



## Identification and Prioritization of Effective Factors on Willingness to Pre-Purchase Demand of Housing (Case Study: Buyers of Under Construction Houses in the City of Ilam)

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Received: 2016/11/23

Accepted: 2017/02/05

**Abstract:** Pre-purchase is a way to buy housing with consumption-investment motivation in uncertainty condition with high risk and direct financial investment. This research aims to identify and prioritize effective factors on willingness to pre-purchase demand of housing in the city of Ilam and to present a conceptual model. In terms of purpose, this research is applied and it is descriptive-analytical with mixed approach (qualitative and quantitative) in terms of method. To collect data, library and field studies were used. Data collection tools are interview and researcher-made questionnaire. The validity was confirmed by experts and confirmative factor analysis. The reliability was calculated by Cronbach's alpha. In qualitative stage, population including 40 experts (from road and urbanization, housing foundation, Maskan Bank, and real estate experts) of Ilam selected by purposive sampling method. In the quantitative stage, population included buyers of under construction houses determined 240 ones based on Morgan table and selected by available sample sampling method. To analyze data, SPSS 16 and Lisrel 8.5 were used. The results indicated that economic, financial, fiscal-behavioral, motivational, and social factors influence on housing pre-purchase and economic factors including poverty, economic efficiency and economic crisis, with the coefficient of 4.57, ranked first and political ones-economic policies- ranked the last with the coefficient of 2.66.

**Keywords:** housing pre-purchase, demand for consumption-investment housing, identification and prioritization of factors, city of Ilam

**JEL Classification:** C81, R21, R31, N55

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## 1- Introduction

Some goods including housing, which for most families is a commodity, have been needed since long time ago and it cannot be removed from their portfolio (Soheili et al., 2014). Thus, housing as shelter is the most basic needs (Babatunde Femi & Hayat Kha, 2014), and it is one of the important indicators of the standard of living (Funmilayo & Adetokunbo, 2013). Due to population growth and urbanization, this need has become one of the most acute problems in underdeveloped as well as developing countries. From the most important factors for resolve this issue are land supply, strong management, and building materials (Mazlum Khorasani, 2011). The uncontrolled growth of housing prices, inadequate loan of housing, inflation vs. income of family, expensive and speculation of land, jobbery in products, lack of the actual seller, inconspicuous of government role, the presence of very sensible of private sector, and dealers caused imbalance between purchasing power and housing prices. Thus, the buy applicants act by pre-buy.

In the past, from the viewpoint of non-manufacturing economy, the housing was a personal wealth and as shelter (Choguill, 1993). But nowadays, housing has the dual nature of consumer-capital. This means that consumer demand is stable and predictable, but the capital-demand for housing is influenced by several factors, and it is unpredictable (Mousavi and Doroudian 2015). According to studies, the poor allocate to housing almost 50% of their income, while this amount for the rich is maximum 20% (Deilami & Shafiee, 2012). Problems such as high percentage of rental housing and mortgage are highlighted the necessity of systematic and parallel with housing buyers

in Ilam city. Thus, this research aims to identify and determine effective factors on willingness to housing pre-buy, and prioritize them to understand the housing demand situation, for appropriate policy-making and planning in housing sector of city of Ilam. In this regard, research questions are:

**Question 1:** What factors are effective on tend to pre buy demand of housing among homebuyers in Ilam city?

**Question 2:** What is the priority of these factors to each other?

## 2- Literature Review

### *a) Foreign Researches*

In study in Greece in 1997-2013, Panagiotidis and Panagiotis (2015), by using of monthly –nominal data and the causality method of Granger, reported the mortgage loan has a significant effect on housing market by bank system.

In studying the urban multiple structure and housing price, during the transitional period of Hong Geo in China, Wen and Tao (2015) concluded that the impact of urban centers on housing prices is gradually increased. So that, the steep price and its gradient have increased from 2003 to 2011.

Aang, Zhang and Qinghua (2014), have examined the house prices increment in Chinese cities between years 2002 and 2008 by surveying the important of change in underlying factors of supply and demand for housing (such as the urban population, income, wage, the supply of urban land and construction costs). Their results indicated that the fundamental factors change of mentioned can form an important part of actual changes of housing prices.

Dieci and Westerhoff (2014) have provided a simple model for speculative market by using nonlinear dynamic map. In this model; demand for housing is the function of buyers' expectations of the

futures prices of housing. However, the results indicated that the relative change in the share of demanders with different expectations causes boom and boost in the housing market.

Gimeno and Martinez (2010), examined the variables of housing prices, loans for buying a house, and the relationship between them in Spain by the error correction model. The results indicated that these two variables are dependent together in the long term, and until the end of the study, both variables were higher rather than their equilibrium level.

Seiler et al. (2016) examined the behavioral-financial factors related to investing in real estate. They concluded a significant relationship between the mental accounting and investing in real estate, in a combined portfolio from several type of asset, and concluded that when the value of an investment will pay more prices, people are more willing to sell.

M.c.Stephen et al. (2007), estimated reasons and limitations of homeownership and the government policy of China, in order to solve housing problems, and also the results have shown that affordability difficulties of housing in China are composed of population growth, sustainable economic growth, speculation, housing supply adequate power.

#### ***b) Iranian Researches***

Akbari et al. (2013), in order to analyze valuation and calculate consumers' willingness to pay for various characteristics of housing by experimental selection method (CEM), concluded that the financial variable, especially, the benefit ratio from the exemption from construction for residents was important. So that, with increasing the exemption from construction, is increased the desire to construction, due to normal economic situation of residents.

