

## The Influence of Expenditure Behaviour Towards Homeownership

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### ABSTRACT

*Homeownership becomes the dream of all households. It requires proper planning on the buyer's income and expenses. The different level of household expenditure often influences the allocation of money for house purchasing. Hence, various types of household expenditures have been studied to see how far they may affect the current income and homeownership. A mixed-method was adapted to completing the study. A study sample was obtained through the questionnaire survey among respondents residing within the Klang Valley region. The analysis was conducted using the correlation technique. The results show that all categories of expenditure are significant and have a high impact on the status of homeownership.*

**Keyword:** Expenditure, Household, Homeownership, Correlation

### INTRODUCTION

Homeownership becomes a big dream among households. However, the level of affordability has been a significant hindrance in acquiring a house amongst the households. Several reasons were identified including high purchase cost with high financing rates which influence the households' current expenditure and their quality of life. In addition to the surplus of household income in considering affordability, the problem is more apparent whereby every housing loan offered is subject to various requirements imposed from time to time.

Through the 10<sup>th</sup> and 11<sup>th</sup> Malaysia Plan (Malaysia Government, 2015), the Malaysian government is working very hard to provide a home to all income groups in line with the government's objective of homeownership. Provision of housing at prices as low as RM130,000 were set to be delivered for the low-income earners of RM 3000 a month (Khazanah Research Institute, 2014). However, with the high standard

of living especially in urban areas and the current income level (Kadir et al, 2020), it is difficult for the households to meet their monthly payments. It has been established that home prices are one of the critical factors in assessing the ability to own property. However, the restructuring of household expenses from the amount of income earned is also an important aspect that should be considered in contributing towards homeownership. Therefore, this study aims to see how much of the expenditure incurred by households can affect the status of homeownership. In order to gain more insight into the effect of income and expenditure on homeownership, this paper is organized as follows. First, the research background is presented to highlight the need for this study. Then, the relevant literature encompasses the concept of homeownership in relation to affordability and factors influencing them are discussed. Thereafter, the methodology, theoretical framework of the study and the tools used in assessing the effect of income and expenses on homeownership were discussed. Finally, the analysis and conclusion of the paper are presented and discussed.

## **RESEARCH BACKGROUND**

Home is a basic thing in life. Therefore, owning a home is an important part of current society (Suaid, 2012; Majid et al., 2012; Majid, 2010) that involved high financing cost (Majid et al., 2012; Majid et al., 2014; Pollack et al., 2010) and dependent on the buyer's affordability. Meanwhile, this affordability is also associated with the level of remaining income (Abd Aziz, 2011; Rappaport, 2008; Lin et al., 2014; Thalman, 2003) after deducting total household expenditure, which eventually led to the common designation of 30% of total revenue (Linneman & Megbolugbe, 1992; Sani, 2012; Nguyen, 2005; Khan et al., 2012). However, overall spending among households varies according to the size, location and purpose, which contributes to affordable rates at different income levels and house price range (Abd.Ghani & Ab.Ghani, 2006). Hence, the allocation of 30% of the total income is entirely hypothetical and inaccurate in measuring the housing affordability. Instead, the variety of expenses by homebuyers should be the benchmark in determining the affordability level of homeownership (Fratantoni, 2001). This is because various types of expenses as referred to non-housing cost will contribute to a different rate of residual income (as referring to 30%) which ultimately contribute to the actual housing cost. Besides that, different households' profile will have different rates of non-housing cost, thus contributing to different rates of housing cost. Meanwhile, each household has its tastes and preferences on their dream house (Abdul Kadir et al, 2020). Therefore, this residual income rate should meet the needs of actual housing cost on their preference house. This is important to ensure the success of house ownership amongst the potential buyers. Therefore, in the effort to find an opportunity to own their dream house, a potential buyer should have the capability to manage all of their expenses to enable them to own the desired home. As such, this study was conducted to see which type of expenditure has a big impact on homeownership opportunities. The proposed type of expenses mentioned should be the main concern of the household in the effort to own a house.

