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Changing tenure inequalities through China's urban housing reforms

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Abstract

Housing system transitions often involve successive but overlapping periods of reform with crucial implications towards housing inequality dynamics. Building on market transition and welfare regime frameworks, this paper considers how the shifting roles of the state, market, and family affect changing tenure structure and privileged housing access over four decades of reforms in urban China. Using the Chinese Household Income Project (1988, 1995, 2002) and Chinese Household Finance Survey (2011, 2017), our analyses reveal the path-dependent nature of housing advantage, even as the reforms have dramatically upended urban China's tenure structure. Inequalities initially associated with political power remain significant largely through privileged access to state-subsidized homeownership which has subsequently been translated into market capacity. We additionally find a substantial and increasing role of family support in the face of constrained state and market access to housing. Together, our findings point to the reproduction and apparent amplification of housing inequalities over time and across generations.

Keywords: *housing tenure, housing inequality, transitional housing system, path-dependency*

Introduction

Many countries have witnessed significant transformations in the housing sector featuring a remarkable expansion of private homeownership over the past half century or so (Hamnett, 1999; Van Duijne & Ronald, 2018; Doling & Ford, 2007). Housing systems in (post-)socialist 'transition economies' have, arguably, experienced the most dramatic transformations from a socialist welfare regime towards a market-based system, fundamentally altering housing provision and access (Stephens et al., 2015). This involved a major shift from contexts of near-universal public housing to often financialized and speculative housing markets. At the same time, housing represents a relatively illiquid commodity characterized by lower transaction rates and path-dependency (Ronald & Doling, 2012; Stephens et al., 2015). Transitions in housing systems thus often involved successive but overlapping periods of reform with crucial implications towards changing – or

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persisting – dynamics of housing inequality. We contend that it is essential to understand how such processes of transition can reflect or even amplify path-dependent advantage in privileged housing access and property wealth accumulation.

Underlying housing transitions are important shifts in the role of the state, market, and family. Initially, changing inequalities in (post-)socialist housing systems have largely been attributed to the shifting state-market responsibility in housing provision emphasising the path-dependent and successive nature of housing reforms (Bodnár & Böröcz, 1998; Huang & Jiang, 2009; Stephens, 2010). Meanwhile, family has constantly functioned as a default housing provider supplementing state or market housing provision over transitional periods (Stephens et al., 2015). While the interplay between these three domains has been increasingly investigated in different contexts using a framework derived from Esping-Anderson's (1990) welfare regime (Allen, 2006; Arundel & Lennartz, 2017; Doling & Ronald, 2010), literature on (post-)socialist countries remains limited. In this article, we contribute to an innovative examination of housing inequality dynamics in transition economies by bringing together two key frameworks, market transition and welfare regime, to investigate inequality dynamics in transitional housing systems. As we demonstrate in this paper, this perspective helps to, on the one hand, disentangle the detailed varieties of housing tenure and, on the other hand, examine the structures that enable differentiated access to these.

Housing transitions have often involved varied and mutable tenure arrangements. As we argue in this paper, housing tenure is more complicated than the dichotomy of rental versus homeownership, particularly in considering transitional housing systems. Dominant tenures change over different stages of housing reforms (Hamnett, 1999) alongside the relative valuation and meanings associated with tenures (Fernandez & Aalbers, 2016). For example, public rental, while dominant under most socialist housing systems, was often repositioned in post-transitional systems as a marginal category for those most disadvantaged (Cao & Keivani, 2014). Critically, shifting roles of the state, market, and family give rise to different housing arrangements *within* the major categories of rental and homeownership. For example, among homeownership tenures in (post-)socialist countries, the welfare legacy of state-subsidized homeownership distinguishes it significantly from purchasing directly from the market (Bodnár & Böröcz, 1998; Ślomiczyński & Shabad, 1996). As the former was obtained at a highly discounted price while homeownership bought at market value required a major input of households' own capital, the relative potential for a subsequent increase in value is strongly differentiated. Such often-overlooked variations in access to different homeownership tenures are therefore a key source of uneven housing wealth accumulation (Marciniczak et al., 2015).

China presents a valuable case for understanding changing housing tenure structure and inequality dynamics within a context that has experienced a dramatic housing system transition. The housing reforms that began in the late 1970s have successively and substantially altered the mix of state, market, and family roles in housing provision and access (Cui et al., 2021; Niu & Zhao, 2021; Zhou & Ronald, 2017). To date, studies into China's housing reform have largely focused on uneven opportunities of entering homeownership and the shift from a state to a market housing system (Huang, 2004; Logan et al., 2009; Zhou & Logan, 1996). We argue it is crucial to untangle the successive and path-dependent nature of housing transitions to understand the extent to which inequalities have changed, persisted, or been amplified through the course of the housing reforms. Additionally, we argue for a differentiation of tenure that recognizes shifting roles of the state, market, and family in housing arrangements.

Using China as a case, this study will thus untangle dynamics of housing inequalities arising in the changing interplay between the state, market, and family in housing provision and access. It will examine differentiation within detailed tenure categories to assess how inequality of access has changed over four decades of housing reform across key dimensions of employment sector, income, and education. The main research questions are thus:

- 1 How have detailed tenure categories changed over the housing reform period in relation to the shifting role of the state, market, family in housing provision?
- 2 How has relative access to different tenures changed over time in terms of socio-economic indicators of employment sector, income, and education? And how has this driven housing inequality dynamics?

In the sections below we begin by reflecting on two key frameworks applied to transitional housing systems, market transition theory and welfare regime theory, and their implications for understanding changing inequalities through housing tenure structure. We then present our first empirical analysis of changing tenures in urban China over the past four decades of housing reform. This is followed by our second examination of relative inequalities in tenure access across key socio-economic dimensions of employment sector, income, and education and how disparities have changed over this period. We conclude by discussing how our analyses contribute to understanding the path-dependency of housing inequality through successive housing reform periods.

Changing inequalities in a transitional housing system: the role of the state, market, and family

Transitional housing systems present a unique opportunity for researching changing housing provision and patterns of inequality. Based on previous research, two key frameworks, market transition and welfare regime, are discussed here to untangle changes in (post-)socialist housing systems.

Market transition theory

Market transition theory was developed based on Szelenyi's discussion on the relationship between 'market' and 'redistribution' in different socioeconomic and institutional contexts, and its implication for social stratification and inequality (Szelenyi, 1978; Szelenyi & Manchin, 1987). Building on this in examining the process of market reform in China, Nee (1989) argued that economic reforms have led to fundamental changes in resource allocation, with the shift to increased participation in market activities. According to Nee (1989), this market transition results in a decline in the return on political capital and an increase in the return on human capital and entrepreneurial ability.

