Homeownership in Iran: An Analysis on the Relationship between Characteristics of the Household Head and Homeownership

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Introduction

Having increased up to 1986, the homeownership rate declined in Iran over recent decades. Iran's census data show that homeownership rate has declined from 71.6% in 1966 to 60.5 in 2016. During this half century, this rate fell from 54.9% and 82.4% to 54.5% and 79.2% in urban and rural areas, respectively. In urban areas, there have been more fluctuations than in rural areas, due to housing policy changes. For example, the land provision for housing in cities contributed to considerable boosting the urban homeownership rate to its highest level, around 70% in 1986.

Besides housing policy, demographic and socio-economic factors can explain changes in the homeownership rates. Previous research has demonstrated that household characteristics such as age, education, race, income, household size, and childbearing can be related to the tenure choice (Aizawa & Helble, 2016; Lauridsen & Skak, 2007; Huang & Clark, 2002; Gyourko & Linneman, 1996; Courgeau & Lelièvre, 1992). Research by Andrews and Caldera Sánchez (2011) suggests that changes in household characteristics can account for around three-quarters of the increase in aggregate homeownership rates in Austria and the United Kingdom over the decade from the mid-1990s to mid-2000s, but only around one-third of the increase in Canada, Germany, Spain, Switzerland and the United States (Andrews & Caldera Sánchez, 2011). This paper investigates the extent to which characteristics of household head can explain the homeownership.

Method and Data

In this paper, census 2011 2-percent microdata sample containing records for 420021 household heads have been used to investigate relation between homeownership and characteristics of household heads including age, sex, education, marital status, place of residence, employment status, lifetime migration, and household size.

To analyze data, we regressed homeownership - a dichotomous variable - on characteristics of household head via binary logistic regression. The relationship between each independent variable and the dependent variable was examined separately by simple logistic regression. Then, two multiple logistic regression models were fitted. In the former, the depended variable was regressed on seven independent variables. In the latter, the categorical age variable, because of its considerable effect on the homeownership in the simple regression model, was added to independent variables set.

Findings

Findings suggest that the share of homeowners tends to increase among older household heads. The similar relationship holds for the homeownership and household size. The larger the household size is, the larger the share of homeowners will be, except for one-person households.

Table 1 shows that homeownership rate has a roughly U-shape relation with education, so that it is higher among household heads at the low and high end of the education distribution than among their counterparts with secondary education. As reported in Table 2, odds ratios for education in the second multiple logistic regression model well represent the U-shape relation.

Moreover, the results reveal that demographic factors such as divorce, lifetime migration, unemployment, residence in urban areas, as well as being female reduce significantly the chance of being a homeowner.