## **LITERATURE REVIEW**

The homeownership rate is highly dependent on the wisdom of prospective buyers in managing their daily expenses properly (Ghani et al., 2019; Fratantoni, 2001; Econ, 2006), rather than trying to allocate a hefty sum for home financing expenditure (Nettleton & Burrows, 1998). However, the extent of the expenses planned by household might contribute more to affordable homeownership (Majid et al., 2014). Restructuring the best spending patterns may contribute to the high status of the homeownership (Econ, 2006). Nevertheless, it is challenging to plan expenses, particularly for the low and middle-income groups with a high number of siblings (Majid et al., 2014).

Generally, food purchasing becomes part of the household's expenditure (Hamilton & Richards, 2019; Khazanah Research Institute, 2014; Cattaneo et al., 2020). According to Capps et al. (1985) and Hamilton and Richards (2019), convenience food are one of the most critical changes in today's food consumption habits. It is not only intended to satisfy hunger but to provide nutrition in their daily life as well, which will prevent illnesses (Menrad, 2003; Nikhashemi et al., 2015). Different household number (Daniels & Glorieux, 2015) and household occupation (Daniels et al., 2012) will spend a different proportion of their food budget. Therefore, food and beverage expenditure have become one of the essential expenses of the household (Mad Ludin et al, 2016; Teuteberg, 2007). Also, credit plays a significant role in smoothing consumption and protecting household financial (Anderloni et al., 2012). Current loan repayment has also become an essential expenditure among householder. According to Wangwe (2004), the availability of financing has contributed to a positive impact on the family's economic conditions. Most of the women who live with their family are likely to face credit constrained (George et al., 2013).

Interestingly, miscellaneous spending is the category of household expenditure that seems to grow based on 'will' and not 'needs'. Any expenditure that does not fit logically into one of these categories will fall under miscellaneous spending. Therefore, the household does have the capability to control and manage the spending of this miscellaneous expenditure according to the level of priority of the goods and services. In general, transportation expenditures are divided into several categories such as insurance, registration, and taxes: and drivability, maintenance, repairs, and fuel costs. These have increased the total expenditure (Abreu e Silva et al., 2006). Demand for transportation is influenced by socio-demographics (Dargay & Hanly., 2004; Dagsvik et al., 2002). The cost of transportation is also determined by different locations (Ferdous et al., 2010).

Next, Utilities which refer to water (Md Issa et al., 2012), electricity and gas are essential services that play a vital role in daily life. Utility expenditures can be divided into five services, namely water and other public services, fuel oil and other fuels, natural gas, telephone and electricity (Janice, 2012). The utility expenditure pattern might be influenced by factors such as the physical housing conditions, some demographic aspects, the presence of some appliances that were encountered and the financial situation (Derix, 2010). Meanwhile, savings are funds saved from net income to cover emergencies for the household. As defined by George et al. (2013), saving is an essential component of financial services which could determine households' ability to create wealth and move out of poverty. Saving has shown a strong relationship with income (Dynam et al., 2004).

Besides, telecommunications have become a fixed expenditure for households (Urama & Oduh, 2012; Yang & Ju, 1997). The telecommunications services involve simple voice, internet services which include the multifunctional tool in providing diverse services such as the acquisition of information, online transactions and entertainment goods such as music, games and video (Park et al., 2012). Household healthcare expenditures consist of spending on health insurance, medical services, and medical supplies (Obama, 2016). The medical services category comprises spending on hospital room and services; lab tests and x rays; medical care in a retirement community, convalescent, or nursing home; physicians' services; eye and dental care services; services by a professional other than a physician; and other medical care services (Foster, 2001). The expenditure on child education has increased rapidly in an urban area (Chi & Qian, 2016). These expenses were very much depending on household income (Li, 2000; Qin & Liu, 1992; Lei, 2005) and influenced by parents' education levels and occupation (Lei, 2005; Li, 2000). Meanwhile, household equipment refers to home appliances such as an electrical or mechanical machine which accomplishes some household functions. Such examples are air conditioners, dishwashers, clothes dryers, drying cabinets, freezers, refrigerators, kitchen stoves, water heaters, washing machines, trash compactors, microwave ovens and induction cookers.

