Municipal Government [WMC], 2014). At the other end of the spectrum, cities such as Chongqing and Xianyang (in Shaanxi Province) hope to attract migrants, and allow all migrants to access PRH if they meet the same income and housing eligibility criteria as local residents (CMG, 2010; Chongqing Housing and Urban Rural Development Committee [CHURDC], 2011; Xianyang Housing and Urban Rural Development Bureau [XHURDB], 2013). The city of Chongqing was the first (in 2010) to establish a large PRH program for all qualified residents (requiring a stable job and meeting income and housing criteria[3]), regardless of their *hukou* status (CMG, 2010). By 2016, 48% of the 300,000+ households that had moved into PRH were migrants (National Development and Reform Commission [NDRC], 2016).

Most cities fall somewhere between these extremes, practicing selective inclusion, and only allow so-called qualified migrants to access PRH or rent subsidies. In addition to income/asset and housing thresholds (which also apply to local urban residents), qualified migrants need to meet extra eligibility criteria, which vary between cities. For example, in Beijing and Nanjing, extra criteria for migrants include stable employment (with a labor contract), a Residence Card, and several years of payment history for social security insurance or income tax (usually 2–5 years; BHURDC, 2014; Nanjing Municipal Government [NMG], 2015). In Xiamen, only a labor contract and the lack of homeownership are needed for migrants to apply for PRH (Xiamen Construction Bureau [XCB], 2016). In some cities, qualified migrants with a history of payment to social security insurance, a Residence Card, and no homeownership can also access monetary rental subsides (CMG, 2019; WMC, 2018). Other local governments only allow educated and professional migrants to access housing subsidies and PRH.

Since 2014, the competition among cities to attract talent has become increasingly fierce as the Chinese population ages and the economy slows down. Meanwhile, housing prices have skyrocketed and housing affordability has become a serious problem, especially in large coastal cities such as Beijing, Shanghai, and Shenzhen, because of a shortage of supply and a potential mispricing in the asset market (Li et al., 2020). The emergence of an ant tribe in Beijing highlights the severe lack of housing affordability among college graduates (Lian, 2009). Not surprisingly, cities began to use housing subsidies as an important policy instrument to attract talents—talent housing—setting off a new wave of development-oriented subsidized housing allocation. For example, in Shenzhen—a city of migrants and a pioneer in talent housing—various subsidies are provided to qualified talents depending on their education level and talent category, including PRH, monetary subsidies, and free rental housing for up to 10 years (SMG, 2011, No. 229; 2015, No. 273). In Hangzhou, the municipal government set up an earmarked fund of 0.8 billion yuan for the period 2015–2019 to provide both rental housing and monetary subsidies to different types of talents (ranging from rent completely waived to paying 40% of market rent; Hangzhou Municipal Government [HMG], 2014). Having excluded all migrants from PRH, Wuhan started in 2017 to offer subsidized rental housing, at 80% of market rent, to college graduates (WMC, 2017). In Beijing and Shanghai, district governments and development zones are required to provide subsidized rental housing to talents (BMG, 2018; SMG, 2015). Although these talent housing strategies benefit educated migrants, this also usually results in less PRH and subsidies for the majority of migrants with less education.

In July 2021, State Council (No. 22) issued a major document to promote the development of indemnity rental housing (*baozhangxin zulin zhufang*), targeting new residents and young people in large cities with housing difficulties. Although detailed entry criteria have yet to be set up by local governments, indemnity rental housing seems to target mainly migrants, compared with PRH that

mainly targets local residents. This is an encouraging development, although its impact has yet to be seen. Thus, despite significant regional variations, 2010 marks an important turning point when qualified migrants became eligible for subsidized rental housing in Chinese cities.

Subsidized Homeownership

Migrants were also excluded from subsidized homeownership before 2010. The most common subsidized housing types in the owned sector were Economic and Comfortable Housing (ECH, *jingji shiyong fang*) and Price-Capped Commodity Housing (PCH, *xianjia fang*). Both are private housing built by developers and sold at government-controlled prices, with ECH targeting low- and middle-income households first, then low-income households since 2007, and PCH targeting middle-income households (Huang, 2012). Migrants were not entitled to ECH and PCH, as local urban registration was clearly stated as a prerequisite, in addition to the income and housing thresholds (Ministry of Housing and Urban Rural Development [MHURD], 2007, No. 258).

Since 2010, the central government has emphasized the importance of providing subsidized housing to talents as it encourages innovation and pursues economic upgrading (State Council, 2010b). In the 2014 NUP, the central government called for the inclusion of 100 Million migrants in the subsidized housing system, including subsidized owned housing (State Council, 2014a). In the same year, the central government chose six pilot cities to experiment with Shared Ownership Housing (SOH), another subsidized private housing type with below-market prices, sold to qualified households who share ownership with local governments based on the prices they pay[4] (MHURD, 2014). Although the central government did not specify that migrants are entitled to SOH, it did not exclude migrants either. In 2019, local governments were encouraged to develop localized SOH programs (MHURD, 2019), allowing them to be highly selective in granting migrants access to SOH.

Similar to the rental sector, there is a large spectrum in local policy regarding homeownership, which has also changed over time generally toward more inclusion. Initially, most cities (e.g., Shanghai) excluded migrants from any type of subsidized homeownership (SMG, 2016). Over time, cities started to allow qualified migrants who met extra criteria to access subsidized homeownership. For example, the city of Chengdu, Sichuan Province, has been trialling the Urban–Rural Coordinated Development program, in which qualified migrants who are married, and where both partners have been working in the city, have been paying for social security insurance for 5+ years, and do not own housing were allowed to access subsidized housing including ECH and PCH (CMHURDB, 2010).[5] Whereas SOH targets mainly local urban households, in Beijing, 30%+ of SOH must be allocated to migrants (BHURDC, 2017). In Shanghai, migrants were not allowed to access SOH in 2016, but this was changed in 2018. However, migrants have to meet four criteria in addition to the standard housing and income/asset thresholds for local residents; they must (a) hold a Shanghai Residence Permit and meet the point threshold (120 points);[6] (b) own no housing in Shanghai; (c) be married; and (d) have been paying for social security insurance or income tax in Shanghai continuously for 5+ years (SMG, 2018). Thus, although the door to subsidized homeownership is open to migrants even in the largest cities, their access is much more restricted than that of local urban residents.

