

Article

Economic Potential Gain, Income Uncertainty, and Rural Migrants' Urban Homeownership: Evidence from China

Jie Chen ¹ , Wei Wang ^{2,*} and Yan Song ³

¹ School of International and Public Affairs, China Institute for Urban Governance, Shanghai Jiao Tong University, Shanghai 200240, China

² School of Energy and Building Environment, Guilin University of Aerospace Technology, Guilin 541004, China

³ Department of City and Regional Planning, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA

* Correspondence: wwwh177@163.com or wangwei@guat.edu.cn

Abstract: Citizenization of rural migrants is considered as a labeling urbanization goal in developing countries. Homeownership has always been regarded as the most important cornerstone of citizenization for individuals and families in China. Despite the existence of plenty of literature on migrants' homeownership, some critical influencing factors are still under-investigated. On the basis of the large nation-wide micro data of the China Migrant Dynamic Survey (CMDS), this study investigates the correlations among economic potential gain, income uncertainty, and rural migrants' homeownership propensity in their host cities. The empirical results suggest that economic potential gain is positively correlated with the likelihood of rural migrants' homeownership in their host cities, whereas there is negative association between income uncertainty and urban homeownership propensity among rural migrant households. In addition, we found that larger income uncertainty lowers the positive association between economic potential gain and rural migrants' homeownership propensity in their host cities. Furthermore, the heterogeneity of these correlations across demographic characteristics and regions were investigated. We conclude this paper by making several suggestions, including offering a level playing field for rewarding migrants' human capital endowment reasonably in terms of income, accelerating the hukou system reform, and eliminating institutional discrimination imposed on rural migrants to increase income stability.

Keywords: homeownership; economic potential gain; income uncertainty; rural migrant



Citation: Chen, J.; Wang, W.; Song, Y. Economic Potential Gain, Income Uncertainty, and Rural Migrants' Urban Homeownership: Evidence from China. *Sustainability* **2023**, *15*, 7407. <https://doi.org/10.3390/su15097407>

Academic Editors: Hongsheng Chen, Yang Xiao and Sainan Lin

Received: 28 March 2023

Revised: 23 April 2023

Accepted: 27 April 2023

Published: 29 April 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Large-scale rural–urban migration constitutes a central feature of social transition as well as a key force of economic development in China since the economic reform and openness in the 1980s. The current lack of urban housing security for rural migrants in China constitutes an important barrier to their citizenization [1]. Owning a house in urban China is an important influencing factor for migrants' sense of happiness and subjective well-being [2,3]. Along with housing purchase restriction policies for rural migrants issued in most Chinese cities, the homeownership possibilities for rural migrants in their host cities are still very low. According to a survey report on migrant workers released by the National Bureau of Statistics of China (NBSC), only 19% of rural migrants owned a home in their host cities in 2018, which was in sharp contrast to the level of local residents which was approximately 80% [4]. Furthermore, the home ownership rate of rural migrants in host cities is much lower than that of urban migrants. According to statistical analysis of the CMDS 2017, the homeownership rate (18.43%) of rural migrants in the destination area was approximately half that of urban migrants (37.80%).

The migrants' homeownership decision represents not only their personal economic prosperity but also their social inclusion to local community, as well as the usual key to

access to a wide range of facilities and social services [5,6]. This concern is especially relevant in China, where owning a home has been traditionally considered as the most important cornerstone of economic–social security for individuals and households [7]. In addition, at the city level, the heterogeneity for the housing ownership rate of rural migrants affects the “viscosity” between rural migrants and the destination cities, to a certain extent. Meanwhile, with the fast deepening of aging of local residents in Chinese cities, the prospect of the Chinese real estate market is, to a large extent, contingent on the chances of rural migrants to purchase housing in the cities. Thus, over last few years, there are growing interests on investigating what are key determinants of homeownership propensity of Chinese rural migrant in their host cities [8–10].

Despite the fast-growing literature on the topic of rural migrants’ housing tenure choice, we observe that two important factors are still missing in the previous research. One is the economic potential gain in the host cities, and the other is income uncertainty, which are both highly relevant to rural migrants. First, classical migration theory has predicted that rural migrants are more likely to settle down in the cities where they have more income improvements [11]. Economic potential gain, which measures the ratio of migrant’s income in the host city relative to his or her expected income in the home county if remaining there, combines the “pull” incentive of the host city with the “push” factor of migrant’s hometown. Meanwhile, economic potential gain has been verified to be positively associated with rural migrants’ settlement intentions in the host cities [12]. Thus, it may be expected that economic potential gain is one of crucial economic factors that influence migrants’ housing tenure choices. However, so far, the existing literature has not investigated whether and how economic potential gain affects migrants’ house purchasing behavior in the host cities. Second, the literature has suggested that Chinese rural migrants still face labor market discrimination in urban areas, resulting in greater volatility and instability regarding their income [13]. Due to the unstable economic status of rural migrants in the destination cities, their housing purchase behaviors are different from those of local residents [14]. In the research on the influencing factors of homeownership, there already has been considerable attention paid to studying the role of income uncertainty [15–17]. Nonetheless, research on how income uncertainty affects rural migrants’ homeownership decisions is still rare. These unique institutional setting and economic characteristics of Chinese rural migrants can offer an ideal context to investigate the impact of economic potential gain, income uncertainty, and their joint effect on migrants’ homeownership.

This study aims to extend the literature with regard to the following non-negligible aspects. First, this study, for the first time, investigates the effect of economic potential gain on rural migrants’ homeownership possibility. Following a recent work [12], we construct micro-level potential income gains by comparing rural migrants’ income in the host cities with their expected income if still staying in their hometowns. Second, this study also explores how income uncertainty may change the impacts of potential income gains on the chance of owning a home in the host city. That is, we examine how an increase in income uncertainty may weaken the positive impact of economic potential gain on homeownership. Such an analysis can provide knowledge on the spillover of labor market fluctuations on the housing market in China. Third, this study examines how the impacts of these factors on migrants’ homeownership vary across different subgroups, especially, different migrant cohorts and various sizes of cities. These explorations would be useful for improving the effectiveness of policies that aim to promote rural migrants’ homeownership rate in the cities.

The remainder of the paper is structured as follows. Section 2 provides a literature review of relevant studies. Section 3 discusses the data and selection of variables. Section 4 presents our empirical results and discussions of findings. Heterogeneity investigations are presented in Section 5, and influencing mechanism is discussed in Section 6. Finally, Sections 7 and 8 conclude this paper with discussions and policy implications, respectively.

2. Literature Review and Theoretic Framework

Housing tenure choice is a significant decision made by households when households are mature enough to choose a certain type of tenure to maximize a multi-period utility within a given budget constraint [18], no matter whether it is in China or in other countries, for both in-border migration and international migration [19]. Increasing attention has been paid by existing works in the literature to low-income households' homeownership vulnerability, e.g., African-Americans in the U.S., residents in Africa, or immigrants in the Middle East region [20–22]. Both potential earnings and fluctuations in income have been identified to affect the tendency to own a home, respectively [15,23]. However, how these economic factors interact in the mechanism of housing tenure decision has not yet been fully subject to empirical investigation.

2.1. The Role of Income in Homeownership

Homeownership attainment is often seen as the key step in capturing the rewards of climbing the housing ladder and critical in the build-up of family wealth through acquisition of housing equity, e.g., in China or Japan [1,24,25].

Family income has been identified as the most important factor of housing ownership decision [18,26,27]. Specifically, observed household income or computed permanent income has been widely considered as the primary predictor in explaining households' tenure choices [15,16,28,29]. It has also been repeatedly found for Chinese rural migrants that their personal or household income is strongly and positively associated with the propensity of their homeownership likelihood in their host cities [30–33], suggesting that their housing tenure choices are similarly governed by economic reasons as those observed on other groups.

However, according to the “push–pull” migration theory, which was proposed by Lee, migrations are governed by both “push” and “pull” factors: “push” factors are those discouraging migrants from remaining at their origins, while “pull” factors are those attracting migrants to their destinations or inflow areas [11]. Migrants would hesitate to stay in urban regions when their living conditions do not improve or when there are better rewards in their hometown [34].

Unfortunately, surveyed income or regression-fitted permanent income can reflect only the “pull” incentive derived from the host city but can not take the “push” factor of migrant's origin county into consideration. To understand housing tenure choices of rural migrants more deeply, there is a need to take the balance of the relative strength of push–pull factors into account. Following the method proposed in the previous literature [12], the key variable “economic potential gain”, which measures the migrant's income in the host city relative to their expected income in the home county, is constructed in this study. This indicator can help to identify the role of household income in rural migrants' homeownership in urban destination through not only its absolute term but also its value relative to alternative possibility of their origins. The “economic potential gain” received by rural migrants in their destinations can be regarded as the recognition of their working ability and the sense of economic gain in the inflows.

2.2. The Role of Income Uncertainty in Homeownership

Migrants often have to face labor market uncertainty, whether in developing countries or in developed countries [35,36]. Their integration in the formal local labor market of their host areas continues to be a challenge [37]. The variability or uncertainty of income has been long found to be an important factor that affects the likelihood of homeownership [26,27]. For instance, the higher the levels of employment insecurity and income uncertainty, the lower the chances of being a mortgage holder for homeownership in France, the U.K., Spain, and Poland [38].

Previous studies have generally suggested that income uncertainty reduces the likelihood of owning homes [15,27]. Meanwhile, the large earnings disparities between rural migrants and local workers in urban China's labor markets have also been widely identified

in the literature [33]. Such disparities can be partly ascribed to the effect of non-local rural hukou [39,40]. The hukou-based wage discrimination not only depresses rural migrants' income level [13,41] but also leads to shorter employment contracts and incomes that are more vulnerable to firm-level risks and aggregate economic shocks [28,42]. Because of their uncertain and precarious positions in the host city, as well as their country life experience and consumption habits [43], rural migrants' housing behaviors are found systemically different from those local hukou holders [14].

