The intergenerational transfer of housing advantage

Examining tenure and residential location outcomes

Cui, J.; Arundel, R.; Cui, C.

DOI
10.1016/j.cities.2024.105300

Publication date
2024

Document Version
Final published version

Published in
Cities

Cities 153 (2024) 105300

Contents lists available at ScienceDirect

Cities

journal homepage: www.elsevier.com/locate/cities

The intergenerational transfer of housing advantage: Examining tenure and residential location outcomes

Junru Cui [a,*], Rowan Arundel [a], Can Cui [b]

[a] Department of Geography, Planning and International Development Studies, University of Amsterdam, Amsterdam 1018WV, Netherlands
[b] The Centre for Modern Chinese City Studies & School of Urban and Regional Science & Future City Lab, East China Normal University, Shanghai 200062, China

ARTICLE INFO

Keywords:
Intergenerational support
Housing tenure
Housing location
Housing inequality

ABSTRACT

This research considers the intersection between intergenerational support, housing outcomes, and spatially-differentiated housing markets to examine the transmission and reproduction of housing inequality across generations. Specifically, it aims to advance the understanding of the relationship between parental backgrounds and young adults' housing tenure as well as residential location outcomes. Drawing on original survey data collected in Shanghai over 2018 and 2019, this study, firstly, reveals both Chinese young adults' strong tendency to enter homeownership early in their housing trajectories and the key role of parental support. Alongside the influence of parental financial support and other socioeconomic resources in housing market entry, the analysis shows the importance of living in parental-owned housing in enabling subsequent homeownership access. Secondly, we investigate the spatial dimension of the intergenerational reproduction of inequality. While descriptive analyses imply more advantaged parental backgrounds structure access to higher value and to some extent higher gain submarkets, our regression modelling points to significant effects being concentrated among individual socioeconomic characteristics. We contend that research integrating both tenure and spatial housing market dynamics is valuable in understanding the transmission of housing inequalities across generations.

1. Introduction

Increasing reliance on intergenerational support has led to significant divergence in housing access, especially in terms of homeownership entry among young people across different socioeconomic contexts (Arundel & Ronald, 2015; Cigdem & Whelan, 2017; Coulter, 2017; Cui, Cui, et al., 2021; Druta & Ronald, 2018; Galster & Wessel, 2019; Köppe, 2018; Mulder et al., 2015; Mulder & Smits, 2013). Young people whose parents have more wealth, higher socioeconomic statuses, and are homeowners have better opportunities to enter homeownership (Bayrakdar & Coulter, 2018; Manzo et al., 2019; Mulder & Smits, 2013). Transfers from parents can directly improve young people's financial capability, such as in overcoming borrowing constraints, and enabling earlier and higher value home purchase (Engelhardt & Mayer, 1998; Guiso & Jappelli, 2002; Lee et al., 2020). Broadly-speaking, parents can also affect their children's housing outcomes through intergenerational transmission of socioeconomic status (Cui, Cui, et al., 2021) and socialization of housing preferences (Henretta, 1984; Mulder & Smits, 1999). How the intergenerational reproduction of housing inequality is reflected through more detailed tenure arrangements besides homeownership is getting more attention. For example, evidence from some Western countries has found that (extended or returned) co-residence in the parental home allows young people to cope with expensive housing markets (Arundel & Lennartz, 2017; Maroto & Severson, 2020) and save for housing purchase in the future thereby skipping or shortening rental periods before ownership (Worth, 2021).

Beyond the active discussion on the intergenerational transmission of housing (dis)advantages, how this process is configured by the spatial housing market needs more investigation. It is commonly understood that house prices and their appreciation rates vary dramatically across space – in other words, property ownership takes place within *spatially-differentiated* housing submarkets – as influenced by the natural attributes of the land, access to amenities, construction, and broader social and economic processes of urban development and gentrification (Aalbers, 2007; Ahlfeldt, 2011; Haurin & Brasington, 1996; Liang et al., 2018). Recent research points to housing location as one of the key indicators for housing wealth accumulation in the context of the spatially-differentiated nature of housing markets (Arundel & Hochstenbach, 2020; Hochstenbach & Arundel, 2020). Spatial inequality of housing markets combines with population sorting along other socioeconomic

* Corresponding author.
E-mail address: j.cui@uva.nl (J. Cui).

https://doi.org/10.1016/j.cities.2024.105300
Received 28 March 2023; Received in revised form 9 July 2024; Accepted 12 July 2024
Available online 30 July 2024

and cultural dimensions structuring where households invest in housing (Gyourko et al., 1999). Homeowners with a higher socioeconomic status tended to flow into higher-gain housing submarkets – in terms of proportional gains, regardless of dwelling values – versus lower socioeconomic status counterparts (Arundel & Hochstenbach, 2020). Building on this literature, the influence of intergenerational support on the spatial sorting of housing inequality, particularly in contexts beyond Europe needs further examination.

Contributing to the literature on intergenerational housing support, this research explores the impact of parental background on young adults' housing tenure outcomes as well as residential locations across spatially-differentiated housing markets. Instead of focussing on specific channels through which parents support their adult children in the housing market, this research considers parental background in a broader sense using parents' housing tenure and socioeconomic status as important indicators of parents' capability to help their adult children. The analysis includes two main parts, which contribute to the existing literature: 1) the investigation of the relationship between parental background and young people's housing tenure outcomes beyond the conventional binary of rental versus homeownership, and 2) the exploration of the relationship between parental background and young people's access to spatially-differentiated housing submarkets with varying housing values and value changes over time. Related research has shown that the housing location outcomes of young people with different parental backgrounds can present a major source of wealth inequality among young people in the long-term (Hochstenbach & Arundel, 2020). We assert that this has significant implications for our understanding of the intergenerational transfer of housing inequality yet has received limited attention.

The research turns to the Chinese context to bring these themes together through an investigation of a novel dataset on young adults' housing trajectories in the Shanghai metropolitan area. China presents a fascinating context to understand both intergenerational and spatial variation in housing opportunities, in dialogue with international scholarship. Firstly, as housing prices skyrocketed, Chinese young people have become increasingly dependent on the support from their families to acquire housing (Cui et al., 2020; Or, 2018) with growing delays in leaving the parental home in the face of housing unaffordability (Xian & Forrest, 2020). This reflects similar trends worldwide where deteriorating housing conditions for young people have intensified, particularly in accessing homeownership, such as captured by the term 'generation rent' (Lennartz et al., 2016; McKee et al., 2017; Ronald, 2018). Secondly, both the housing systems in urban China[1] and post-socialist countries in Eastern Europe have experienced radical transformations from redistributive to market-based systems. Through this process, different dimensions of housing inequalities have emerged, accompanied by shifting state-market-family dynamics, with crucial implications for understanding current societal inequalities (Lux et al., 2018; Stephens et al., 2015).

In the subsequent sections, we first establish a theoretical framework through a review of key literature to understand the intergenerational transfer of housing advantage in relation to tenure and residential location, with a particular emphasis on the Chinese context. This is followed by an introduction of the data, key variables, and methods employed. The results are organized into our two key foci, presenting, firstly, an analysis of differentiation in housing tenure outcomes of young people by their parents' homeownership and socioeconomic status and, subsequently, an examination of how this structures residential location outcomes. We conclude with a discussion of the main implications of our findings.

2. Parental background and young adults' housing outcomes in the Chinese context

The urban housing reform in China since the late 1970s has greatly altered housing provision from a state-based redistributive system under the previous socialist regime to a predominant reliance on the market (Song & Xie, 2014). Before the economic reforms of 1978, housing, as a form of welfare, was constructed and allocated by the state or through work units, while the market and family played limited roles in the housing supply (Wu, 1996; Zhu, 2000). In the years that followed, the privatization of work-unit housing, rental reform and marketized housing finance were implemented to establish a private housing market. In 1998, in-kind housing allocation was terminated, representing an important turning point in China's housing reform. The focus of housing policy shifted to the construction of a housing system dominated by homeownership with the market gradually becoming the primary means to achieve homeownership.

Following these decades of reform, China has transformed into a market-oriented homeowner society, where household homeownership rates in urban China have reached about 80 % (Clark et al., 2021). For young people, homeownership access has become tightly aligned with transitions into adulthood and family formation, while it is further often determinant for accessing welfare services provided by local governments. Meanwhile, young people in China, on average, enter homeownership at a significantly earlier age than their counterparts in many Western countries (Mu et al., 2021). According to CHFS 2017 data, the homeownership rate among young adults aged 28–37 was over 60 % (Clark et al., 2021). While the dream of becoming homeowners has become central to contemporary China, skyrocketing house prices have made affordability a major issue for young people in major cities. The repayment-to-income ratios in 2018 in Shanghai, Beijing, Shenzhen, Xiamen were >100 % (Li et al., 2020). In overcoming affordability barriers, young adults resort to increasing support from their parents in achieving homeownership (Cui et al., 2020; Deng et al., 2020). Traditional familialistic values in China that place expectations for parents to assist their adult children in establishing a home, have remained, if not been amplified, over the course of the urban housing reform (Or, 2018; Zhang & Bian, 2021).