Increasingly, qualified migrants are defined by many local governments as those with high education and skills. As discussed, high housing prices, an aging population, and the need for economic upgrading have propelled cities—especially large cities—to use subsidized housing to attract talents. For example, Shenzhen Municipal Government formulated specific subsidy standards for different types of talents (e.g., outstanding vs. leading talents; graduates with different types of degrees), and provides monetary subsidies for housing purchase (up to 50% of market price), housing tenure gifts (*chanquan zengyu*), and in-kind subsidized owned homes (SMG, 2010, 2011, No. 229; 2015, No. 273). In Nanjing, talents can receive housing purchase subsidies of up to 50% of the purchase price for a housing unit of qualifying size (no more than 2 million yuan; NMG, 2017). Some cities even set ambitious targets for the number of talents they wish to attract. For example, Xi'an aims to attract one million talents related to the Belt and Road Initiative, with free

homeownership, 700,000 yuan (about $100,000) in housing purchase subsidies, and rent subsidies depending on the type of talent (XMG, 2017), whereas the Wuhan government aims to attract one million college graduates in the next 5 years, by providing subsidized housing (20% lower than market prices) and local *hukou* (WMC, 2017). So far, no city has provided migrants the same access to subsidized homeownership as local urban residents.

Other changes have been made in the post-2010 era that are more inclusive of migrants. For example, the Housing Provident Fund (HPF) is an employment-based housing saving account with employer matching (often >5% of wages), which also provides participants housing mortgages with a low interest rate. Few migrants participated in HPF before 2010, as it was not mandatory for employers to set up the system, cross-boundary deposit and withdrawal were not allowed, and withdrawal was only allowed for home purchases (Chen & Deng, 2014). These institutional set-ups unintentionally excluded most migrants from HPF with their informal employment, high mobility, and the lack of affordability for homeownerhsip. Since 2011, however, HPF can be used to pay for rent, and cross-city deposit and withdrawal has been allowed nationwide since 2017 (MHURD, 2017; State Council, 2011). These changes are clearly a step toward greater inclusion of migrants in HPF, from which they have benefited;[7] however, the changes so far are sporadic, and the impact is still limited.

In sum, housing policy in China has become increasingly inclusive of migrants since 2010. There have been some significant policy changes at the central government level designed to incorporate migrants into the subsidized housing system. However, with the decentralized policy design, there is a significant discrepancy between the central government and local governments, and there are large variations between cities regarding the inclusion of migrants. In the rental sector, cities range from completely excluding migrants to treating migrants the same as local residents, whereas many cities require extra eligibility criteria for migrants. Cities are generally less inclusive in the subsidized owned sector than in the rental sector, requiring strict entry criteria for migrants. In particular, local governments have often transformed subsidized housing into talent housing only available to educated migrants, which continues to exclude massive numbers of rural migrants with lower education levels.

Even in the private sector, certain exclusionary and discriminatory policies exist in home purchases and mortgage access. For example, migrants are subject to more restrictive Housing Purchase Limit (*xian gou*) policies by many local governments to control the overly heated housing market. In general, local residents are allowed to purchase up to two homes, whereas migrants without a home are allowed to purchase only one home (or none if they already own a home; Jia et al., 2018; State Council, 2010a). Migrants are also required to pay a higher down payment ratio than local residents in some cities (e.g., 50% for migrants in Jiaxin and 40% for migrants in Haining in Zhejiang Province, vs. 30% for local residents; Jiaxin Housing Security Bureau [JHSB], 2017; Sohu.com, 2017). Thus, although housing policy has generally become more inclusive in recent years, especially in the rental sector and for educated migrants, significant restrictions and barriers remain, and exclusion and discrimination persist for most migrants. The following empirical analysis examines migrants' actual access to subsidized housing over time.

Empirical Analysis

Data

The China Migrants Dynamic Survey (CMDS) is an annual national questionnaire that has been administered by the National Health and Family Planning Commission since 2009. It is the largest survey on migrants, covering all provincial units, with over 200,000 samples every year. It adopts a stratified three-stage probability proportionate to size (PPS) sampling method, and collects rich information on migrants and their families, on topics including employment, housing, health care and medical service, marriage, and childbearing. The survey does not track migrants over time; thus,

we use the 2010 and 2017 surveys to study changes over time. 2010 is the year when policy changes started and 2017 is the latest survey available to the public. Migrants are defined as people who are 15+ years old and have been living in the current city/county for more than one month while their *hukou* is registered elsewhere. We focus on migrants in cities and towns, giving us a sample size of 120,326 in 2010 and 168,465 in 2017. Interviewees were treated as the head of household for the following analysis. To see changes over time, we present not only analyses for 2010 and 2017 individually, but also an analysis of the pooled data set.

Although it would be ideal to use census data to conduct such analyses, the micro-level data for the 2010 and 2020 censuses is not yet publicly accessible, whereas the 2000 census is too old to reflect policy and housing changes in recent years. Other national surveys, such as the China Family Panel Survey, include a very small number of migrants (469 migrants in 2012 and 754 migrants in 2018, nationwide). A limitation of CMDS is that it did not collect HPF information (although this is more an employment benefit than a housing subsidy by the government). Yet CMDS remains the largest, most representative source of data on migrants, even though it does not allow us to compare migrants with local urban residents.

Conceptually, living in subsidized housing is not equivalent to being eligible for or having access to subsidized housing, as people who are eligible or have access to subsidized housing may choose to live in private housing. However, according to the 2017 CMDS, about 73% of migrants claim they have difficulties regarding income and 61% have difficulties regarding housing. With income and housing as the two most important challenges migrants face in cities, and the well-documented poor housing conditions they experience, it is reasonable to believe that migrants would choose to live in housing subsidized by the government if they had access to it because of the prohibitively high rents/prices for private housing. Thus, given the lack of data on migrants who have access to or are eligible for subsidized housing, we consider migrants living in subsidized housing as those who have access to subsidized housing, which may somewhat underestimate migrants' access to subsidized housing.

Descriptive Analysis

During 2010–2017, migrants' housing access changed (see Table 2). In both years, migrants were most likely to rent private housing, followed by owning private housing and living in employer-provided housing.[8] Over time, migrants are less likely to live in employer-provided housing and private rental housing, and much more likely to own private homes. This demonstrates the significant improvement in migrant housing, although much of migrants' homeownership involves ambiguous property rights.[9] However, very few migrants live in subsidized housing in both years and there is only a negligible increase. Over 1% of migrants in 2010 and 2% in 2017 lived in subsidized housing (in both the rental and owned sectors).[10] However, as mentioned, most migrants experienced difficulties with income and housing in 2017. Clearly, the negligible share of subsidized housing among migrants is not justified if the housing system is inclusive.

Table 2. Migrants' housing access.