Therefore, considerable attention should be paid to income uncertainty when analyzing rural migrants' homeownership in urban China. Substantively, income uncertainty can be seen as another "push factor" for rural migrants' housing tenure choice. Within the analysis framework of rational humans proposed by Coleman, migrants would take the above two key factors into consideration when making housing purchase decisions. Nonetheless, to the best of our knowledge, only a few studies have explored the role of uncertainty in migrants' housing tenure choices. For example, Zhou found that an increase in income uncertainty decreased the migrants' homeownership rate in urban China [44]. However, the behavioral mechanisms of rural migrants' housing tenure choice might have changed over time, especially after implementation of the "New-Type Urbanization" policy in China since 2014. For comparative analysis, two years of cross-sectional data (CMDS 2014 and CMDS 2016) are used in this study to examine whether key factors (economic potential gain and income uncertainty) affecting rural migrants' home ownership rates have changed after the "New-Type Urbanization" policy was issued. Furthermore, this study not only uses the newly available data to identify how the latest trend of how income uncertainty affects rural migrants' housing tenure choices but also explores how the income uncertainty affects the impact of micro-level economic potential gain on rural migrants' homeownership propensity in urban China.

2.3. Other Determinants of Rural Migrants' Homeownership

In the literature, determinants of rural migrants' homeownership propensity in urban China can be classified into two categories: micro-level factors and institutional factors. Micro-level factors, including rural migrants' marital status, educational level, occupational category, employment status, and mobility range, as expected, are found to be closely associated with migrants' homeownership likelihood in China [8,9,31,45,46]. On the other hand, the institutional factors, including housing market condition, access to social security system, and particularly the hukou system (urban registered residence system, which was established in 1951), have also been focused by studies on migrants' housing tenure choices in China [32,46–48]. The hukou system has been verified to hamper rural–urban migration by imposing migration friction [49,50] even though hukou reform has been launched in small and mid-sized cities to make granting of local resident status to migrants easier, e.g., hukou registration restriction on new migrants in cities with populations between 3 million and 5 million would be relaxed [51]. Hukou-based policies, which might include allocation of public services and the right to purchase houses, would delay migrants' benefit growth and aggravate spatial hukou segregation [52,53]. In addition, the urban hukou accessibility has been verified to exert significant effect on migrants' long-term settlement intention and even psychological well-being in urban areas [54,55]. Therefore, the hukou system still functions as an impediment for rural migrants' homeownership decisions [9].

These factors will be also modelled in the regression equation as control variables when analyzing rural migrants' housing tenure behaviors. On the other hand, in the past decade, to curb soaring housing prices, the Chinese government introduced a series of restriction policies by administrative method [56]. The housing restriction policy may affect the local housing markets and migrants' settlement decisions [57,58], which would be included in the empirical regression.

In addition, the tendency of being a homeowner increases with the proportion of housing costs that can be mortgaged [18]; thus, the availability of housing credit is crucial in determining housing tenure choice (e.g., [30,59,60]). Especially for developing countries, the

performance of housing finance institutions and finance affordability have been identified to have a direct effect on low-income earners' homeownership [20]. In China, with rising housing prices, increasingly more households have to borrow mortgages to acquire a home in urban areas [29]. There are two approaches for Chinese urban households to access mortgage finance for housing purchase: commercial bank mortgage loan and the Housing Provident Fund (HPF), the latter of which is a type of preferential home loan issued by the fund pool collected through contributions from both employers and salaried employees [61]. HPF is a compulsory saving system that is legally enforced on employers and employees of formal sectors but optional for small private firms; thus, its participation rate varies significantly across industries and cities [61–63]. Individual-level HPF participation has been verified to be significantly positively related to rural migrants' urban settlement intentions [10]. With the unique availability of data in the CMDS, we are able to construct city-level rural migrants' participation rates of HPF for each inflow city as a key contextual control variable, with the aim to measure how "housing financing-friendly" the urban destinations are for rural migrants. The analytical framework is shown in Figure 1.

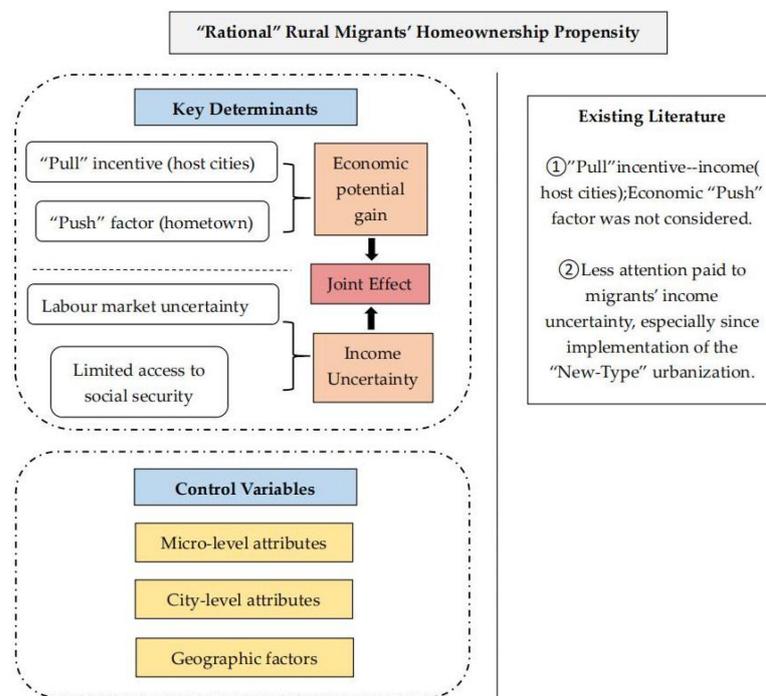


Figure 1. Analytical framework of rural migrants' housing tenure choices.

3. Data and Variables

3.1. Data

The data used in this paper are from the 2014 and 2016 waves of the China Migrant Dynamic Survey (CMDS), which is conducted annually by the National Health Commission of the PRC. The survey interviews members of migrant population aged 15–59 who had resided in the host city for more than 1 month in that year. The Probability Proportionate to Size (PPS) sampling method was used for the sampling of interviewees, and the sample covered all 31 province-level region units of mainland China. As there was no information on migrants' housing ownership in the 2015 wave of the corresponding questionnaire, the 2015 wave of the CMDS was not used in empirical analysis in this study. In addition, since there was no relevant information about the housing provident fund paid by the rural migrants in the 2017 wave of the corresponding questionnaire, which was used to construct the key control variables for empirical analysis, the 2017 wave of the CMDS was not used in empirical test in this study.

In this paper, rural migrants who were younger than 18 or those staying in the host cities for less than 6 months in the corresponding survey year are not suitable for the analysis

and were, thus, excluded from the sample data. To make the computation of home–host income differentials possible, we also excluded migrants with intra-provincial migration. This is because in the CMDS database, we knew only from which province the migrants originated but not from which city. Following the previous literature [12], we attributed the provincial capital city as being the hometown for all migrants who originated from the same province, and then estimated the host–home income ratio (economic potential gain) for inter-province migrants. However, due to the data restriction, we could not compute the host–home income ratio if the migrants migrated within the same province. After data screening and cleaning, the final data of the 2014 wave/2016 wave used in this article contained samples of 70,198/55,390 observations, respectively, which cover inter-provincial rural migrants from all 31 province-level region units of mainland China.

3.2. Variables

The key variables used in our analysis include homeownership, economic potential gain, income uncertainty, and control variables, as suggested by the previous literature. In addition, as explained above, we added the interaction item between economic potential gain and income uncertainty into the regression. The definition and summary statistics of key variables are provided in Table 1.

Table 1. (a) Definition and descriptive statistics of key variables (Dummy/Categorical variables). (b) Definition and descriptive statistics of key variables (Continuous variables).

(a)					
Variable	Dummy/Categorical Variables Description	CMDS2014		CMDS2016	
		Freq.	Percent	Freq.	Percent
Homeowner	=1 if Yes to owning housing in the current city; =0 if No.	5348 64,850	7.62% 92.38%	10,406 44,984	18.79% 81.21%
Female	=1 if female; =0 if male.	29,038 41,160	41.37% 58.63%	25,920 29,470	46.80% 53.20%
Married	=1 if married; =0 if not married.	56,757 13,441	80.85% 19.15%	46,582 8808	84.10% 15.90%
Edu_level	=1 if graduated with primary school degree or below; =2 if graduated with junior middle school degree; =3 if graduated with high middle school degree; =4 if graduated with associate degree or above.	11,627 41,320 12,891 4360	16.56% 58.86% 18.36% 6.21%	9872 27,943 8677 8898	17.82% 50.45% 15.67% 16.06%
Child	=1 if have children, no matter where; =0 if do not have children.	67,067 3131	95.54% 4.46%	52,196 3194	94.23% 5.77%
Childlocal	=1 if have children and living together in the local area; =0 if without children in the local area.	35,859 34,339	51.08% 48.92%	28,392 26,998	51.26% 48.74%
East_origin	=1 if outflowing from eastern China; =0 if outflowing from mid-west regions of China.	15,542 54,656	22.14% 77.86%	12,195 43,195	22.02% 77.98%
Self-employed	=1 if self-employed or employer; =0 if employed.	27,854 42,344	39.68% 60.32%	19,949 35,441	36.02% 63.98%
Secondary_indu	=1 if working in secondary industry; =0 if not working in secondary industry.	22,373 47,825	31.87% 68.13%	16,285 39,105	29.40% 70.60%
Tertiary_indu	=1 if working in tertiary industry; =0 if not working in tertiary industry.	46,321 23,877	65.99% 34.01%	37,933 17,457	68.48% 31.52%
Businessman	=1 if doing business or trade; =0 if otherwise.	12,745 57,453	18.16% 81.84%	9066 46,324	16.37% 83.63%
Service-staff	=1 if working at service-staff position; =0 if otherwise.	53,496 16,702	76.21% 23.79%	41,887 13,503	75.62% 24.38%
HPF	=1 if paying housing provident fund in host cities; =0 if not paying housing provident fund in host cities.	3452 66,746	4.92% 95.08%	4051 51,339	7.31% 92.69%
PensionU	=1 if paying pension insurance in host cities; =0 if not paying pension insurance in host cities.	13,450 56,748	19.16% 80.84%	27,493 27,897	49.64% 50.36%

Table 1. Cont.