However, other researchers have contended that the often gradual and partial nature of reforms are absorbed into existing institutional frameworks that may perpetuate some advantages extant within the previous system (Lin & Bian, 1991; Walder, 1992; Zhou & Tuma, 1994). A body of literature on (post-)socialist countries have pointed to the enduring legacy of political power associated with redistributive systems following market reforms (Bian & Logan, 1996; Burawoy & Krotov, 1992; Logan et al., 1999; Stephens et al., 2015; Walder, 1992). On the one hand, the continued advantages of those with political power may be explained by related market-relevant capital they possess, such as higher educational attainment and other technical qualifications (Nee, 1991). On the other hand, a persisting significance of political and institutional capital may enable increased profits in the private sector, facilitated through their political connections (Rona-Tas, 1994). Political privilege is found to be more permanent and more deeply embedded in the situation of partial reforms (Burawoy & Krotov, 1992). In China, where the market economy has been to a certain extent embedded within the bureaucratic authority structure, such notions of 'power persistence' from market transition theory have proved valuable in capturing how established power elites retain advantage in resource access and derive private rent-seeking abilities through the process of market reform (Bian & Logan, 1996; Liu, 2005).

Welfare regime

Welfare regime theory was developed based on the framework proposed by Esping-Anderson in understanding different institutional configurations in the provision of welfare goods. The author identified three major welfare regime typologies, ‘social-democratic’, ‘corporatist’, and ‘liberal’, underscored by different roles played by the state, the market, and families in welfare provision (Esping-Anderson, 1990). These were subsequently complimented by the ‘southern European’ (Castles & Ferrera, 1996) as well as the ‘productivist’ typologies, with the latter associated with East Asian countries including China (Holliday, 2000; Zhou & Ronald, 2017). While housing was not originally integrated into the welfare regime literature, this was subsequently advanced in discussions on the relationship between homeownership and welfare services (Kemeny, 2001; Castles & Ferrera, 1996). The interplay between state, market and family in the provision of welfare goods has also proven useful to understand housing systems. Welfare regime theory has thus commonly been applied as a more comprehensive framework linking housing systems to differentiated social welfare contexts (Allen, 2006; Arundel & Lennartz, 2017; Doling & Horsewood, 2011; Doling & Ronald, 2010; Stephens et al., 2015; Zhou & Ronald, 2017).

In contrast to discussions on market transition, the welfare regime framework also brings the role of the family into consideration. The importance of family in housing provision, especially for younger generations, has only intensified since the global financial crisis (Ronald & Lennartz, 2019). Researchers have pointed to the increasing importance of intra-family transfers of financial resources, in-kind support, indirect influence through socioeconomic status transmission, and socialisation of housing preferences in shaping housing access for young adults (Arundel & Ronald, 2015; Druta & Ronald, 2017; Mulder & Smits, 2013). In considering welfare regime contexts, family influence is seen as the most significant in the Southern European and East Asian countries. Studies have highlighted the familialistic nature of Southern European welfare regimes where intergenerational exchanges within (extended) families is an informal but important source of welfare provision (Allen, 2006; Poggio, 2008). In East Asia, there is a long tradition of strong mutual support between generations, where under the productivist welfare regime, the role of the family in welfare provision has been sustained by state policies (Zhou & Ronald, 2017). Furthermore, familialism plays an important role in post-socialist contexts. Particularly where the state has retreated and the market is undeveloped or fails to deliver alternatives, family support is often a fundamental dimension of welfare (and housing) provision (Stephens et al., 2015; Arundel & Lennartz, 2017).

Taken together, the two frameworks mentioned above help frame our understanding of shifting housing provision and access in relation to changing state, market, and family roles. Through such a perspective, the story of transition economies is more complex than a rapid shift from state to market housing provision. The early stage of transition has commonly been marked by mass privatization generating a rapid increase in homeownership (Logan et al, 2009), where public rental (or free) housing was transferred, or sold-off at reduced prices, to existing tenants (Bodnár & Böröcz, 1998). While this might be described as the initiation of a housing ‘market’, this early stage in fact remains one of largely *state*-provided homeownership, as costs (when applicable) were usually strongly discounted. Where costs were indeed incurred, the lack of an established mortgage market meant that families often played the supplementary role in mobilising resources for housing (Stephens et al., 2015; Druta & Ronald, 2018). Although, as the transition progressed, the market subsequently became the primary housing provider, the legacy of a state redistributive system remained important in determining housing access (Liu et al., 2012). This is especially true when considering intergenerational dynamics, since parents who benefited from the privatization of public housing are more likely to have accumulated substantial housing wealth and transmit housing advantage to their children, underscoring the reproduction of inequality across generations (Or, 2018; Deng et al., 2016).

China’s successive housing system reforms

Through China’s housing system transitions, the balance between the state, market and family in housing provision and access has successively changed, as reflected in the shifting housing tenure structure, with important consequences for housing inequalities. Following the establishment of the People's Republic of China in 1949, housing was constructed and allocated as a welfare good by the state directly or via work units (Wu, 1996; Zhu, 2000). The market and family were largely absent in the housing of urban residents (Cui et al., 2021). The first period of reform was initiated in 1978 and lasted until 1998. Privatization of work-unit housing, rental reform and housing finance was implemented to establish a private housing market (Wang & Murie, 2000). Nonetheless, this period is characterized by a continued strong role of the state and a relatively minor role of the market or families in housing distribution. The expansion of private homeownership in this period was mainly driven by in-kind housing allocation through work-units (Huang & Clark, 2002). While former public rental housing was sold to sitting tenants, work-units themselves also bought commodity housing at market prices or built new houses, which they then re-sold to their employees at discounted prices (Logan et al., 2009).

1998 was an important turning point in China's reforms when in-kind housing allocation was terminated to promote the housing market (Logan et al. 2009). Since then, the state gradually withdrew from large-scale housing provision and refocused on urban populations with housing difficulties, such as low-income families through the construction of affordable homeownership (i.e. *'jingji shiyong fang'*) and other forms of low-rent social housing (Deng et al, 2016). In 2003, the real estate industry was declared as a 'pillar industry' of the national economy. The government shifted most of the housing supply structure to market homeownership and further stimulated housing market growth. In urban China, this resulted in commodified market housing becoming the primary means towards homeownership, supplanting previous access through subsidized housing privatization (Liu et al., 2012). At the same time, property prices rose rapidly and at a much faster rate than incomes, worsening housing affordability. As affordability diminished, this increasingly engaged a mobilization of the family, as supplementary to the state and market, in accessing housing (Cui et al., 2020; Mu et al., 2021).

A substantial body of literature has examined how market reform has affected housing inequality in China (Bian & Logan, 1996; Huang & Clark, 2002; Liu et al., 2012; Wang & Murie, 2000; Yi et al., 2021). With the introduction of the market, housing has transformed from a welfare good into a commodity and inequalities in housing have been associated with market power. Education and economic capacity have become increasingly determinative for homeownership attainment (Li & Fan, 2020; Song & Xie, 2014). Nonetheless, a nascent literature has pointed to the continued role of institutional and political position in the post-reform period in access to housing (Fang et al., 2020; Song & Xie, 2014), and housing-related administrative resources and knowledge (Li, 2002). More importantly, privileged access to housing by people with political power in the previous system persists (Fu et al, 2015). This is particularly relevant when considering intergenerational differences. Broadly speaking, older generations are more likely to retain multiple advantages from housing privatization: having obtained subsidized housing during privatization in the early stage of reforms, having accumulated substantial housing wealth over a longer period of house value increases, and be in a more advantaged socio-economic position to further invest in the housing market (Deng et al., 2016). Furthermore, within the older generation, those with political resources are more likely to have obtained higher quality and better located housing enabling them to subsequently accumulate more housing wealth (Wang & Murie, 2000).