Housing type (%)	2010	2017	Change
Employer-provided housing	18.28	10.84	− 7.44
Rent public housing	0.08	1.01	0.93
Rent market housing	69.98	56.08	− 13.9
Own subsidized housing	1.08	1.26	0.18
Own private housing	7.78	27.74	19.96
Other	2.79	3.08	0.29
Total %	100	100	0
Total *N*	120,326	168,465	48,139
Subsidized housing (%)	1.17	2.27	1.1

Although the government officially eliminated the distinction between agricultural and non-agricultural *hukou* in 2014, the difference persists in housing access. Migrants with nonagricultural *hukou* are more likely to live in subsidized housing than those with agricultural *hukou* in both years, although both groups improved over time, mainly in subsidized rental housing (see Figure 1). There is a slight decline in subsidized ownership among those with nonagricultural *hukou* over time (1.93% in 2010 to 1.74% in 2017), which is probably a result of the significant increase in private homeownership (18.7% in 2010 to 41.56% in 2017). Overall, the share of migrants having access to subsidized housing is still very small in 2017 for both groups (2% for those with agricultural *hukou* and 3% for those with nonagricultural *hukou*).

As discussed, education is becoming increasingly important in accessing subsidized housing. Although every educational group has greater access to subsidized housing in 2017 relative to 2010, migrants with some college[11] education, or a college education or more (referred to here as college +), experienced a larger increase than those with lower education levels, especially in the subsidized rental sector (see Figure 2). Yet, even among those with college+ education, only about 3% had access to subsidized housing in 2017.

Figure 3 shows access to subsidized housing by migration duration, because many cities require migrants to pay for at least 3 or 5 years of social security insurance to access housing subsidies. In both years, migrants with longer duration are more like to access subsidized housing, especially in the rental sector. However, migrants with less than 5 years of duration gained more percentage points over time in subsidized rental housing than did those with 5+ years, whereas changes in the owned sector are very small. The requirement for residence duration in terms of accessing subsidized rental housing seems to have been reduced over time.

Regression Analysis

Both logistic and multinomial logit regression are conducted. Although a small percentage of migrants live in subsidized housing, the number of migrants living in subsidized housing (the *event*) is relatively large because of the large sample size, which ensures an unbiased logistic regression and makes Firth logistic regression unnecessary.[12] The dependent variable for the logit regression is a dummy variable indicating whether migrants live in subsidized housing (including both rental and owned housing). The dependent variable for the multinomial logit regression is a five-category variable: renting subsidized housing, owning subsidized housing, renting private housing, owning private housing, employer-provided housing/other. In addition to running the

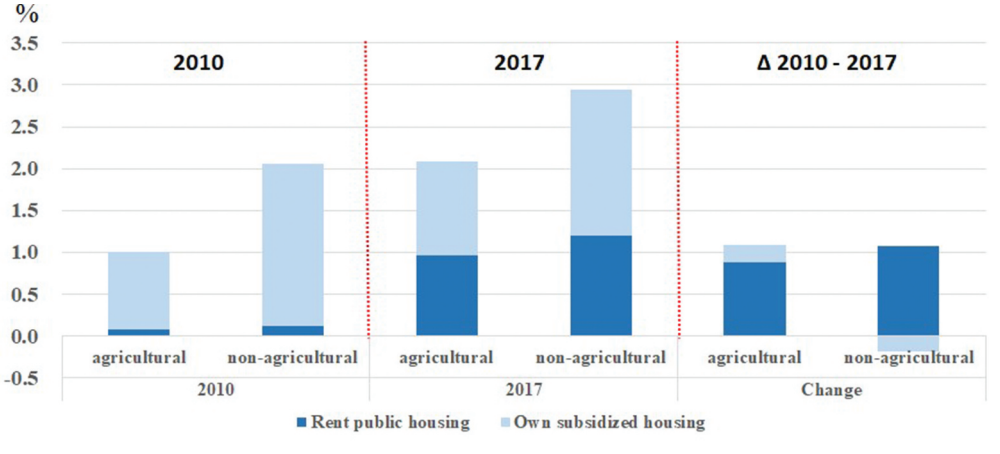


Figure 1. Migrants' access to subsidized housing by *hukou* type over time.

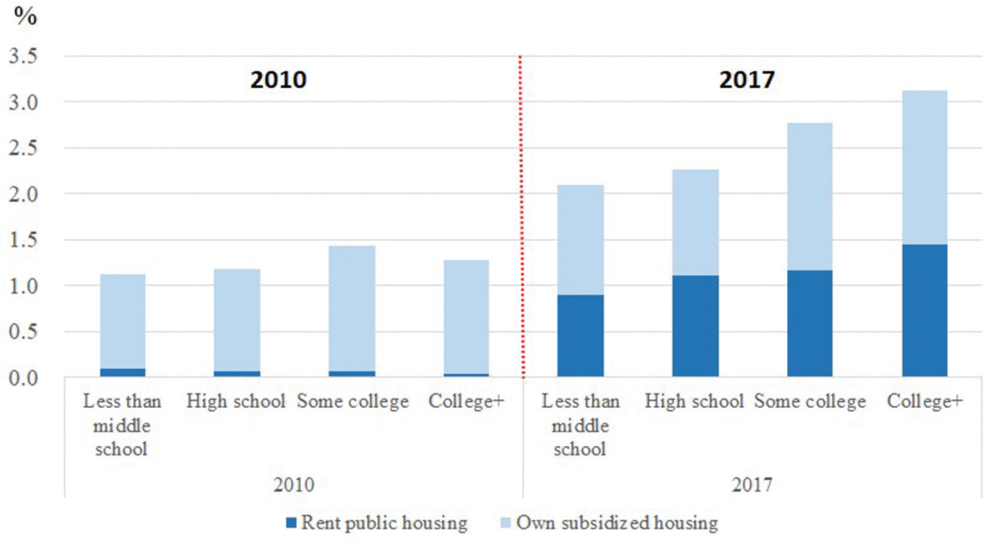


Figure 2. Migrants' access to subsidized housing by education over time.

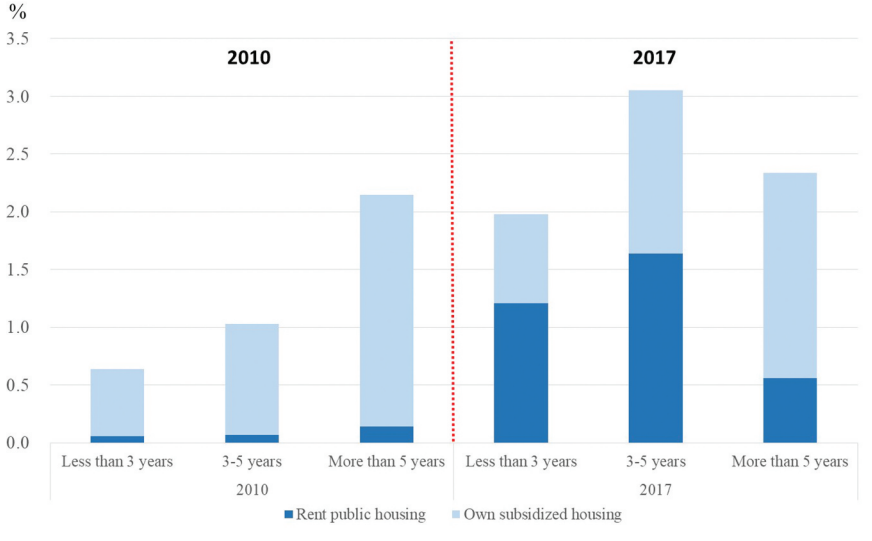


Figure 3. Migrants' access to subsidized housing by migration duration over time.