MedicareU	=1 if paying medical insurance in host cities; =0 if not paying medical insurance in host cities.	15,157 55,041	21.59% 78.41%	8768 46,622	15.83% 84.17%				
Purchase_restriction	=1 if housing purchase restriction policy is implemented; =0 if no housing purchase restriction policy is implemented.	39,257 30,941	55.92% 44.08%	39,257 30,941	55.92% 44.08%				
(b)									
Continuous Variables		CMDS2014				CMDS2016			
Variable	Description	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.
Age	The household head's age in the year surveyed (unit: year)	34.7	9.05	18	59	35.95	10.05	18	59
Moveyears	Years of migration by the end of the year surveyed (unit: year)	5.31	4.76	1	45	6.50	5.62	1	43
Distance to hometown	Geo-distance from current city to the provincial capital of the residential province (unit: km, in log)	6.70	0.71	4.87	8.49	6.70	0.74	4.86	8.39
LN_POP	The population of current city in 2013/2015 * (unit: 10,000 persons (in log))	5.87	1.17	0.99	8.12	5.95	1.18	1.13	8.12
LN_PERGDP	GDP per capita of current city in 2013/2015 * (unit: 10,000 yuan (in log))	2.13	0.75	0.17	3.84	2.32	0.67	0.01	3.89
LN_HPrice	House price per square meter of current city in 2013/2015 * ((unit: 1000 yuan/m ² (in log))	2.01	0.58	0.49	3.15	2.18	0.67	0.61	3.52
H_FinanceAC	Percentage of paying housing provident fund at the host city level	0.05	0.05	0	0.5	0.07	0.06	0	0.48

* The control variables with a lag time of one period are added in the empirical test in order to avoid endogeneity that may be caused by bidirectional causality.

3.2.1. Migrants' Homeownership in Urban Destinations

The CMDS survey asked rural migrant respondents whether they have bought housing in their host cities, and those who answered yes were treated as homeowners in our analysis. That is, the dependent variable of homeownership regression was a dummy variable, which was 1 for homeowners and 0 otherwise.

3.2.2. Measuring Economic Potential Gain

As mentioned above, the concept of economic potential gain was induced in homeownership regression to take both the "pull" incentive of the host city and the "push" factor of migrant's hometown into consideration. Following the literature [12], we employed the counterfactual method to estimate the rural migrant's expected income by the human capital regression if they were to remain in the hometown. In order to capture the variations on returns to rural migrants' human capital in different cities, we constructed interaction items of human capital variables, such as education attainment, employment status, and occupational groups with city-level attributes when predicting the economic potential gain. The empirical result indicated that these interaction items are mostly statistically significant, suggesting the effects of human capital on rural migrants' economic earnings do vary substantially across different cities.

Then, to control the difference of living cost between host cities and originate hometowns, we defined measurement of economic potential gain with the micro-specific predicted ratio of the current net income in the host city and the expected net income in the hometown from where the migrant originated by deducting the city-level average living expense from both incomes. Living expense used in this study refers to the expenses related

to daily consumption, including clothing, food, transportation, education, communications, health care, entertainment, etc. and excluding productive outlays or borrowing expenses. Note that the first-stage income model's estimated coefficients, as reported in Appendix A Table A1, were used to construct counterfactual levels of the rural migrants' expected incomes in their hometowns.

3.2.3. Measuring Income Uncertainty

According to the literature, income uncertainty can be measured by three approaches: variance of actual income [64], variance of the transitory income [65], and variance of unemployment rate [44,66]. In this paper, the measurement of income uncertainty was household-specific estimate. Following the approach used in the previous literature [16,44,67], we decomposed migrants' families' income in the host city into permanent and a transitory components. The estimate of permanent income was derived from a cross-sectional estimation of household income on a vector of household characteristics and city-level attributes [68]. In addition, the measure of permanent income (PERM_INC) was the predicted values of a migrant's household income [27]. The regression residual was taken as the transitory income (TRANS_INC). In this paper, variation in transitory income was used to represent income uncertainty in rural migrant's homeownership regression. As noted above, migrant's family income in the host city was decomposed by the following equation:

$$T_INC_i = \alpha_1 MHC_i + \alpha_2 HCA_i + \varepsilon_i, \quad (1)$$

$$PERM_INC_i = \alpha_1 MHC_i + \alpha_2 HCA_i, \quad (2)$$

$$TRANS_INC_i = \varepsilon_i \quad (3)$$

where the subscript i refers to the migrant. The variable T_INC_i is the migrant's household income, and MHC_i is a vector of migrant's household characteristics (including age, gender, household size, educational level, the duration of migration, the industry involved in, occupation type, and social security participation). HCA_i is a vector of city-level attributes of the migrant's host city, and ε_i is the residual item. The estimation result of permanent income regression is shown in Appendix A Table A1.

For the calculation of variation in transitory income, note that since the mean of transitory income was zero, the square of transitory income was an unbiased estimator of its variance [44]. Thus, the degree of migrant' household income uncertainty INC_UNC_i was estimated by Equation (4) below. Following the previous literature (e.g., [44]), the sign of INC_UNC is positive when $TRANS_INC$ is greater than zero and is negative when $TRANS_INC$ is less than zero.

$$INC_UNC_i = (TRANS_INC_i)^2 = \varepsilon_i^2 \quad (4)$$

4. Empirical Analysis and Findings

4.1. Econometric Methodology

On the basis of the measurements of key independent variables (economic potential gain, income uncertainty) as defined above, we proceeded to examine how these key determinants affected rural migrants' homeownership propensity in their urban destinations. Our empirical models are presented below.

Given that the dependent variable in our paper is a binary outcome of rural migrants' homeownership in host cities, we used the standard probit model to identify the effect of economic potential gain ($Econ_gain_i$) and income uncertainty (INC_UNC_i) on migrants' homeownership. Assuming that the error term followed a normal distribution, we applied the following model:

$$Homeownership_i = \alpha + \beta_1 Econ_gain_i + \beta_2 INC_UNC_i + \beta_3 Econ_gain_i \times INC_UNC_i + \sum \beta_k Control_i + \varepsilon_i \quad (5)$$

where $Homeownership_i$ in Equation (5)—which is the latent variable equation—is a dummy variable (1 if a homeowner in the host city, 0 otherwise), which can be written as a linear function of the covariates. As mentioned in Section 3.2.3, $Econ_gain_i$ refers to the ratio of the rural migrant's observed household earning in the host city and the predicted income if remaining in the hometown. INC_UNC_i refers to the degree of migrants' household income uncertainty.

$Control_i$ contains a set of micro-level attributes (demographics, migration characteristics, and occupational information of rural migrants), city-level attributes (such as GDP per capita, population size, and purchase restriction policy), and geographic factors (distance from the host city to hometown). Finally, ε_i denotes a random error term. We explored how income uncertainty affects the impact of economic potential gain on migrants' homeownership by analyzing the interaction terms of economic potential gain with income uncertainty. All the empirical results were estimated by probit regression model.

4.2. Descriptive Analysis

The statistical descriptions of the sample data are reported in Table 1, showing that the representativeness of our sample was sound. However, as shown in Table 1, homeownership rate for rural migrants, though rising from 2014, was still only 18.79% in 2016, which is lower than the finding of 19% in the NSFC survey report of migrant workers in 2018 [4]. This discrepancy may be attributed to the fact that the sample in the previous literature covered both inter-provincial and within-provincial rural migrants, whereas this study focused only on inter-provincial rural migrants, who may suffer more economic hardships and receive less family support in achieving their homeowner ambition. The CMDS 2016 reported that the homeownership ratio in the host cities was 18.79% for inter-provincial rural migrants but 25.47% for within-provincial rural migrants. A similar pattern was found from CMDS 2014 but with lower levels, respectively.

4.3. Full Sample Result

In the first stage, we discuss the impact of economic potential gain and income uncertainty on rural migrants' homeownership in their host cities. Model 1 and Model 2 in Table 2 show the regression results using the 2014 and 2016 waves of the CMDS, respectively. Table 2 reports that the coefficient of economic potential gain was consistently positive and statistically significant. Specifically, a one-unit increase of the individual-level host-home income ratio will be associated with an approximately 4.7% higher likelihood of owning home in the host city, which is more than twice as much as the marginal effect for CMDS 2014. In a sense, the economic potential gain for rural migrants could be considered as ability identity or sense of gain from economic achievement in host cities, which may make rural migrants more motivated to think of ways to realize identity transformation and integrate themselves into the local society so that the economic potential gain could be ensured or even further improved in future. In the context of the household registration system in China, obtaining homeownership could be an important approach to realize identity transformation from migrant to local urban resident in the short term [2,3,5]. Thus, the probability of rural migrants' acquiring homeownership in host cities could increase when rural migrants have higher economic potential gains in these cities, whether from the point of view of objective conditions or from the perspective of subjective psychology.

Table 2. Probit regression of rural migrants' homeownership in host cities.