Recent studies have increasingly emphasized the crucial role of the family in housing, particularly for young adults (Cui et al., 2021; Deng et al., 2020; Zhang & Bian, 2019). Although market homeownership has become the main housing tenure, house prices in cities have risen beyond the

affordability range of most incomes (Clark et al., 2021). As such, young people’s housing access has become increasingly dependent on family support (Cui et al., 2020). Herein, it is particularly parents who benefited from the mass privatization of public housing that tend to have accumulated substantial housing wealth and are more likely to further provide financial help for – or indeed invest through – their adult children’s housing (Or, 2018). Beyond *what* property was acquired during privatization, a key element that differentiates the housing wealth position of the parental generation is also *where* they acquired housing with substantial variation in localities’ subsequent price increase². Recent research in Beijing, for example, has shown that adult children from local-urban parents who benefitted from the housing reform are most likely to live for free a home owned by their parents (or receive substantial financial help to purchase from the market (Lian, 2021).

As outlined above, housing system restructuring has involved a gradual transitional process where the shift from public rental to the dominance of market homeownership implicated successive changes to available tenures alongside wider socio-economic changes. Current research on China, however, has centred on the major divisions between owning and renting, largely as homogeneous categories. This is inadequate in understanding housing system transitions and their associated inequality dynamics, particularly in the Chinese context. We contend that an integrated examination of changing tenure structure must consider crucial differences within these major tenure categories in relation to the shifting role of the state, market, and family.

Data

This study aims to investigate the changing housing tenure structure and access in urban China over the period of successive market-oriented housing reforms since 1978. As there is unfortunately no single dataset covering the entire period, this analysis makes use of two national datasets: the Chinese Household Income Project (CHIP) in 1988, 1995, and 2002 as well as the Chinese Household Finance Survey (CHFS) in 2011 and 2017. The CHIP is a repeated cross-sectional survey and covers all of China’s major regions and is, contingent on weighting, nationally representative (Li & Sicular, 2014). Six waves of the survey have been conducted from 1988-2018. However, only the 1988, 1995 and 2002 waves provide the required detailed information on housing tenures and are therefore included in covering the early years of housing reforms.

² In the Chinese context, there are strong spatial housing market differences across ‘urban China’ between, for example, what are classed ‘first-tier’ cities that saw explosive housing value growth and more peripheral urban areas that experienced slower or more volatile gains (Wang, 2019). Related research has pointed to the link between the spatial polarization of housing markets and unequal wealth accumulation across societies (see Arundel & Hochstenbach, 2020; Hochstenbach & Arundel, 2020).

Subsequently, we make use of the CHFS data available for 2011 and 2017 to capture what can be considered the late, or post, reform period. The CHFS, launched in 2011, is a household-level survey with national representativeness. Substantial information on tenure, housing assets and debts was included making it suitable for our research.

The analyses are confined to ‘urban’ areas of China. While these areas are conventionally termed ‘urban China,’ this is not directly translatable as the term relates in China to an official classification that often includes large areas beyond core urban centres. Nonetheless, the classification is of key relevance as the institutional structures of housing markets are distinct in urban and rural classified areas in China. Crucially, the impacts of the housing reform have largely been confined to ‘urban’ districts, while housing in ‘rural’ areas cannot be traded on the formal housing market and remains largely self-built on collectively-owned land. Additionally, migrant populations have had limited access to urban housing, especially over the early stages of the reform, and are less representative of the dramatic transformations experienced by their local urban counterparts. For this reason, the population of analysis is confined to ‘local urban’ residents: in other words, residents of urban areas holding a local registration (*hukou*). The selected sample sizes for analysis in the five years are listed in Table 1.

Table 1. Sample sizes of analysis over the years

Dataset/year	CHIP 1988	CHIP 1995	CHIP 2002	CHFS 2011	CHFS 2017
Sample size	8721	6929	6650	3359	14640

Source: authors’ tabulation

Our categorization of tenure types goes beyond the dichotomy of rental versus ownership to capture the role of the state, market, and family in the housing provision. At the same time, the tenure categories need to consider comparability across different survey years. The resulting tenure types thus include: 1) public rental, 2) private rental, 3) subsidized homeownership, 4) market homeownership, 5) self-built/inherited/gift homeownership, 6) resettlement homeownership, and 7) other tenures.

Among these tenure types we further attribute, where relevant, a dominant (albeit not exclusive) role in their provision in terms of state, market and family. Herein, public rental and subsidized homeownership are highly influenced by state power, while private rental and market homeownership are market-based tenures. Self-built and inherited/gifted housing represent forms of family-supported housing (see Stephens et al., 2015). Self-built housing in China usually involves financial and labour resources pooled from (extended) families (Cui et al., 2021). Resettlement homeownership has existed since the economic reform in 1978 due to urban renewal, municipal

expansion, and real estate development and can be both state and market driven (Cui et al., 2021). Resettlement housing can only be separated from other categories in 2011 and 2017, whereas it appears classed within ‘other tenures’ for previous years. This last group includes small categories beyond the six main types. Among this, the specific category of ‘living rent-free in family-owned dwellings’ can be identified for 2011 and 2017 as an additional family-supported tenure category.

Changes in housing tenure structure under the housing reforms

Changes in total homeownership rate in urban China from 1988 to 2017 reflect the dramatic transformation of China into a homeownership society, as shown in Figure 1. Homeownership shares grew rapidly from 13.6% in 1988 to around 80% in 2002, then continued rising more gradually to around 86% in 2017. The most significant increase was observed in the period from 1988 to 2002 when public rental housing underwent widescale privatization. This aligns with similar dynamics across many transition economics, such as in Eastern Europe, where mass privatization resulted in very high homeownership rates (Stephens et al., 2015). It is crucial, however, to understand how China’s shift to a market system occurred in transitional and overlapping steps. As the data attests, subsidized homeownership presented a vital legacy of the previous socialist system and remains the origin for a major share of today’s owner-occupied housing.

As demonstrated in Figure 1, dominant tenures fully changed over the different stages of China’s housing reform. In 1988 when housing reform was newly implemented as a national policy (after only limited trials in select cities), the main tenure remained public rental housing provided through the socialist allocation system, accounting for 84.8% of dwellings in our sample. Homeownership tenures were barely present in this period. The small share of homeownership that did exist fell into the category of ‘self-built, inherited or gift.’ At this time, this would have primarily consisted of self-built housing by residents in the periphery of cities or within urban villages built in the 70s or 80s to meet housing shortages, as well as a limited amount of older private houses built before the foundation of the People’s Republic of China in 1949 (Fu et al., 2015; Logan et al., 2009).

From 1988 to 1994, housing reform focused on the sale of public housing. As shown in Figure 1, by 1995, the share of public rental housing had reduced sharply to 56.8%, albeit remaining the dominant tenure. Conversely, subsidized homeownership appeared as a new prominent tenure type, as the second largest component. Despite rapid change in the housing system over this period, the traditional in-kind distribution of housing was still implemented in many work-

units as these would buy apartments from developers to then lease to their employees (Logan, et al., 2009). A considerable number of people, hoping to get a house through their work-units, remained reluctant to enter the housing market at this time (Fang, 2020), with only about 3% of households in our dataset having accessed market homeownership by 1995.