Neshat et al. (2013), in Damghan by using survey methods, GIS, mouse and hedonic model, concluded that higher land prices, the construction cost increases more, and accordingly, its amount is reduced. Understanding the structure of supply and demand is the most important factor to achieve appropriate ways of production and supply of housing. In this context, to meet the demand for housing of low-income groups, it is needed to identify the exact place of residence and locating new housing to minimize the impact of effective spatial index on demand structure.

Mazlum Khorasani et al. (2010), in Mashhad during the years 2008-2009, introduced the variables of awareness; mass media advertising, trust, satisfaction of the presenters, mental preparation and positive attitude project, real assumption of buying house, assessing the financial and political support of government respectively as the effective and positive factors of housing cooperative.

Qaderi et al. (2010), during 1996-2006, by using the combination of two raised pattern on housing investment; portfolio and autoregressive model with distributed lags for integration analysis concluded that rising housing prices, liquidity ratio and household income result in real estate investment in housing sector and also increasing asset prices of housing rivals (currency, exchange, gold etc.) and decline in housing investment.

Azani et al. (2004) in their study in Isfahan in order presenting a model by using AKNM model concluded that the urban household income has a positive effect on housing demand, and increasing the Prices of goods and services consumed, will decrease effective housing demand, but increasing urban marriage cause housing demand increase.

Mahnam (2015) in Isfahan by using of modeling, concluded that the variables of cost of building material, labor costs in housing sectors, the rate of construction, population index, bank facilities, and other effective variables of inflation on housing prices have a significant positive impact on housing prices in different areas of the city, and the population growth increases the demand for housing; thus, population control policy should be applied.

### 3- Theoretical Framework

Housing economy is a branch of economics. According to economic theory of housing, investment in housing sector is the causes of price, but it is not the reason. This means that housing price and rental are determined in the housing market, and the given prices the will be the base of investors' decisions. If the prices and conditions of housing are appropriate and housing investment returns is more than other assets, investment in housing will be increased (Karimi and Zahedi, 2010). One of the housing problems is that it is known as a purely economic commodity. Today, with the increasing population, this problem worsens in developing countries because we face the rising demand of housing, shortage of land and housing supply (Dabagh and Keshavarz, 2012).

#### *How to Invest in Real Estate*

Investment in real estate sphere can be done in two ways:

- Indirectly by purchase of shares of companies active in this field that the main advantage of indirect investment is high liquidity ratio.

- Direct investment by the presence on the supply side or the demand for housing.

Direct investment on the supply side includes buy land and build on it, buy land and attracting investment for its

construction, land acquisition and financing for the construction by bank sources and pre-buy or combination of them, participative decision - making of land owners and the combination of all cases.

Direct investment on the demand side is by pre-buy; buy through capital or loans, or the combination of all cases (Kozehchi, 2013). Pre-buy is one way to housing with high-risk tolerance, which it has created under uncertainty for low-income groups and lack of housing as commodity and freedom from rent, and it is a direct investment for high-income groups with the ultimate goal of profit and investment.

Consumer demand in order to provide an adequate shelter for households is inevitable. In this type of demand, the housing prices and household income are effective. This type of demand has always been there, and it is likely that regarding the housing prices and household income changes, bank payment facility for buy property, transaction costs (price contract related to real estate agents, price setting documents, the cost of moving and handling), household preferences (diversity, etc.), and demographic trends (increase in the number of households, increase or decrease of households) are effective in consumer housing demand (Bahrami & Morovat, 2015).

The demand for housing finance is formed when purchase housing in comparison with other assets such as stocks and bonds have greater profitability. Profitability is formed once speculators expect that in the short term, the market price of housing will be more than its basic price. Thus, they can profit by buying housing at a price lower than the basic price. The housing and real estate, according to experience with low-risk and its appropriate efficiency in long time can cause decrease

the portfolio risk and increase its profit, and meanwhile, the impact on capital markets and assets is effective on the economic system performance (Gholizadeh et al., 2015).

It is a fact that you must buy real estate with other people's money. People buy by using the money and resources of banks, insurance companies, private lenders, or the seller of the property. Money is often given in the form of a mortgage loan because finance through a mortgage is the part of real estate investment (Galilni, 2011). Banks are among the most important savings institutions, mobilization and allocation of funds and this role has changed them into one of the factors contributing to the economic growth and development. Nevertheless, it should be noted that for the mobilization of financial resources and its allocation in order to investment, they have specific capacity. Regardless of the sources of income or the economic policies of country, banks that wish to distribute their loans and rate to their customers will experience crisis (Olokoyo, 2011). Thus, loans assigned to individuals, economic organizations, and government, then they could invest and develop their own activities, as a result, contribute to the country economic development and the growth of a sector. Due to having the information from borrowers, they are specialized in solving the financial problems of society. Thus, decreasing bank lending could bring serious damage to private sector (Lashkari et al. 2015).

The appropriate shape of houses has an important role in supply of this need. Thus, it is necessary to consider the area of residential units, design, strength and materials used in the construction of housing units. Accordingly, five key factors should be regarded including land, financial resources, manpower and technology,

building materials, management and supervision (Akbari et al, 2013).