Full Sample	2014 CMDS		2016 CMDS	
	Model 1		Model 2	
Variables	Coef.	Marginal Effect	Coef.	Marginal Effect
Econ_gain	0.213 *** (0.018)	0.019 *** (0.002)	0.203 *** (0.010)	0.047 *** (0.002)
INC_UNC	−0.009 ** (0.004)	−0.001 *** (0.000)	−0.006 (0.004)	−0.001 (0.001)
Econ_gain × INC_UNC	−0.020 *** (0.003)	−0.002 *** (0.000)	−0.011 *** (0.001)	−0.002 *** (0.000)
Micro-level attributes				
Age	−0.001 (0.008)	−0.000 (0.001)	−0.038 *** (0.005)	−0.009 *** (0.001)
Age_sqr	0.000 (0.000)	0.000 (0.000)	0.001 *** (0.000)	0.000 *** (0.000)
Female	0.164 *** (0.016)	0.015 *** (0.001)	0.108 *** (0.014)	0.025 *** (0.003)
Edu_level	0.321 *** (0.011)	0.028 *** (0.001)	0.176 *** (0.009)	0.041 *** (0.002)
Married	−0.015 (0.031)	−0.001 (0.003)	0.272 *** (0.026)	0.057 *** (0.005)
Child	−0.461 *** (0.040)	−0.057 *** (0.007)	−0.355 *** (0.030)	−0.096 *** (0.009)
Childlocal	0.647 *** (0.022)	0.057 *** (0.002)	0.339 *** (0.015)	0.078 *** (0.004)
East_origin	0.219 *** (0.018)	0.021 *** (0.002)	0.273 *** (0.016)	0.068 *** (0.004)
Self-employed	0.026 (0.021)	0.002 (0.002)	0.014 (0.018)	0.003 (0.004)
Businessman	0.080 ** (0.038)	0.007 ** (0.004)	−0.169 *** (0.030)	−0.037 *** (0.006)
Service-staff	−0.082 ** (0.033)	−0.007 ** (0.004)	−0.296 *** (0.024)	−0.074 *** (0.006)
Moveyears	0.057 *** (0.004)	0.005 *** (0.000)	0.083 *** (0.003)	0.019 *** (0.001)
Moveyears_sqr	−0.001 *** (0.000)	−0.000 *** (0.000)	−0.001 *** (0.000)	−0.000 *** (0.000)
PensionU	0.046 (0.029)	0.004 (0.003)	−0.109 *** (0.015)	−0.025 *** (0.003)
MedicareU	0.385 *** (0.026)	0.041 *** (0.003)	0.475 *** (0.021)	0.128 *** (0.006)
HPF	0.312 *** (0.032)	0.035 *** (0.004)	0.222 *** (0.028)	0.057 *** (0.008)
City-level attributes				
LN_PERGDP	0.234 *** (0.016)	0.020 *** (0.001)	0.103 *** (0.014)	0.024 *** (0.003)
LN_POP	0.042 *** (0.009)	0.004 *** (0.001)	0.025 *** (0.007)	0.006 *** (0.002)
LN_HPrice	−1.012 *** (0.027)	−0.088 *** (0.002)	−0.789 *** (0.021)	−0.183 *** (0.005)
H_FinanceAC	2.006 *** (0.191)	0.174 *** (0.017)	1.041 *** (0.145)	0.241 *** (0.034)
Purchase_restriction	0.435 *** (0.022)	0.037 *** (0.002)	0.046 (0.029)	0.011 (0.007)
Geographic factors				
Distance to hometown	−0.068 *** (0.012)	−0.006 *** (0.001)	−0.012 (0.010)	−0.003 (0.002)

Table 2. Cont.

Full Sample	2014 CMDS		2016 CMDS	
	Model 1		Model 2	
Variables	Coef.	Marginal Effect	Coef.	Marginal Effect
Constant	−1.745 *** (0.184)		−0.128 (0.125)	
Pseudo R ²	0.1926	0.1926	0.1508	0.1508
Observations	70,198	70,198	55,390	55,390

Note. ** $p < 0.05$. *** $p < 0.01$. Robust standard errors are shown in parentheses.

Moreover, not surprisingly, income uncertainty (INC_UNC_i) was negatively correlated with rural migrants' homeownership in host cities for CMDS 2014, whereas it was not statistically significant at the 10% level for CMDS 2016. In other words, income uncertainty had an adverse impact on housing purchases, which is in line with previous research on uncertainty [15,26,27,68]. However, after the implementation of the new urbanization policy, with housing credit support implemented in parts of the inflow areas, the negative impact of income uncertainty on the rural migrants' home ownership rate was no longer statistically significant.

More importantly, we found that the coefficient of the interaction term $Econ_gain_i * INC_UNC_i$ was significantly negative for CMDS 2014/2016, indicating that the increase of uncertainty of household income will have not only a direct negative effect on migrants' homeownership tendency but also an indirect negative effect through lowering the positive impact of economic potential gain on rural migrant's homeownership likelihood in urban areas. According to rational choice theory, rural migrants make their rational choices of housing purchase taking into full consideration their own conditions and resources. Rational choice theory emphasizes that people make decisions by calculating costs and benefits to maximize their benefits [69]. The so-called "rationality" means that in order to meet someone's certain needs or achieve certain goals by social behaviors, such as personal resources or social exchange, it is necessary to rationally consider various influencing factors that affect the realization of their goals [70]. Economic potential gain, which combines the "pull" incentive of the host city with the "push" factor of migrant's hometown, actually reflects migrants' sense of gain in terms of income derived from the host city, whereas income uncertainty in the host city is essentially the measurement of stability or future expectation of this sense of income acquisition for rural migrants. When making home purchase decisions in the host cities, rural migrants, as "rational social persons", would consider the balance of these two factors. The increase of uncertainty of household income, which may show a fluctuating sense of income acquisition in the future, was empirically tested and shown to have an indirect negative effect through lowering the positive impact of economic potential gain on rural migrant's homeownership likelihood in urban areas.

In the second stage, as shown in Table 2, empirical findings for control variables (micro-level characteristics of rural migrants, city-level attributes of host city, and geographic factor of migration) were in line with theoretic forecasts and consistent with the previous empirical literature [8,9,48,71,72]. It is important to note that the city-level indicator of rural migrants' accessibilities to HPF was shown to have a significantly positive effect on migrants' homeownership propensity. In addition, the positive marginal effect of HPF on homeownership was shown to be rising from 2014. This finding echoes the existing literatures that housing finance accessibility matters for homeownership tendency [31,40,73] and supports a recent finding that HPF plays an active role in China's housing finance system [43,74]. Moreover, the marginal effect of city-level HPF participation rate on migrants' homeownership acquisition (e.g., 0.241 for CMDS 2016) was more than four times that of individual-level HPF participation (0.057 for CMDS 2016). In other words, even if rural migrants could not participate the HPF system at the present stage, due to economic or institutional restriction, relatively high city-level HPF participation rate for rural migrants in

the host cities could be seen as a positive signal of “financing-friendly” environment towards rural migrants and, thus, associated with higher homeownership likelihood of rural migrants.

4.4. Robustness Tests

In this section, we tested the robustness of our findings by experimenting with alternative measurements of economic potential gain in two ways. First, we followed the previous studies in the literature to use city-level GDP per capita, rather than an individual migrant’s estimated income in the origin, to calculate the economic potential gain with deducting the city-level living cost in corresponding cities. Second, exactly following the literature [12], another alternative measurement of economic potential gain was the individual-specific predicted ratio of the current income in the host city and the expected income in the hometown from where the migrant originated without deducting the city-level living cost in corresponding cities. The results in Table 3 shows that all the regressions with alternative specifications produced consistent findings and suggest that our benchmark findings are robust. In addition, we also applied the standard logit mode to the empirical regression for robust test, assuming that the error term followed a logistical distribution. The regressions with logit mode produced consistent findings and suggests that our benchmark findings are robust. Due to limited space, the robustness results of logit mode are not presented in this paper.

Table 3. (a) Robustness test with Alternative Measures I (CMDS 2014/2016). (b) Robustness test with Alternative Measures II (CMDS 2014/2016).

(a)				
Full Sample	CMDS2014		CMDS2016	
	Alternative Measures I		Alternative Measures I	
Variables	Coef.	Marginal Effect	Coef.	Marginal Effect
Explanatory variables				
Econ_gain	0.146 *** (0.012)	0.013 *** (0.001)	0.174 *** (0.010)	0.040 *** (0.002)
INC_UNC	−0.002 (0.005)	−0.000 (0.000)	−0.002 (0.004)	−0.000 (0.001)
Econ_gain × INC_UNC	−0.014 *** (0.002)	−0.001 *** (0.000)	−0.009 *** (0.001)	−0.002 *** (0.000)
Micro-level controls	Y	Y	Y	Y
City-level controls	Y	Y	Y	Y
Geographic controls	Y	Y	Y	Y
Constant	−1.626 *** (0.183)		0.000 (0.125)	
Observations	70,198	70,198	55,390	55,390
Pseudo R ²	0.1884	0.1884	0.1486	0.1486
(b)				
Full Sample	CMDS2014		CMDS2016	
	Alternative Measures II		Alternative Measures II	
Variables	Coef.	Marginal effect	Coef.	Marginal effect
Explanatory variables				
Econ_gain	0.378 *** (0.022)	0.032 *** (0.002)	0.252 *** (0.011)	0.058 *** (0.003)
INC_UNC	−0.018 *** (0.003)	−0.002 *** (0.000)	−0.012 *** (0.003)	−0.003 *** (0.001)
Econ_gain × INC_UNC	−0.040 *** (0.005)	−0.003 *** (0.000)	−0.014 *** (0.001)	−0.003 *** (0.000)

Table 3. *Cont.*

Micro-level controls	Y	Y	Y	Y
City-level controls	Y	Y	Y	Y
Geographic controls	Y	Y	Y	Y
Constant	−1.626 *** (0.183)		0.259 ** (0.126)	
Observations	70,198	70,198	55,390	55,390
Pseudo R ²	0.1884	0.2046	0.1544	0.1544

Note. ** $p < 0.05$. *** $p < 0.01$. Robust standard errors are shown in parentheses.