Based on the above discussion, we can conclude that every household is bound by various non-housing costs that need to be managed properly, in the process of owning their own house as suggested by Majid et al (2014). This is important in ensuring that the supply of housing units in the market having the demand from a potential buyer (Osman et al., 2018). The oversupply of house unit in the market may invite more choice among home buyers. Therefore, these potential home buyers tend to choose the house they are interested in. Even if it does not meet the housing cost rate or current residual income level. Therefore, prudent monthly spending management will contribute to the high property purchase rate, while meeting the total demand for home products offered.

From the literature review above, the framework of the study has been established, as shown in Figure 1.

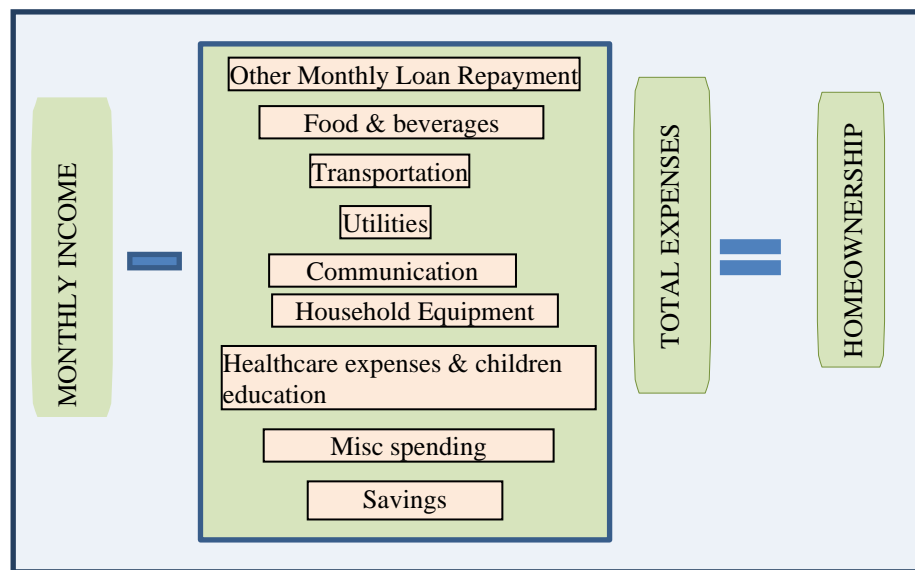


Figure 1: Theoretical Framework

## METHODOLOGY

In applying the proposed framework in Figure 1, the study has adopted a mixed-method approach comprises qualitative and quantitative analysis. Data has been obtained from questionnaire distribution that consists of a variety of daily expenses which are allocated by the respondents from the total income earned. 472 respondents comprise the public at large, focusing on who has the desire to buy residential units (Krejcie & Morgan, 1970). The respondents include tenants and homeowners who are located at five significant locations due to many housing developments projects in line with the population rate in Klang Valley. The area refers to Klang, Putrajaya, Shah Alam, Petaling Jaya and Kuala Lumpur (Figure 2). Data has been analysed using SPSS through descriptive and inferential statistic. All expenses elements are run using the reliability test. Main data sets are further analysed to establish the significant levels and the impact of spending behaviour towards homeownership for the entire Klang Valley area through a Chi-Square test (Sharpe, 2015). The Asymp. Sig. (2-sided) value which indicates  $\leq 0.05$ , proves that the variable is significant  $\leq 0.05$  (Zhu, 2012). Main data set has been divided into two data sets, namely (i) the tenant and (ii) the owner of a house. Both of these data sets have been conducted with Pearson Chi-square correlation analysis along with significant household expenditures.

