

# Factor Affecting the Decision of Homeownership in Johor Bahru

<sup>1</sup>Izzaamirah Ishak, <sup>2</sup>Nurul Atikah Ismail, <sup>3</sup>Muhammad Syahiran Mohamad

**ABSTRACT**--*This paper examines the factors that may have influence to the decision of homeownership in the area of Johor Bahru. A total of 200 working individual had participated in this research by answering a set of questionnaire with 29 questions related to the homeownership determinant. The objectives of this research is to identify which factor among financial factors, locational attributes and structural attributes give the most impact towards homeownership decision. It is said that each individual has their own preferences for homeownership, so the researcher aims to identify that through this research. The decision of homeownership is measured by the buyers' motivation to buy a house in the Johor Bahru area specifically. The findings of this research can create awareness and also provide meaningful knowledge to housing developers for their business while contributed to the public who interested on this research. Financial Factors, Homeownership, and Locational Attributes Structural Attributes*

**Keywords**—*decision, homeownership, Johor bahru*

## I. INTRODUCTION

Home ownership is where the person own or buy their own house for his/her living. According to Tan[1] the pivotal aspect of the Malaysian Dream is absolutely having a house. Unfortunately, it is not easy to achieve that dream for the average Malaysian. This is because of the price of property in Malaysia in increasing year by year as reported, [2]. Thus, this scenario really give a hard time for the homebuyer in order to buy a house. As the price of the house is increasing, in order to make the buyer feel worthy buying houses, several factors of what satisfy the homebuyers' needs and preferences should be considered. Those factors are including the locational attributes of housing, structural attributes and financial factors of the buyers. It is said that the probability to afford more than one house or apartment rose significantly if the household income increases [3]. Besides, the location of the house bought by the buyer that can be divided into three categories which are rural, sub-urban and urban area which also depending on their financial factor. Regarding to the structural attributes of housing, it is considering the quality of the house and also the physical conditions of the house such as the number of bedroom and bathroom [4]. As for demographic, it include gender, age, marital status and profession of the potential buyer same like in the research made by Saw Lip Sean[5]. Meanwhile, the location chose to make this research study is in Johor Bahru. That means

---

<sup>1</sup> Department of Accounting and Finance, College of Business Management and Accounting, UNITEN Sultan Haji Ahmad Shah Campus, Pahang, Malaysia

<sup>2</sup> Ten & Han Trading Pte Ltd, Singapore

<sup>3</sup> Graduated with Bachelor Degree in Finance from Universiti Tenaga Nasional (UNITEN).

the distribution of the questionnaires will be made only in state of Johor. As we know, Johor is the second largest population in Malaysia after Kuala Lumpur and obviously a state that rapidly develops. Johor also acts as Malaysia's industrial and transportation hub and this is the reason why this state is chosen for this research. Moreover, the development of Iskandar Malaysia in Johor Bahru and the location of Johor Bahru which is beside Singapore really make Johor Bahru a suitable and perfect location to do the research about the factors affecting home ownership in there. Nowadays, in this kind of uncertainty economy in Malaysia, the living cost is increasing year by year. The price of almost all of the goods and services is high and this scenario obviously gives impact towards the housing sector too. Undeniably, the house price is also increasing every year in Malaysia. As the house price increases, financial factors of the homebuyer's should also be considered whether they consider about the tax rate, developer interest and base lending rate. However, it is said that individual obviously has their own preferences for home ownership [6] which means the structural attributes of the house, the size of the house and so on, so that the house's price is worth to the needs of the homebuyers. Because of that, it is concerning on how and what are the factors that developers of housing sectors need to know in order to satisfy the homebuyers' preferences of home ownership. Consequently, an individual who has a high income will afford to buy more than one house [3] and the possibility the location of the house in the urban area is also high. The locational attributes of the house sometimes become a problem to the homebuyers as whether they consider about the accessibility within the house or not. Thus, this study aims to measure and determine extensively the factors of financial, locational and structural attributes towards the buyers' motivation of homeownership in Johor Bahru.