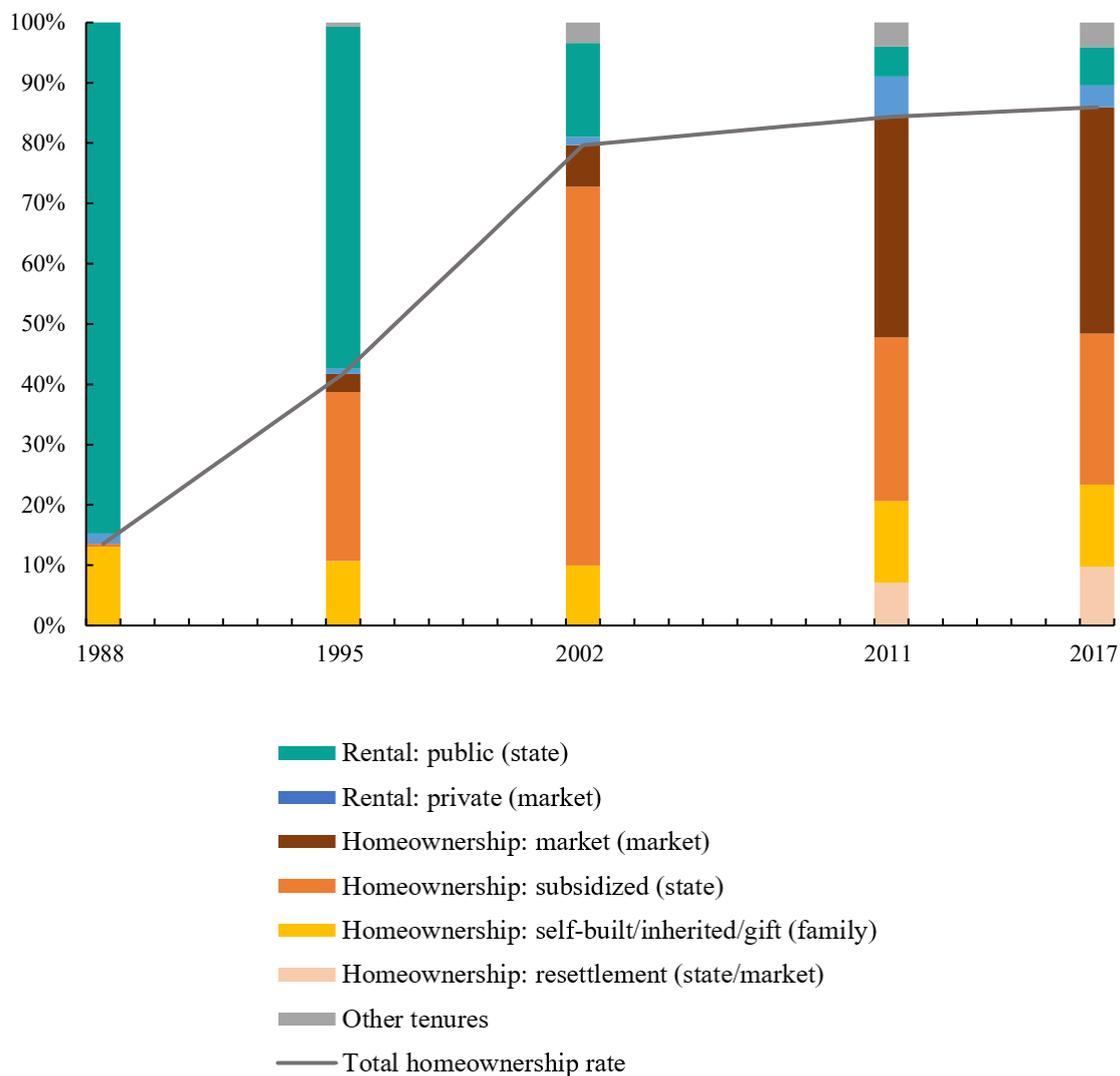


Figure 1. Changes in housing tenure structure in urban China from 1988 to 2017.

Source: CHIP (1988, 1995, 2002) and CHFS (2011, 2017), authors' calculation

In 1998, in-kind allocation of previous public rental housing was terminated to encourage housing consumption (Wang & Murie, 2000). Our data reveals that by 2002, only four years later, subsidized homeownership had become the dominant tenure at 62.8% – a full 47.3 percentage-points higher than public rental housing. At the same time, ‘market-based’ tenures

including market homeownership and private rental still accounted for a small share of the tenure structure, at 6.9% and 1.4% respectively. Overall, the dominant position of subsidized homeownership in the tenure structure, with public rental in second position, underscores how housing allocation was still following mechanisms of a socialist housing system with access primarily determined by political and institutional resources at the levels of both work-units and individuals.

By the start of the 21st century, the Chinese economy had grown precipitously, mirrored in rapid development in the housing market. Real estate was declared a ‘pillar industry’ of the national economy in 2003 ushering in a shift towards making *market* homeownership central to the housing supply structure of urban China. Investment in the housing market grew rapidly, alongside house prices. As attested by the data, the share of market homeownership rose sharply and by 2017 had become the largest tenure, at around 37.5%, while subsidized homeownership decreased substantially to 25%.

The private rental sector, the other component of market-based housing, played only a very minor role in 1988, 1995, and 2002 (at between 0.8% to 1.7%). Although it increased over the subsequent years of housing reform to 6.67% in 2011, followed by a decrease to 3.64% in 2017, private rental shares remain a more marginal component of the housing system compared to market homeownership. Public rental shrunk to less than 7% in both 2011 and 2017, yet remained larger than private rental. In other words, while market homeownership has become dominant in the owner-occupied sector for local urban households, market-based private rental remains relatively minor.

Finally, turning to the shares of ‘self-built, inherited, or gift homeownership’, we see a comparatively more stable picture than other tenures with a gradual decline from 13.1% in 1988 to under 10% in 2002 and then an increase again to 13.6% in 2017. For the last two data-points we were able to further investigate the influence of family towards homeownership access through additional categories that were possible to extract in the CHFS dataset, which we elaborate in the paragraphs below. With the CHFS surveys in 2011 and 2017, we also have a fourth homeownership category related to ‘resettlement’ housing, however, as this encompasses different types of private or state-led resettlement housing, it is more difficult to clearly situate this as either market or state-supported homeownership.

Additional family-supported housing measures

While imperfect, the CHFS dataset provides some useful measures in 2011 and 2017 that help to uncover the role of family through more detailed tenure categories related to role of family support. These measures, shown in Table 2, imply overall an increasing importance in the role of the family for housing. First, we first find that the share of the subcategory of ‘inherited and gift’ homeownership – which implicates direct family support – increased from 3.28% in 2011 to 3.85% in 2017. While the shares are small, this growth is significant given that this tenure category is limited to houses *fully* gifted or inherited. Secondly, it was possible to identify those who accessed homeownership with a financial gift from family members to cover fully or partly their down-payment. As the data shows, the share of households who received this form of family support increased from 1.37% in 2011 to 1.56% in 2017. Additionally, we were able to gain some limited insight into the practice of intra-family loans. In China, ‘family loans’ have been a common means to finance house purchase and are usually characterized by very low or no interest and flexible repayment expectations (Cui et al., 2021). In 2011, a full 10.81% of all households had reported borrowing from their family for housing, and at that point, 5.24% (or about half) were still paying off their family loans. Unfortunately, for 2017, we only have data on households still repaying family loans, accounting for 2.66% of all households. While a decrease from 2011 in this one subcategory, it is hard to draw clear conclusions here as the change could be explained by either more households turning to bank loans or simply a larger share of households having already paid off their family loans.