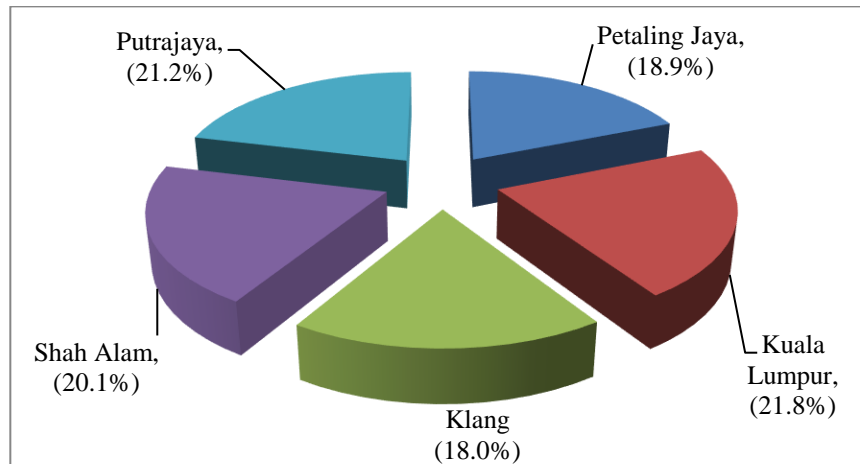


Figure 2: Sample allocation in Klang valley area

## RESULTS & DISCUSSION

Table 1 shows the level of reliability of each category of expenditure studied. All categories revealed the value of Cronbach's Alpha close to 0.6 (Ursachi et al, 2015). All expenditure categories indicated Cronbach's Alpha values ranging from 0.583 (close to 0.6) to 0.64. It shows that all categories of expenditure studied in this research are reliable and can be applied for further analysis.

Table 1: Reliability Test

Type of Household Expenditures	Cronbach's Alpha
Other Loan Commitment	.594
Food and Beverages	.599
Monthly Utilities	.608
Transportation	.583
Household Equipment	.618
Saving	.689
Communication	.614
Miscellaneous	.584
Healthcare and Education	.644

Table 2 shows the significant status of each type of expenditure surveyed on monthly household income as well as the ability to own home among households. The results show that all of these expenditure types are significant on their monthly income and affect the ability of a household to own a property. All of Asymp. values have indicated value <0.05. Meanwhile, most of the expenditure type had indicated 0.000, which is very significant (Zhu, 2012).

**Table 2: Result for Asymp. Sig. (2-sided) under Chi-square test**

Type of Household Expenditures	Asymp. Sig. (2-sided)	
	Household Income Per Month	Ownership
Other Loan Commitment	.000	.000
Food and Beverages	.000	.000
Monthly Utilities	.000	.000
Transportation	.000	.000
Household Equipment	.039	.000
Saving	.000	.033
Communication	.000	.000
Miscellaneous	.000	.001
Healthcare and Education	0.00	.000

Table 3 shows the correlation between expenditure types and household income through the overall data set. Seven types of expenditure incurred by households are seen to have had a significant impact on the current income level indicated values greater than one that is exceeding the maximum value. This shows that the expenditure allocated by the household exceeds the sum of the amount. This expenditure can be referred to Other Loan Commitment (107.468<sup>a</sup>), Food and Beverages (107.081<sup>a</sup>), Transportation (128.327<sup>a</sup>), Saving (172.389<sup>a</sup>), Communication (151.580<sup>a</sup>), Miscellaneous (159.908<sup>a</sup>) and Healthcare and Education (141.847<sup>a</sup>). All categories of expenditure indicated a very high correlation value with the monthly household income rate. All categories present the value of  $\geq 0.75$  which indicate significant impact towards the household income.