#### 4- Research Method

In terms of propose, this research is applied and in terms of methodology is mixed exploratory (qualitative-quantitative). The method of data collection, for literature parts, was the library procedure, and field study method was used for the main results. In the qualitative phase, data were collected by the interviews with experts in the field of housing, and in the quantitative phase by the researcher-made questionnaire. The validity of the results of the interviews has been approved by experts composed of faculty of management and economics and housing experts. The reliability was approved through Cronbach's alpha test. The reliability of economic factors was (0.941), financial (0.976), behavioral-financial (0.911), motivational (0.878), political (0.920), and social (0.890). In the qualitative part, to identify the factors, an open coding process was used. The statistical population of the qualitative stage consists of 40 experts from Roads and Urban Planning Experts, Housing Foundation, Bank Maskan, and Estate Advisers of Ilam City who selected by using targeted sampling method. In the qualitative method, the sample size is at least 15 people. The population of the quantitative stage includes the buyers of housing under construction, and since the number of communities is not known, according to the Krejcie and Morgan table for descriptive-analytic research, the minimum sample size is 240, determined by available sampling. For statistical analysis, SPSS16 and LISREL 8.5 softwares were used. Exploratory and confirmatory factor analysis was used to determine the correlation of factors with concepts and

components. Kolmogorov-Smirnov tests were used for data normalization. Binomial was used for testing statistical assumptions and answering questions, and Friedman test was used to rank the factors.

## 5- Research Findings

### a) Qualitative Findings

Firstly, raw data were extracted by interviews with housing experts. A number was considered for each interviewee and the common data in the form of 24 codes

were classified and it became into 12 concepts and they were obtained in the form of 6 factors. As a result, the conceptual model has been extracted. For this process, the review method with interviewees was used. Given the structured process of research, precision in sample selection, its purposefulness, and observing duplicate data, sufficient sampling was obtained. The aim of the study was described for experts in this field. The results of coding are summarized in table1.

**Table1. Encoding data extracted from interviews**

Raw data	Number of interviewees	Code	Concepts	Factors
Weak financial base and lack of savings	1,2,5,13,22	Lack of liquidity and support	Poor	Economic
Facilitating payments to a particular class	3,4,5	Discrimination and inequality		
Income vs. inflation	10,17,19,26	Irregular trend of rising prices	Economic crisis	
The country's economic crisis	1,2,3,5,6,7,9	Economic fluctuations	Economic efficiency	
The added value of housing under construction	7,13,16,35,37,38	The difference between input and output data		
Surplus to requirements for capital	1,8,9	Household economic management		
Fluctuations in metal prices	23,26,38	Basic factors of decision making		
The disproportionate amount of the loan with the cost of construction	2,18,31,40	Inadequate banking facilities	Financial straits	Financial
The ability to repay a loan interest	24,39	Repayment		
The power to choose and change equipment used	1,4,11,31	Diversity of interests and needs	Financial facilities and special rates	
Supervision of banks of investment in housing sector	4,5,12,27	Intermediary bank and government		
Discounts of Engineering System	1,2,9,16,28			
Self-sufficiency in retirement	5,14,15,33	Welfare-oriented	Consumer demand	Motivational
Freedom from mortgage or rent	2,7,19,21,25,36			
Profit arising from price fluctuations	1,2,3,9,11,12,34,39	Merchant	Demand of Capital expenditures	
Having tend to house Surplus to requirements and wealth	5,15,22,29,40	Capital expenditures		
The decision to buy, sell or rent housing	1,7,10,11,21,32			
Promoting public participation in economic development	13,28	The functioning of the housing sector		
Fears of devaluation cash	2,3,6,7,10,11,15,19,27	Risk aversion	Emotional bias	Behavioral Finance
Low investment risk in this area	5,16,33,37			
Not be economic to repair reconstruction of old construction	2,23,34	Mental accounting	Cognitive bias	
Experience and knowledge to economic developments	3,5,12,14,16,22,40	Cross-available		
Advertising tricks Estate	1,7,13,14,18,22			
Disregarding the social and cultural effects Mehr housing	4,16,26	The challenge Mehr housing scheme	Economic policy	Political
Location of housing units	4,7,23,35,36,37			
Implementation of targeted subsidies	7,13,18,28	Policy		
taxes on land and housing	14,16,20,26	Government actions		
The government's decision to increase the price of housing	14,25,32			
buy-culture of increasing commodity prices	2,4,9,15,21,30	Norms and values	Sociability	Social
family-based stabilization and association	18,29	Social status		
The desire to live independently	6,9,13,18,22,29,31,36			
The need to small housing	5,11,17,33,38	Demographic trends	Demographic	
Number of family members	2,12,16,19,28,34			

**Reference: (Researchers' findings)**

### Conceptual Model

According to the conducted interviews, the variables were extracted in the form of codes, concepts, components and main

variable. Pre-buy of housing is the dependent variable and the obtained factors are independent variable. The conceptual model of research is shown in Fig. 1.