Previous literature in China has clearly found that young adults receiving financial support from family are more likely to become homeowners (Zhang & Bian, 2021). Meanwhile, strong disparities in the socioeconomic position of parents implies different abilities of parents to provide help (Deng et al., 2016). Beyond income and education, employment in the public sector, CCP membership,[2] and/or local residential registration ('*local hukou*'[3]) are important markers of socioeconomic privilege both before and during the transitional period of housing reform in the Chinese context (Huang & Clark, 2002). Crucially, such households were likely to benefit more from the previous privatization of public rental housing and thus are more capable to help their adult children (Or, 2018).

While most studies in China centred on homeownership or its broader differences with rental, considering more detailed housing tenure arrangements is valuable in understanding the reproduction of housing inequality across generations. Unlike counterparts in many English-speaking liberal economies, it is not uncommon for young people in China, following traditional familialistic expectations, to stay in the parental home for extended periods until they are capable of

[1] The housing reforms towards a marketized system have specifically applied to 'urban' China. This official designation includes large areas of the country, extending beyond conventional urban boundaries. While housing markets in 'urban China' now operate similarly to the market systems of Western countries, housing in rural areas remains mainly self-built, cooperatively-owned, and/or cannot be traded formally.

[2] '*CCP membership*' refers to being a member of Chinese Communist Party.

[3] '*Hukou*' refers to the household registration system in China, which is not only a tool for basic social management but also closely related to the allocation of resources in the society.

Table 1
Profile of respondents in the dataset (n = 501).

	Percent/mean
Information of respondents	
Age (20–39)	31.35
Male	44.71 %
Married	60.28 %
Educational level	
Lower (High school and below)	17.17 %
Middle (College)	26.35 %
Higher (Bachelor and above)	56.49 %
Employment in public sector	30.34 %
CCP membership	12.57 %
Local hukou at birth	67.47 %
Local hukou currently	71.26 %
Annual household income (yuan)[a]	
≤100,000	25.55 %
100,001-200,000	35.13 %
200,001-300,000	23.55 %
> 300,001	15.77 %
Parental background of respondents	
Parents' educational level	
Lower (Middle high school and below)	42.12 %
Middle (High school)	41.92 %
Higher (College and above)	15.97 %
Parents' employment in public sector	56.49 %
Parents' CCP membership	14.17 %
Parents' local hukou	67.47 %
Parents' tenure when respondents were 14 years old	
Rental	16.57 %
Single homeownership	73.65 %
Multiple homeownership	9.78 %

[a] The exchange rate of RMB against the U.S. dollar is around 0.145 in 2019 (i.e. ¥100,000 = US$14,500).

purchasing housing or moving out to establish a new family (Yin, 2010). Moreover, it is also more common for Chinese parents to invest in multiple homeownership with the aim of providing a dwelling directly for their adult children, particularly for sons (Huang et al., 2020).

3. Spatially-differentiated housing markets

While research remains more limited, the spatial dimension of housing markets may play an important role in intensifying housing inequalities both at the individual level and through intergenerational reproduction of advantage. Spatial inequality in housing markets is a primary and, arguably, intensifying driver of rising housing wealth inequality (Arundel & Hochstenbach, 2020). Residential location can be a key determinant for the extent and rate of housing wealth accumulation. While substantial research has found the significant influence of parental background on young adults' homeownership access, limited research has investigated how parental background affect young people's housing location outcomes across spatially-differentiated housing (sub)markets. Those studies that exist have revealed that differentiated parental wealth backgrounds contribute to spatially uneven residential outcomes among young people (Arundel & Hochstenbach, 2020; Hochstenbach, 2018; Hochstenbach & Boterman, 2017). While Western European countries have received some attention, evidence from other contexts with different social, economic, and political arrangements is needed.

In China, at the macro-scale, there is first significant spatial housing wealth inequality between urban and rural China (Wang et al., 2020). The marketization of housing in the Chinese context has only been fully rolled out in 'urban China' and this has helped urban households accelerate their wealth accumulation through higher capital gains. Second, there are significant differences in house values between cities, with an institutionalized system of urban hierarchical in the Chinese context, namely first-tier cities, second-tier, third-tier etc. (Wang, 2019). In addition, the transformation of housing markets — through ongoing marketization and financialization — has exacerbated spatial differentiation, with the most significant housing value growth concentrated in the most developed cities (i.e. first-tier), implying differences in housing wealth accumulation between cities. Thirdly, as in international contexts, stark differences in housing prices and price developments exist between housing submarkets within the same city, associated with different locational characteristics (i.e., proximity to services, distance from urban core) as well as housing types (i.e., size, amenities, and age) (see Liang et al., 2018).

In the Chinese context, the dynamics of the urban housing reform, intertwine with these inequalities at different geographical scales to intensify the differentiation of housing wealth (and accumulation potential) at the household level. In the initial stages of housing reform, previously public rental housing was sold with a heavy discount to sitting tenants who were mainly employees in work-units (Lee & Zhu, 2006). Within one city, households were further sorted into different housing submarkets. Those employed by work-units and with better institutional resources initially benefited the most during the privatization process and were more likely to access homeownership in central and high-value locations (Yi & Huang, 2014). Alongside this process, the ongoing housing marketisation saw particularly those with better social and financial abilities investing in select more desirable spatial housing (sub)markets with, potentially, more stability in the face of downturns or higher value appreciation. Through these mechanisms, the geographical differentiations of housing (sub)markets can contribute to the wealth inequalities at the household level over the longer-term. As housing assets have become the largest component of family wealth, people coming from different housing (sub)markets indicates significant differences in the accumulated housing wealth.

4. Data and methods

4.1. Data

The data for this research is derived from a survey on 'Housing and Living space for Urban Residents' conducted over 2018 and 2019 in Shanghai by a research group at a university in Shanghai. Shanghai as one of the largest and most rapidly urbanizing cities in China provides a particularly salient case for this research. Following successive periods of housing reform, the housing market in Shanghai has experienced an unprecedent boom and is now one of the most expensive markets in the world (Chen et al., 2010). Investigating housing inequalities in such a market facing both intensified housing wealth accumulation (i.e. for the parental generation) and affordability constraints (i.e. for the younger generation) offers important insights into the dynamics of urban housing challenges and intergenerational support. While Shanghai presents an especially 'hot' market, these dynamics resonate beyond the city's borders across other major urban housing markets.

This survey targeted household heads or their spouses who were between 18 and 60 years old and had lived in the surveyed neighbourhoods for more than six months. Collected information included questions on housing trajectories, family, employment, health. The geographical scope of this survey was concentrated on both the central area of Shanghai and its surrounding built-up suburbs.[4] Due to the survey being residence-based and limited to formal neighbourhoods, we recognize that it was challenging to reach a significant number of migrants residing in informal housing, such as factory dormitories or 'urban villages'. Consequently, the respondents were biased towards residents with a local hukou, higher education levels and being female,

[4] Shanghai has 16 districts in total. The surveyed areas fall within 13 out of the 16 districts, while the three districts of Jinshan, Fengxian and Chongming are less constructed, still largely rural and therefore excluded from this survey.