## II. LITERATURE REVIEW

According to Giovanni Favara [7] the analysis made by assumptions, the main determinant of housing demand is income. This is because, most of the richer agents managed to spend more for housing and earning income makes credit constraints relax. That are the evidences on how income can influence the demand for housing. Moreover, there were problems rose due to land shortage has augmented drastically caused by housing advancement and commercial buildings development. Besides, there are three main factors that effects the house price which are internal factors, external factors and capitalize factors as according to [8]. If the demand for housing in an area is higher than the supply, so eventually the cost or house prices will increase too. Nevertheless, the cost or housing prices cannot increase too high because it will caused the decreasing number of potential buyers, thus the possibility of house prices fall increased making them affordable because there are no buyers who can afford to buy them [9]. Location is defined as locating a housing, facilities or a group of facilities of specific size and type in certain area. For locational qualities, this highly relates to the site or place where the housing system is located, whether in an urban area or rural area or even suburban areas. The main indicators for locational qualities are frequented as accessibility to city center, workplace, hospital, shopping and also municipal services as according to [10]. However, the effect of distance to an amenity on price of a house may be quite intricate and not necessarily monotonically. For example, it may be sensible for a house to be neither too close nor too far away from the

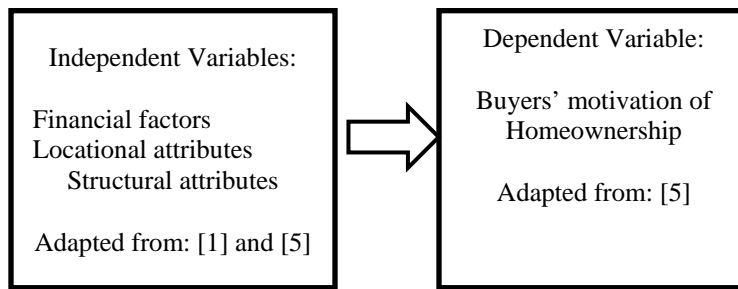
workplace, hospital, shopping and also municipal services city center, etc. Besides, the commute time is perhaps giving more information alternative of the distance to the city center [11] as well as survey of urban transportation performance or jammed.

Structural attributes of housing is the consideration of physical features of house which consists the number of bedroom and bathroom, the size of living room and kitchen and whether the house is an eco-friendly or not. The researcher [1] has been done their research on structural attributes of housing and it is said that the related factors of homeownership are the number of bedrooms and the presence of supportable living features. The number of bedrooms is important as bedrooms are features of privacy space which the study of [12] said that the homebuyers at Saudi Arabia are highly considered the privacy factors. This can be supported by [4] in the study of home ownership which emphasized the importance features of a house is the number of room and bathrooms. The size of the house would definitely influence the sale ability of the house to the buyers [5]. It clearly show that the home developers should making the best decision in designing the house in order to sell them according to the preferences of the buyers.

The preference for homeownership is likely not the same for each individual in every places. There are many factors affecting the homeownership decision such as a desire to own a property and a desire for stability and of course not simply be measured by income and age [13]. Besides, in the study by [14] in China shows that higher homeownership rate resulting to the low social security spending as the house price rises. Meanwhile, also in China, the homeownership give significantly positive impact to the residential satisfaction across the gender, economic status and generation [15]. The study also said that females value homeownership more than males. While, on the other study by [16] also states that many of the homeownership begin with the purchasing using access to credit mostly in the develop countries such as Netherlands, Denmark, Switzerland, Belgium, France and Sweden.

### **III. DATA AND METHODOLOGY**

All the data used in this study is primary data which is the data that have been collected through distribution of 200 conservative questionnaires to the respondents who are consider as potential homebuyers. The response rate is 100% due to the face-to-face method using by the researchers. Each respondents will be given the same exact set of questionnaires and need to answer all the questions for about ten to fifth teen minutes time only. In this study, the convenience sampling is used as sampling technique. The questionnaire is developed using close-ended question with two section. Section I seeks respondent's demographic profile, and Section II gathers data on the related variables that may influence to the homeownership decision. To ensure the objective of this study is achieved, Multiple Regression Analysis is conducted using IBM SPSS Statistics. Thus, the variables are illustrated in Fig 1.



**Figure 1:** Independent and dependent variables

### **A. Hypothesis Development**

H<sub>0</sub>: There is no impact of financial factors, locational attributes and structural attributes towards buyers' motivation of homeownership.

H<sub>1</sub>: There is an impact of financial factors, locational attributes and structural attributes towards buyers' motivation of homeownership.

### **B. Measurement Of Variables**

**Financial factors:** The variable of financial factor is measured by scale developed by [5] which consider whether tax, interest, base lending rate and loan were important for individual in order to own a house or residential property. In the questionnaires, the respondents need to rate the statement by tick (✓) in the five labelled boxes (1 = strongly agree, 5 = strongly disagree). One of the sample question is "I would consider the Developer Interest Bearing Scheme (DIBS) given by developers".

**Locational Attributes:** This variable was measured by scale adapted from [1] and [5]. It was designed to measure whether locational attributes influence the individual decision on buying houses. The scale for answering the questions were also use format, where 1 = strongly agree, 5 = strongly disagree. Sample item of locational attributes is "I would consider the distance travelled to work from home".