5. Heterogeneity Investigations

In this section, we further investigated how the correlation between key explanatory variables (economic potential gain, income uncertainty) and rural migrants' homeownership in their host cities varied across migrant cohort and in different cities. To allow the analysis to capture the time varying features, the 2014 and 2016 waves of the CMDS were combined into pooled data for heterogeneity analysis. The dummy variable $Year\ 2016_i$ was added to the regression model in order to capture the difference between the two years.

5.1. Cross-Generational Difference

Table 4 presents the cross-generational differences of the impact of key explanatory variables on homeownership: the older generation (rural migrants born before 1980) and the new generation (those born after 1980). The coefficients for all key explanatory variables were all significant, and their signs were consistent with those of the full sample. First, it is worth noting that the marginal effect of economic potential gain for the older-generation (0.034) was 1.10 times the corresponding value for the new-generation rural migrants (0.031). That is, compared with the new-generation rural migrants, the older-generation migrants were more sensitive to economic potential gain. Moreover, the marginal effect of interaction term $Econ_gain_i \times Year\ 2016_i$ for the older-generation migrants (0.006) is one and a half times that of the effect for the new-generation migrants (0.004), indicating that the degree of sensitivity to economic returns for the older has been observed to increase more than that for the new generation between 2014 and 2016. The literature from the socio-demographic perspective has long suggested that the housing tenure choice is inherently linked with the life course (e.g., [75]). The older cohorts generally entail a wider range of responsibilities, not only providing for their children's education but also supporting their aged parents [32]. In contrast, the younger cohorts bear relatively fewer economic responsibilities. Therefore, the older-generation rural migrants are expected to be more influenced by potential economic gains when considering the homeownership plan in the urban area.

Second, for these two cohorts of rural migrants, there was no difference in the marginal effect of income uncertainty and its corresponding interaction item on rural migrants' housing ownership. That means, throughout rural migrants' life cycle, income uncertainty is always one critical determinant when making a housing choice.

In addition, we note that the marginal effect of city-level the Housing Provident Fund participation on homeownership for the older-generation rural migrants (0.169) was 1.88 times of that of the effect for the new-generation counterpart (0.09). This indicates that the older-generation rural migrants, who are more experienced and, thus, have better credit records, are expected to benefit more from an improvement in housing support in aspiring to own a home in the city.

Table 4. Probit regression of rural migrants' homeownership in host cities (by cohort).

Cohort Heterogeneity	New Generation		Older Generation	
Data	CMDS 2014 and 2016 Pooled Data			
	(1)	(2)	(3)	(4)
VARIABLES	Coef.	Marginal Effect	Coef.	Marginal Effect
Explanatory variables				
Econ_gain	0.246 *** (0.015)	0.031 *** (0.002)	0.204 *** (0.018)	0.034 *** (0.003)
INC_UNC	−0.014 *** (0.003)	−0.002 *** (0.000)	−0.014 *** (0.003)	−0.002 *** (0.000)
Econ_gain × INC_UNC	−0.016 *** (0.002)	−0.002 *** (0.000)	−0.014 *** (0.002)	−0.002 *** (0.000)
Year 2016	0.602 *** (0.023)	0.081 *** (0.003)	0.610 *** (0.024)	0.108 *** (0.005)
Econ_gain × Year 2016	0.031 *** (0.013)	0.004 *** (0.002)	0.038 *** (0.015)	0.006 *** (0.002)
Micro-level controls	Y	Y	Y	Y
Geographic controls	Y	Y	Y	Y
H_FinanceAC	0.709 *** (0.149)	0.090 *** (0.019)	1.027 *** (0.162)	0.169 *** (0.027)
Other City-level controls	Y	Y	Y	Y
Observations	67,308	67,308	58,280	58,280
Pseudo R ²	0.2173	0.2173	0.1905	0.1905

Note: *** $p < 0.01$.

5.2. Regional Heterogeneity

In China, large cities and megacities are generally associated with much higher price-to-income ratios that make home purchase much more difficult than small and medium-sized cities. The impacts on housing tenure decisions of key interest variables were investigated to see how they varied with the size of destination cities. As shown in Table 5, rural migrants in big cities or megacities were more sensitive to economic potential gains when making housing tenure choice in host cities. By contrast, rural migrants placed a higher value on non-economic components with respect to the aspiration to own a home in smaller cities. Furthermore, the coefficient of interaction item $Econ_gain_i \times Year\ 2016_i$ was significantly positive for big cities or megacities but insignificant for migrants in small or medium-sized cities. In other words, compared with those in smaller cities, the rural migrants in bigger cities become more sensitive to potential economic returns in host cities when making homeownership decisions after the New-Type Urbanization policy was implemented in 2014.

Secondly, income uncertainty is found to be negatively and significantly associated with rural migrants' home ownership likelihood in big cities or megacities but insignificant for rural migrants in small or medium-sized cities. This implies that income uncertainty would be a critical issue when rural migrants make homeownership decisions in big cities or megacities but much less important for rural migrants in small or medium-sized cities. This finding is reasonable: purchasing a home in big cities is very costly so purchasers must be very cautious of income fluctuations, but purchasing a home in small cities requires much less financial input so buyers do not need to be as cautious regarding uncertainty. Meanwhile, the coefficient for the interaction term $Econ_gain_i \times INC_UNC_i$ is still significantly negative in all types of cities.

Table 5. Probit regression of rural migrants in host cities across city sizes. The classification criterion of 5.2 in heterogeneity analysis is the standard “Notice of The State Council on Adjusting the Standards for Dividing the size of Cities” (document 2014, 51 issued by The State Council of China. URL http://www.gov.cn/zhengce/content/2014-11/20/content_9225.htm (accessed on 20 November 2014).

Regional Heterogeneity	Small and Medium City		Big City and Megacity	
Data	CMDS 2014 and 2016 Pooled Data			
	(1)	(2)	(3)	(4)
VARIABLES	Coef.	Marginal Effect	Coef.	Marginal Effect
Explanatory variables				
Econ_gain	0.175 *** (0.028)	0.031 *** (0.005)	0.252 *** (0.012)	0.034 *** (0.002)
INC_UNC	−0.005 (0.006)	−0.001 (0.001)	−0.017 *** (0.002)	−0.002 *** (0.000)
Econ_gain × INC_UNC	−0.021 *** (0.004)	−0.004 *** (0.001)	−0.017 *** (0.001)	−0.002 *** (0.000)
Year 2016	0.837 *** (0.041)	0.162 *** (0.009)	0.532 *** (0.018)	0.076 *** (0.003)
Econ_gain × Year 2016	0.001 (0.029)	0.000 (0.005)	0.045 *** (0.010)	0.006 *** (0.001)
Micro-level controls	Y	Y	Y	Y
Geographic controls	Y	Y	Y	Y
H_FinanceAC	2.217 *** (0.253)	0.386 *** (0.044)	0.469 *** (0.129)	0.064 *** (0.017)
Other City-level controls	Y	Y	Y	Y
Observations	19,975	19,975	105,613	105,613
Pseudo R ²	0.2481	0.2481	0.2035	0.2035

Note: *** $p < 0.01$.

Lastly, compared with those migrants residing in big cities or megacities, where the housing price is beyond migrants’ payment ability, a more city-level “friendly financing” environment supported by the Housing Provident Fund has a more positive effect on boosting rural migrants’ homeownership in small or medium-sized cities. From the perspective of housing affordability, small or medium-sized cities could be the preferred settlement for rural migrants. According to the empirical result, more attention should be paid to economic stimulus and housing financing support if local authorities aim to enhance rural migrants’ homeownership rate in small or medium-sized cities.

6. Discussion on Influencing Mechanism

Economic potential gains, which combine the “pull” incentive of the host city with the “push” factor of migrant’s hometown, have been empirically verified to have a significant positive impact on the probability of rural migrants’ urban settlement intentions [12]. On the other hand, there was a significant connection between rural migrants’ homeownership and their urban settlement intentions [76,77].

On the basis of the above analysis, one can see that economic potential gains are likely to further affect the rural migrants’ homeownership in urban areas by influencing their intention to settle in cities as an intermediary variable. The following is an empirical test of the above conjecture through the mediation effect test procedure. The specific steps are as follows:

Step 1: On the basis of Equation (5), the positive impact of economic potential gains on rural migrants’ homeownership in urban areas was identified (Shown in Column 2/5 of Table 6).

Table 6. Test for influencing mechanism (CMDS 2014/2016).