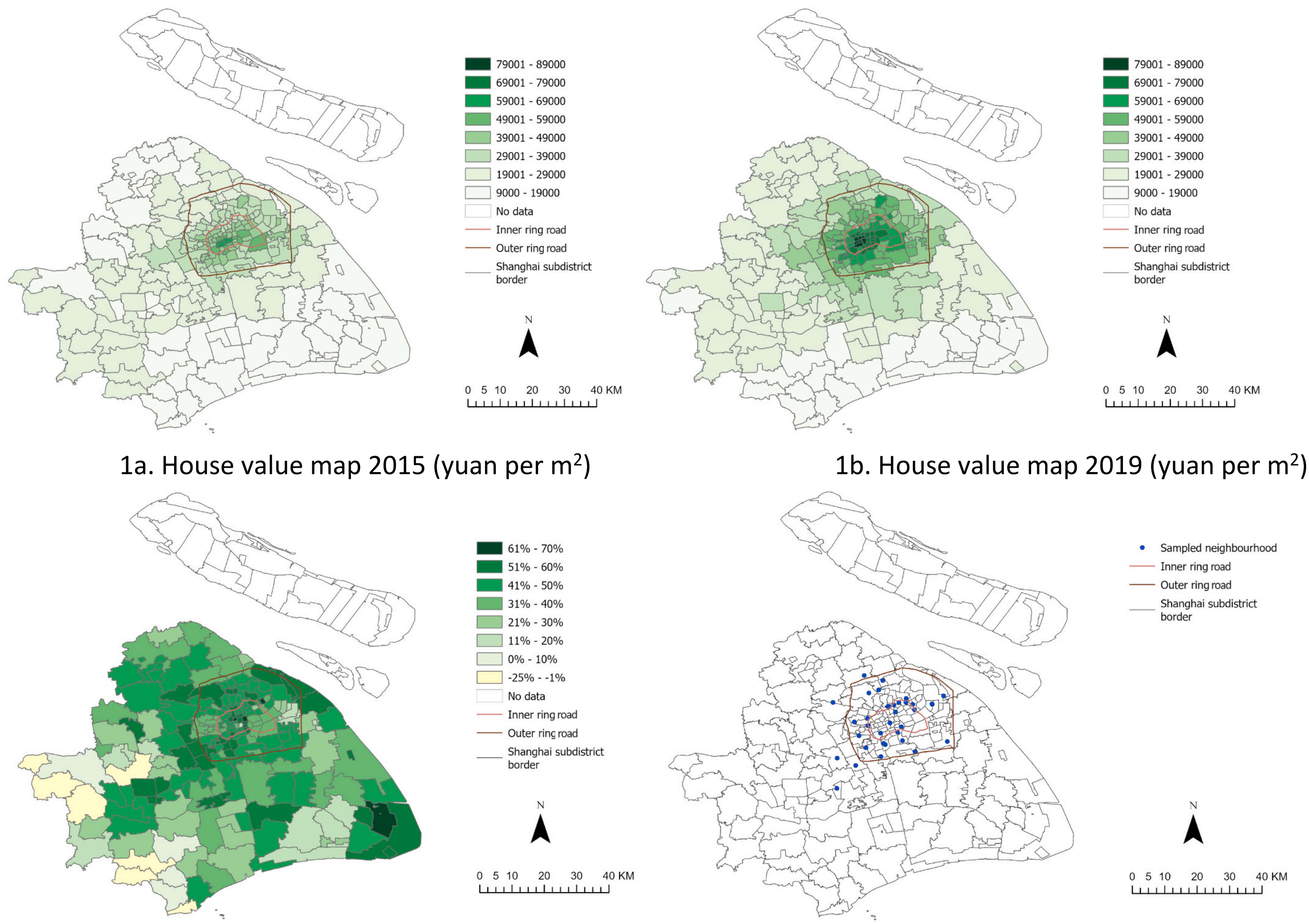


Fig. 1. Surveyed neighbourhoods and house price at subdistrict-level in Shanghai in 2015 and 2019[a].
1a. House value map 2015 (yuan per m^2), 1b. House value map 2019 (yuan per m^2)1c. House value change 2015–2019 (%), 1d. Surveyed neighbourhoods.
[a]Housing values and value change are adjusted for inflation and were all converted into 2019 values.

compared to the general population distribution as reported in the Seventh Census conducted in 2020.

Regarding sampling process, districts were chosen as a first strata, whereby a four-stage sampling, including subdistricts,[5] neighbourhood committees,[6] neighbourhoods, and households, were then used to select respondents. The stratification by districts makes the sample points relatively scattered, which is conducive to improving the overall representativeness of the sample and consideration of locational diversity in residential outcomes. At the first stage, the number of subdistricts to be sampled within each district was calculated using the total number of subdistricts in each district divided by five and then rounded up. Then, subdistricts were selected using probability proportional-to-size sampling according to residential population density. At the second stage, in each selected subdistrict, random sampling was applied to select one neighbourhood committee from a list of all neighbourhood committees. At the third stage, the neighbourhoods where the selected committees were located were then chosen whenever possible. However, as many neighbourhoods in Shanghai are 'gated developments,' sometimes entry was not able to be arranged. In cases where the survey team was not allowed to enter a sampled neighbourhood, a similar neighbourhood nearby would be chosen. At the final stage, within each neighbourhood, around 70 households were selected based on a random sampling of their apartment numbers. At the end, approximately 35 households were interviewed face-to-face in each neighbourhood representing an estimated response rate of about 50 %. The interviews were conducted by a team of professional investigators from commercial companies, assisted by a group of university students from related disciplines to ensure the survey quality for academic research. During each interview, the interviewers read questions on their tablets and filled out the questionnaire in the system based on the oral answers from respondents. In total, there are 1038 respondents with valid information.

For this research, we are interested in housing outcomes of young people and focus on respondents between 20 and 39 years old. After limiting the sample to this age range and excluding a small number lacking necessary variables, 501 respondents were selected for further analysis. Given the age selection, this group was all born after the start of the opening-up and reforms post-1978. Their parents thus experienced and often directly benefited from the period of housing reforms and development of the housing market. The descriptive profile for the selected dataset is listed in Table 1. Weights were not used in the analysis.

4.2. Key variables

This research aims to investigate the impact of parental background

[5] Subdistrict as an administrative level in Chinese context includes *jiedao* ('街道' in Madrian) and townships.

[6] Based on a report on Youth Daily in 2020, a neighbourhood committee in Shanghai on average includes 1363 households. (see: http://www.why.com.cn/wx/article/2020/02/02/15806505521057440192.html

on young adults' tenure and spatial outcomes. Young people in this survey were asked about their current and previous six residential arrangements in Shanghai occurring after the age of 18-years-old, lasting for more than half a year, and excluding living in university dormitories. As the research is focussed on outcomes, the key dependent variables include their current – at time of survey – housing tenure and residential location. Whether young people hold the ownership title of their houses or not forms the basis for the categorization of their tenure outcomes. Tenure categories thus include homeowners, renters, and living in parental-owned housing.[7] The latter category, in comparison to the other two, refers to the situation where young people reported to be in homeownership but in actuality were residing in houses titled under the name of their parent(s). This classification is valuable in considering the familialistic practices in the Chinese context of parents investing in additional homeownership for their children or sharing their houses with adult children who do not (yet) live independently.

In assessing locational outcome, the analyses examine this in relation to housing values across Shanghai, drawing on a large transaction dataset for existing dwellings from one of the biggest property brokerage companies in China, *Lianjia*. From this dataset, we were able to generate a spatial housing value map for Shanghai for 2015 and 2019 at the level of administrative subdistricts ('*jiedao*' in Madrian), thus representing our spatially-differentiated housing submarkets. Values were standardized to *yuans* per square metre and corrected for inflation across the two years. Only the Northern island district of Chongming was excluded due to its low-density and lack of sufficient transactions. Empirical Bayesian Kriging in ArcGIS was applied to interpolate geographical housing values across Metropolitan Shanghai based on transaction prices per m^2 at different neighbourhoods. Fig. 1 shows housing value maps in 2015 (1a) and 2019 (1b). House value changes were then calculated based on the increase/decrease of interpolated values over 2015–2019, as a percentage change from 2015, as shown in Fig. 1c. Lastly, Fig. 1d shows an overview of the location of surveyed neighbourhoods in our dataset.

As shown in Fig. 1a and b, house values per m^2 tend to decrease from the city centre outwards to the surrounding areas. Meanwhile, differences between the house value maps for 2015 and 2019 show an expansion of the higher value areas outwards. This is reflected to a certain extent in the map of housing value changes over 2015–2019 in relative percentages, albeit the pattern appears more complicated. The submarkets that experienced the strongest percentage increases tend to be in the regions with middle to relatively lower valued houses alongside a pattern of higher value increases radiating along axes of development North and West of the centre. To assess the spatial disparities of housing values and their developments among young adults' residential locations, this study classifies housing submarkets as being in the top 30 % of submarkets either in terms of (1) housing value in 2019 and (2) percentage value change 2015–2019 (versus all other submarkets: the bottom 70 %). The 30:70 break was selected in consideration of the distribution of the data. Given the more limited coverage of neighbourhoods in our survey compared to all neighbourhoods in Shanghai, the number of respondents in the top 10 % or 20 % housing submarkets in terms of housing values and changes was small. By using the 30:70 cut, we achieve a more natural break in the data, making the analysis more robust and representative of the housing market dynamics, while still highlighting significant differences in housing values and changes between different submarkets.

The key variables on parental background include housing tenure, hukou status (local or non-local), CCP membership, education level, and employment sector. Family financial support for homeownership is also available in our dataset where respondents reported a direct transfer of parental resources in assisting with the purchase of their dwelling. While we examine this among homeowners, we are not able to include this measure in the analyses of all respondents, given that it is unavailable for non-homeowners. This variable is nonetheless highly correlated with other parental characteristics supporting their inclusion instead for other analyses. Most parental socioeconomic characteristics are based on the parents' current situation, except in cases where they have passed away, in which case the situation when respondents were 14 years old is provided. The exception is with parents' tenure position which is always based on the situation when the respondents were 14 years old. This is useful as it provides a stronger differentiation among parents at an early stage in their housing careers. Finally, several key variables on the young adults' demographic and socioeconomic characteristics are controlled for in the modelling analyses, including gender, age, marital status, CCP membership, employment sector, education, and income.