Table 2. Family-supported housing measures in 2011 and 2017

	2011	2017
	(% of all households)	
Family-supported homeownership		
Inherited/gift from family	3.28%	3.85%
Family support with down-payment	1.37%	1.56%
Family loan (still paying)	5.24%	2.66%
Family loan (all: completed /still paying)	10.81%	unknown
Parents as co-owners	unknown	9.85%
Family-supported other		
Living rent-free in family-owned dwelling	3.87%	3.95%

Source: CHFS (2011, 2017), authors’ calculations

An additional variable available just for 2017 is the share of households which report ‘co-owning their dwelling with their parents’. While we can’t determine a trend, we find significantly that nearly 1 in 10 of *all* households report parental co-ownership, representing a major form of intergenerational family mobilization in housing access in contemporary urban China. Besides support related to homeownership, we were also able to separate out households living rent-free

in family-owned dwellings which involved a further nearly 4% of households and experienced some increase from 2011 to 2017. While certain data limitations remain, these assessments point once again to the importance of disentangling tenure in understanding the role of family-support in homeownership provision and access. In the context of urban China, it is clear that family plays a significant role beyond, or at least alongside, the market with evidence of its role growing in recent years over a period that also saw market homeownership become increasingly unaffordable for many young households.

Changing inequalities in access to different housing tenures

Our subsequent analyses untangle how China's successive periods of housing reforms impacted *changing* housing inequalities in terms of access to different tenures. Table 3 provides first an overview on the distribution of homeownership among different socioeconomic groups in China from 1988 to 2017. In other words, we uncover here *who* has entered homeownership over the successive housing reform periods. As Hamnett (1999) has emphasized, transformations in tenure structure can contribute to changes in the social composition that inhabit them. The changes in homeownership over this period show that, despite an overall increase across different population groups, differentiated socio-economic dynamics are intertwined with the changing housing system and dominant tenures, as we elaborate on below. In our further analyses, we reveal changing *relative* inequalities in entering different tenures over time across selected key socio-economic indicators.

The analyses of housing inequality dynamics focus on access to five main tenures reflecting different state-market-family roles in provision: state-provided public rental and subsidized homeownership, market-provided private rental and market homeownership, and family-provided self-built/inherited/gift homeownership. In understanding differentiated access, three key socio-economic indicators are of interest, including employment sector (public or private), income, and education level. These socio-economic indicators, to a certain extent, relatedly expose state versus market power. Working in the public sector is associated with privileged access to state-provided housing, clearly in the pre/early reform housing system, but it has also been related to continued housing advantage in the late/post-reform period (see Cui et al., 2020). Income and education indicate position of market power and are thus considered more determinant in accessing housing in late/post-reform market systems (Huang & Yi, 2010; Logan et al., 2009). In untangling how inequalities persist, or are amplified, over the housing reform period, we therefore examine the changing access of populations with different state and market resources to tenures associated with different degrees of state, market, or family support.

Table 3. Total homeownership shares for different population groups from 1988 to 2017

	1988	1995	2002	2011	2017
Employment sector					
Non-public	23.4%	42.1%	78.0%	83.7%	85.1%
Public	12.4%	41.8%	81.2%	86.2%	89.1%
Income quartile					
Lowest	18.4%	42.9%	74.9%	76.8%	79.5%
Middle-low	14.0%	41.7%	79.2%	86.5%	85.0%
Middle-high	12.2%	41.4%	81.1%	88.5%	88.7%
Highest	9.5%	41.0%	83.4%	85.7%	90.7%
Education					
Primary and below	19.6%	45.4%	75.1%	83.9%	83.1%
Junior high	15.5%	41.0%	76.7%	83.3%	84.7%
High and technical	12.2%	42.9%	81.3%	86.4%	85.5%
College and above	6.0%	39.5%	82.7%	83.6%	89.1%

Source: CHIP (1988, 1995, 2002) and CHFS (2011, 2017), authors' calculations

Employment sector

We first examine access to housing tenures based on public or private sector employment. Under China's pre-reform socialist housing system, being employed in the public sector was a key indicator of institutional and political advantage and related to improved access to public rental housing, the dominant tenure at the time. As public rental housing was provided as a state welfare good and usually was of comparatively higher quality, private owning and renting in urban China remained unattractive. As we thus see in Table 3, in 1988 when the housing reform was in its early stages, homeowners were more common among those working in the private sector, mainly consisting of older private houses that were inherited or self-built. In 1995, homeownership rates among people in the private sector remained higher than their counterparts in the public sector. After 2002, however, those in the public sector were able to translate their advantaged position into better access to homeownership overall. By 2017, the advantaged position of those in public sector employment for homeownership had increased (see Table 3) with their share 4 percentage-points higher than those in the private sector.