models separately for the 2010 and 2017 data, we follow Hauser and Xie (2005) and Yi et al. (20211) and run a model on the pooled data set, with interactions between variables and the binary variable for the year (1 for 2017, 0 for 2010), to test whether there are significant temporal changes in the effect of institutional constraints and other driving forces on access to subsidized housing.[13]

There are three sets of independent variables: institutional, socioeconomic, and contextual. The first set are variables mostly related to housing policies on migrants' access to subsidized housing, including *hukou* type (agricultural vs. nonagricultural), migration duration (<3, 3–5, or 5+ years), and urban medical insurance (yes/no). Most cities require migrants to pay social security insurance (including pension, medical, unemployment, work-related accident, and birth insurance) for a

number of years to be eligible for subsidized housing. However, CMDS does not include information on social security insurance as a whole (except medical insurance). Thus, *urban medical insurance* is used as a proxy, which refers to having either urban resident medical insurance or urban employee medical insurance. These variables test the effect of institutional barriers on access to subsidized housing and their changes over time. The second set includes conventional socioeconomic variables, such as household head's age, age squared, gender, marital status, living arrangement (living alone, living with spouse or children, living with spouse and children, living with others), education, occupation, and household income (log form), as well as variables unique to migrants, such as migration type (intracity, intraprovince, interprovince) and settlement intention (yes, no, undecided). City tier[14] and region are included to control contextual effects of local housing markets and housing policies.

Descriptive statistics for independent variables are listed in Table 3. It is clear that migrant profile has changed over time. In 2017, migrants were older, more educated, more likely to be urban migrants, and more likely to have urban medical insurance. They were also more likely to have the intention to settle down in the destination city and had been living in the city for a longer period than their counterparts in 2010.

Results of the logit regressions are listed in Table 4, and results of the Firth logistic regression are very similar (see Table A1 in the Appendix). First, institutional variables are important in both years, and their importance generally declines or remains the same over time, indicated by significant negative coefficients and nonsignificant coefficients in the pooled model. Urban migrants with nonagricultural *hukou* are 48% ($e^{0.394} = 1.48$) more likely to access subsidized housing than those with agricultural *hukou* in 2010, but the effect is no longer significant in 2017; and the change over time is significant (− 0.379 for the comparison). Thus, the importance of *hukou* type in accessing subsidized housing and the difference between urban and rural migrants have declined over time. These are most likely the result of the *hukou* reform in 2014, which eliminated the differentiation between agricultural and nonagricultural *hukou*. It is interesting to note that migration duration of 5 + years is significant in 2010 but not in 2017, whereas 3–5 years is important in both. This indicates that many cities may have lowered their migration duration requirement from 5+ years to 3+ years for subsidized housing. For example, in 2016, Changchun city (Jilin Province) eased restrictions on migrants and significantly shortened the history required for social security insurance payment, from 2 years to 6 months (Changchun Housing Security and Real Estate Administration Bureau [CHSREAB], 2016). In Beijing, migrants with stable employment are eligible for subsidized housing, but there is no clearly specified duration of residence, further reflecting the flexibility in migration duration (BMG, 2017). Urban medical insurance also has a positive effect in both years; however, the change over time is not significant, meaning it remains important in 2017 as it was in 2010. This shows that cities continue to require migrants to have a record of insurance payment to access subsidized housing.

Second, socioeconomic variables are important in accessing subsidized housing, and their effects have mostly declined or remained the same over time. For example, being married and living with one's spouse and/or children make one more likely to access subsidized housing, with no significant change over time. This shows that the allocation of subsidized housing seems to favor families. Meanwhile, the importance of household income, migration type, and settlement intention has declined, with significant negative coefficients in the pooled model. In contrast, education, especially college+ education, becomes significantly more important over time. Migrants with college+ education are 25% ($e^{0.225} = 1.25$) more likely to access subsidized housing than those with middle school education or less in 2017, whereas this factor was not significant in 2010. This is to be expected with the policy of talent housing in recent years. Related to that, service workers are less likely to access subsidized housing than professionals/managers in both years, although the change over time is not significant. Thus, whereas most socioeconomic factors become less important or remain the same over time, college+ education becomes more important in accessing subsidized housing.

Finally, city tier has become less important, whereas region has become more important. In 2010 migrants in smaller cities were more likely to access subsidized housing, but that intercity difference declined over time. This shows that the first-tier cities may have become more inclusive of migrants

Table 3. Descriptive statistics of main independent variables.

	2010			2017		
	Mean	*SD*	Percentage	Mean	*SD*	Percentage
Age	33.55	8.76		36.15	10.98	
Gender: Male			50.1			51.78
Married			81.39			81.91
Hukou type						
Agricultural			84.31			77.87
Nonagricultural			15.69			22.13
Education						
Less than middle school			74.74			60.63
High school			13.37			21.83
Some college			10.00			10.53
College+			1.89			7.00
Occupation						
Manager/professional			10.26			8.08
Staff			3.28			1.43
Service worker			44.17			49.32
Operator			18.48			17.76
Agricultural laborer			1.83			1.51
Other			21.97			21.9
Urban medical insurance						
Without insurance			93.38			70.62
With insurance			6.62			29.38
Migration distance						
Interprovincial			46.92			49.28
Intraprovincial (intercity)			35.13			32.97
Intracity (intercounty)			17.95			17.74
Live with family members						
Alone			27.05			10.87
Live with spouse/children			23.66			26.42
Live with spouse and children			45.68			44.56
Live with others			3.61			18.14
Median household income (yuan)	26,400			72,000		
Settlement intention						
Undecided			27.82			14.8
Yes			64.32			82.75
No			7.86			2.44
Migration duration						
Less than 3 years			55.45			46.48
3–5 years			13.22			13.75
More than 5 years			31.33			39.78
City rank						
First-tier city			6.55			10.62
Second-tier city			55.42			44.9
Third-tier city			20.34			18.12
Fourth-tier city			17.69			26.36
Region						
Eastern			45.64			43.54
Central			26.25			21.77
Western			28.1			34.69
N	120,326			168,465		

SD = standard deviation.

over time. Meanwhile, migrants in Central ($e^{0.595}$ = 1.81, 81% more likely) and Western regions ($e^{1.359}$ = 3.89, 289% more likely) are much more likely to access subsidized housing than those in the East, in 2017, which is probably the result of these relatively less developed regions trying to attract migrants in recent years.