**Structural Attributes:** Structural attributes for independent variable is designed by [5] and [1]. This variable is important as individual who want to own a house mostly have their own preferences of structure of the house that they will choose to buy. One item from this variable is "I would consider the number of rooms".

**The Buyers' Motivation of Homeownership:** This dependent variable was adapted from the scale by [5]. By understanding the buyers' motivation for buying houses, the researchers would be able to know the factors that matter the most for homeownership. A sample question from this variable is "I have an incentive to maintain my dwelling unit well".

### **C. Multiple Regression Analysis**

Regression model for this study can be stated as follows:

$$M = \beta_0 + \beta_1F + \beta_2L + \beta_3S + \varepsilon \quad (1)$$

where  $M$  is the value of Buyers' motivation of homeownership,  $\beta_0$  is a constant,  $\beta_i$  is the coefficient of variable  $X_i$  for  $i = 1, 2, 3$  and  $\varepsilon$  is the error of the observation.

The model explains the variables that impact of financial factors, locational attributes and structural attributes towards buyers' motivation of homeownership.

#### **D. Reliability Analysis**

The function for the reliability test is to measure the internal consistency and stability of the multi-item scales. The reliability analysis calculates a number of commonly used measures of scale reliability and it could also provide information on the relationship between individual items in the scale. Cronbach's alpha is the most commonly used means to measure the scale reliability test and the Cronbach's alpha can also detect if the test of the study is accurately measuring the variable of interest. [17] stated useful Cronbach's alpha should be at least 0.70 and preferably higher.

## **IV. Results and findings**

### **A. Reliability Analysis**

**Table 1:** Summary of Reliability Analysis

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Financial factors	0.951	8
Locational attributes	0.948	11
Structural attributes	0.954	8
Motivation of homeownership	0.635	2
All variables	0.971	29

According to the table summary above, the reliability of dependent variable (buyers 'motivation of homeownership) shows the Cronbach's Alpha of 0.635 for the two items

(N=2). This value is more than 0.5 which is reliable value for internal consistency. Moving to the first independent variable (financial factors), the Cronbach's Alpha coefficient is 0.951 for the eight items (N=8), second independent variable (locational attributes) is 0.948 for the eleven items (N=11) and the last independent variable (structural attributes) is 0.954 for the eight items (N=8) respectively. Since all the three values of Cronbach's Alpha

is high above 0.8 and generally a score more than 0.7 is consider okay [18], all the variables were acceptable and reliable for internal consistency.

**B. F-Test**

**Table 2:** Summary of ANOVA Table

Measurement	Value
R <sup>2</sup>	0.468
F-Test	57.525
p-value	0.000

The summary of ANOVA table shown in Table 2 has computed the value of R<sup>2</sup>, F-Test and also the p-value. For this study the R square is 0.4680 meaning that 46.80% of the dependent variable (Motivation of homeownership) can be explained by the independent variable (financial factors, locational attributes and structural attributes). The function of the F-statistics and the p-value is to see whether the null hypothesis could be rejected or accepted. The value of F-statistics is 57.525 and the p-value is zero showing that the data is statistically significant at 5% level. This can lead to rejection of null hypothesis.

Hence, there is an impact of financial factors, locational attributes and structural attributes towards buyers' motivation of homeownership.

**C. Multicollinearity**

**Table 3:** Correlation matrix

Variables	Financial factors	Locational attributes	Structural attributes
Financial factors		0.491	0.557
Locational attributes	0.491		0.624
Structural attributes	0.557	0.624	

Table 3 above shows the correlation coefficient for each independent variables. There is no multicollinearity arises since the correlation coefficient has moderate positive relationship for each independent variables.

**D. Coefficient Test**

**Table 4:** Summary of Coefficient analysis table

Variables	B	Std. Error	t-Statistics	p-value
Constant	0.590	0.108	5.460	0.000
Financial	0.656	0.067	9.851	0.000

factors				
Locational	-0.081	0.072	-1.114	0.267
attributes				
Structural	0.163	0.081	2.011	0.046
attributes				

From Table 4 shows the first variable which is financial factors, the coefficient is 0.000 and significant at 0.05 significant level. Next is locational and structural attributes variable which is 0.267 and 0.046 respectively. The regression coefficient for locational attributes is statistically not significant as it more than 5% level of significant but it obviously significant for structural attributes because the p-value is less than 5% level of significant. Thus, the regression model would be:

$$M = 0.590 + 0.656F - 0.081L + 0.163S$$

**E. Summary of findings**

**Table 5:** Hypothesis of F-Test

Hypothesis	Acceptance
There is an impact of financial factors, locational attributes and structural attributes towards buyers' motivation of homeownership.	Accepted with fit model

From the Table 5 above, the null hypothesis is rejected and alternate hypothesis is enough evidence to be accepted as the best model.