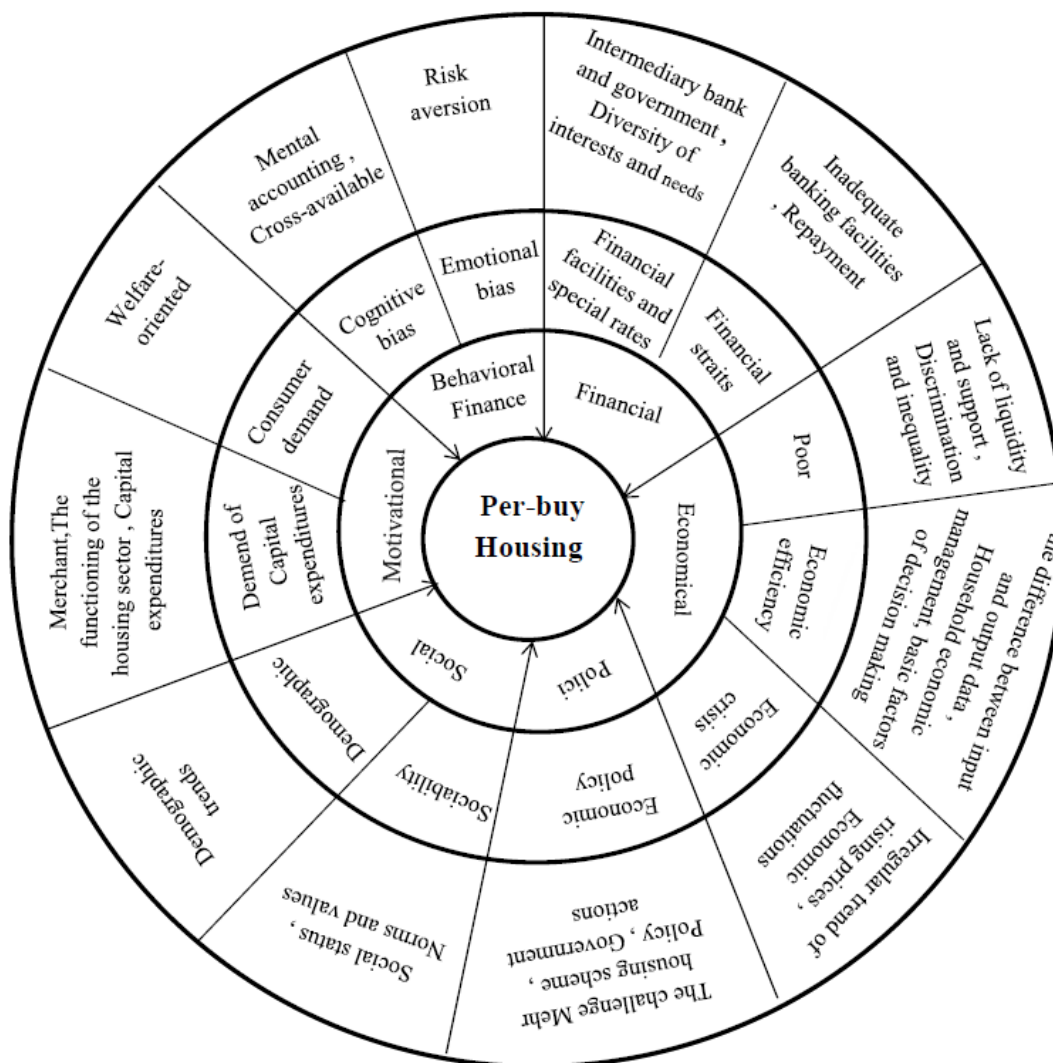


Fig1. Conceptual Model

Reference: (Researchers' findings)

### b) Quantitative Data

The validity of the questionnaire was tested through the opinions of housing experts, professors in economics and management, and a confirmatory factor analysis. In addition, its reliability was estimated through Cronbach's alpha, economic factors 0.941, financial factors 0.776, behavioral 0.911, motivational 0.88 0.8, political 0.920 and social 0.0890. For

the purpose of normal or abnormal data, the Kolmogorov-Smirnov test was used. To identify the factors affecting this issue, exploratory factor analysis, and to test the obtained results, first, confirmatory factor analysis and then by using the non-parametric tests proportional to data, the findings of the research were investigated.

To examine the data normalization, we tested the null hypothesis test at the

margin of error 0.05. If the significance levels of the test results are greater than

or equal 0.05, in this case, the data are normal, otherwise, are abnormal (table 2).

**Table2. Normality test**

Factors	Mean	Standard deviation	Kolmogorov	Significance level
Economic	3.83	0.71	0.78	0.000
Financial	3.30	0.74	0.55	0.000
Financial -Behavioral	3.50	0.81	1.82	0.000
Motivational	3.40	0.80	0.53	0.000
Social	3.60	0.79	0.55	0.000
Political	3.23	0.77	0.78	0.000

**Reference: (Researchers' findings)**

To identify factors, exploratory factor analysis was used. The first output can be seen in table (3). The KMO value indicates a sufficient number of samples for analysis and it should be greater than 0.5. In addition, sig is less than 0.05 that indicates appropriate factor analysis to identify the structure factor model.

According to the results in table (2), the significance level for all economic, financial, financial-behavioral, motivational, social and political factors is equal to zero and less than 0.05. This means that data are abnormal. Therefore, nonparametric tests are used.

**Table3. KMO test**

Sig	DF	Approx. Chi-Square	KMO Measure of Sampling Adequacy
0.000	528	13679.750	0.951

**Reference: (Researchers' findings)**

Due to the significance level of 0.000, and the Bartlett's test 13679.750, the number of samples is sufficient for factor analysis, and the use of exploratory factor analysis is appropriate. The second output

of variable share listed in table (4). The approval criterion for factors in this early share table is 1, and the amount of variance of each factor is greater than 0.5.