4.3. Methods

This research first, through descriptive analysis, looks at the young people's residential arrangements and differentiated tenure and location outcomes according to parental background. We subsequently use multinomial logistic regression analysis to examine the influence of parental background on young people's tenure and location outcome after controlling for young adults' demographic and socioeconomic variables. The model specification is as follows:

$$ln\left(\frac{P(Y = j|X = x)}{P(Y = J|X = x)}\right) = \alpha_j + \sum_{i=1}^{n} \beta_{ji} x_i$$

Where x_i includes parental background and characteristics for a given individual. *P* is the probability of a given individual having a certain housing outcome *j*. Housing outcome *J* is set as the base outcome.

5. Results

5.1. Young people's residential arrangement

This research first examines the tenure arrangement of young adults including homeowners, renters and those living in parental-owned housing. Additionally, homeowners who received family financial support when they bought the houses are separately listed. Table 2 shows that homeownership is the primary tenure type for Chinese young adults. As the data also reveals, nearly half of young adults became homeowners directly as their first housing arrangement after 18. This is consistent with previous research showing that Chinese enter homeownership earlier compared to most of their counterparts in Western countries (Mu et al., 2021). Despite the dominance of homeownership among young people, the increasingly expensive housing market compared to young adults' income implies a strong reliance on family resources to access homeownership. As shown, around 15 % of the full sample received financial support from their family for homeownership (i.e. representing about a third of those who went directly into homeownership). Moreover, while 21.36 % of the full sample started their housing trajectory in parental-owned housing, 7.39 % of the full sample lived independently in houses provided by their parents.

As seen in Table 2, young adults' previous tenure is informative in indicating their subsequent housing trajectory. For those who did not become homeowners directly, living in parental-owned housing appears as a potential strategy to save money for future homeownership, given the relatively high share making that direct transition. Compared to their first housing tenure, there was an increase of 18.77 percentage-points in young people being homeowners in their current dwelling (at time of survey) with the share in the rental sector decreasing to around 25 %. Meanwhile, the share of young adults receiving family financial support also increased by around 10 percentage points to one

[7] Young people who hold the ownership title of their property while also living with parents (i.e. their parents have moved into their property), are categorized under 'homeowners', as their ownership title is key to capturing (potential) housing wealth accumulation, over the household composition of co-residence.

Table 2
Residential arrangements for young adults (n = 501).

	Percent of all respondents
Housing tenure for first housing after 18 years old [a]	
Homeowners	47.90 %
Homeownership accessed with family financial support	14.77 %
Renters	30.74 %
Living in parental-owned housing	21.36 %
Independently living in parental-owned housing	7.39 %
Housing tenure for current housing at time of survey	
Homeowners	66.67 %
Homeownership accessed with family financial support	25.55 %
Renters	24.95 %
Living in parental-owned housing	8.38 %
Independently living in parental-owned housing	1.60 %
Changes from first to current housing	
Continual homeowner	46.91 %
Continual renter	22.56 %
Living in parental-owned housing >> homeowner	12.38 %
Continual living in parental-owned housing	7.39 %
Renter >> homeowner	7.39 %
Living in parental-owned housing >> renter	1.60 %
Homeowner >> renter	0.80 %
Renter >> living in parental-owned housing	0.80 %
Homeowner >> living in parental-owned housing	0.20 %

[a] All residential arrangements between the age of 18 to time of the survey are reported, however, with the exception of while young adults are living in student dormitories.

in four homeowners in the full sample (or nearly 40 % of the current homeowners). However, focussing on changes, we see a higher share of those who started in rental staying in rental over the reported period, pointing to a subset of the population seemingly more likely to remain in rental for the longer-term. More significant shifts appeared among young adults who started their housing trajectory living in parental-owned housing. This group observed a decrease from over 20 % at first residential experience to only 8.38 % at the time of the survey. This finding suggests that young adults who live rent-free in parental-owned housing have a higher chance of transitioning into homeownership compared to their counterparts in the rental sector. This supports similar arguments made in other contexts regarding the advantages of parental co-residence in helping young adults save money to buy a home (Worth, 2021).

5.2. *Parents' influence on young people's housing tenure outcomes*

Our subsequent focus turns to an examination of the impacts of parents' socioeconomic and tenure characteristics on young people's housing outcomes. In the Chinese context, parents in public sector employment, having a CCP membership and holding a local hukou registration are likely to have benefitted more during the privatization of housing in gaining access to higher quality and better situated dwellings (Wang, 2000; Zhu, 2000). We also look at parental education, income and their tenure position when children were 14 years old in assessing the potential intergenerational transmission of broader socioeconomic advantage. Fig. 2 presents young adults' current tenure at time of survey in relation to their parent's characteristics.

As shown in Fig. 2, young adults with more advantaged parental backgrounds had overall a stronger propensity of having entered homeownership while less likely to be renters. Homeownership rates were higher among young adults whose parents are better educated, work in the public sector, hold CCP membership, have a local hukou, and are multiple homeowners. The sharpest contrast can be seen between those whose parents have a local versus non-local hukou status. Parents having a local hukou implies they are more likely to have accessed housing in Shanghai and accumulated wealth locally which can

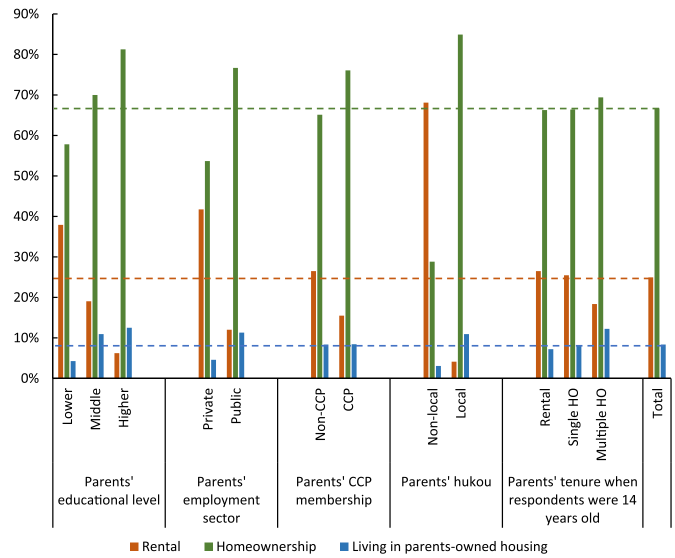


Fig. 2. Young adults' current housing tenure by parental background.
Note: Dashed lines indicate total sample averages for comparison.

then be easily transferred to the younger generation. Conversely, discriminatory hukou-based policies have often prevented migrant parents with non-local hukou status from purchasing houses in Shanghai (Wang, 2018). Additionally, a share of young adults with non-local parents will also have non-local status themselves (albeit not all). Interestingly, we find only a negligible difference in homeownership attainment between individuals whose parents had single homeownership versus those in the rental sector. Those whose parents were multiple homeowners, however, exhibited a clear advantage in achieving homeownership themselves. Fig. 2 also illustrates that the relationship between being in rental and parental background follows a clear opposite pattern than homeownership and is associated with less advantaged parental status across the measures.

Interestingly, our results reveal that the shares living in parental-owned housing are greater for young adults with more advantaged parental backgrounds. This is especially clear for those whose parents are more highly educated and have a local hukou where the proportions living in parental-owned housing were even higher than rental. Similarly, we see noticeably larger proportions of young adults living in parental-owned housing for those whose parents are in public employment. The difference attributable to CCP membership was negligible and we find once more that parental tenure position only appears to matter when they reported being multiple homeowners. Multiple homeownership would, of course, directly confirm the availability of an additional parental-owned dwelling where their children could reside. This implies that more privileged young Chinese adults may choose not to invest in homeownership (or postpone the decision), when they are able to live in homes bought by their parents. It is important to remember that the survey measured parental tenure at the time of the respondents being children and therefore previous renter and single homeowner parents may currently own properties where their children can reside, alongside some respondents potentially living in dwellings owned by other relatives.

5.2.1. *Multinomial regression model predicting tenure*

To investigate the relationship between socioeconomic characteristics and parental resources with tenure outcomes, we subsequently run multinomial logistic regression models based on the outcome of current tenure at time of survey. The results are shown in Table 3.

When controlling for young people's characteristics, we find some support for significant impacts of the socioeconomic position of parents on young adults' housing tenure outcomes. As shown in Table 3, having

Table 3
Multinominal logistic regression on young people's current housing tenure (n = 501).

