Impact of Migration on Housing Prices: A Case of Low-Income Households in Iran

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Abstract: Housing shortage is a problem for all levels of household income particularly affects low-income households in recent years. The main purpose of this paper is to investigate the relationship between migration and housing prices of low-income households. This study adopted the quantitative research method and involved a questionnaire survey of 381 low-income households in the district 20 located in south of Tehran, Iran. The result of this research shows that the inappropriate policy to control the housing prices in Tehran. The finding of this research can be used by the public and the private sectors as a basis for policy and decision making in housing markets, especially in the Iranian context.

Keywords: migration; housing prices; low-income household

JEL Classification: R31

1. Introduction

During the past two decades, housing in Iran has been studied as an important property investment asset, although traditionally it is considered as a consumer good or a shelter (Abbasinezhad & Yari, 2009). The construction and housing sector are one of the most important sectors in economy of Iran and nearly 120 industrial activities are related directly or indirectly to this sector. Historically, housing prices have never decreased in Iran. Low interest rates and strong housing demand are the most important problems in the housing market in Tehran. Due to the inflation in recent decade, housing prices have increased faster than the prices of other commodity services in Tehran (Naji Meidani et al., 2011). The average price of a housing unit in urban areas is about ten times the annual income of urban households. Generally, increasing the housing prices cause several problems for

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low-income households such as spending the portion of household income on housing payment and having a lower quality or less housing (Frank, 1999).

Due to the unprecedented population growth, this city faced with several problems such as housing shortage and affordability crisis particularly for low-income households. Population migration rush especially has automatically resulted in population growth rate in Tehran capital of Iran. The main causes of migration during the years 1999-2009 are as follows: family dependence (46%), employment (13.8%), military service (10.3%), studying (9.9%), and job transfer (5.1%), (Atlas of Tehran Metropolis, 2009). Unfortunately, there is no reliable source of the statistics of low-income households available in Tehran. According to the income category in Iran, monthly income below USD540 for a family of five persons has been declared as a poverty line in 2010 (ISNA Agency, 2010).

2. Review of Housing Demand Literature

Housing demand has been studied for at least three decades. Housing is the most important asset and the largest expense for many households around the world (Warnock & Warnock, 2008). Housing is one of the consumption goods which includes of the largest portion of the average household budget (Kim, 2004). Accordingly, housing is an important socioeconomic issue in different areas which low-income households are faced with the issue as it is in around the world. There are some characteristics indicating that market mechanisms for housing are different from those of other goods or services and determine demand and supply in the market. The distinguishing features of housing are listed and described as follows: fixity, durability and heterogeneity of housing. According to Gilbert et al. (2009), the first step for most of housing demand studies is the individual consumer's utility function that affects the consumers' performance for a product in relationship to all products. The purpose of examining housing needs determines what elements are included in a measure. Leunig and Overman (2008) define housing demand as the quantity of housing of the type and quality that household can afford to purchase or rent. Therefore, housing demand considers as preference and the ability to pay. Moreover, in the public sector, demand is assumed to be equal to housing needs and in the private sector, demand is constrained by affordability. Obviously, the special feature of housing is to determine the behaviour of demand and supply for housing from the demand and supply curves for other goods (Koebel, 2008). Therefore, the willingness and household affordability to pay affect on demand condition for housing.

3. Migration and Demand for Housing

"*Urban housing demand is a reflection of households' desire to live in cities*" (Poterba & Sinai, 2008). The source of population growth determines whether there is an immediate or future demand for housing. A market search is the first step that households face when they want to migrate (Aroian, 2010). Obviously, there is a strong relationship between changes in housing and net migration, which represents the new household formation. Therefore, housing and lack of housing may lead to out-migration or prevent migrants from entering (Mulder, 2006). The result of some studies shows that homeowners are considerably less likely to migrate than renters in most countries (Helderman et al., 2006; Mulder, 2006). The impact of migration on housing may be discussed meaningfully in terms of supply and demand. Furthermore, internal migrants affect housing demand and supply the labour, so a structural economic aspect would identify elasticises with respect to housing prices (Vermeulen & Ommeren, 2009).

Saiz (2007) points out that due to the migration during the period 1967 to 1983, Los Angeles experienced major housing prices increases compare to other American metropolitan areas. Similarly, Ley and Tuchener (1999) find time-series correlation between immigration in Toronto and Vancouver and housing prices. In Australia, Burnley and Murphy (1997) point out that migration is one of the major correlates of inflation of housing prices in the main immigrant city such as Sydney. Therefore, immigrant concentration in an area affects the price of an average dwelling (Akbari & Aydede, 2009). Besides, housing market has affected migration flows through shared owner-occupied houses and housing prices. According to the adjustment of regional labour market, changes in housing prices have different effects on in-migration and out-migration. Increasing in housing prices may constrain some households who prefer to move, and may slow down in migration as well (Arzaghi & Rupasingha, 2008). Qualitative factors such as moving to a new job increase migration and are important variables in housing demand. Work site, income, and life cycle all have significant effects on households' choice of location and the amount of housing consumed (Straszheim, 2008).