To further understand the change in migrants' housing access during 2010–2017, the Blinder–Oaxaca–Firlie decomposition (Blinder, 1973; Fairlie, 1999, 2005; Oaxaca, 1973) was conducted. This technique decomposes the effect of each variable into the endowment effect (the effect from changes in observable differences in endowment characteristics) and the coefficient effect (the

Table 4. Logit regression on migrants' access to subsidized housing (reference: no).

	2010	2017	2017 vs. 2010
Institutional variables			
Nonagricultural *hukou* (ref. = agricultural *hukou*)	0.394***	0.016	− 0.379***
Migration duration (ref. = <3 years)			
3–5 years	0.291***	0.350***	0.059
More than 5 years	0.813***	0.007	− 0.806***
With urban medical insurance (yes/no)	0.662***	0.742***	0.080
Socioeconomic and contextual variables			
Age	− 0.040	0.009	0.049*
Age*Age	0.001***	0.000	− 0.001**
Male	− 0.056	− 0.253***	− 0.196***
Married	0.338**	0.070	− 0.268
Live with family members (ref. = alone)			
Live with spouse or children	0.213*	0.464***	0.251
Live with spouse and children	0.488***	0.585***	0.097
Live with others	1.443***	0.935***	− 0.508***
Education (ref. = less than middle school)			
High school	0.071	0.163***	0.091
Some college	0.200*	0.170***	− 0.030
College+	− 0.245	0.225***	0.469**
Occupation (ref. = manager/professional)			
Staff	0.140	0.129	− 0.011
Service worker	− 0.521***	− 0.539***	− 0.018
Operator	0.038	0.067	0.029
Agricultural laborer	0.072	0.255**	0.184
Other	0.319***	0.061	− 0.259**
Ln (income)	0.055	− 0.388***	− 0.444***
Settlement intention (ref. = undecided)			
Yes	0.779***	0.344***	− 0.435***
No	0.008	− 0.014	− 0.022
Migration type (ref. = interprovincial)			
Intraprovincial (intercity)	0.796***	0.255***	− 0.541***
Intracity (intercounty)	0.772***	− 0.196***	− 0.968***
City rank (ref. = first-tier city)			
Second-tier city	0.834***	0.056	− 0.778***
Third-tier city	0.796***	− 0.326***	− 1.123***
Fourth-tier city	1.939***	0.282***	− 1.657***
Region (ref. = Eastern)			
Central	0.023	0.595***	0.572***
Western	0.035	1.359***	1.324***
Constant	− 8.222***	− 1.791***	− 8.222***
N	113,349	163,287	276,636
Pseudo R^2	0.123	0.092	0.110
LR Chi^2	1,691.270***	3,306.810***	5,567.370***
Log likelihood	− 6054.076	− 16231.025	− 22285.101

Note. * significant at 0.1 level; ** significant at 0.05 level; *** significant at 0.01 level.

effect from changes in unobservable factors, which are often identified as discrimination). In this case, the endowment effect measures different housing access because of differences in migrants' endowment characteristics, whereas the coefficient effect represents the difference in housing access among migrants with similar endowment characteristics caused by different institutional environments (i.e., policies and discrimination). The endowment and coefficient effects of each explanatory variable and their contributions (%) are listed in Table 5.

Migrants are more likely to access subsidized housing in 2017 than in 2010, and the total difference in the logarithm of the odds of migrants' access to subsidized housing is 0.01194. Overall, the endowment effect accounts for 59.90% of the difference and the coefficient effect accounts for 40.10%, which demonstrates that the increase in the probability of migrants' housing access over time is more a result of the increase in migrants' endowments. Regarding specific institutional variables, the endowment effect of *hukou* and migration duration is relatively small; however, their contributions to the coefficient effect are negative, which means they reduce the gap

between 2017 and 2010. This suggests that housing discrimination based on migrants' *hukou* and migration duration has decreased over time. In contrast, urban medical insurance makes a large contribution to the endowment effect (37.16%) and the coefficient effect (10.38%), which demonstrates its unequal importance in explaining the difference in housing access and its increasing importance over time. In addition, being married, education level, and region are more important in 2017 and contribute positively to the difference in housing access over time.

The multinomial logit regressions have similar results, with separate estimates for subsidized rental and subsidized owned housing (see the full results in Table A2). Interpretations will focus on changes in coefficients for institutional variables in the pooled model for subsidized housing (see Figure 4). First, and clearly, the importance of institutional variables either remained the same or declined over time. In the subsidized rental sector, all coefficients for institutional variables are insignificant (i.e., their importance remained the same over time), except that 5+ years of migration duration experienced a significant decline in importance. In other words, in the subsidized rental sector, institutional barriers have largely remained the same, except that the threshold for long migration duration (5+ years) has been lowered significantly over time. As discussed, this is consistent with the lowered migration duration in the eligibility criteria of many cities. However, in the subsidized owned housing sector, there are significant declines in the importance of *hukou* type, whereas migration duration and insurance payment remain important over time. This means that although some institutional barriers remain, there seems to be a move toward greater inclusion in access to subsidized housing in both rental and owned sectors. Yet there are differences between the rental and owned sectors, with the former being more inclusive to migrants with a shorter migration duration and the latter more inclusive of migrants with different *hukou* and origins (migration type).

Second, the importance of socioeconomic variables has changed differently depending on the particular variable (see Table A2). For example, living with family members is becoming more important over time for accessing both subsidized rental and subsidized owned housing, which demonstrates the family preference in subsidized housing access. In contrast, being married becomes less important for subsidized rental and remains important for subsidized owned housing. Whereas education is important in both years, some college education becomes more important in accessing subsidized rental housing whereas college+ education becomes more important in accessing subsidized owned housing. This is consistent with the talent housing strategy adopted by many local governments. Third, the effects of city tier become less important, especially for subsidized owned housing, and the destination region becomes more important over time for both subsidized rental and owned housing.

Table 5. Blinder–Oaxaca–Fairlie decomposition of change in migrants' access to subsidized housing between 2010 and 2017.