**Table4. Share variables, special values with rotation and without rotation**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			Communalities	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Initial	Extraction
1	11.163	33.828	33.828	11.163	33.82	33.828	6.499	14.694	19.694	1.000	0.820
2	6.217	18.841	52.669	6.217	18.84	52.669	5.687	17.235	36.929	1.000	0.943
3	5.651	17.125	69.795	5.651	17.12	69.795	4.951	15.004	51.933	1.000	0.945
4	3.093	9.371	79.166	3.093	9.371	79.166	4.935	14.958	66.888	1.000	0.943
5	2.692	8.157	87.322	2.692	8.157	87.322	4.788	14.509	81.397	1.000	0.820
6	2.345	7.105	94.427	2.345	7.105	94.427	4.300	13.030	94.427	1.000	0.979

**Reference: (Researchers' findings)**

Initial subscriptions are all equal to 1, and the share extractions are greater than 50%. According to the obtained extractive share in table, all factors are approved. The fourth output of the factor matrix is

shown in Table 5, which includes the factor loads of each of the variables in the remaining factors after the rotation, which should be more than 0.5.



**Table5. Factor load of variables**

Factor load	The matrix of rotational components						Factor load	The matrix of rotational components					
	1	2	3	4	5	6		1	2	3	4	5	6
Economic	0.855						Behavioral					0.956	
Economic	0.903						Behavioral					0.941	
Economic	0.903						Behavioral					0.949	
Economic	0.903						Behavioral					0.961	
Economic	0.855						Behavioral					0.944	
Economic	0.921						Social			0.973			
Economic	0.924						Social			0.972			
Motivational		0.921					Social			0.977			
Motivational		0.993					Social			0.953			
Motivational		0.930					Social			0.984			
Motivational		0.929					Political				0.967		
Motivational		0.930					Political				0.969		
Motivational		0.891					Political				0.969		
Financial						0.917	Political				0.972		
Financial						0.919	Political				0.968		
Financial						0.761	-	-	-	-	-	-	-
Financial						0.923	-	-	-	-	-	-	-
Financial						0.909	-	-	-	-	-	-	-

Reference: (Researchers' findings)

According to the data in table (6), motivational, financial, political, economic, social and behavioral factors have a variance of more than 0.5, which are confirmed after the rotation of the factors.

The factor analysis of the research variables indicates whether the observed

variables were appropriate or not. If the ratio chi-square to degrees of freedom and the root mean square error is approximation,( less of 0.1) , there will be a correlation between the factors and indicators, and will be fit.The result of this test is presented in table (6).

**Table6. Fitness indicators**

Obtained Value		Goodness of Fit	Adjusted goodness of fit	Fitting normalities	Fitting abnormalities	Comparative analysis	Chi—Square proportion to the degree of freedom	Root Square mean
	economic	0.97	0.93	0.91	0.96	0.91	1.76	0.062
	financial	0.96	0.95	0.91	0.92	0.91	0.047	0.000
	behavioral	0.97	0.98	0.97	0.96	0.91	1.858	0.066
	motivational	0.98	0.98	0.98	0.95	0.94	0.275	0.000
	social	0.98	0.99	0.92	0.95	0.95	0.002	0.000
	political	0.99	0.99	0.97	0.99	0.98	2.44	0.000

Reference: (Researchers' findings)

According to the results of table (6), all factors have the root mean square of less than 0.1, and the index values for

each of the structures are at an appropriate level. Thus, the intended factors in the table have the appropriate factor load in model.

In addition, in Fig. 1, the factor analysis model is in the standard state and

in Fig. 2, the factor analysis model is shown in a significant state.