4. Housing Prices

Price is determined based on demand and supply. The average house prices and trend in house prices is a key element of the housing market. In a fully competitive housing market, housing price is determined in an equilibrium demand and supply condition. On the one hand, applicants for housing demand different quantities of it with different purchase prices but in a constant condition where other factors are not changed. On the other hand, different quantities of goods are supplied by the sellers to the market, provided that other factors remain constant and unchangeable.

The fluctuations in housing prices play an important role in the economy in a wider context (Hadavandi et al., 2011). The housing market refers to the supply and demand for houses in a particular country or region. Accordingly, changes in housing demand and supply effect on changing on housing prices. Therefore, the market price is balanced when the demand and supply have equal conditions in the market. Dusansky and Koç (2007) indicate that housing price has a statistically significant and positive effect on the demand for housing services for those who choose to own. Ioannides and Zabel (2003) state that the demand for structural equation includes a price variable that is the amount of neighbourhood quality purchased. Han (2006) indicates house price uncertainty affects households' home purchase behaviour. Price is basically reduced when the demand is reduced. "*Income and price elasticity of housing demand may change with different concepts of housing demand*" (Zabel, 2004). In Tehran, Iran, Hadavandi et al. (2011) find that the main portion of house prices is affected by land price in Tehran's 20 different areas housing prices. Moreover, some researches show that geographic variables are an important determinant of housing prices (Goodman & Thibodeau, 2003). Housing prices also influence household location decisions.

6. Methodology

The main purpose of this research is to examine the association between migration and housing prices linked to the specific condition of low-income households. Accordingly, this study highlights a main objective which is the foundation of this research; to examine the relationship between migration and housing prices of low-income households. This study adopted the quantitative research and the questionnaire survey was the major source of gathering primary data to identify relationships between independent and dependent variables of this research. The study has research population of 50,000 households (respondents) in the study area of Tehran, the District 20 (Shahr-e-Rey). The required sample size for population of 50,000 in this research was calculated as 381 respondents (Krejcie & Morgan, 1970). Accordingly, the questionnaire surveys were sent to the respondents by postal mail and after all the respondents feedback had been collected, the appropriate analysis methods were carried out. The analysis method in this research is mainly descriptive and regression analysis by using the SPSS software.

7. Data Analysis and Discussion

After collecting the data, this research adopted the Descriptive Statistic (DS) for frequency and percentage of respondent's background. Descriptive statistics of respondent's background indicate that nearly 93% of the respondents (household head) in this research are more than 40 years old, 71% of them are male and most

of the them (67%) are married. Household gender is important because family size and overcrowding can be influenced by household gender. In addition, nearly 82% of the respondents have low levels of education (completed high school or below). Besides, 59% of the respondents indicated that their income was below USD540. Nearly 77% of respondents have lived in Tehran for less than 10 years and 50% of them indicated that employment or job transfer was the reason for migration. Other reasons for migration are 9% family dependent, 7% Tehran facilities, 6% higher education, and 3% marriage. Further, 92% of respondents live in rental houses, while 85% of respondents indicated that they live with more than one family in one residential unit.

The aim of research objective is to investigate the contribution of each of the predictor variables (independent variable) towards the variance of a dependent variable. In Table 1, the R Square identifies the variance explained by the independent variable (migration) that is approximately 0.163, it means that the model after the IV has been entered, explains 16.3% of the variance in housing prices.

Table 1. Model Summary for the Dependent Variable (Housing Prices)

Mode	R	R Square	Adjusted R Square	Std. Error	R Square Change	Sig. F Change
1	0.403	0.163	0.160	0.39473	0.163	0.000

In Table 2, the ANOVA table indicates that the model is significant contribution as indicated by the Sig. = 0.000 this really means *P < 0.005*.

Table 2. ANOVA for the Dependent Variable (housing prices)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.459	1	11.459	73.544	0.000
	Residual	59.053	379	0.156		
	Total	70.513	380			

Analysis and evaluator of the research data revealed that migration as independent variable had a good relationship with housing prices. Therefore, Multiple Regression Analysis found the relative contribution of each independent and dependent variable of the study. Accordingly, the objective of the research was achieved.

8. Conclusion

The main objective of this research has designed to examine the relationship between migration and housing prices of low-income households. The result of this study found that there is a positive relationship between migration and housing prices. Further, the research has detected some of the main problems associated with the low-income households in Tehran who have migrated. The result of this research shows that most of migrated households to Tehran have low level of education, low income, and migrated to this city during the past ten years ago. Furthermore, this research finds one of the main problems of housing demand in Tehran is a lack of policy to control the housing prices. Therefore, the Government should pay more attention to income affordability, purchase affordability to decrease the burden of low-income household. The government should improve housing credit, housing loan, and ease loan term, and decrease the interest rate especially for developer who wants to improve low-income housing conditions. Furthermore, loan terms is very difficult in Iran with high interest rate, so low-income household does not have the ability to borrow money from banks and also amount of payment is not economically reasonable according to their income. Accordingly, Government can apply new policy for low-income to facilitate long term, by this, the Government can help them repair or reconstruct existing housing stock to promote housing quality.

It will be useful for future research to consider another aspect of housing demand in another locality. In addition, this study just focused on the influence of one variable on housing prices which facing by low-income households, hopefully in the future study survey other variables of housing demand such as housing inflation, construction cost and etc. in another area.

9. References

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