	Total	Endowment effect	%	Coefficient effect	%
Institutional variables					
Nonagricultural *hukou*	− 0.00358	0.00005	0.44	− 0.00363	− 30.39
Migration duration	− 0.00611	0.00047	3.98	− 0.00658	− 55.14
With urban medical insurance	0.00567	0.00444	37.16	0.00124	10.38
Socioeconomic and contextual variables					
Age	0.01820	0.00051	4.26	0.01769	148.18
Age^2	− 0.00979	0.00044	3.72	− 0.01023	− 85.71
Male	− 0.00215	− 0.00005	− 0.46	− 0.00210	− 17.58
Married	0.00079	0.00000	0.00	0.00079	6.66
Live with family members	0.00061	0.00314	26.27	− 0.00252	− 21.12
Education	0.00105	0.00090	7.58	0.00015	1.25
Occupation	− 0.00072	0.00022	1.85	− 0.00094	− 7.87
Ln (income)	− 0.04297	− 0.00490	− 41.05	− 0.03807	− 318.95
Settlement intention	− 0.00034	0.00042	3.54	− 0.00076	− 6.35
Migration type	− 0.00619	− 0.00002	− 0.20	− 0.00616	− 51.64
City rank	− 0.00919	0.00063	5.28	− 0.00982	− 82.29
Region	0.01177	0.00090	7.54	0.01087	91.04
Constant	0.05486	-	-	0.05486	459.62
Total	0.01194	0.00715	59.90	0.00479	40.10

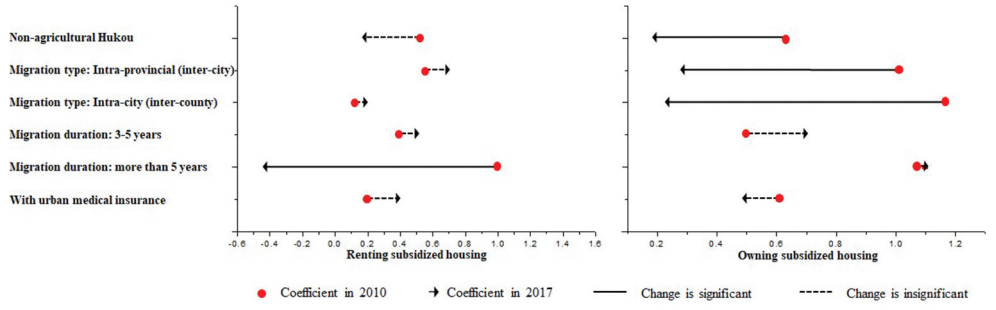


Figure 4. Multinomial logistic regression coefficients for institutional variables for subsidized housing in 2010 and 2017.

Discussion and Conclusions

China has been experiencing rapid urbanization including massive numbers of internal migrants, who have been treated the way illegal immigrants are treated in the West, with their urban citizenship and entitlements denied. With unprecedented inequality and discontent in Chinese society, the government has embraced the goal of inclusive development in the last decade. Migrants' right to live in the city and their inclusion there have finally become part of the policy agenda. There have been many reforms and policy changes to be more inclusive of migrants since 2010 at both central and local levels. However, it is not clear how much real impact these policy changes have had on migrants and whether social inclusion has been achieved in China. This article focuses on one key welfare benefit—housing subsidized by the government—and examines whether housing policy and housing access have really become more inclusive for migrants over time. Using a mixed-methods approach, this article contributes to a better understanding of housing inclusion in China through assessing policy changes and empirically analyzing migrants' housing access over time. This research makes a significant theoretical contribution to the literature by studying an important but not well-understood dimension of social exclusion—exclusion of domestic migrants based on an uncommon birth-ascribed status defined by the government—and by providing a multiscalar perspective on social inclusion with large policy discrepancies between the central and local governments.

Policywise, migrants are allowed to access subsidized housing in both rental and owned sectors in the post-2010 era, which marks significant progress toward housing inclusion in China. However, with the decentralized policy design there are large regional variations, and local municipal governments tend to restrict migrants' access with additional requirements that are not required for local residents, such as stable employment, years of residency, history of paying taxes and social security insurance, and even marital status. Many local governments require high levels of education for migrants to access subsidized housing, shifting the mission of housing subsidies from helping the poor to attracting talent. In other words, although housing policy has become more inclusive to migrants since 2010, housing inclusion has been selective: it is only inclusive to qualified migrants who meet additional restrictive entry criteria, whereas the majority of migrants are still excluded from subsidized housing. Thus, despite the central government's call for migrant inclusion, local housing policy in Chinese cities has remained largely exclusionary and selectively inclusive at most.

Empirically, few migrants have access to subsidized housing, with little improvement over time. Institutional barriers and eligibility requirements specific to migrants persist over time and continue to exclude them from subsidized housing. The majority of migrants have not really benefited much from policy changes, and there is a significant disconnection between housing policy (especially at the central level) and housing reality in China. However, some institutional barriers are becoming less important over time, such as migration duration and *hukou* type. This shows that although institutional hurdles remain significant, they are becoming less insurmountable, offering some evidence for a relatively more inclusive housing policy over time.

Whereas the West focuses on how to provide housing subsidies to ensure social inclusion, China seems to be still struggling with the question of being inclusive of whom, especially at the local level. Furthermore, migrants' exclusion from accessing subsidized housing forces them to live in informal housing in marginalized locations, which significantly hinders their integration into the urban society. Research shows that migrants living in subsidized rental housing are more likely (Zheng, Song, & Sun, 2020), whereas those living in informal housing are less likely, to be socially integrated (Lin, Wu, & Li, 2020). In other words, migrants continue to suffer double housing exclusion in China: they are excluded from (subsidized) housing, and they are socially excluded through housing. According to the latest 2020 census data, the social service gap between migrants and local urban residents is even larger in 2020 than it was in 2014 when the government pledged profound *hukou* reform (Chan, 2021). Clearly, the *hukou* reform has basically stalled, and profound policy changes and institutional reforms are needed to improve migrants' housing access and better integrate them into the urban society.

First, the central government needs to be more committed to migrant inclusion and must hold local governments accountable for being inclusive of all migrants. With the sheer number of migrants in China, providing decent and affordable housing to migrants is an unprecedented challenge. However, the local governments have invested massively in affordable housing targeting local urban residents since 2010 (Huang, 2012), whereas they are virtually missing in the provision of migrant housing, even in 2017. The central government needs to be more committed to migrant inclusion by providing financial means such as earmarked funds, low-interest loans, and tax incentives to encourage local governments to provide migrants with subsidized housing. Local governments also need to be held accountable by including social targets such as migrants' housing access and housing conditions in municipal officials' performance evaluation system, which has so far focused more on economic targets (Edin, 2003; Huang, 2012).

It is encouraging to see local governments using talent housing to attract skilled migrants; yet more housing subsidies are probably needed for unskilled migrants, who are essential to the urban economy as well. Thus, the next stage of *hukou* reform should aim to provide subsidized housing to migrants at the lower rungs of the social ladder, especially in large cities where migrants congregate and housing is unaffordable. Eventually, access to subsidized housing should be determined by a household's financial and housing conditions only, instead of requiring migrants to meet extra criteria as is the case now. The latest effort by the State Council (2021) to develop indemnity rental housing for new residents and young residents in large cities is an encouraging step forward, which potentially can benefit migrants and facilitate their inclusion. However, again, it is up to local governments to define specific entry and exit criteria, and the effect on migrants has yet to be seen.