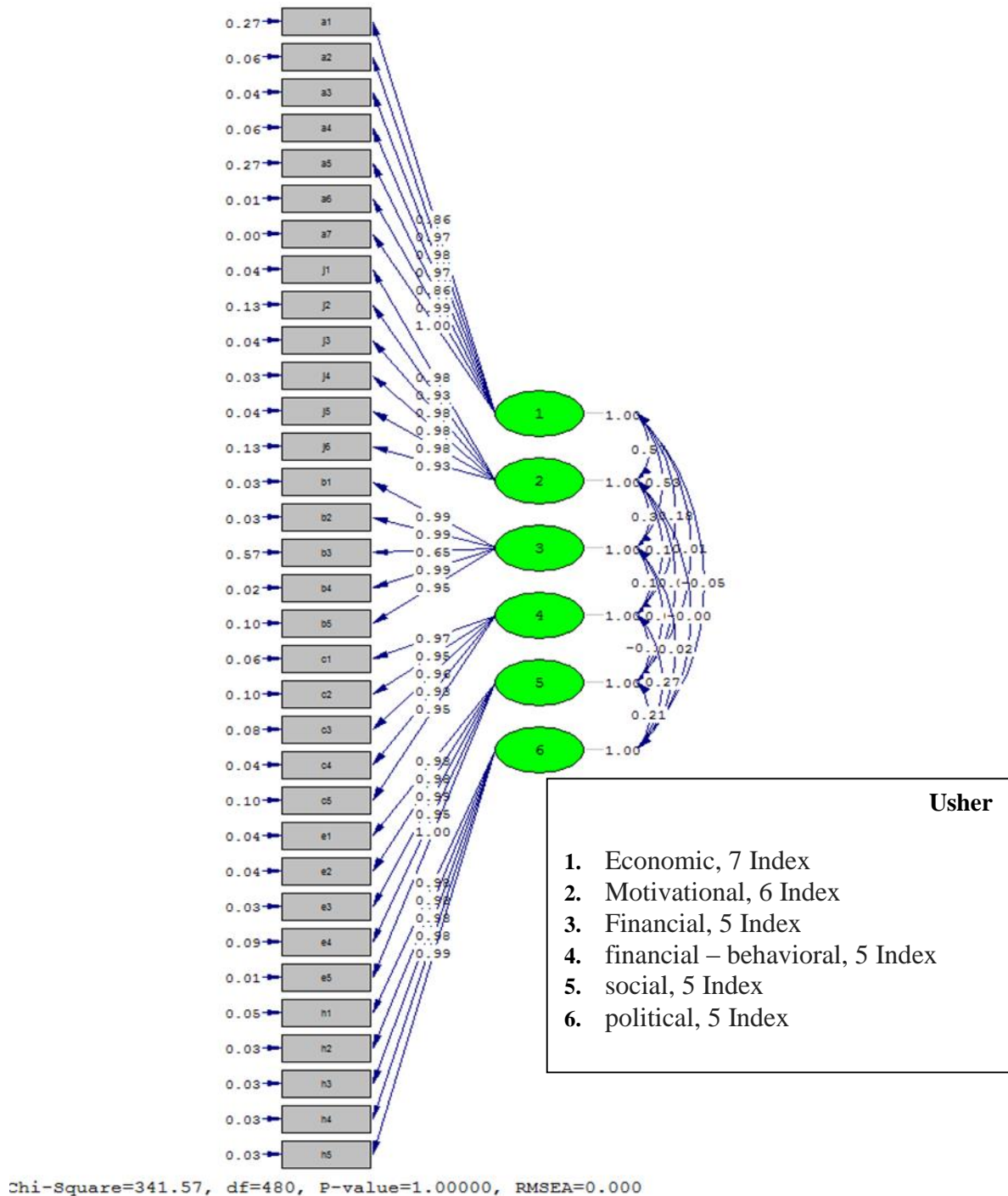
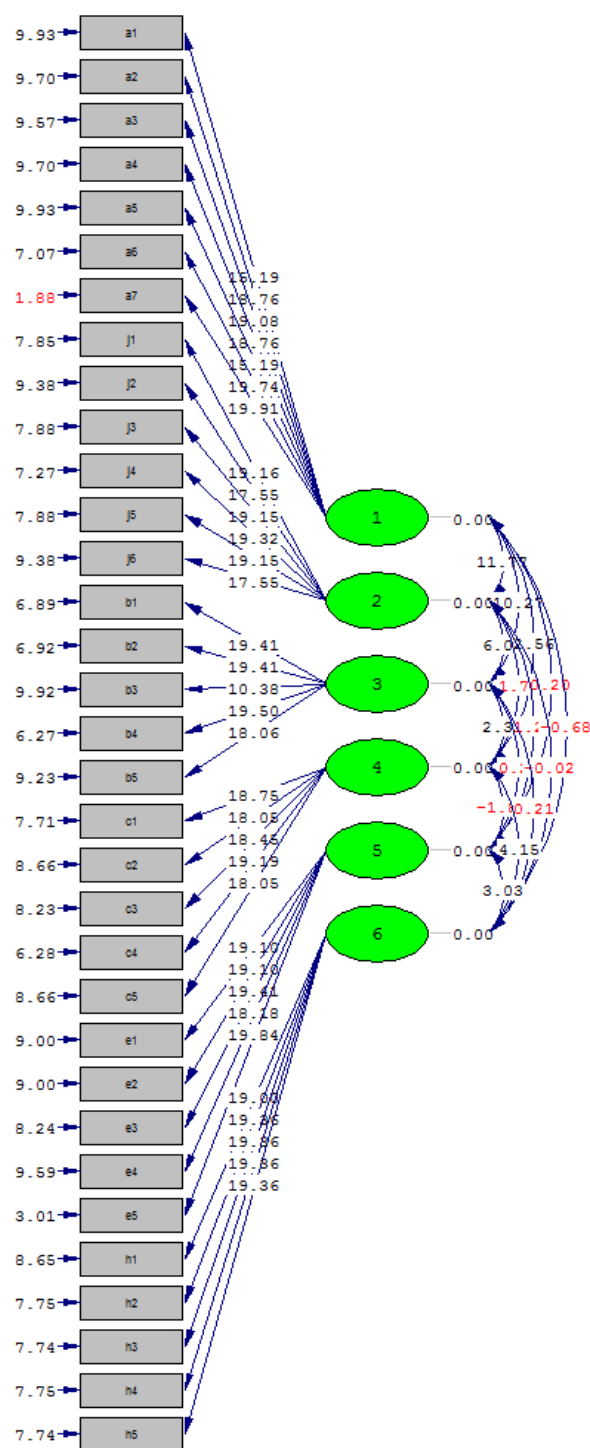


Fig.2. Factor analysis pattern in standard mode

Reference: (Researchers' findings)



Chi-Square=341.57, df=480, P-value=1.00000, RMSEA=0.000

**Fig.3 Factor analysis pattern in significant state**

**Reference: (Researchers' findings)**

To investigate factors, given the abnormalities of factors, success rate test was used in Table 7. The criterion for

verifying factors, the level of significance is less than 0.05 and the observed percentage is 0.6 and more.