	Y: Current housing tenure (ref. homeowners)					
	Renters			Living in parental-owned housing		
	Coef.	S. E.	p	Coef.	S. E.	p
Parents' tenure (ref. no homeownership)						
Single homeownership	−0.085	0.469	0.856	0.213	0.517	0.681
Multiple homeownership	−1.307*	0.758	0.085	0.750	0.681	0.271
Parents' local hukou (ref. non-local)	−3.813***	0.400	0.000	−0.027	0.553	0.961
Parents' CCP membership (ref. non-CCP)	−1.299**	0.564	0.021	0.099	0.510	0.846
Parents' education level (ref. lower)						
Middle	0.115	0.389	0.767	0.675	0.460	0.142
Higher	−0.838	0.686	0.222	0.690	0.577	0.232
Parents' public employment (ref. private)	−0.136	0.379	0.720	0.503	0.413	0.223
Male (ref. female)	−0.047	0.364	0.897	0.254	0.364	0.485
Age	−0.105**	0.045	0.020	0.045	0.046	0.330
Married (ref. not married)	0.067	0.456	0.884	−1.768***	0.462	0.000
CCP (ref. non-CCP)	0.647	0.538	0.229	0.873*	0.459	0.057
Public employment (ref. private)	−0.197	0.440	0.655	−0.616	0.402	0.126
Education level (ref. lower)						
Middle	−0.841*	0.499	0.092	1.101	0.824	0.181
Higher	−1.356***	0.515	0.008	0.406	0.821	0.620
Income (ref. ≤100,000)						
100,001-200,000	−0.779*	0.424	0.066	0.102	0.517	0.844
200,001-300,000	−1.626***	0.516	0.002	−0.104	0.586	0.860
> 300,001	−2.024***	0.577	0.000	−0.401	0.644	0.533
Pseudo R^2	0.420					

[*] significance at p=0.1 level.
[**] significance at p=0.05 level
[***] significance at p=0.01 level.

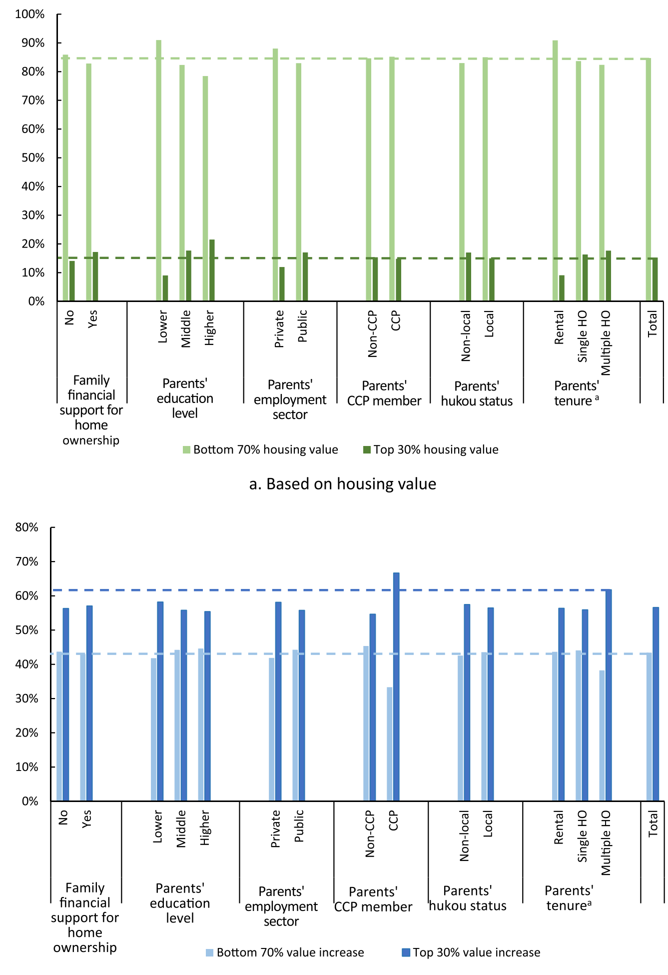
parents who are multiple homeowners, registered with a local hukou, and CCP members significantly correlates with higher probabilities of young adults entering homeownership over rental while holding other explanatory variables constant. According to estimated average marginal effects (Appendix 1a), compared to young adults whose parents have no homeownership, those whose parents have multiple homeownership are 9.65 % less likely to enter rental over other tenure types with the effect of parents being CCP members is similar (9.17 %). Significantly, young adults whose parents have a local hukou are about 50 % less likely to rent in terms of estimated marginal effects. This supports the notion of an intergenerational transmission of socioeconomic advantage through housing tenure. Our regression modelling doesn't, however, indicate additional significant impacts for parental education level or employment sector on their children's tenure outcomes. Interestingly, there aren't significant differences between living in parental-owned housing versus homeownership explained by parental socioeconomic position. This supports the notion that, in the Chinese context, both direct homeownership and living in housing owned by parents are similarly indicators of privilege and potentially equally applied strategies among those able to access these tenures. The clearest exception is in relation to marital status where married respondents are significantly more likely to own themselves rather than live in parental-owned housing. This is in line with both the need for stronger independence associated with family formation and the normative expectations of homeownership at marriage within the Chinese context (Mu et al., 2021).

Among control variables, we find further relationships in accordance with previous literature. As with marriage, increasing age encourages the advance of housing trajectories into homeownership. Education and income are similarly significant determinants of young adults' homeownership access and represent indicators of competitiveness within an increasingly marketized Chinese housing system (Clark et al., 2021). CCP membership of young adults is only significantly associated with living in parental-owned housing rather than becoming a homeowner. This may reflect the shifting influence of CCP membership. While it may have provided advantages to the parental generation, including in acquiring better housing in the reform periods of housing privatization (Huang & Clark, 2002), CCP membership may no longer be associated with the most privileged within an increasingly marketized Chinese economy, at least with regards to housing tenure outcomes.

5.3. Parental backgrounds and young adults' location outcomes

Our second focus of the analysis examines individual and parental resources' influence on residential location. This consideration of the spatial differentiation of housing markets presents an additionally novel understanding of intergenerational dynamics of housing inequality. Here, we consider the access of young people to spatially-differentiated housing submarkets in terms of local housing values and changes in housing values. We then assess the distribution of young homeowners across these in relations to their parents' socioeconomic characteristics. Fig. 3a first looks at location outcomes based on housing submarket value in 2019, with Fig. 3b then considering housing value change from 2015 to 2019. Our initial descriptive analyses support the notion that parental background structures not only young adult's access to homeownership but also spatial outcomes of where they enter the housing market.

Looking at residential location in terms of housing value among homeowners (Fig. 3a), greater shares of young adults who received family financial support entered top 30 % housing value housing submarkets, relative to the total distribution, with the opposite the case for those without support. When it comes to parents' socioeconomic characteristics, we find that having parents with a higher educational attainment, employed in the public sector and being homeowners showed the clearest relative advantage in entering higher value submarkets. These findings indicate that family financial support for homeownership and parents' socioeconomic characteristics further structure young adults' differentiated spatial trajectories across housing submarkets. However, CCP membership did not imply any important difference in locational outcome and, surprisingly, young homeowners



a. Based on housing value

b. Based on housing value increase

Fig. 3. Young homeowners' current residential locational outcomes by parental background.
3a. Based on housing value, 3b. Based on housing value increase.
Note: Dashed lines indicate total sample averages for comparison.
[a]Parents' housing tenure when respondents were 14 years old.

with non-local parents were more likely to enter the more expensive housing submarkets. While unexpected, it is important to note that this is a very select subset of this group, since a non-local hukou is related to much lower homeownership rates in the first place (as seen in Fig. 2).

In terms of the change in local housing submarket values, we find that more young adult homeowners were concentrated in housing markets with top 30 % value increases (Fig. 3b) – despite being more concentrated in districts with lower overall values as was shown above. As seen in Fig. 3b, we only see a very minimal difference in entering housing submarkets with top 30 % value increases between those that received family support for homeownership and those that didn't. Turning to our measures of parental socioeconomic characteristics, we find mixed results. On the one hand, we find that those whose parents hold a CCP membership and have multiple homeownership show a clear advantage in entering top 30 % most increasing submarkets. On the other hand, we see an unexpected reverse relationship in terms of both parental education and employment sector in young adults' access to submarkets with a higher relative gain. Finally, we do not see here a noticeable disadvantage for non-local parental hukou in locational outcome, albeit again this represents a small subset since having non-local parents is related to much lower homeownership overall.

5.3.1. *Multinomial regression model predicting residential location*

From the descriptive analyses above, we could see some apparent relationships between parental background and young adults' location outcomes. We subsequently run multinomial logistic regression models based on locational outcomes in terms of submarket housing value and relative value increases (Table 4). The models are thus able to examine the impact of parental measures while also controlling for young adults' individual characteristics. As noted in our methods, we are not able to include family financial support given that this variable is not measured for non-homeowners and we look here at comparisons across the three tenure categories.

Turning to the outcome of the submarket housing value (Table 4, left-side), the results indicate that parental background show limited significant relationships beyond individual characteristics. When looking at our set of parental characteristics, we find only some significance in terms of parental hukou and CCP membership on not being a homeowner (versus being a homeowner in the bottom 70 %). This primarily corroborates the main difference between accessing homeownership or not, as seen in our previous model on tenure outcomes (Table 3). However, we do not find any significance of parental variables on the difference of being in the top 30 % versus bottom 70 % of housing value market.