Test	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
Data	CMDS 2014						CMDS 2016					
Dependent Variable	Homeowner		Settlement Intention		Homeowner		Homeowner		Settlement Intention		Homeowner	
Empirical Method	Probit		Probit		Probit		Probit		Probit		Probit	
Model	Equation (5)		Equation (6)		Equation (7)		Equation (5)		Equation (6)		Equation (7)	
Variables	Coef.	Mar. *	Coef.	Mar.	Coef.	Mar.	Coef.	Mar.	Coef.	Mar.	Coef.	Mar.
Econ_gain	0.213 *** (0.018)	0.019 *** (0.002)	0.132 *** (0.009)	0.052 *** (0.003)	0.191 *** (0.018)	0.011 *** (0.001)	0.203 *** (0.010)	0.047 *** (0.002)	0.133 *** (0.009)	0.052 *** (0.004)	0.185 *** (0.010)	0.037 *** (0.002)
INC_UNC	−0.009 *** (0.004)	−0.001 *** (0.000)	−0.001 (0.003)	−0.000 (0.001)	−0.009 ** (0.004)	−0.001 ** (0.000)	−0.006 (0.004)	−0.001 (0.001)	−0.003 (0.003)	−0.001 (0.001)	−0.006 (0.004)	−0.001 (0.001)
Econ_gain * INC_UNC	−0.020 *** (0.003)	−0.002 *** (0.000)	−0.009 *** (0.001)	−0.004 *** (0.000)	−0.017 *** (0.003)	−0.001 *** (0.000)	−0.011 ** (0.001)	−0.002 ** (0.000)	−0.007 *** (0.001)	−0.003 *** (0.000)	−0.010 *** (0.001)	−0.002 *** (0.000)
Settlement Intention					1.076 *** (0.026)	0.067 *** (0.002)						
Micro-level Attributes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
City-level Attributes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Constant	−1.745 *** (0.184)		−0.699 *** (0.108)		−2.376 *** (0.193)		−0.128 (0.125)		0.291 *** (0.105)		−0.894 *** (0.131)	
Pseudo R ²	0.1926	0.1926	0.1084	0.1084	0.2570	0.2570	0.1508	0.1508	0.0850	0.0850	0.2254	0.2254
Observations	70,198	70,198	70,198	70,198	70,198	70,198	55,390	55,390	55,390	55,390	55,390	55,390

* Marginal effect. ** $p < 0.05$. *** $p < 0.01$.

Step 2: To test the effect of economic potential gains on rural migrants’ settlement intention in host cities, probit regression was used following Model (6) below:

$$Settlement_Intention_i = d + \gamma_1 Econ_gain_i + \gamma_2 INC_UNC_i + \gamma_3 Econ_gain_i \times INC_UNC_i + \sum \gamma_k Control_i + \varepsilon_i \tag{6}$$

where the subscript i refers to the migrant. The variable $Settlement_Intention_i$ refer to rural migrants’ willingness to settle down in the inflow areas, and ε_i is the residual item.

As shown in Column 3/6 of Table 6, controlling for micro-level and city-level control variables, economic potential gains had a significant positive impact on rural migrants’ willingness to settle down in the inflow areas. Furthermore, when economic potential gains increased by one unit, the willingness of rural migrants to settle down in the inflow areas increased by 5.2%.

Step 3: Economic potential gains, together with the variable $Settlement_Intention_i$, were used in the empirical model of rural migrants’ homeownership in urban areas. Model (7) is shown as follow:

$$Homeownership_i = c + \mu_1 Econ_gain_i + \mu_2 INC_UNC_i + \mu_3 Econ_gain_i \times INC_UNC_i + Settlement_Intention_i + \sum \mu_k Control_i + \varepsilon_i \tag{7}$$

The mediating effect of rural migrants’ willingness to settle down in the inflow areas in the impacts of economic potential gains on rural migrants’ homeownership in urban areas was identified, as shown in Table 6. Table 6 shows that the positive effect of economic potential gains on rural migrants’ homeownership in urban areas can be partially realized through their urban settlement intentions.

7. Discussion

The belief that owning one's home in the inflow area is the foundation of upward mobility that has been strongly held by migrants, which can be seen not only in China but also in other countries [78]. Home ownership indicates successful integration in the host areas [79]. Home ownership is also one key factor of the principles of livability towards achieving a livable city [80].

Thus, the decisions "whether to own or rent a home" and "where to buy" for migrants are of significance, but all are risky [22]. In this risky-behavior housing purchase, the factors that cannot be ignored include income and its uncertainty. The correlation between household real income and homeownership has been examined by statistically empirical tests (e.g., [22,81–84]) or through case study (e.g., [84]). In addition, the real income segregation has been verified to have a significant positive effect on homeownership segregation [78]. However, different from local residents, migrants discussed in our paper take into account economic factors from the origin when making housing tenure choice, a topic which has not been fully studied in the existing literature. Our research, therefore, contributes to a body of literature that studies relative income, which is a comparison between income from destination and that from the origin (economic potential gain). While it has been testified that the homeownership gaps between rural–urban migrants and urban–urban migrants vary by real income [82], we further explored that economic potential gain, which indicated the sense of gain in terms of income, positively affecting rural-urban migrants' home ownership.

On the other hand, while income uncertainty has been shown to exert a negative effect on home ownership [16,85], most of the relevant research focused on labor income uncertainty for local residents, most of whom are employed in a working environment with a relatively sound labor system [86]. Facing unstable employment environment and being exposed to greater occupational risk, migrants would be more concerned with income risk when making the decision "whether to own or rent a home". Furthermore, how income uncertainty affects the effect of economic potential gain on home ownership is also investigated in our study. Of course, due to limitations in the form of survey data used, we admit that using cross-sectional data in empirical regression makes it impossible to track changes in home ownership for the same migrant household over time.

8. Conclusions and Policy Implications

It has been emphasized in the people-oriented new-style urbanization strategy in China that the local integration of rural migrants in the host cities is a top priority issue to achieve inclusive social development [87]. Assuring stable residence in the city is one of the major challenges of rural migrant life in the host city. As the transition into homeownership would signal a critical progress in the migrants' economic and social assimilation process, analyzing the determinants of rural migrants' homeownership carries important policy implications.

On the basis of the Chinese nationwide micro-level data collected in 2014 and 2016 by the CMDS, this article contributes to the literature of migrants' housing choices by showing that rural migrants' homeownership likelihoods in their host cities would increase when they expect high income growth relative to their hometowns and less income uncertainty in the urban destinations. Further, our empirical results also showed that the increase of income uncertainty would reduce the positive impact of economic potential gain on rural migrants' tendency to become homeowners in urban areas. It is also found that an improvement of city-level housing finance accessibility can spur rural migrants' housing consumption in urban destinations. Moreover, this paper also explored the disparities of the associations among income potential gain, income uncertainty, and migrants' housing tenure choices across cohorts and regions.

Our findings have some important policy implications. First, the evidence here suggests that there are higher potential income gains from settling down in host cities as compared with hometowns. Inducing more attractions to be integrated in the host cities is

crucial in affecting whether rural migrants wish to own a home in the urban destinations. Thus, rural migrants are rational in making housing tenures, and only cities with booming economic potential can encourage rural migrants to become homeowners. It will be fruitful to encourage rural migrants to buy homes in the cities with brighter economic outlooks that cater to their human capital endowments, but it would be much less fruitful to promote homeownership if rural migrants feel less confident with their future income path in the cities. If a level playing field can be provided for the rural migrants in urban areas so that their human capital endowment can be reasonably rewarded in terms of income, then the urban homeownership rate of rural migrants will be improved further.

Second, the significant adverse impact of income uncertainty on rural migrants' homeownership reminds us that assuring household income stability and job security should be one of key focus if local authorities aim to raise rural migrants' homeownership rates in urban areas. As the hukou system creates wage discrimination in the labor market, difficulty in accessing local public service systems and the welfare system exacerbates rural migrants' income uncertainty. Accelerating the hukou system reform and eliminating institutional discrimination imposed on rural migrants can help them increase their income stability and, subsequently, have higher aspirations to strive for homeownership dreams. Third, the strong interaction between income uncertainty and potential income gains suggests that extending social security system on rural migrants can have a double effect on their homeownership tendency. One is the direct effect through reducing income uncertainty, and the other one is the indirect effect through the amplification of potential income gains with reduced income uncertainty. These findings are useful for both designing inclusive urbanization strategy and predicting the city-specific trend of the real estate market in China. With increasing availability of data in the future, we can extend the research to the housing tenure decisions of rural migrant workers with intra-provincial migration. In addition, future research can also be proceeded to quantify how social security coverage extension may affect rural migrants' homeownership propensity in the urban destinations.

Author Contributions: Conceptualization, J.C. and W.W.; methodology, J.C. and W.W.; software, W.W.; validation, J.C., W.W. and Y.S.; formal analysis, W.W.; data curation, W.W.; writing—original draft preparation, J.C. and W.W.; writing—review and editing, J.C. and Y.S.; visualization, W.W.; funding acquisition, J.C. and W.W. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Guangxi Natural Science Foundation (No. 2021GXNSFBA196044).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data sharing is not applicable to this article.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. OLS regression result of rural migrants' income (Y_1) determinants.

Full Samples Variables	CMDS 2014		CMDS 2016	
	Coef.	Robust SE	Coef.	Robust SE
Age	0.004 *	(0.002)	0.012 ***	(0.003)
Age_sqr	−0.000 ***	(0.000)	−0.000 ***	(0.000)
Female	0.017 ***	(0.004)	0.009 *	(0.005)
Edu_level	0.046 ***	(0.009)	0.014 ***	(0.010)
Married	0.424 ***	(0.007)	0.331 ***	(0.009)
Child	0.030 ***	(0.010)	−0.018 *	(0.010)
East_origin	0.034 ***	(0.005)	0.032 ***	(0.006)

Table A1. Cont.

Full Samples Variables	CMDS 2014		CMDS 2016	
	Coef.	Robust SE	Coef.	Robust SE
Self-employed	0.112 ***	(0.017)	0.103 ***	(0.022)
Secondary_indu	0.220 ***	(0.017)	0.446 ***	(0.019)
Tertiary_indu	0.103 ***	(0.017)	0.354 ***	(0.019)
Businessman	0.098 **	(0.031)	0.228 ***	(0.040)
Service-staff	−0.113 ***	(0.027)	0.010	(0.033)
Moveyears	0.015 ***	(0.001)	0.014 ***	(0.001)
Moveyears_sqr	−0.000 ***	(0.000)	−0.000 ***	(0.000)
HPF	0.047 ***	(0.009)	0.123 ***	(0.010)
PensionU	0.031 ***	(0.009)	0.034 ***	(0.005)
MedicareU	0.056 ***	(0.008)	0.061 ***	(0.007)
LN_PERGDP	0.030 *	(0.015)	0.155 ***	(0.017)
LN_POP	0.015 ***	(0.002)	0.054 ***	(0.002)
Edu_level* LN_PERGDP	0.013 ***	(0.004)	−0.000 ***	(0.004)
Self-employed* LN_PERGDP	0.031 ***	(0.007)	0.019 *	(0.010)
Businessman* LN_PERGDP	−0.013	(0.014)	−0.064 ***	(0.017)
Service-staff* LN_PERGDP	0.008	(0.011)	−0.047 ***	(0.013)
Constant	0.900 ***	(0.054)	0.446 ***	(0.059)
Observations	70,198		55,390	
R-squared	0.162		0.160	

Note. Y_1 represents the sample migrant's annual total household income in the current city; the reference group for occupation dummies is the worker group. * $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$.