**Table7. Binominal test**

Factor	Category	N	Observed Prop	Test Prop	Asymp. Sig
Economic	$\leq 3$	37	0.2	0.6	0.000
	$> 3$	203	0.8		
Financial	$\leq 3$	105	0.4	0.6	0.000
	$> 3$	135	0.6		
Financial-behavioral	$\leq 3$	77	0.3	0.6	0.000
	$> 3$	163	0.7		
Motivational	$\leq 3$	94	0.4	0.6	0.000
	$> 3$	146	0.6		
Social	$\leq 3$	72	0.3	0.6	0.000
	$> 3$	168	0.7		
Political	$\leq 3$	100	0.4	0.6	0.000
	$> 3$	140	0.6		

Reference: (Researchers' findings)

All factors extracted in the previous stage (mentioned in table7) have the significant level of 0.000, and the tested percent is greater than 0.6. Thus, economic factors with an observed percentage of 0.8, a financial equal to 0.6, a financial-behavioral equal to 0.7, motivational equal to 0.6, a social equal to 0.7 and political equal to 0.6 are in the range of test percentages of 0.6; therefore, all

factors have a significant impact on the pre-purchase of housing.

The Friedman test determines the difference or no difference and prioritizes the factors. In order to realize the difference of the average view of respondents in the effective factors statistical test was used in table (8). The criterion of differences between the factors is at significance level of less than 0.05.

**Table8. Factor statistics**

Statistics	N	Chi-Square	df	Asymp. Sig.
Quantity statistics	240	192.735	5	0.000

Reference: (Researchers' findings)

Due to the significance level of 0.000, that it is less of the error of 0.05, and the test statistic 192.735, as a result, the hypothesis  $H_0$  is accepted. This means that there is a significant difference

between the mean. The average of ranks is shown in table (9). In this table, the variables are prioritized based on the obtained ratings.

**Table9. Prioritization of factors**

Factors	Economic	Financial	Behavioral	Motional	Social	Political
Mean Rank	4.57	3.97	3.63	3.27	2.90	2.66
Priority	1	2	3	4	5	6

Reference: (Researchers' findings)

The results indicate that the economic factors with the coefficient 4.57 are in first place, and the political factors with the coefficient of 2.66 are in the last place.

## 6- Conclusion and Discussion

The present study aimed to identify and prioritize the factors affecting the willingness to pre-buy housing in Ilam city. The results of the study indicated that economic, financial, financial-behavioral, motivational, political and social factors have an impact on pre-housing. Economic factors include the concepts of poverty, economic crisis and economic productivity that are characterized by lack of liquidity and backing, discrimination and inequality, irregular price rises, economic fluctuations, disparities in data, household economic management, and basic factors of construction. The results of this part of the research are consistent with the results of the research by Dyachi and Vesterhev (2012), Mahnam (2014). These researches have been focused on the effects of factors such as inflation expectations of homebuyers and the price volatility of construction materials, population growth and economic crises on housing purchase. Based on these findings, it can be concluded that economic factors are effective on demand for housing.

Financial factors include financial and credit bottlenecks with inadequate facility indicators, repayment of installments, and facilities and special financial privileges, such as the variety of tastes and needs and mediation between banks and the state.

This finding is consistent with Panagiotidis & Printzis (2016) Gimeno & Martinez-Carrascal (2010), Neshat et.al (2013), Akbari et al. (2013). The researchers found in their studies that the impact of factors such as bank loans, resource

constraints, and how repayment of loans were effective on homebuyers' decision.

Motivational factors include the concept of consumer demand and the trend towards prosperity and capital demand with the concepts of speculation and function of the housing sector. The results are in accordance with Khorasani et. al. (2011), Seiler et al. (2010) emphasizing on the effective factors such as mental accounting, the probability of investing in the housing sector compared to other sectors, media advertising and the psychological climate, and issues such as trust and satisfaction of housing executives and expecting homeownership.

Behavioral-financial factors include concepts of emotional bias with the risk-outcome and cognitive bias with indicators of mental accounting and available skewed. These findings are in line with Wang & Zhang (2014), Mak et al (2007), Mahnam (2014). In these researches, the impact of government policies on housing sector, limited supply of housing, land constraints in cities and the price of other factors such as consumer goods have been investigated. The results indicated that these factors are effective on demand for pre-purchase.

Political factors include the concept of economic policy and indicators of Mehr housing challenges, policies and government actions. The results are in accordance with Mak et al (2007) and Qaderi et al (2011). The results indicate that government policy in various economic sectors, including restrictions on housing supply, population control and prices for other goods and services, are factors influencing the demand for housing by buyers.

Social factors include the concept of socialization with indices of norms and

values and social status, as well as demographics with the population transformation index. The findings are in line with Javid & Morovat (2015), referring to the impact of population changes and household preferences and the variety of their needs and income as well as the number of households on the demand for housing.

According to the findings of the study, the following suggestions for housing policy makers are presented based on each of the findings:

1. Economic factors: Adopting policies to reduce inequality, control inflation and liquidity, increase productivity and control economic fluctuations

2. Financial factors: Providing appropriate banking facilities, monitoring the payment of housing facilities and considering the ability to repay loans and bank interest rates

3. Motivational factors: Matching different sectors of the economy and preventing focusing on just housing, creating policies for building construction and renting, and providing the ground for building public participation in housing construction

4. Financial-behavioral factors: Monitoring property advisors in providing reasonable housing prices, encouraging policies in congested buildings and rationalizing profits in the housing sector, in line with other economic sectors

5. Political factors: Reforming the policies of the housing plan and solving its problems, implementing tax policies on housing and vacancies and land, targeting subsidies along with housing policies and paying attention to the general level of prices