Our next model (Table 4, right-side) looks at the outcome of local housing value change over the studied period. The model examines how individual and parental variables predict being in either no homeownership or the top 30 % of submarkets based on housing value gain (compared to the bottom 70 % submarkets). Here, we see that parental hukou status acts as a significant determinant of entering homeownership versus being in the bottom 70 %, echoing differences found in Table 3. However, other parental characteristics are largely insignificant across the model. The interesting exception here is parental CCP membership which does appear to provide a significant advantage, beyond other parental and individual variables, in entering submarkets with the highest housing value gains. According to estimated average marginal effects (Appendix 1c), young adults whose parents have CCP membership are over 15 % more likely to enter housing submarkets with the highest housing value gains. This motivates the need for further research in untangling why particularly parental CCP membership may correlate with an increased likelihood for entering higher-gain submarkets.

Our models further reveal effects of individual level characteristics in terms of locational outcomes of young adult homeownership. Beyond the clear and expected impact of better socioeconomic status indicators on accessing homeownership itself, we find some significant relationships between individual measures and being in the top 30 % valued submarkets in terms of higher income, which, as expected, enable entry into pricier submarkets. Somewhat surprisingly, our models on value change didn't show any clear correlations with individual characteristics. As additional investigations, we also ran models without controlling for young adults' individual characteristic.[8] The results show that parents' higher education is significantly related to young adults' access to high value housing submarket, and parents' CCP membership related to higher value increases. However, the influence of parents' education become insignificant after considering young adults' socioeconomic position, while young adults' income exerts significant impact on the value of housing submarkets. One explanation could be the correlation between parents' education and young people's income.

Our analyses of spatial outcomes thus indicate limited impacts of parents' socioeconomic characteristics on young adults' housing location outcome when controlling for individual characteristics, despite descriptive analyses implying relationships between them.

[8] The results are not listed in this article due to the word limit and can be provided per request.

Table 4
Multinominal logistic regression on young adults' current locational outcome (n = 501).

	Y: Housing value (ref. bottom 70 % housing value)						Y: Housing value increase (ref. bottom 70 % value increase)					
	No homeownership[a]			Top 30 % housing value			No homeownership [a]			Top 30 % value increase		
	Coef.	S. E.	p	Coef.	S. E.	p	Coef.	S. E.	p	Coef.	S. E.	p
Parents' housing tenure (ref. no homeownership)												
Single homeownership	0.118	0.345	0.734	0.446	0.526	0.397	0.075	0.385	0.845	0.001	0.319	0.998
Multiple homeownership	−0.197	0.547	0.719	0.292	0.712	0.682	−0.150	0.604	0.803	0.084	0.479	0.860
Parents' local hukou (ref. non-local)	−2.633***	0.300	0.000	−0.443	0.475	0.350	−2.475***	0.347	0.000	0.180	0.349	0.606
Parents' CCP membership (ref. non-CCP)	−0.678*	0.405	0.094	−0.021	0.453	0.962	−0.304	0.451	0.500	0.625*	0.330	0.058
Parents' education level (ref. lower)												
Middle	0.317	0.303	0.295	0.509	0.419	0.224	0.182	0.336	0.589	−0.117	0.276	0.672
Higher	0.125	0.449	0.781	0.546	0.507	0.282	−0.081	0.483	0.866	−0.204	0.364	0.576
Parents' public employment (ref. private)	0.115	0.283	0.685	0.395	0.374	0.290	0.014	0.312	0.965	−0.083	0.255	0.744
Male (ref. female)	0.116	0.265	0.661	0.129	0.342	0.707	0.098	0.292	0.738	0.005	0.242	0.982
Age	−0.040	0.033	0.223	0.025	0.044	0.564	−0.040	0.037	0.272	0.004	0.031	0.893
Married (ref. not married)	−0.757**	0.328	0.021	−0.514	0.434	0.237	−0.665*	0.366	0.069	0.073	0.308	0.813
CCP (ref. non-CCP)	0.600	0.368	0.104	−0.997	0.639	0.119	0.714*	0.413	0.084	0.013	0.347	0.971
Public employment (ref. private)	−0.255	0.294	0.385	0.312	0.345	0.366	−0.344	0.318	0.278	−0.093	0.247	0.708
Education level (ref. lower)												
Middle	−0.275	0.382	0.472	0.657	0.832	0.429	0.025	0.448	0.955	0.625	0.439	0.154
Higher	−0.820**	0.392	0.037	0.568	0.798	0.477	−0.811*	0.442	0.067	0.090	0.417	0.830
Income (ref. ≤100,000)												
100,001-200,000	−0.533	0.326	0.102	0.312	0.690	0.651	−0.721*	0.375	0.055	−0.332	0.353	0.348
200,001-300,000	−0.979**	0.395	0.013	1.192*	0.684	0.081	−1.139**	0.444	0.010	−0.013	0.384	0.973
>300,001	−1.308***	0.448	0.003	1.431**	0.699	0.041	−1.133**	0.512	0.027	0.620	0.424	0.143
Pseudo R^2	0.260						0.210					

[a] No homeownership includes rental and living in parental-owned housing mentioned in the beginning of analysis.
* significance at p=0.1 level.
** significance at p=0.05 level.
*** significance at p=0.01 level.

6. Discussion and conclusion

The increasing dependence of young adults on their parents to access homeownership has received substantial attention and promoted wider interest in the intergenerational transfer of housing inequality. Building on a burgeoning literature, this research makes its contribution by considering differentiation in terms of both housing tenure outcomes and residential location. Urban China presents a salient context where differentiated advantage from past housing reforms might be passed on to children within an increasingly marketized housing context (Or, 2018). Through an examination of detailed survey data in Shanghai, it is revealed that Chinese young people, overall, are most likely to enter homeownership at the start of their residential trajectories. This is different from their counterparts in many Western contexts where traditional housing trajectories commonly begin in rental housing (McKee et al., 2017). However, as housing markets have become increasingly unaffordable, maintaining normative expectations of early homeownership has promoted a strong reliance on family support to navigate the housing market.

The importance of parental support in young adults' homeownership access has been discussed by several other scholars (Druta & Ronald, 2018; Gentili & Hoekstra, 2021; Köppe, 2018; Mulder et al., 2015). In the context of Shanghai, a major Chinese metropolitan area, our findings also underscore the significant influence of parental background on young adults' transition into homeownership. However, our study moves beyond the conventional binary of rental versus homeownership and delves into the significance of other tenure arrangements in mediating parental resources. This exploration is particularly pertinent in the context of China's familialistic culture, where direct parental housing support and co-residence are commonly observed. Our findings reveal that young people living in houses owned by parents represents a form of housing 'privilege' (see Worth, 2021). This alternative housing arrangement, on the one hand, could be viewed as a preferred option for young individuals facing barriers to becoming homeowners directly and might provide a better chance to transition into homeownership in the future. On the other hand, it could also reflect the diverse ways for parents who own (multiple) houses to support their children's access to homeownership. This is especially true for the group of young people who live independently in parental-owned houses. Moreover, the clear correlation in the Shanghai's context between a more advantaged parental background and living in parental-owned housing further nuances literature from many Western contexts which posits that young people with relatively worse socioeconomic positions fail to launch from the parental home (Arundel & Ronald, 2015; Ronald, 2018).

Examining young adults' housing outcomes in spatially-differentiated housing (sub)markets, young adults appear less concentrated overall in submarkets with the highest values, however, they are disproportionately found in areas with stronger housing wealth accumulation over time. This reflects the fact that young people tend to buy into relatively more affordable housing submarkets in cities – with the potential to grow – rather than already established expensive areas. This helps to understand the limited influence of parental background on young adults' access to local submarkets with higher housing value, as parents are also helping young people buy into relatively less valuable housing submarkets. It is noteworthy that entry to expensive housing submarkets is related to the socioeconomic position of the young adults. Nonetheless, young adults with higher market competence are more likely to come from better family backgrounds following classic processes of intergenerational mobility. Meanwhile, the pattern of young people accessing housing submarkets with different value increase is more complicated. Only parents' CCP membership exerts a positive impact. This provides some corroboration – albeit limited – of research in other contexts that has found that young adults with advantaged parental backgrounds are more likely to enter housing submarkets experiencing upgrading or gentrification processes (Hochstenbach, 2018).

Further research would prove useful in supporting the exploratory findings presented here and in teasing out some of the tentative spatial dynamics uncovered in our analyses, particularly given some limitations in the currently available data. A wider geographical coverage in the sample of respondents would more robustly investigate disparities in housing values across the broader Shanghai metropolitan area (or another region). Relatedly, a larger sample size overall would be valuable in future research in further assessing and confirming statistical relationships. Finally, analyses that are able to trace the geographical trajectories of parents' housing could allow examination of the intergenerational implications of their own housing wealth accumulation through spatially-differentiated housing (sub)markets.

Nonetheless, the research offers some valuable insight into the dynamics of intergenerational transmission of housing inequality within the urban Chinese context. In addition to the important impacts of parental background on young adults' access to homeownership, the analysis has revealed that young adults' individual market competence, especially income, is also a key determinant for overall housing market entry and particularly buying in higher value housing submarkets. In contrast, markers of institutional resources including CCP membership and public employment, that to a large extent determined housing access under a system dominated by state provision, have become less significant at the individual level. It is argued that urban China has evolved, since the turn of the millennium, into a liberal regime with corporatist traits (Cui, Deng, & Lu, 2021). These findings evidence an ongoing shift from the centrality of the state to a market provision of housing and welfare, reflecting decades of market-oriented housing reform. At the same time, the role of the family has also gained in importance towards securing privatized economic security, most notably through the housing market. Family strategies thus appear increasingly mobilized in securing housing assets across generations, with our findings reflecting common trends seen across many other neoliberal economies (Ronald & Arundel, 2023).