**Table 6:** Hypothesis of coefficient test

Hypothesis	Acceptance
There is a impact of financial factors towards buyers' motivation of homeownership	Accepted with positive impact
There is a impact of locational attributes towards buyers'	Rejected with insignificance evidence

---

motivation of homeownership	
There is a impact of structural attributes towards buyers' motivation of homeownership	Accepted with positive impact

---

As for Table 6 shown the factor of financial factor are statistically significant at level of 5% ( $p\text{-value} < 0.05$ ) and the financial factor has a positive influence on buyers' motivation. So, if the financial factor increase, the buyers' motivation would increase too. However, the locational attributes variable is not statistically significant for the constant because the  $p\text{-value}$  is more than significant level of 5% ( $p\text{-value} > 0.05$ ). Meanwhile, the structural attributes are statistically significant at level of 5% ( $p\text{-value} < 0.05$ ) and has a positive influence on buyers' motivation. So, if the structural attributes increase, the buyers' motivation would also increase.

## V. CONCLUSION

As for conclusion to this research, the researchers can conclude that all of these three factors; financial factors, locational attributes and structural attributes do effect and influence the buyers' motivation of homeownership in Johor Bahru. Among these three factors, financial factor show the highest significant impact towards the decision of homeownership in Johor Bahru followed by structural attributes of housing and the least effect is locational attributes. This consistent with the study made by [5]. The financial factor is clearly the key factor that a person consider the most before making the decision to own and buy a housing property as the price of the house is very expensive and buying a house can be consider as a long-term investment. This is much likely consistent with the study made by [5] and [1].

The second independent variable which is locational attributes also have a highly positive significant relationship to this research as we can see from the correlation analysis results. This is consistent with the study made by [1] and [10]. However, based on the researchers' regression analysis, the locational attributes do give insignificant impact to the buyers' motivation of homeownership. This may be could be explain by the Causal Theory for how two variables could be unconditionally independent yet conditionally dependent.

The structural attributes is also the main consideration for buyer to buy a house. This is because the housing characteristic is different for every each individual and the developers should be more creative and smart in order to satisfy the potential buyers demand on housing sector. This is supported by the research made by [1], [10] and [12]



## VI. ACKNOWLEDGMENT

This project is financially supported by Pocket Grant (RJO10436494/POCKET/2019018) from Universiti Tenaga Nasional (UNITEN).

## REFERENCES

1. Tan, T.-H. (2008, September). Determinants of Homeownership In Malaysia. Retrieved from Habitat International: <http://www.sciencedirect.com/science/article/pii/S0197397507000689>
2. Globalpropertyguide. (2017, June) Retrieved from: <https://www.globalpropertyguide.com/home-price-trends/Malaysia>
3. Chuanchuan Zhang, S. J. (2016, September). Housing affordability and housing vacancy in China: The role of income inequality. Retrieved from Journal of Housing Economics: <https://www.sciencedirect.com/science/article/pii/S1051137716301085>
4. Raheem farista, pradeep m muragundi (2016) practical possibilities to empower patients in management of inflammatory bowel disease. *Journal of Critical Reviews*, 3 (4), 1-5.
5. Ricardo Hurtubia, O. G. (2010, April 19). Attributes of Households, Locations and Real-Estate Markets for Land Use Modeling. Retrieved from [http://www.sustaincity.org/publications/WP\\_2.7\\_Socioeconomic\\_attributes.pdf](http://www.sustaincity.org/publications/WP_2.7_Socioeconomic_attributes.pdf)
6. Saw Lip Sean, T. T. (2014, December 31). Factors affecting the Purchase Decision of Investors in the Residential Property Market in Malaysia. Retrieved from <http://jummecc.um.edu.my/index.php/JSCP/article/view/6398>
7. Uday Venkat Mateti, Anantha Naik Nagappa, Manohar Bairy, Shankar Prasad Nagaraju, Ravindra Prabhu Attur. "Pharmaceutical Care for Dialysis Patients." *Systematic Reviews in Pharmacy* 4.1 (2013), 1-6. Print. doi:10.4103/0975-8453.135830
8. Hyman, P. S. (1992, Semtember 1). A Nation of Home Owners. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/026101839201203512?journalCode=cspa>
9. Giovanni Favara, Z. S. (2014, January). House price dynamics with dispersed information. Retrieved from science direct: <http://www.sciencedirect.com/science/article/pii/S0022053113001014>
10. M.A.Khoiry, N. T. (2012, October 17). Critical Factors Affecting Double Storey Terrace Houses Prices in Bandar Baru Bangi. Retrieved from Science Direct: <https://www.sciencedirect.com/science/article/pii/S1877042812038785>
11. Ministry of Housing and Local Government Malaysia (2011, July) Retrieved from: <http://ehome.kpkt.gov.my/index.php/pages/view/297>
12. Muhamad Hilmi b Mohamad @ Masri, A. H. (2016, October 31). Review of Building, Locational, Neighbourhood Qualities Affecting House Prices in Malaysia. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1877042816315178>
13. Shimizu, C., Yasumoto, S., Asami, Y., & Clark, T. N. (2014). Do Urban Amenities Drive Housing Rent?.