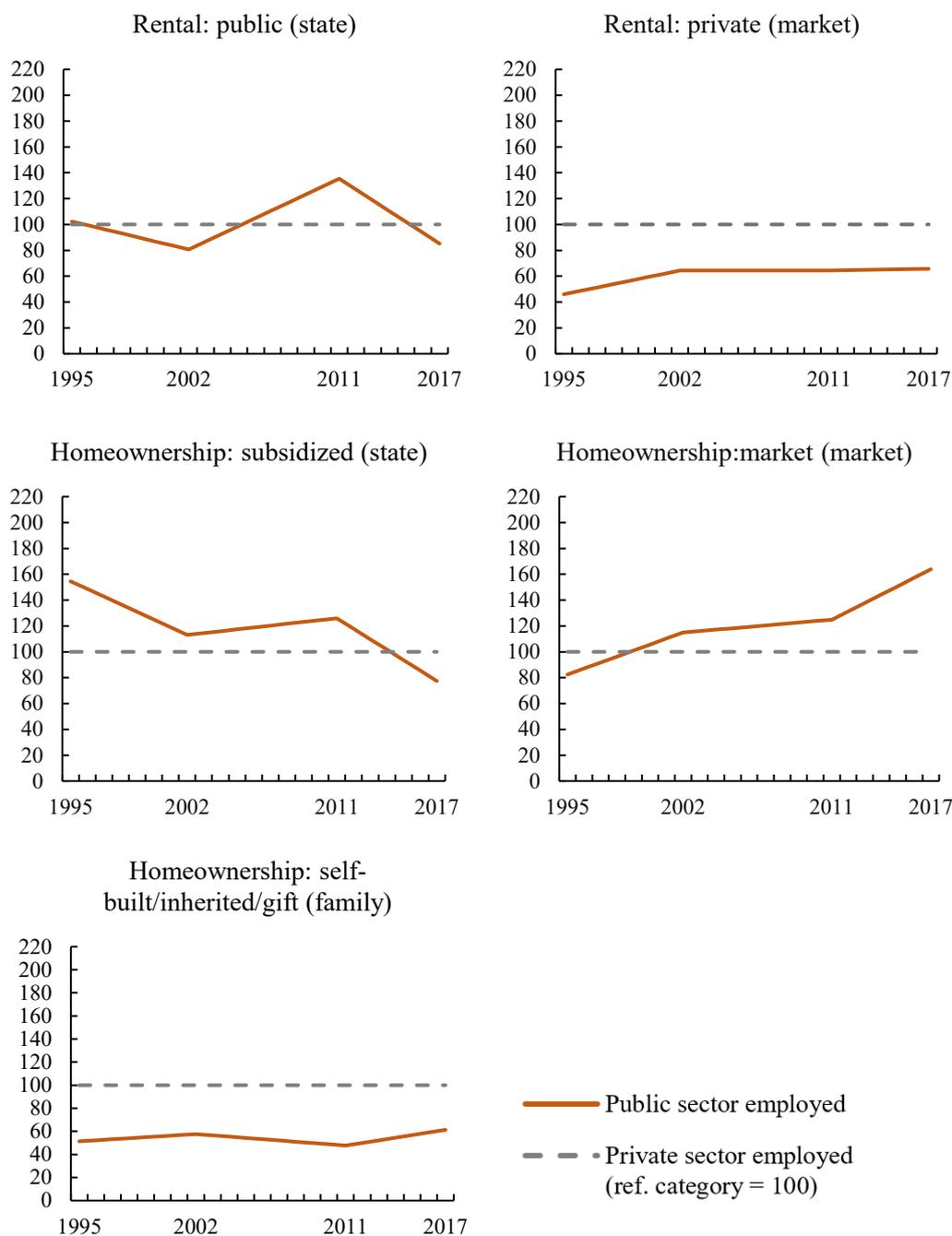


Figure 2. Relative inequality in housing tenure access by employer type from 1995 to 2017.

Source: CHIP (1995, 2002) and CHFS (2011, 2017), authors' calculations

Figure 2 traces relative inequalities in tenure access by employment type over time. In 1995, we see the opportunity to access public rental was almost identical for both employment groups. However, those in the public sector were much more likely to obtain state-subsidized homeownership while much less prevalent in private rental (about half as likely) or in market homeownership. Conversely, counterparts in the private sector were more likely to be in self-

built/inherited/gift homeownership and, at that time, market homeownership. Over the housing reform period, both public rental and subsidized homeownership exhibit similar trends and considerable volatility. Following a decrease from 1995 to 2002 in relative access for public sector employed, this group experienced a significant increase in 2011 and then returned to near parity in 2017.

Market homeownership, however, stands out as displaying a clear and steady reversal in differentiated access by employer type. While those in the private sector were somewhat more likely to enter market homeownership in 1995, this had reversed by 2002 and the gap between the two subsequently continued to grow. By 2017, those employed in the public sector were now about 1.6 times more likely to be in market homeownership. This echoes the shifting tenure hierarchies as market homeownership became the more desirable housing class in recent years. Beyond their higher propensity in the most desirable tenures, people employed in the public sector have remained much less prevalent – despite some variability – in the less privileged tenures of private rental or in self-built/inherited/gift homeownership throughout this period.

Despite four decades of market-oriented housing reform that purported a weakening of links between employer type and access to institutional housing resources, our analyses show its persistent structuring of tenure access. The findings underscore how households with better political and institutional resources have retained their advantageous positions even through dramatic housing system transitions. Even as desirable tenures shifted from public rental, to subsidized homeownership, and then to market homeownership, we find that those in the public sector consistently display privileged access to these. Such trends reveal a clear path-dependency underlying China's housing transition with the privilege in the welfare distribution system among and within work-units being reproduced in the market phase. Crucially, we also find an apparent increase in the disparity between the two groups in recent years in accessing market homeownership pointing to not only a persistence of housing inequalities but an apparent amplification. This is particularly significant here given public sector employment's traditional association with pre-reform institutional political power. In other words, rather than market-oriented housing reform supplanting socio-economic hierarchies, it appears to reproduce, or even intensify them.

Income

Income largely determines the capability to access housing through the market, but its role in housing access under the socialist and transitional housing systems is more complicated. We find, in Table 3, a negative relationship between income and total homeownership in 1988 with the

highest income quartile having the lowest share of homeowners. As we have argued, it is again crucial to understand here changing tenure hierarchies. In 1988, those with better political resources, who were also more likely to have higher incomes, remained favoured in the housing allocation system resulting in better access to the more desirable public rental housing. As the housing system marketized and homeownership became a more privileged tenure, particularly with ballooning property values, we see a shift towards higher income households becoming disproportionately represented in homeownership. This thus again reveals a clear path-dependency in certain population groups having privileged housing access.

We subsequently examine relative access to our main tenure categories by income quartiles (Figure 3). We find in 1995, in fact, no significant disparities in terms of public rental housing. This implies a more egalitarian access to this dominant tenure in terms of income position at this early stage of housing reform. From 2002 to 2011, however, the lowest income quartile displays an increased likelihood of being in public rental housing, which reflects trends towards residualization and its more constrained social welfare role within an increasingly market-based housing system. This, however, was no longer the case by 2017 with private rental seemingly beginning to supplant public rental as the tenure overrepresented among the lowest income group. As Figure 3 also shows, lower income households have been consistently more likely to enter private rental, even while its absolute share strongly increased over the years.

Considering state-subsidized homeownership, we find a clear disadvantage in access for the bottom income quartile. This was already the case in 1995 and 2002 – the period of widespread conversion of public rental to subsidized homeownership – and represents an important dimension of inequality given the longer-term and path-dependent nature of advantage transmitted through the subsidized privatization of housing. Even as this tenure category subsequently declined in importance, the data shows this disadvantage for the lowest income households remained almost unchanged from 2002 to 2017. While the highest income quartile is eventually also less concentrated in state-subsidized homeownership, this is explained by their further shift into market homeownership – after having likely capitalized on substantial property wealth accumulation through previous subsidized homeownership. The trends for market homeownership in Figure 3 reflect such dynamics. Again, in 1995 we see an apparent reverse situation associated with market homeownership being still relatively rare and, as mentioned above, initially less desirable than opportunities for subsidized homeownership. However, in following years, the data reflects increasing characteristics of a market economy with a clear growing advantage for those with higher incomes in entering the housing market. Meanwhile, higher

income populations have remained less likely to rely on family-supported self-built/inherited/gift homeownership throughout this period, with some initial convergence but, since 2011, the disparity increasing once more.