References

- Wang, Y.; Dong, X. Housing Policies for Rural Migrant Workers in China. In *Urban Inequality and Segregation in Europe and China*; The Urban Book Series; Pryce, G., Wang, Y.P., Chen, Y., Shan, J., Wei, H., Eds.; Springer: Cham, Switzerland, 2021. [CrossRef]
- Zhang, S.; Hou, C.; Chen, J. Homeownership, city integration, and the sense of happiness of migrants in urban China. *Front. Bus. Res. China* **2019**, *13*, 1. [CrossRef]
- Liao, L.; Wu, W.; Zhang, C. Housing prices and the subjective well-being of migrant workers: Evidence from China. *J. Happiness Stud.* **2022**, *23*, 3363–3388. [CrossRef]
- National Bureau of Statistics of China. The Monitoring Report on Rural Migrant Workers. 2018. Available online: http://www.gov.cn/xinwen/2019-04/30/content_5387773.htm (accessed on 30 April 2019).
- Ben-Ner, A.; Hamann, D.J.; Ren, T. Does ownership matter in the selection of service providers? Evidence from nursing home consumer surveys. *Nonprof. Volunt. Sec. Q.* **2018**, *47*, 1271–1295. [CrossRef]
- Huang, X.; Dijst, M.; van Weesep, J. Tenure choice in China's medium-sized cities after hukou reform: A case study of rural–urban migrants' housing careers in Yangzhou. *J. Hous. Built Environ.* **2020**, *35*, 353–373. [CrossRef]
- Yuan, C.; He, X.; Kim, Y. Home ownership, housing price and social security expenditure. *China Econ. Rev.* **2017**, *46*, 290–305. [CrossRef]
- Tang, S.; Feng, J.; Li, M. Housing tenure choices of rural migrants in urban destinations: A case study of Jiangsu Province, China. *Hous. Stud.* **2017**, *32*, 361–378. [CrossRef]
- Wu, L.; Zhang, W. Rural migrants' homeownership in Chinese urban destinations: Do institutional arrangements still matter after Hukou reform? *Cities* **2018**, *79*, 151–158. [CrossRef]
- Wang, Z.; Cui, C. Job and home dilemma: Housing pathways of urban migrants in china. *Asian Popul. Stud.* **2022**, *18*, 294–314. [CrossRef]
- Lee, E.S. A Theory of Migration. *Demography* **1966**, *3*, 47–57. [CrossRef]
- Chen, J.; Wang, W. Economic incentives and settlement intentions of rural migrants: Evidence from China. *J. Urban Aff.* **2019**, *41*, 372–389. [CrossRef]
- Song, Y. Hukou -based labour market discrimination and ownership structure in urban China. *Urban Stud.* **2016**, *53*, 1657–1673. [CrossRef]
- Logan, J.R.; Fang, Y.; Zhang, Z. The Winners in China's Urban Housing Reform. *Hous. Stud.* **2010**, *25*, 101–117. [CrossRef]
- Robst, J.; Deitz, R.; McGoldrick, K. Income variability, uncertainty and housing tenure choice. *Reg. Sci. Urban Econ.* **1999**, *29*, 219–229. [CrossRef]
- Diaz-Serrano, L. Labor income uncertainty, skewness and homeownership: A panel data study for Germany and Spain. *J. Urban Econ.* **2005**, *58*, 156–176. [CrossRef]

17. Gathergood, J. Unemployment risk, house price risk and the transition into home ownership in the United Kingdom. *J. Hous. Econ.* **2011**, *20*, 200–209. [[CrossRef](#)]
18. Henderson, J.V.; Ioannides, Y.M. A Model of Housing Tenure Choice. *Am. Econ. Rev.* **1983**, *73*, 98–113.
19. Varshaver, E.A.; Ivanova, N.S.; Rocheva, A.L. Why and when do migrants in Russia come to homeownership and how is it related to integration? *Monit. Obsestven. Mnenii* **2022**, *2*, 223. [[CrossRef](#)]
20. Gambo, M.J. Effect of institutional context and finance context of housing finance on home ownership among low-income earners in bauchi. *J. Financ. Manag. Prop.* **2022**, *27*, 415–436. [[CrossRef](#)]
21. Ren, C. Vulnerability of low-income homeownership in the United States: An analysis based on household liquidity. *J. Urban Aff.* **2022**, 1–26. [[CrossRef](#)]
22. Lewin, A.C. Poverty, affluence and homeownership among working-age immigrants in Israel. *Popul. Space Place* **2023**, *29*, e2601. [[CrossRef](#)]
23. Haurin, D.R.; Hendershott, P.H.; Watchter, S.M. Borrowing constraints and the tenure choice of young households. *J. Hous. Res.* **1997**, *8*, 137–154.
24. Morrow-Jones, H.A.; Wenning, M.V. The Housing Ladder, the Housing Life-cycle and the Housing Life-course: Upward and Downward Movement among Repeat Home-buyers in a US Metropolitan Housing Market. *Urban Stud.* **2005**, *42*, 1739–1754. [[CrossRef](#)]
25. Iwaisako, T.; Ono, A.; Saito, A.; Tokuda, H. Disentangling the effect of home ownership on household stockholdings: Evidence from Japanese micro data. *Real Estate Econ.* **2022**, *50*, 268–295. [[CrossRef](#)]
26. Haurin, D.R.; Gill, H.L. Effects of income variability on the demand for owner-occupied housing. *J. Urban Econ.* **1987**, *22*, 136–150. [[CrossRef](#)]
27. Haurin, D.R. Income variability, homeownership, and housing demand. *J. Urban Econ.* **1991**, *1*, 60–74. [[CrossRef](#)]
28. Xing, C.; Yuan, X.; Zhang, J. City size, family migration, and gender wage gap: Evidence from rural–urban migrants in China. *Reg. Sci. Urban Econ.* **2022**, *97*, 103834. [[CrossRef](#)]
29. Chen, J.; Yang, Z. What do young adults on the edges of homeownership look like in big cities in an emerging economy: Evidence from Shanghai. *Urban Stud.* **2017**, *54*, 2322–2341. [[CrossRef](#)]
30. Cui, C.; Geertman, S.; Hooimeijer, P. Access to homeownership in urban China: A comparison between skilled migrants and skilled locals in Nanjing. *Cities* **2016**, *50*, 188–196. [[CrossRef](#)]
31. Huang, X.; Dijst, M.; Van Weesep, J.; Zou, N. Residential mobility in China: Home ownership among rural–urban migrants after reform of the hukou registration system. *J. Hous. Built Environ.* **2014**, *29*, 615–636. [[CrossRef](#)]
32. Huang, X.; Dijst, M.; Van Weesep, J.; Jiao, Y.; Sun, Y. Residential Choice among Rural-Urban Migrants after Hukou Reform: Evidence from Suzhou, China. *Popul. Space Place* **2017**, *23*, e2035. [[CrossRef](#)]
33. Zhang, Z.; Wu, X. Occupational segregation and earnings inequality: Rural migrants and local workers in urban China. *Soc. Sci. Res.* **2017**, *61*, 57–74. [[CrossRef](#)]
34. Lucas, R.E.B.; Stark, O. Motivations to Remit: Evidence from Botswana. *J. Political Econ.* **1985**, *93*, 901–918.
35. Alderotti, G.; Mussino, E.; Comolli, C.L. Natives’ and migrants’ employment uncertainty and childbearing during the great recession: A comparison between Italy and Sweden. *Eur. Soc.* **2022**, 1–35, ahead-of-print. [[CrossRef](#)]
36. Hamedanian, F. Access to the European labor market for immigrant women in the wake of the COVID pandemic. *World* **2022**, *3*, 957–978. [[CrossRef](#)]
37. Bagnoli, L.; Estache, A. Mentoring migrants for labor market integration: Policy insights from a survey of mentoring theory and practice. *World Bank Res. Obser.* **2022**, *37*, 39–72. [[CrossRef](#)]
38. Sani, G.M.D.; Acciai, C. Two hearts and a loan? Mortgages, employment insecurity and earnings among young couples in six European countries. *Urban Stu.* **2018**, *55*, 2451–2469. [[CrossRef](#)]
39. Knight, J.; Song, L.; Huaibin, J. Chinese rural migrants in urban enterprises: Three perspectives. *J. Dev. Stud.* **1999**, *35*, 73–104. [[CrossRef](#)]
40. Meng, X.; Zhang, J. The Two-Tier Labor Market in Urban China: Occupational Segregation and Wage Differentials between Urban Residents and Rural Migrants in Shanghai. *J. Comp. Econ.* **2001**, *29*, 485–504. [[CrossRef](#)]
41. Zhang, L.; Sharpe, R.V.; Li, S.; Darity, W.A.J. Wage differentials between urban and rural-urban migrant workers in China. *China Econ. Rev.* **2016**, *41*, 222–233. [[CrossRef](#)]
42. Dulleck, U.; Fookan, J.; He, Y. Hukou status and individual-level labor market discrimination: An experiment in China. *Ind. Labor Relat. Rev.* **2020**, *73*, 628–649. [[CrossRef](#)]
43. Wang, J.; Ai, S.; Huang, M. Migration history, hukou status, and urban household consumption. *Econ. Model.* **2021**, *97*, 437–448. [[CrossRef](#)]
44. Zhou, J. Uncertainty and housing tenure choice by household types: Evidence from China. *China Econ. Rev.* **2011**, *22*, 408–427. [[CrossRef](#)]
45. Huang, Y.; Clark, W.A.V. Housing Tenure Choice in Transitional Urban China: A Multilevel Analysis. *Urban Stud.* **2002**, *39*, 7–32. [[CrossRef](#)]
46. Tao, L.; Hui, E.C.; Wong, F.K.W.; Chen, T. Housing choices of migrant workers in China: Beyond the Hukou perspective. *Habitat Int.* **2015**, *49*, 474–483. [[CrossRef](#)]