Second, the Chinese government needs to move beyond being inclusive of whom and consider how to provide housing subsidies to migrants to foster social and economic inclusion. As discussed, in the West the provision of housing subsidies has shifted from the supply side to the demand side, and from the public to the private sector, to foster social inclusion. Although China has experimented with monetary housing subsidies and inclusionary housing strategies, they are designed mainly for urban local residents. Similar demand-side subsidies and private provision of subsidized housing should be applied to migrants and to achieve inclusion beyond housing. Only then might an inclusive housing policy be achieved, and migrants' right to the city will be one step closer.

Notes

1. *Hukou* is assigned at birth, often following parents' *hukou* status. There are only a few ways for residents with rural/agricultural *hukou* to change to urban/nonagricultural *hukou*, including attending college and joining the army.
2. *Five insurances and one fund* refers to five types of social security insurance (pension, medical insurance, unemployment insurance, work-related injury insurance, and maternity insurance) and the Housing Provident Fund (HPF), a housing saving account with employer matching.

3. The income threshold is no more than 3,000 yuan per month for one person, no more than 4,000 yuan for a couple, and no more than 2,000 yuan per month per person for larger households. The household must not own housing or must have per capita living space of less than 13 m^2.
4. The six cities for the experiment were Beijing, Shanghai, Shenzhen, Chengdu, Huai'an, and Huangshi.
5. If migrants are from the city administrative region, the criteria are slightly less restrictive, and qualified migrants in this case include those who have been paying for social security insurance for 3+ years, either married or single but 35+ years old, and do not own homes.
6. Like the immigration policy in Canada, Shanghai adopts a point system to allow migrants to establish their legal residence in Shanghai, which is based on a list of factors such as education, employment, and years of residence (SMG, 2018).
7. In 2017, about 50% of new HPF enrollers are college graduates and migrants; more than 10% of withdrawals were made by renters and about 3.5% of the funds withdrawn were for rental housing (MHURD, 2018). By the end of 2017, cumulatively there were 540,240 HPF mortgages, in the amount of 163.5 billion yuan, that were issued in a different city from that of the HPF deposit.
8. Owned private housing includes self-built housing, commodity housing, and small property rights housing. Employer-provided housing is sometimes subsidized by employers but other times not; thus, it is not considered subsidized housing by the government.
9. Migrants are more likely to own small property rights housing (2.55%) and self-built housing (3.62%), which tend to have poor conditions and less secure property rights than the commodity housing owned by most local residents.
10. According to the 2010 census, 11.76% of migrants compared with 35.13% of local urban residents lived in subsidized housing. Although census data are not completely comparable with CMDS regarding housing type, this demonstrates the difference between migrants and local residents in accessing subsidized housing. In the following decade, the Chinese government set up ambitious targets for subsidized housing with massive investment; however, most of them are for local urban residents, and thus the difference in access to subsidized housing between migrants and local residents in 2017 is expected to be even larger.
11. *Some college* refers to training in vocational and technical colleges, which usually require a study duration of 3 years, instead of 4 years as in regular colleges.
12. According to Allison (2012), it is the number of events, not the percentage of events, that matters regarding rare events. In the case of a large number of events but a small percentage, regular logistic regression using maximum likelihood estimation has no bias. Although the percentage for subsidized housing in this study is small, the number of migrants living in subsidized housing was 1,402 in 2010 and 3,826 in 2017. Thus, it is not considered a rare event scenario and there is no estimation bias in the logistic regression. For multinomial logistic regression, similarly, the number of events is 102 in subsidized rental housing and 1,300 in subsidized owned housing in 2010, and 1,702 in subsidized rental housing and 2,121 in subsidized owned housing in 2017. For the combined model on which our main findings are based, the number of events is in the thousands. Again, estimation bias is less of a concern. However, a Firth logistic regression is conducted for comparison.
13. Regression coefficients in the models for 2010 and 2017 cannot be compared directly regarding their relative importance with different samples in the models; however, the coefficients for the pooled data model can test the significance of the change in the effect of a specific independent variable over time.
14. Chinese cities are differentiated in a four-tier system: Tier 1 cities are the very large cities, including Beijing, Shanghai, Tianjin, Guangzhou and Chongqing; Tier 2 cities include provincial capitals, cities with populations of 3–15 million; Tier 3 cities are prefecture capitals with populations of 150,000 to 3 million, and Tier 4 cities are county-level cities.

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Appendix

Table A1. Firth logit regression on migrants' access to subsidized housing (reference: no).

	2010	2017	2017 vs. 2010
Institutional variables			
Nonagricultural *hukou* (ref. = agricultural *hukou*)	0.397***	0.016	− 0.381***
Migration duration (ref. = <3 years)			
3–5 years	0.291***	0.350***	0.059
More than 5 years	0.811***	0.007	− 0.804***
With urban medical insurance (yes/no)	0.660***	0.742***	0.082
Socioeconomic and contextual variables			
Age	− 0.040	0.009	0.049*
Age*Age	0.001***	0.000	− 0.001**
Male	− 0.056	− 0.253***	− 0.197***
Married	0.336**	0.069	− 0.267
Live with family members (ref. = alone)			
Live with spouse or children	0.209*	0.463***	0.254
Live with spouse and children	0.482***	0.584***	0.102
Live with others	1.440***	0.934***	− 0.506***
Education (ref. = less than middle school)			
High school	0.073	0.163***	0.090
Some college	0.201*	0.171***	− 0.030
College+	− 0.227	0.225***	0.452**
Occupation (ref. = manager/professional)			
Staff	0.146	0.131	− 0.015
Service worker	− 0.522***	− 0.540***	− 0.018
Operator	0.038	0.067	0.029
Agricultural laborer	0.083	0.257**	0.174
Other	0.317***	0.060	− 0.257**
Ln (income)	0.057	− 0.388***	− 0.445***
Migration type (ref. = interprovincial)			
Intraprovincial (intercity)	0.795***	0.255***	− 0.540***
Intracity (intercounty)	0.771***	− 0.196***	− 0.967***
Settlement intention (ref. = undecided)			
Yes	0.776***	0.343***	− 0.433***
No	0.015	− 0.008	− 0.023
City rank (ref. = first-tier city)			
Second-tier city	0.815***	0.054	− 0.761***
Third-tier city	0.779***	− 0.328***	− 1.107***
Fourth-tier city	1.919***	0.280***	− 1.639***
Region (ref. = Eastern)			
Central	0.023	0.595***	0.572***
Western	0.035	1.358***	1.323***
Constant	− 8.187***	− 1.782***	− 8.187***
N	113,349	163,287	276,636
LR Chi^2	1582.740***	3103.370***	5171.850***
Log likelihood	− 5972.558	− 16130.795	− 24883.354

*p < .1, ** p < .05, ***p < .01.