CRediT authorship contribution statement

The research findings presented in this publication are the result of a collaborative endeavour, with each author playing a distinct role in the project. The sequence of authorship does not imply a hierarchy of contributions but reflects the shared effort that went into this work.

[Junru Cui]: Literature review; research design; quantitative analyses; interpretation of results; writing the original draft.

[Rowan Arundel]: Supervision; refining the research design; contributing to interpretation of results; review & editing.

[Can Cui]: Access to research data sources; contributing to the interpretation of results; review.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

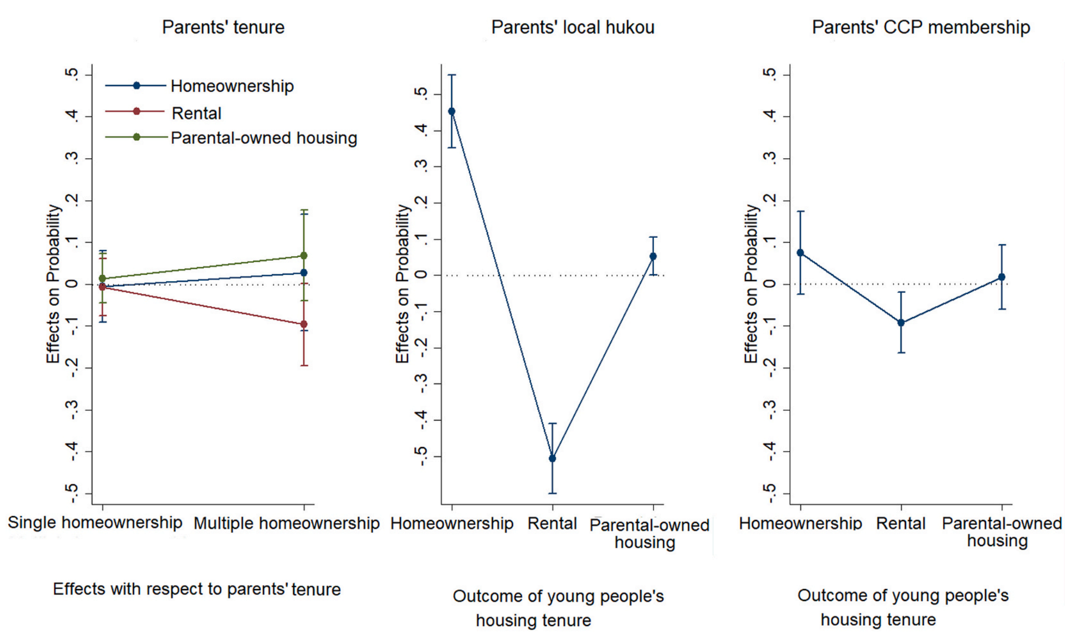
Data availability

The authors do not have permission to share data.

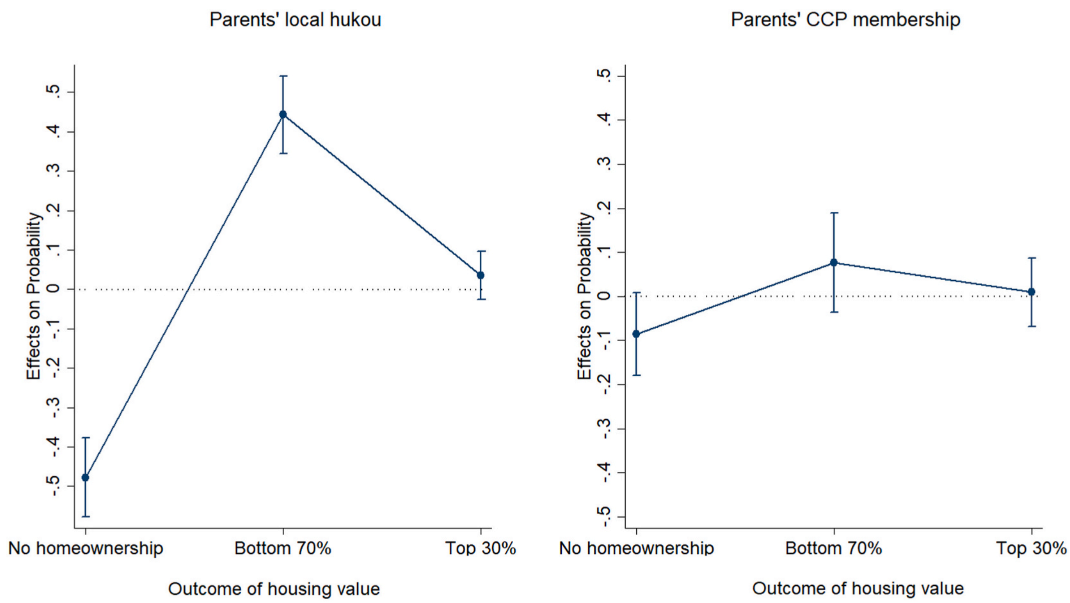
Acknowledgement

This work was supported with funding from the China Scholarship Council under Grant No. 202006140013; and the Dutch Research Council under Grant Vl.Veni.201S.031.

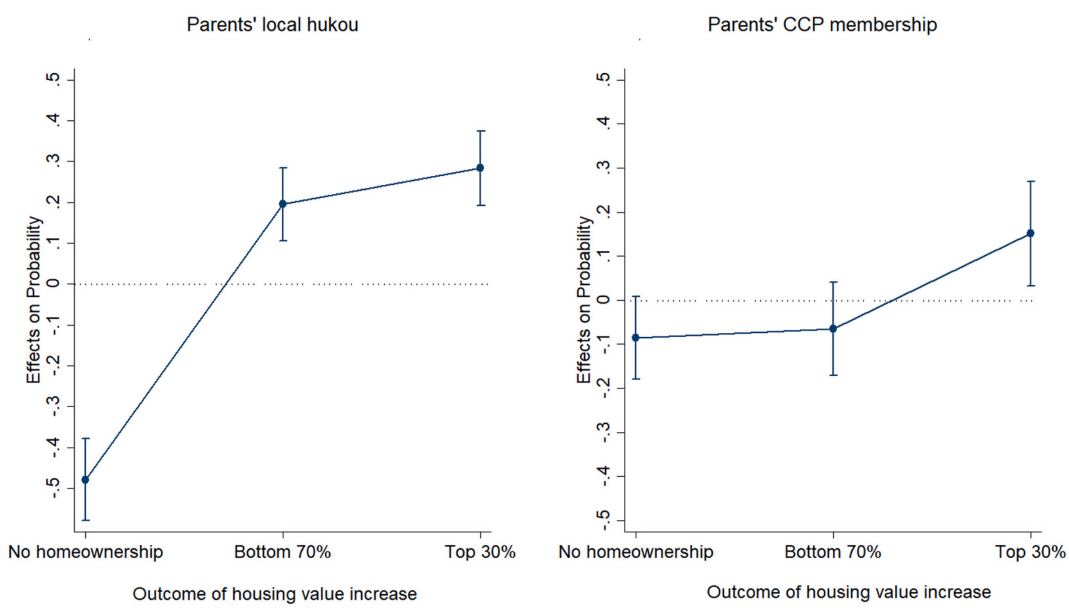
Appendix 1. Average marginal effects of key variables on young people's housing outcomes (with 95% CIs)



a. Young people's current housing tenure



b. Young adults' current locational outcome in terms of housing value



c. Young adults' current locational outcome in terms of housing value increase

References

Aalbers, M. B. (2007). Geographies of housing finance: The mortgage market in Milan Italy. *Growth and Change, 38*, 174–199.

Ahlfeldt, G. (2011). If Alonso was right: Modeling accessibility and explaining the residential land gradient. *Journal of Regional Science, 51*(2), 318–338.

Arundel, R., & Hochstenbach, C. (2020). Divided access and the spatial polarization of housing wealth. *Urban Geography, 41*, 497–523.

Arundel, R., & Lennartz, C. (2017). Returning to the parental home: Boomerang moves of younger adults and the welfare regime context. *Journal of European Social Policy, 27*(3), 276–294.

Arundel, R., & Ronald, R. (2015). Parental co-residence shared living and emerging adulthood in Europe semi-dependent housing across welfare regime and housing system contexts. *Journal of Youth Studies, 19*(7), 885–905.

Bayrakdar, S., & Coulter, R. (2018). Parents local house prices and leaving home in Britain. *Population, Space and Place, e2087*.