	Table 1:Percentage Frequency Distribution of Homeownership	Table 2: Odds Ratio for Homeownership										
Characteristics of Household Head				Total				Simple regression model		ession	Multiple regres	
F		Homeowner	Non- Homeowner		Characteristics of household head				model 1		model 2	
Sex	Male Female	63/5 66/9	36/5 33/1	87/9 12/1				Sig	Exp(B)	Sig	Exp(B)	
					Sex	Male (ref)	Exp(B)	-		-	r (-)	
Age	10 - 29	35/2	64/8	14/5	Ber	female	1/159	*	0/613	*	0/691	
	30 - 39	50/4	49/6	26/6	Area of residence	Rural area (ref)	-	-	-	-	-	
	40 - 49	69/7	30/3	22/4		Urban area	0/33	*	0/392	*	0/308	
	50 - 59	79/8	20/2	17	Area of birth Household size	Current area of residence (ref)	-	-	-	-	-	
	60 - 69	83/4	16/6	9/5		Elsewhere (urban area)	0/504	*	0/587	*	0/537	
	69 <	83/1	16/9	10		Elsewhere (rural area)	0/887	*	0/805	*	0/811	
Household Size	1	62/1	37/9	7/1		Abroad	0/091	*	0/040	*	0/052	
	2	56/4	43/6	18/4		Abioad	0/091	*	1/372	*	1/225	
	3	56/1	43/9	27/2	Household size	Marriel(met)	0/149					_
	4	67/4	32/6	26/3	Marital status	Married (ref)	-	-	-	-	-	
	5	75/4	24/6	12/5		Divorced	1/594	*	1/591	*	0/983	
	6	78/1	21/9	5/3		Widowed	0/432	*	0/825	*	0/642	
	6<	80/6	19/4	3/1		Single	0/559	*	1/403	*	1/561	_
Area of birth Marital Status	Current area of residence	69	31	58/4	Employment status Education	In employment (ref)	-	-	-	-	-	
	Elsewhere (urban area)	52/9	47/1	24/1		In unemployment	0/707	*	0/608	*	0/7	
	Elsewhere (rural area)	66/4	33/6	16/1		Not seeking employment (family-related reason)	1/293	*	1/598	*	1/126	
	Abroad	16/9	83/1	1/5		Not seeking employment (income with no job)	2/406	*	2/986	*	1/301	
	Married	63/6	36/4	86/4		other	1/825	*	1/519	*	0/87	
	Divorced	73/6	26/4	9/8		Illiterate (ref)	-	_	-	_	-	
	Widowed	43	57	1/7		Primary education	0/617	*	0/594	*	0/953	
	Single	49/4	50/6	2/1		Lower secondary education	0/316	*	0/344	*	0/725	
Education	Illiterate	80.3	19/7	20/7		-		*	0342	*	0/710	
	Primary education	71/5	28/5	22/4		Upper secondary education	0/271	*		*		
	Lower secondary education	56/2	43/8	18/8		Short cycle tertiary education and bachelor	0/326	*	0/468	т 	0/934	
	Upper secondary education	52/5	47/5	23/1		Master and doctoral	0/339	*	0/584	*	1/025	_
	Short cycle tertiary education and bachelor	57	43	12/6	Age	10 – 29 (ref)	-	-	-	-	-	
	Master and doctoral	58	42	2/4		30 - 39	1/871	*	-	-	1/85	
Employment Status	In employment	60/9	39/1	69/5		40 - 49	4/252	*	-	-	4/157	
	In unemployment	52/4	47/6	5/5		50 - 59	7/269	*	-	-	7/376	
	Not seeking employment (family-related reason)	66/8	33/2	4/6		60 - 69	9/257	*	-	-	10/043	
	Not seeking employment (income with no job)	78/9	21/1	14/5		69 <	9/09	*	-	-	10/251	
	other	74	26	5/9		Constant	-	-	2/711	*	1/029	
Area of Residence	Rural area	80/6	19/4	27		Chi-square	-	_	64756	*	92978	_
	Urban area	57/8	42/2	73		-2 Log likelihood	_		453154	-	424932	_
Total Seconda Since		63/9	36/1	100	<u> </u>	Nagelkerke R Square	_		0/21	_	0/29	
	Sample Size	264285	149081	420021			D < 0.01		0/21		0/2/	-

Conclusion

Over the past decades, housing policies in Iran appear to have had significant influences on homeownership rates. However, as suggested in this paper, cross-sectional differences in household characteristics can account for the differential chances of homeownership. Because the household heads are significant decision-makers for household behaviors, especially for economic behaviors such as consumption and savings, in this study, the statistical analysis focuses on their characteristics. In comparison to other household characteristics, age of household head exhibits a stronger relation to the homeownership. It seems that increasing age of household head accompanied by the increase in savings leads to the greater odds of purchasing a home. Furthermore, familial intergenerational transfers, especially through bequest, from their parents, may enable household heads to purchase a housing unit at higher ages.

Although this study shows that there are correlations between some demographic factors such as lifetime migration, divorce, and household size and the dependent variable, one cannot conclude that dependent variable is caused by these factors. For example, it cannot be argued that an increase in the household size increases the likelihood of homeownership, because the causal direction in the relationship is unidentified.

A limitation of this study is that it cannot provide a causal interpretation of the relationship between all the characteristics of household head and homeownership. Moreover, a large number of variables useful to explain homeownership do not exist in census data. Considering variables such as household income, intergenerational transfers and macroeconomic indicators on the one hand and applying longitudinal research designs on the other, is useful to overcome limitations of this study.

References

1- Aizawa, T., and M. Helble. 2016. Determinants of Tenure Choice in Japan: What Makes You a Homeowner? ADBI Working Paper 625. Tokyo: Asian Development Bank Institute. Available: https://www.adb.org/publications/determinants-tenure-choice-japan-what-makes-you-homeowner

2- Andrews, Dan and Aida Caldera Sánchez (2011), "The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences", OECD Journal: Economic Studies, Vol. 2011/1.

http://dx.doi.org/10.1787/eco_studies-2011-5kg0vswqpmg2

3- Courgeau, D and E. Lelièvre. (1992). "Interrelations between First Homeownership, Constitution of the Family, and Professional Occupation in France." *Demographic Applications of Event History Analysis*. Oxford: Clarendon Press. Pp. 120-140 4- Gyourko, J. and P. Linneman. (1996). "Analysis of the Changing Influences on Traditional Households' Ownership Patterns." *Journal of Urban Economics*, 39: 318-341.

5- Huang, Y. and W. A. V. Clark. (2002). "Housing Tenure Choice in Transitional Urban China: A Multilevel Analysis." Urban Studies, 39(1): 7-32.

6- Lauridsen, J. and M. Skak. (2007). "Determinants of Homeownership in Denmark." *Discussion Papers on Business and Economics*, Denmark: University of Southern Denmark.