14. Abdul-Muhmin, R. A. (2010, April). Housing preferences and attribute importance among low-income consumers in Saudi Arabia. Retrieved from Science Direct: <http://www.sciencedirect.com/science/article/pii/S0197397509000733>
15. Donald R. Haurin, T. L. (2002). Does Homeownership Affect Child Outcomes? Retrieved from Wiley Online Library: <http://onlinelibrary.wiley.com/doi/10.1111/1540-6229.t01-2-00053/abstract>
16. Cheng Yuan, X. H. (2017). Home ownership, housing price and social security expenditure. Retrieved from science direct: [https://ac.els-cdn.com/S1043951X17300159/1-s2.0-S1043951X17300159-main.pdf?\\_tid=d075b1b6-ebd1-11e7-90b0-00000aab0f27&acdnat=1514467392\\_4589f21b8d8a4f54c4693a153d8999b2](https://ac.els-cdn.com/S1043951X17300159/1-s2.0-S1043951X17300159-main.pdf?_tid=d075b1b6-ebd1-11e7-90b0-00000aab0f27&acdnat=1514467392_4589f21b8d8a4f54c4693a153d8999b2)
17. Zhonghua Huang, X. D. (2015, May 28). Home ownership and residential satisfaction: Evidence from Hangzhou, China. Retrieved from science direct: [https://ac.elscdn.com/S0197397515000892/1-s2.0-S0197397515000892-main.pdf?\\_tid=fa5a97eebd1-11e7-872a-00000aab0f01&acdnat=1514467454\\_a2971c0f41d0acabeee0287631a8438a](https://ac.elscdn.com/S0197397515000892/1-s2.0-S0197397515000892-main.pdf?_tid=fa5a97eebd1-11e7-872a-00000aab0f01&acdnat=1514467454_a2971c0f41d0acabeee0287631a8438a)
18. Viola Angelini, A. L. (2013). Home-ownership. Retrieved from science direct: [https://ac.elscdn.com/S1040260812000731/1-s2.0-S1040260812000731-main.pdf?\\_tid=1e6b6578-ebd2-11e7-b367-00000aab0f26&acdnat=1514467514\\_4634948026e83a05e5db2644203e53a7](https://ac.elscdn.com/S1040260812000731/1-s2.0-S1040260812000731-main.pdf?_tid=1e6b6578-ebd2-11e7-b367-00000aab0f26&acdnat=1514467514_4634948026e83a05e5db2644203e53a7)
20. Fraenkel, F. R., Wallen, N. E., & Hyun, H. H. (2006). How To Design and Evaluate Research in Education. New York: McGraw Hill.
21. Al-Zubaide, B.A., Alqraawy, W.K.N.S., Alshemki, M., Jawad, S.M.A., Al-Kaaby, Z.S. Hypolipidemic activity of aqueous flower extract of hibiscus sabdariffa L. in high cholesterol diet fed rats (2018) International Journal of Pharmaceutical Research, 10 (3), pp. 409-413.
22. Dennick, M. T. (2011). Making Sense of Cronbach's Alpha. International Journal of Medical Education, 53-55.
23. Sindhuja, R. (2019). An Analysis of Image Segmentation techniques. Journal of Computational Information Systems, 15(1), 171-175.
24. Sudarsanam, P. (2019). Location Oriented Android Discount Tracker. Journal of Computational Information Systems, 15(2), 15-21
25. Sieb, R.A. Human conscious experience is four-dimensional and has a neural correlate modeled by Einstein's special theory of relativity (2016) NeuroQuantology, 14 (4), pp. 630-644.
26. Pereira, C. Cytoskeleton and consciousness: An evolutionary based review (2015) NeuroQuantology, 13 (2), pp. 232-239.