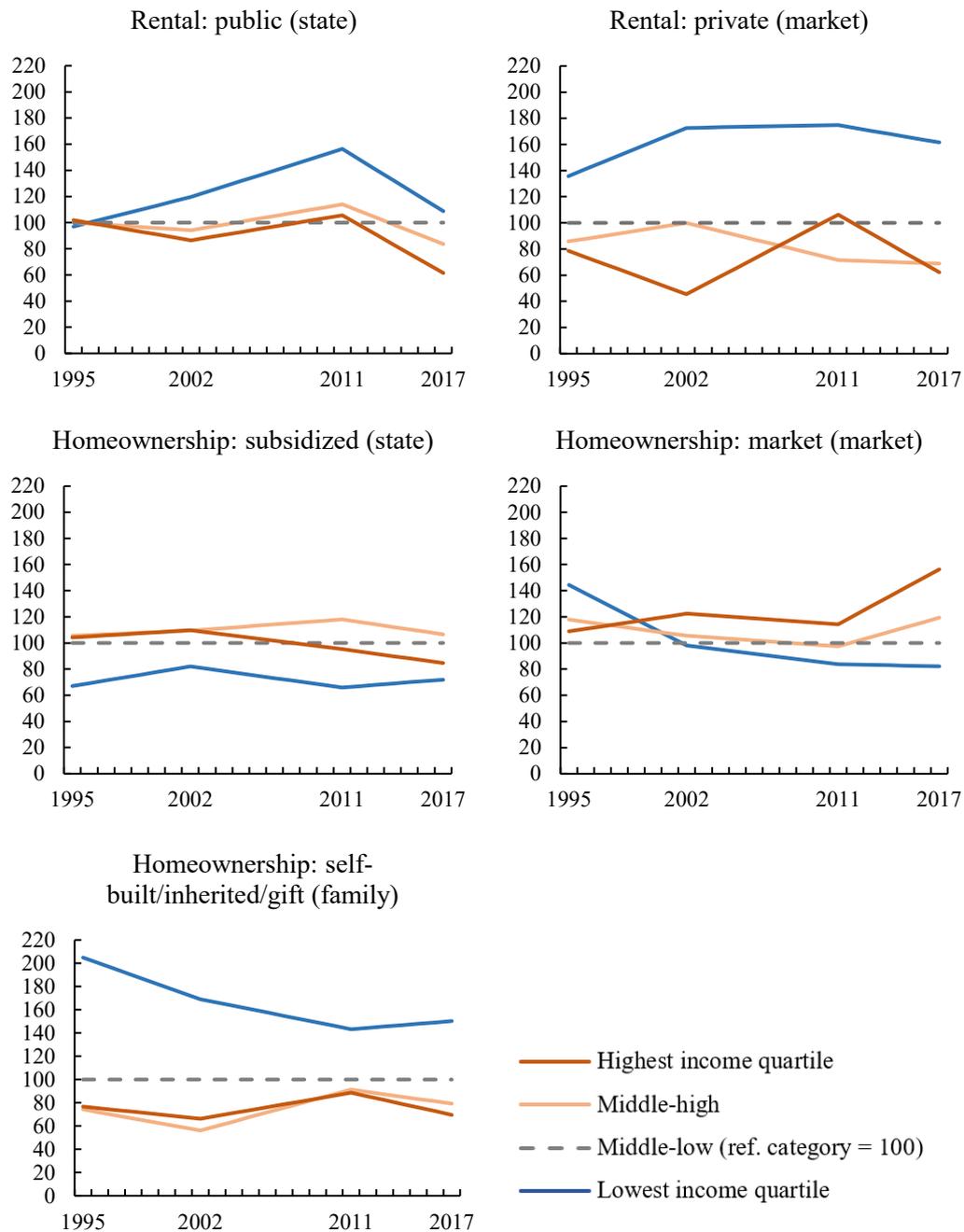


Figure 3. Relative inequality in housing tenure access by income from 1995 to 2017.

Source: CHIP (1995, 2002) and CHFS (2011, 2017), authors' calculations

Education

Lastly, we turn to education as an additional important indicator of market power which could determine access in the housing market. From Table 3, we find that education follows a very similar pattern as income in homeownership access with a shifting tenure hierarchy from privileged access to state-subsidized and then to market tenure access.

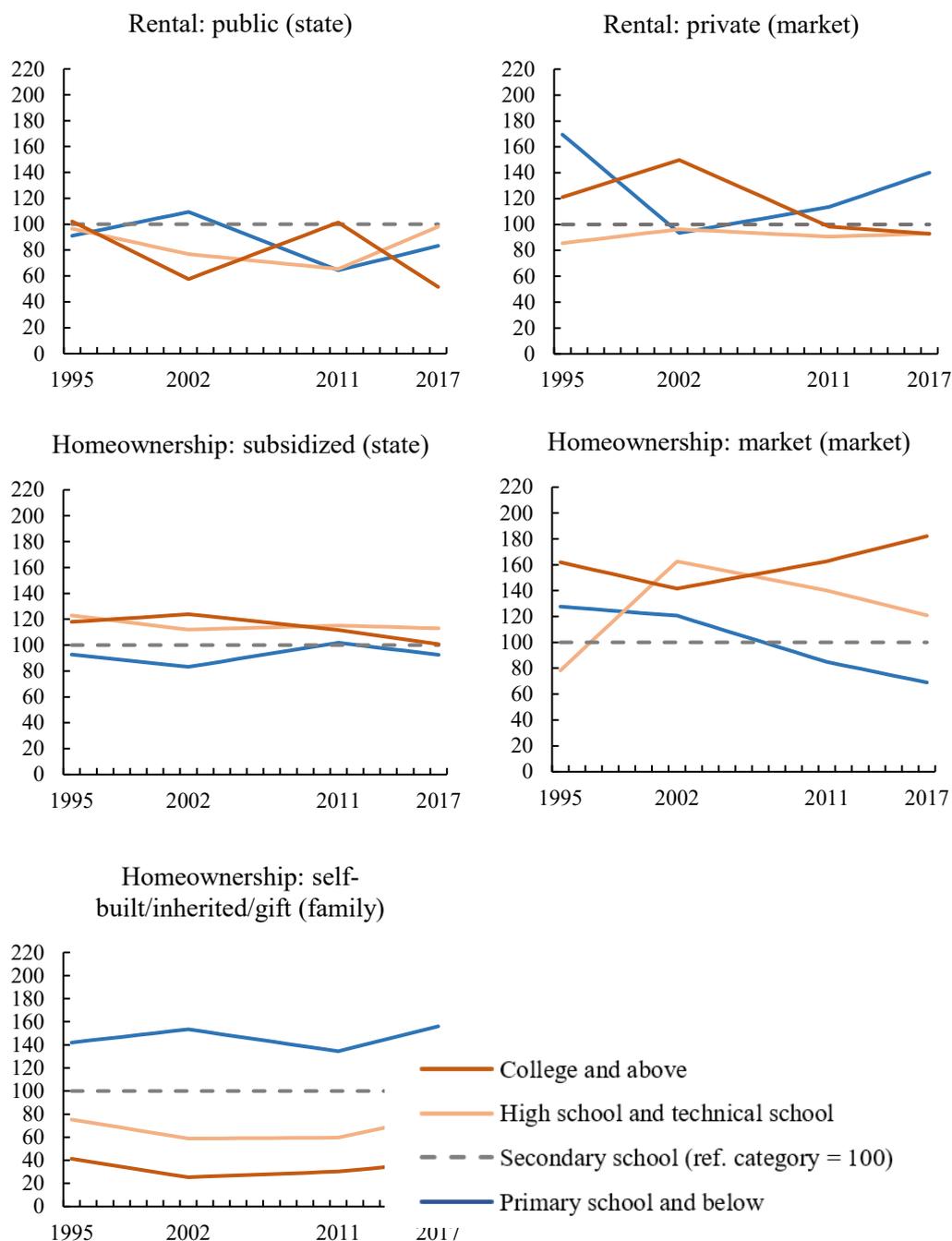


Figure 4. Relative inequality in housing tenure access by education from 1995 to 2017.

