# 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.

Characteristics of Household Head		Homeo	Homeownership		
		Homeowner	Non- Homeowner	Total	
C	Male	63/5	36/5	87/9	
Sex	Female	66/9	33/1	12/1	
	10 – 29	35/2	64/8	14/5	
Age	30 - 39	50/4	49/6	26/6	
	40 - 49	69/7	30/3	22/4	
	50 - 59	79/8	20/2	17	
	60 - 69	83/4	16/6	9/5	
	69 <	83/1	16/9	10	
	1	62/1	62/1 37/9		
	2	56/4	56/4 43/6		
	3	56/1	43/9	27/2	
Household Size	4	67/4	32/6	26/3	
	5	75/4	24/6	12/5	
	6	78/1	21/9	5/3	
	6<	80/6	19/4	3/1	
	Current area of residence	69	31	58/4	
A C1: 1	Elsewhere (urban area)	52/9	47/1	24/1	
Area of birth	Elsewhere (rural area)	66/4	33/6	16/1	
	Abroad	16/9 83/1		1/5	
	Married	63/6	36/4	86/4	
Marital Status	Divorced	73/6	26/4	9/8	
Marital Status	Widowed	43	57	1/7	
	Single	49/4	50/6	2/1	
	Illiterate	80.3	19/7	20/7	
	Primary education	71/5	28/5	22/4	
Education	Lower secondary education	56/2	43/8	18/8	
Education	Upper secondary education	52/5	47/5	23/1	
	Short cycle tertiary education and bachelor	57	43	12/6	
	Master and doctoral	58	42	2/4	
	In employment	60/9	39/1	69/5	
	In unemployment	52/4	47/6	5/5	
Employment Status	Not seeking employment (family-related reason)	66/8	33/2	4/6	
	Not seeking employment (income with no job)	78/9	21/1	14/5	
	other	74	26	5/9	
Area of Posidence	Rural area	80/6	19/4	27	
Area of Residence	Urban area	57/8	42/2	73	
Total		63/9	36/1	100	
Sample Size		264285	149081	42002	

Characteristics of household head		Simple regression model		Multiple regression model 1		Multiple regression model 2	
		Exp(B)	Sig	Exp(B)	Sig	Exp(B)	Sig
Sex	Male (ref)		-	-	-	-	-
	female	1/159	*	0/613	*	0/691	*
Area of residence	Rural area (ref)	-	-	-	-	-	-
	Urban area	0/33	*	0/392	*	0/308	*
Area of birth	Current area of residence (ref)	-	-	-	-	-	-
	Elsewhere (urban area)	0/504	*	0/587	*	0/537	*
	Elsewhere (rural area)	0/887	*	0/805	*	0/811	*
	Abroad	0/091	*	0/040	*	0/052	*
Household size		0/149	*	1/372	*	1/225	*
Marital status	Married (ref)	-	-	-	-	-	-
	Divorced	1/594	*	1/591	*	0/983	
	Widowed	0/432	*	0/825	*	0/642	*
	Single	0/559	*	1/403	*	1/561	*
Employment status	In employment (ref)	-	_	-	_	-	_
	In unemployment	0/707	*	0/608	*	0/7	*
	Not seeking employment (family-related reason)	1/293	*	1/598	*	1/126	*
	Not seeking employment (income with no job)	2/406	*	2/986	*	1/301	*
	other	1/825	*	1/519	*	0/87	*
			·	1/319	·	0/87	
	Illiterate (ref)	0/617	*	0/504	*	0/052	*
Education	Primary education	0/617		0/594		0/953	
	Lower secondary education	0/316	*	0/344	*	0/725	*
	Upper secondary education	0/271	*	0342	*	0/710	*
	Short cycle tertiary education and bachelor	0/326	*	0/468	*	0/934	*
	Master and doctoral	0/339	*	0/584	*	1/025	
Age	10 – 29 (ref)	-	-	-	-	-	-
	30 - 39	1/871	*	-	-	1/85	*
	40 - 49	4/252	*	-	-	4/157	*
	50 – 59	7/269	*	-	-	7/376	*
	60 - 69	9/257	*	-	-	10/043	*
	69 <	9/09	*	-	-	10/251	*
Constant		-	-	2/711	*	1/029	
Chi-square		-	-	64756	*	92978	*
-2 Log likelihood		-	-	453154	-	424932	-
Nagelkerke R Square		_	_	0/21	_	0/29	_

# 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.

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