Table A2. Multinomial logit regression on housing access (reference: employer-provided housing).

	2010				2017				2017 vs. 2010			
	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing
Institutional variables												
Nonagricultural *hukou* (ref. = agricultural *hukou*)	0.135***	0.774***	0.517	0.628***	− 0.021	0.346***	0.172**	0.185***	− 0.156***	− 0.428***	− 0.345	− 0.443***
Migration duration (ref. = <3 years)												
3–5 years	0.177***	0.508***	0.396	0.498***	0.091***	0.508***	0.488***	0.698***	− 0.086**	0.000	0.093	0.200
More than 5 years	0.077***	1.007***	0.991***	1.093***	0.165***	0.987***	− 0.427***	1.100***	0.088***	− 0.020	− 1.419***	0.006
With urban medical insurance	− 0.347***	0.292***	0.204	0.604***	− 0.590***	0.042*	0.407***	0.495***	− 0.243***	− 0.250***	0.203	− 0.110
Socioeconomic and contextual variables												
Age	0.094***	0.015	− 0.032	0.012	0.071***	0.015***	0.076***	0.008	− 0.023**	− 0.001	0.108	− 0.004
Age*Age	− 0.001***	0.000	0.001	0.000	− 0.001***	0.000	− 0.001***	0.000	0.000***	0.000	− 0.002	0.000
Male	0.095***	− 0.155***	− 0.145	− 0.006	0.012	− 0.113***	− 0.300***	− 0.279***	− 0.083***	0.041	− 0.155	− 0.273***
Married	0.031	0.506***	− 0.164	0.524***	− 0.929***	− 0.106**	− 0.886***	0.192*	− 0.960***	− 0.612***	− 0.723*	− 0.333
Live with family members (ref. = alone)												
Live with spouse or children	1.326***	1.554***	0.370	1.342***	1.839***	1.993***	2.104***	1.809***	0.512***	0.439***	1.734***	0.467**
Live with spouse and children	1.547***	2.374***	1.045***	1.941***	2.549***	3.060***	3.111***	2.633***	1.002***	0.686***	2.067***	0.692***
Live with others	1.503***	2.699***	2.075***	2.921***	0.485***	1.716***	1.586***	1.801***	− 1.018***	− 0.983***	− 0.489	− 1.120***
Education (ref. = less than middle school)												
High school	0.013	0.646***	− 0.251	0.232**	− 0.090***	0.251***	0.264***	0.133**	− 0.103***	− 0.395***	0.514	− 0.099
Some college	− 0.067**	1.090***	− 0.647	0.477***	0.042	0.766***	0.261***	0.655***	0.109**	− 0.324***	0.908*	0.178
College+	0.007	1.665***	− 0.888	0.342	0.168***	1.122***	0.654***	0.856***	0.161**	− 0.542***	1.541	0.514**
Occupation (ref. = manager/professional)												
Staff	− 0.049	− 0.020	− 1.519	0.193	0.358***	0.419***	0.580***	0.336**	0.408***	0.440***	2.099**	0.143
Service worker	0.455***	0.065	− 0.143	− 0.257**	1.094***	0.829***	0.192*	0.469***	0.639***	0.764***	0.334	0.725***
Operator	− 0.378***	− 0.818***	− 0.808**	− 0.283**	− 0.217***	− 0.446***	0.107	− 0.465***	0.160***	0.372***	0.915**	− 0.182
Agricultural laborer	− 0.502***	− 0.682***	− 13.642	− 0.038	− 0.409***	1.233***	0.089	1.100***	0.093	1.915***	13.970	1.138***
Other	0.776***	0.534***	− 0.258	1.079***	0.947***	1.378***	0.763***	1.295***	0.171***	0.844***	1.021**	0.216
Ln (income)	0.080***	0.351***	− 0.109	0.222***	0.202***	0.661***	− 0.386***	0.281***	0.122***	0.310***	− 0.277	0.059
Migration type (ref. = interprovincial)												
Intraprovincial (intercity)	0.079***	0.675***	0.548**	1.004***	0.098***	0.554***	0.707***	0.287***	0.019	− 0.120***	0.159	− 0.717***

(*Continued*)

Table A2. (Continued).

	2010				2017				2017 vs. 2010			
	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing	Renting market housing	Owning market housing	Renting subsidized housing	Owning subsidized housing
Intracity (intercounty)	0.090***	1.163***	0.123	1.168***	0.164***	0.876***	0.188**	0.243***	0.074*	− 0.287***	0.065	− 0.925***
Settlement intention (ref. = undecided)												
Yes	− 0.018	1.702***	0.206	− 1.049***	− 0.028	0.676***	0.238***	0.836***	− 0.010	− 1.025***	0.032	− 0.213
No	− 0.278***	0.595***	0.020	− 0.188	− 0.256***	− 0.523***	− 0.143	− 0.495**	0.022	− 1.118***	− 0.163	− 0.307
Second-tier city	0.089**	0.094	− 0.498	1.131***	− 0.475***	− 0.013	− 0.557***	0.084	− 0.564***	− 0.107	− 0.059	− 1.047***
Third-tier city	0.152***	− 0.257***	0.107	0.980***	− 0.646***	0.001	− 1.773***	0.359***	− 0.799***	0.258***	− 1.880***	− 0.620**
Fourth-tier city	0.001	0.534***	− 0.855	2.346***	− 0.805***	0.156***	− 1.100***	0.927***	− 0.806***	− 0.379***	− 0.245	− 1.419***
Region (ref. = Eastern)												
Central	0.040	− 0.088**	0.606**	− 0.006	0.133***	0.604***	0.968***	0.687***	0.093**	0.692***	0.362	0.693***
Western	0.155***	− 0.305***	0.558*	0.063	0.530***	0.945***	2.600***	1.363***	0.375***	1.249***	2.042***	1.300***
Constant	− 2.351***	− 9.924***	− 5.093**	− 11.290***	− 2.547***	− 11.598***	− 2.431***	− 10.840***	− 2.351***	− 9.924***	− 5.093**	− 11.290***
N	110,316				158,320				268,636			
Pseudo R^2	0.178				0.178				0.212			
LR Chi^2	31,624.450***				57,628.100***				110,759.290***			
Log likelihood	− 73,044.557				− 133,416.130				− 206,460.680			

*p < .1, ** p < .05, ***p < .01.