Source: CHIP (1995, 2002) and CHFS (2011, 2017), authors' calculations

Education further reveals several commonalities with income in our analysis of relative access to housing tenures (Figure 4). Looking at subsidized homeownership, we similarly see a clear pattern of advantage among higher education levels in 1995 and 2002. In the pre/early reform period, those with a higher education are more likely to occupy better positions in work-units and thereby be advantaged in the housing allocation system and subsequent privatization. The results indeed show their higher propensity to transition from public rental to subsidized homeownership, although as subsidized homeownership has declined in share, these disparities appear to have narrowed. As with income, this evident increased access to subsidized homeownership implies a significant long-term entrenchment of housing advantage given the substantial wealth accumulation potential as the housing market took off as well as intergenerational implications for the transmission of inequality. For market homeownership, the overall pattern shown in Figure 4 is one of clearly increasing disparities between the highest and lowest education levels in access over the housing reform. The relative inequality in market homeownership entry based on education level has become starkly differentiated in recent years, emphasizing the rising unaffordability of the housing market and growing importance of individual socio-economic factors such as income and education in buying a home.

Some differences between education and income are also apparent. While the trends for self-built/inherited/gift homeownership also show a clear overrepresentation among lower education levels, these have remained much more stable for education over this period than for income, pointing to potentially a more entrenched socio-cultural division in practices of family-supported housing provision. Public rental housing, on the other hand, displays a quite complicated and variable relationship with education over the data period. A possible explanation for the initial shift to lower educated households overrepresented in public rental, is that those with higher educational attainments increasingly entered subsidized homeownership (see Wang & Murie, 2000) while less educated households were more likely to remain (longer) in public rental. This appeared to reverse again in later years, however, bringing into question perceptions since the late 1990s that public rental housing has played the role of a social safety-net in accommodating more marginal populations. Finally, for private rental, the consistent overrepresentation seen with the lowest incomes is not clearly apparent for education levels, however, an increased prevalence for the lowest education level in the early years and an uptick more recently is visible.

Discussion and Conclusion

Over the last four decades, the housing system in urban China has undergone radical transformations that have fundamentally altered the role of the state, market, and family in housing. Several studies have noted increasing housing inequalities in China with the transition from a socialist to a market-based housing system (Clark et al., 2021; Fu et al., 2015; Liu et al., 2012). However, existing research has neglected to examine the dynamic processes of changing inequalities over successive but overlapping periods of housing reforms. We contend that changing housing inequalities over the reforms are crucially shaped by both shifts in the hierarchies of dominant tenures as well as largely persisting socio-economic privilege in access to these. Our analyses here expose the crucially path-dependent nature of housing (dis)advantage over the successive periods of housing reform. The findings reveal that, even as reforms have dramatically upended urban China's tenure structure, enduring positions of advantage remain. These are associated initially with positions of state power but have been translated into market capacity – particularly through the medium of housing – and result in the reproduction, or even amplification, of inequalities over time and across generations.

A detailed examination of transformations in housing tenure, as we argue, is fundamental to understanding changing housing inequalities. Our initial examination of changing housing tenure structure in urban China's confirmed that China has become a homeownership society (Logan et al., 2009). However, as our research reveals, the focus on the broad shift from rental to homeownership obscures crucial transformations within these two tenure categories. Building on market transition debates and welfare regime theory (Esping-Anderson, 1990; Kemeny, 2001), we contend that a valuable lens for understanding how tenures are differentiated is in the varied role of the state, market, and family in their provision and access. While the market has replaced the state as the dominant mechanism in housing access, our research has shown, in line with existing studies (Liu et al., 2012; Logan et al., 2009), that the state still plays a substantial role in housing provision. Despite the decline in public rental housing, state-subsidized homeownership has become a major tenure for urban-local residents and remains the second largest source of accommodation in the post-reform period. Within the transition to market homeownership, this intermediate role of state-subsidized homeownership through privatization is crucial to understanding the path-dependent nature of housing privilege.

Our analyses of relative housing inequalities over time reveal that, despite the weakening of the socialist redistribution mechanism in the housing sector, previous inequalities in institutional and political power have persisted, been reproduced, or even amplified, in the post-reform system.

Factors of market power have become decisive in housing access, as reflected in the significant and growing housing differentiation between income and education levels. However, vested groups with redistributive power under the previous socialist housing system have retained their advantageous positions through housing system transitions, even as dominant tenures shifted from public rental to subsidized homeownership to market homeownership. Our analyses showed, in fact, growing housing inequalities not only in relation to market capacity, but also in terms of the traditional measure of political/institutional power associated with employment sector. Market-oriented housing reforms have not undermined inequalities apparent in the previous socialist housing system but appear to have reproduced or even intensified them.

Despite some limitations in data, we further uncover a crucial and apparently growing role of family support in housing access since the start of the housing reforms. On the one hand, we can speak of some continuity in the role of the family among population groups with low socioeconomic resources that have been excluded from access to dominant tenures, even as the latter shifted from state to market provisioned housing. On the other hand, we find an increasing and more widespread role of family in the late/post-reform period. In the context of growing housing unaffordability in Chinese cities, the role of family has gained prominence with intergenerational support increasingly important to housing access. We find many different family-supported tenure arrangements are implicated from direct gifts and inheritance of dwellings to financial support for down-payments, family loans, and parental co-ownership. The limited data available points overall to an increasing prevalence of most of these forms of family supported housing in recent years. The growing role of parental support in determining housing opportunities has fundamental intergenerational implications. The housing position of parental households appears increasingly determinative, particularly in terms of how much they benefited from privatization of previous public housing and the subsequent rise in property values. As such, family support, moderated by their housing trajectories over the housing reforms, provides a key channel in the reproduction and possible amplification of housing inequalities across generations.

Our findings point to the need to understand the successive nature of housing system transitions in uncovering the path-dependent nature of inequalities even in the face of major restructuring. In the context of urban China, inequalities entrenched in the differentiated access to state-subsidized homeownership in the early reform stages appear significant to the subsequent accumulation of property wealth and ability for households and families to mobilize market power in the late/post-reform housing system. Although this study focuses on the transitional housing system in China, the findings have implications for understanding changing housing inequalities in broader

contexts; not only in the (post-)socialist countries of East Europe (Stephens, 2015) but in many countries that have undergone significant transformations from rental to homeownership and particularly where there was a substantial privatization of public housing (for example, the UK, Hamnett, 1999; Ronald & Kadi, 2018). Underlying such transformations are crucial shifts in the role of the state, market, and family giving rise to mutable tenure arrangements that cannot be captured with a simple homeownership versus rental binary. Critically, the path-dependency of housing inequalities and their potential amplification through housing system transformations underscore the need to examine trajectories of changing access across detailed housing tenure arrangements.

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