47. Mu, X.; Yeh, A.G.; Zhang, X.; Wang, J.; Lin, J. Moving down the urban hierarchy: Turning point of China's internal migration caused by age structure and hukou system. *Urban Stud.* **2022**, *59*, 1389–1405. [[CrossRef](#)]
48. Fang, Y.; Zhang, Z. Migrant household homeownership outcomes in large Chinese cities—the sustained impact of hukou. *Eurasian Geogr. Econ.* **2016**, *57*, 203–227. [[CrossRef](#)]
49. Hsu, W.; Ma, L. Urbanization policy and economic development: A quantitative analysis of China's differential hukou reforms. *Reg. Sci. Urban Econ.* **2021**, *91*, 103639. [[CrossRef](#)]
50. Chang, F.; Impara, E. Predicting migrant workers' intention to acquire local citizenship (hukou) in emerging cities using machine learning models: A case study of five Dongguan factories. *Future Hum. Image* **2022**, *18*, 10–27. [[CrossRef](#)]
51. Li, H.; Chen, K.; Yan, L.; Yu, L.; Zhu, Y. Citizenization of rural migrants in China's new urbanization: The roles of hukou system reform and rural land marketization. *Cities* **2023**, *132*, 103968. [[CrossRef](#)]
52. Tan, J.; Xu, H.; Yu, J. The effect of homeownership on migrant household savings: Evidence from the removal of home purchase restrictions in China. *Econ. Model.* **2022**, *106*, 105679. [[CrossRef](#)]
53. Shen, Y.; Luo, X. Linking spatial and temporal contexts to multi-contextual segregation by hukou status in urban China. *J. Transp. Geogr.* **2023**, *107*, 103540. [[CrossRef](#)]
54. Li, P.; Wu, Y.; Ouyang, H. Effect of hukou accessibility on migrants' long term settlement intention in destination. *Sustainability* **2022**, *14*, 7209. [[CrossRef](#)]
55. Song, Q.; Smith, J.P. The Citizenship Advantage in Psychological Well-being: An Examination of the Hukou System in China. *Demography* **2021**, *58*, 165–189. [[CrossRef](#)] [[PubMed](#)]
56. Liu, J.; Dai, W.; Li, X.; Dong, Z.; Dong, J. The Differentiated Effect of Administrative Policy in China's Housing Market—Based on the Heterogeneous Households Multi-Agent Model. *J. Syst. Sci. Complex.* **2020**, *33*, 167–195. [[CrossRef](#)]
57. Meng, L.; Xiao, X.; Zhou, Y. Housing Boom and Household Migration Decision: New Evidence from China. *J. Real Estate Financ. Econ.* **2021**, *8*. [[CrossRef](#)]
58. Sun, W.; Zhang, S.; Lin, C.; Zheng, S. How Do Home Purchase Restrictions Affect Elite Chinese Graduate Students' Job Search Behavior? *Reg. Sci. Urban Econ.* **2021**, *87*, 103644. [[CrossRef](#)]
59. Lee, C.-C.; Ho, Y.-M.; Chiu, H.-Y. Role of personal conditions, housing properties, private loans, and housing tenure choice. *Habitat Int.* **2016**, *53*, 301–311. [[CrossRef](#)]
60. Akdogan, K.; Karacimen, E.; Yavuz, A.A. Cross-country evidence on the link between job security and housing credit. *J. Hous. Built Environ.* **2019**, *34*, 947–963. [[CrossRef](#)]
61. Zhang, X.; Zheng, Y.; Tian, C. Who benefits from the housing provident fund system in china? An analysis of the internal rate of return for typical employees with different incomes. *Sustainability* **2021**, *13*, 4622. [[CrossRef](#)]
62. Chen, H.; Song, J.; Jiang, H. Inequity in housing welfare: Assessing the inter-city performance of China's housing provident fund program. *Land* **2023**, *12*, 653. [[CrossRef](#)]
63. Zhou, X. A quantitative evaluation of the Housing Provident Fund program in China. *China Econ. Rev.* **2020**, *61*, 101436. [[CrossRef](#)]
64. Carroll, C.D.; Samwick, A.A. The nature and magnitude of precautionary wealth. *J. Monet. Econ.* **1997**, *40*, 41–71. [[CrossRef](#)]
65. Dynarski, M.; Sheffrin, S.M. Housing Purchases and Transitory Income: A Study with Panel Data. *Rev. Econ. Stat.* **1985**, *67*, 195–204. [[CrossRef](#)]
66. Zhou, J. Uncertainty, inequality and consumption preferences in urban China. *Econ. Model.* **2013**, *31*, 308–322. [[CrossRef](#)]
67. Goodman, A.C.; Kawai, M. Permanent income, hedonic prices, and demand for housing: New evidence. *J. Urban Econ.* **1982**, *12*, 214–237. [[CrossRef](#)]
68. Moriizumi, Y.; Naoi, M. Unemployment risk and the timing of homeownership in Japan. *Reg. Sci. Urban Econ.* **2011**, *41*, 227–235. [[CrossRef](#)]
69. Gibbs, J.P. Review of "Foundations of Social Theory". *Soc. Forces* **1990**, *69*, 625–633.
70. Taylor, M. Structure, culture and action in the explanation of social change. *Politics Soc.* **1989**, *17*, 115–162. [[CrossRef](#)]
71. Fu, Y.; Tse, D.K.; Zhou, N. Housing choice behavior of urban workers in China's transition to a housing market. *J. Urban Econ.* **2000**, *47*, 61–87. [[CrossRef](#)]
72. Chen, M.; Wu, Y.; Liu, G.; Wang, X. The effect of the housing provident fund on housing consumption and inequity risks. *Cities* **2020**, *104*, 102812. [[CrossRef](#)]
73. Chambers, M.S.; Garriga, C.; Schlagenhauf, D.E. The loan structure and housing tenure decisions in an equilibrium model of mortgage choice. *Rev. Econ. Dyn.* **2009**, *12*, 444–468. [[CrossRef](#)]
74. Chen, M.; Wu, Y.; Liu, G.; Wang, X. City Economic Development, Housing Availability, and Migrants' Settlement Intentions: Evidence from China. *Growth Change* **2020**, *51*, 1239–1258. [[CrossRef](#)]
75. Dieleman, F.M.; Clark, W.A.V.; Deurloo, M.C. Falling out of the home owner market. *Hous. Stud.* **1995**, *10*, 3–15. [[CrossRef](#)]
76. Lin, L.; Zhu, Y. Types and determinants of migrants' settlement intention in China's new phase of urbanization: A multi-dimensional perspective. *Cities* **2022**, *124*, 103622. [[CrossRef](#)]
77. Huang, X.; Chen, M. Understanding the role of housing in rural migrants' intention to settle in cities: Evidence from China. *Habitat Int.* **2022**, *128*, 102650. [[CrossRef](#)]
78. Ha, S.; Hilber, C.A.L.; Schöni, O. Do long-distance moves discourage homeownership? Evidence from England. *J. Hous. Econ.* **2021**, *53*, 101766. [[CrossRef](#)]

79. Kulkarni, N.; Malmendier, U. Homeownership segregation. *J. Monet. Econ.* **2022**, *129*, 123–149. [[CrossRef](#)]
80. Shakur, E.S.A.; Mohamed, A.F.; Hadi, A.S. Home ownership for liveable city: Case study of Kajang city, Malaysia. *J. Hous. Built Environ.* **2021**, *36*, 1763–1785. [[CrossRef](#)]
81. Goodman, L.S.; Mayer, C. Homeownership and the American dream. *J. Econ. Perspect.* **2018**, *32*, 31–58. [[CrossRef](#)]
82. Ming, J.; Liu, J.; Wang, Z. Does the Homeownership Gap Between Rural–Urban Migrants and Urban–Urban Migrants in China Vary by Income? *Sage Open* **2020**, *10*. [[CrossRef](#)]
83. Kim, D.; Seo, Y.; Freybote, J. Urbanity, financial crisis and the timing of homebuying decisions by young households. *J. Real. Estate Financ.* **2021**, *62*, 481–507. [[CrossRef](#)]
84. Teodorescu, D. Homeownership, mobility, and home: A relational housing study of argentine ludar and romanian rudari. *Geoforum* **2020**, *116*, 98–109. [[CrossRef](#)] [[PubMed](#)]
85. Mnasri, A. Renting vs buying a home: A matter of wealth accumulation or of geographic stability? *J. Econ. Dyn. Control* **2015**, *60*, 42–72. [[CrossRef](#)]
86. Camilli, A.; Gomes, P. Public employment and homeownership dynamics. *Public Choice* **2023**, *194*, 101–155. [[CrossRef](#)]
87. The State Council of the PRC. National New Urbanization Planning. Available online: http://www.gov.cn/xinwen/2014-03/16/content_2639841.htm (accessed on 16 March 2014).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.