6. Social factors: Accurate estimates of population growth rate, prediction of housing demand, attention to the social status of households and the proportion of housing per capita in the country with the socio-cultural status of households

## 7- References

- Abbasinejad, H., & Yari, H. (2009). Impact of Oil Shocks on Housing Prices in Iran, *Journal of Economic Researches*, 9(1).
- Akbari, N., KhoshAkhlagh, R., Mardiha, S. (2013). Measurement and evaluation the influences of factors by the experimental selection from the perspective of households living in distressed areas in Isfahan, *Journal of Economic Research (sustainable growth and development)*, 13(3), 19-47.
- Amao, F. L., & Ilesanmi, A. O. (2013). Housing Delivery in Nigeria: Repackaging for sustainable development. *International Journal of African and Asian Studies*, 1, 80-85.
- Babatunde Femi, A. & Hayat Khan, T. (2014). Bridging the gap between housing demand and housing supply in nigerian urban centres: A review of government intervention so far, *British journal of arts and social sciences*, 18(2), 94-107.
- Bahrami, J., & Morovvat, H. (2013). Modeling the prosperity and stagnation of Tehran housing market, taking into account social dynamics, *Journal of economic researches and policies*, 21(66), 143-168.
- Dabagh, R., & Keshavarz, M. (2012). *Investigating the causal relationships of variables affecting the demand for housing in Iran*, The first international conference on econometric methods and applications, Islamic Azad University, Sanandaj branch.
- Dieci, R., & Westerhoff, F. (2012). A simple model of a speculative housing market. *Journal of Evolutionary Economics*, 22(2), 303-329.

- Galinli, F. (2011). *Financial management and investment (application in housing sector)*, Translated by: Aeini & Jalili, first edition, Tehran: Termeh.
- Gimeno, R., & Martinez-Carrascal, C. (2010). The relationship between house prices and house purchase loans: The Spanish case. *Journal of Banking & Finance*, 34(8), 1849-1855.
- Karimi, F., & Zahedi, M. (2011). Feasibility and prioritization of investment in the housing and building sector in terms of risk and uncertainty, *Journal of Economic Researches and Policies*, 19(57), 31-56.
- Kozehchi, H. (2014). *Investment strategy in the Iranian housing market, focusing on developments and prospects 1393 and 1394*, First edition, Tehran: Donyaye Eqtesad.
- Lashkari, M., Bafandeh Imandoust, S., Hasanniya, N., & Goli, A. (2015). The study of the effect of macroeconomic variables on lending behavior of Maskan Bank, *Journal of Economic Researches (Sustainable growth and development)*, 15(3), 119-134.
- Mahnam, V. (2014). Effect of Municipal Toll and Connections Cost on Housing Prices in Different Areas of the Isfahan City. *International Journal of Academic Research in Business and Social Sciences*, 4(9), 57.
- Mak, S. W., Choy, L. H., & Ho, W. K. (2007). Privatization, housing conditions and affordability in the People's Republic of China. *Habitat International*, 31(2), 177-192.
- Mazloom Khorasani, M., Noghani, M., & Kishbafan, F. (2011). The Study of the Socioeconomic Participation in Mehr Housing Cooperatives and its Effective Factors in Mashhad City in 2009-2010. *Applied Sociology*, 22(4(44)), 131-152.
- Mousavi, H., & Dorudiyani, H. (2015). Analysis of Factors Affecting Housing Prices in Tehran, *Journal of Economic Modeling*, 9(3), 103-127.
- Neshat, A., Niknayi, M., & Sharifzadegan, M.H. (2013). Housing Forecasting Low-income Groups by Analyzing Supply and Demand (Case Study: Damghan City), *Journal of Human Geography Researches*, 45(3), 147-168.
- Olokoyo, F. O. (2011). Determinants of commercial banks' lending behavior in Nigeria. *International Journal of Financial Research*, 2(2), p61.
- Panagiotidis, T., & Printzis, P. (2016). On the macroeconomic determinants of the housing market in Greece: A VECM approach. *International Economics and Economic Policy*, 13(3), 387-409.
- Qaderi, J., Eslamloyian, K., & OjiMehr, S. (2011). Investigating the Factors Affecting Housing Investment in Iran, *Journal of Economic Researches*, 11(3), 47-70.
- Qolizadeh, A.A., Ebrahimi, M., & Kamyab, B. (2015). The optimal allocation strategy for assets in the presence of the housing market, *Quarterly Journal of Economic Modeling Research*, 6(21), 119-151.
- Saboori Deylami, M.H., & Shafiei, S. (2012). Analysis of the structures and variables affecting the housing market, *Economic Journal- Monthly review of issues and economic policies*, 12(3), 41-64.
- Seiler, M. J., Seiler, V. L., & Lane, M. A. (2012). Mental accounting and false reference points in real estate investment decision making. *Journal of Behavioral finance*, 13(1), 17-26.
- Soheyli, K., Fattahi, Sh., & Oveysi, B. (2014). Investigating the Factors Affecting Housing Price Fluctuations in Kermanshah City, *Journal of Economic Researches (sustainable growth and development)*, 14(2), 41-67.
- Wang, Z., & Zhang, Q. (2014). Fundamental factors in the housing market of china, *Journal of housing economics*, Vol. 25, 53-61.
- Wen, H., & Tao, Y. (2015). Polycentric urban structure and housing price in the transitional China: evidence from Hangzhou. *Habitat International*, 46, 138-146.