Chen, J., Hao, Q., & Stephens, M. (2010). Assessing housing affordability in post-reform China: A case study of Shanghai. *Housing Studies, 25*(6), 877–901.

Cigdem, M., & Whelan, S. (2017). Intergenerational transfers and housing tenure–Australian evidence. *International Journal of Housing Policy, 17*(2), 227–248.

Clark, W. A. V., Huang, Y., & Yi, D. (2021). Can millennials access homeownership in urban China? *Journal of Housing and the Built Environment, 36*(1), 69–87.

Coulter, R. (2017). Local house prices, parental background and young adults' homeownership in England and Wales. *Urban Studies, 54*(14), 3360–3379.

Cui, C., Deng, W., & Lu, T. (2021). Pathways to homeownership in urban China: Transitions and generational fractures. *Journal of Housing and the Built Environment, 36*(1), 9–27.

Cui, C., Huang, Y., & Wang, F. (2020). A relay race intergenerational transmission of housing inequality in urban China. *Housing Studies, 35*(6), 1088–1109.

Cui, J., Cui, C., Ronald, R., Yu, S., & Mu, X. (2021). The dynamics of gender in the intergenerational transmission of homeownership: A case study of young couples in Shanghai. *Population, Space and Place, 27*(6), Article e2428.

Deng, W. J., Hoekstra, J. S., & Elsinga, M. G. (2016). The changing determinants of homeownership amongst young people in urban China. *International Journal of Housing Policy, 16*(2), 1–22.

Deng, W. J., Hoekstra, J. S., & Elsinga, M. G. (2020). The role of family reciprocity within the welfare state in intergenerational transfers for home ownership: Evidence from Chongqing. *China. Cities, 106*, Article 102897.

Druta, O., & Ronald, R. (2018). Intergenerational support for autonomous living in a post-socialist housing market: Homes meanings and practices. *Housing Studies, 33*(2), 299–316.

Engelhardt, G. V., & Mayer, C. J. (1998). Intergenerational transfers, borrowing constraints, and saving behavior: Evidence from the housing market. *Journal of Urban Economics, 44*(1), 135–157.

Galster, G., & Wessel, T. (2019). Reproduction of social inequality through housing: A three-generational study from Norway. *Social Science Research, 78*, 119–136.

Gentili, M., & Hoekstra, J. (2021). Homeownership out of reach? Intergenerational transfers and homeownership reproduction in middle class families in Rome. *Italy. Cities, 116*, Article 103277.

Guiso, L., & Jappelli, T. (2002). Private transfers, borrowing constraints and the timing of homeownership. *Journal of Money, Credit and Banking, 34*(2), 315–339.

Gyourko, J., Linneman, P., & Wachter, S. (1999). Analyzing the relationships among race, wealth, and home ownership in America. *Journal of Housing Economics, 8*(2), 63–89.

Haurin, D. R., & Brasington, D. (1996). School quality and real house prices: Inter- and intrametropolitan effects. *Journal of Housing Economics, 5*(4), 351–368.

Henretta, J. C. (1984). Parental status and child's home ownership. *American Sociological Review, 49*(1), 131–140.

Hochstenbach, C. (2018). Spatializing the intergenerational transmission of inequalities: Parental wealth residential segregation and urban inequality. *Environment and Planning A: Economy and Space, 50*(3), 689–708.

Hochstenbach, C., & Arundel, R. (2020). Spatial housing market polarisation: National and urban dynamics of diverging house values. *Transactions of the Institute of British Geographers, 45*(2), 464–482.

Hochstenbach, C., & Boterman, W. R. (2017). Intergenerational support shaping residential trajectories young people leaving home in a gentrifying city. *Urban Studies, 54*(2), 399–420.

Huang, Y., & Clark, W. A. (2002). Housing tenure choice in transitional urban China: A multilevel analysis. *Urban Studies, 39*, 7–32.

Huang, Y., Yi, D., & Clark, W. A. (2020). Multiple home ownership in Chinese cities: An institutional and cultural perspective. *Cities, 97*, Article 102518.

Köppe, S. (2018). Passing it on: Inheritance, coresidence and the influence of parental support on homeownership and housing pathways. *Housing Studies, 33*(2), 224–246.

Lee, H., Myers, D., Painter, G., Thunell, J., & Zissimopoulos, J. (2020). The role of parental financial assistance in the transition to homeownership by young adults. *Journal of Housing Economics, 47*, Article 101597.

Lee, J., & Zhu, Y. P. (2006). Urban governance neoliberalism and housing reform in China. *The Pacific Review, 19*(1), 39–61.

Lennartz, C., Arundel, R., & Ronald, R. (2016). Younger adults and homeownership in Europe through the global financial crisis. *Population, Space and Place, 22*(8), 823–835.

Li, K., Qin, Y., & Wu, J. (2020). Recent housing affordability in urban China: A comprehensive overview. *China Economic Review, 59*, Article 101362.

Liang, X., Liu, Y., Qiu, T., Jing, Y., & Fang, F. (2018). The effects of locational factors on the housing prices of residential communities: The case of Ningbo China. *Habitat International, 81*, 1–11.

Lux, M., Samec, T., Bartos, V., Sunega, P., Palguta, J., Boumová, I., & Kážmér, L. (2018). Who actually decides? Parental influence on the housing tenure choice of their children. *Urban Studies, 55*(2), 406–426.

Manzo, L. K., Druta, O., & Ronald, R. (2019). Supported home ownership and adult independence in Milan: The gilded cage of family housing gifts and transfers. *Sociology, 53*(3), 519–537.

Maroto, M., & Severson, M. (2020). Owning renting or living with parents? Changing housing situations among Canadian young adults 2001 to 2011. *Housing Studies, 35*(4), 679–702.

McKee, K., Moore, T., Soaita, A., & Crawford, J. (2017). 'Generation rent' and the fallacy of choice international. *Journal of Urban and Regional Research, 41*(2), 318–333.

Mu, X., Cui, C., Xu, W., & Cui, J. (2021). Generational variations in the timing of entry into homeownership in Shanghai: The role of family formation and family of origin. *Urban Studies, 00420980211040947*.

Mulder, C. H., Dewilde, C., Duijn, M. V., & Smits, A. (2015). The association between parents' and adult children's homeownership: A comparative analysis European. *Journal of Population, 31*(5), 495–527.

Mulder, C. H., & Smits, A. (2013). Inter-generational ties financial transfers and home-ownership support. *Journal of Housing and the Built Environment, 28*(1), 95–112.

Mulder, C. H., & Smits, J. (1999). First-time home-ownership of couples the effect of inter-generational transmission. *European Sociological Review, 15*(3), 323–337.

Or, T. M. (2018). Pathways to homeownership among young professionals in urban China: The role of family resources. *Urban Studies, 55*(11), 2391–2407.

Ronald, R. (2018). 'Generation rent' and intergenerational relations in the era of housing financialisation. *Critical Housing Analysis, 5*(2), 14.

Ronald, R., & Arundel, R. (2023). *Families, housing and property wealth in a neoliberal world*. Routledge.

Song, X., & Xie, Y. (2014). Market transition theory revisited changing regimes of housing inequality in China 1998-2002. *Sociological science, 1*, 277–291.

Stephens, M., Lux, M., & Sunega, P. (2015). Post-socialist housing systems in Europe: Housing welfare regimes by default? *Housing Studies, 30*(8), 1210–1234.

Wang, M. (2018). 'Rigid demand': Economic imagination and practice in China's urban housing market. *Urban Studies, 55*(7), 1579–1594.

Wang, Y., Li, Y., Huang, Y., Yi, C., & Ren, J. (2020). Housing wealth inequality in China: An urban-rural comparison. *Cities, 96*, Article 102428.

Wang, Y. P. (2000). Housing reform and its impacts on the urban poor in China. *Housing Studies, 15*(6), 845–864.

Wang, Y. P. (2019). Migration and urban housing market dynamics in China. In International Housing (Ed.), *Chiu R LH Liu Z and Renaud B* (pp. 307–329). London and New York: Market Experience and Implications for China. Routledge.

Worth, N. (2021). Going back to get ahead? Privilege and generational housing wealth. *Geoforum, 120*, 30–37.

Wu, F. (1996). Changes in the structure of public housing provision in urban China. *Urban Studies, 33*(9), 1601–1627.

Xian, S., & Forrest, R. (2020). The post-80s generation exploring the attitudes toward family and housing. *Journal of Youth Studies, 23*(6), 780–796.

Yi, C., & Huang, Y. (2014). Housing consumption and housing inequality in Chinese cities during the first decade of the twenty-first century. *Housing Studies, 29*(2), 291–311.

Yin, T. (2010). Parent–child co-residence and bequest motives in China. *China Economic Review, 21*(4), 521–531.

Zhang, L., & Bian, Y. (2021). Parental "love" on time: Strength and timing in homeownership transfer. *Journal of Housing and the Built Environment, 36*(1), 113–129.

Zhu, J. M. (2000). The changing mode of housing provision in transitional China. *Urban Affairs Review, 35*(4), 502–519.