**Table 3: Correlation between Household Income Per Month and Household Expenditures**

Type of Household Expenditures	Household Income Per Month
Other Loan Commitment	107.468 <sup>a</sup>
Food and Beverages	107.081 <sup>a</sup>
Monthly Utilities	94.657 <sup>a</sup>
Transportation	128.327 <sup>a</sup>
Household Equipment	29.835 <sup>a</sup>
Saving	172.389 <sup>a</sup>
Communication	151.580 <sup>a</sup>
Miscellaneous	159.908 <sup>a</sup>
Healthcare and Education	141.847 <sup>a</sup>

The correlation between the different types of household expenditure with homeownership status has indicated various value (Table 4). The results showed that monthly spending on utility bills (53.772<sup>a</sup>) and transportation costs (52,236<sup>a</sup>) had a significant impact on the homeownership status. This explains that households are forced to pay a daily commuting cost per day between the residence location and workplace location, which may be far apart. Utility costs continue to increase in line with the increasing of current charge rates as well as the increasing of households' number over time. The ability to own a home is also contributed by some other categories of household expenditure, namely Household Equipment (42.609<sup>a</sup>), Healthcare and Education (42.242<sup>a</sup>). However, household savings are accounted for only 12% (12.114) towards homeownership. This shows that buyers who are eager to buy residential properties are more likely to choose a 0:100 ratio that is 100% on housing loans in buying their dream house.

**Table 4: Correlation between Ownership Status and Household Expenditures**

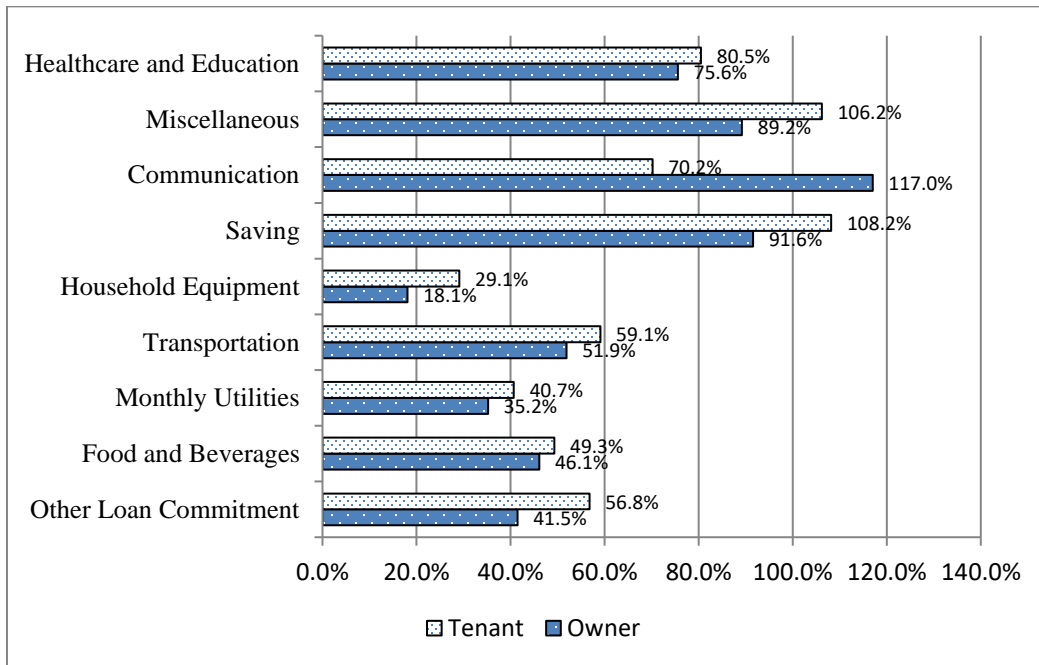
Type of Household Expenditures	Ownership
Other Loan Commitment	26.726 <sup>a</sup>
Food and Beverages	30.902 <sup>a</sup>
Monthly Utilities	53.772 <sup>a</sup>
Transportation	52.236 <sup>a</sup>
Household Equipment	42.609 <sup>a</sup>
Saving	12.114 <sup>a</sup>
Communication	30.679 <sup>a</sup>
Miscellaneous	27.013 <sup>a</sup>
Healthcare and Education	42.242 <sup>a</sup>

The primary data sets have been split into two different sets of data, namely owners and tenants (Table 5). The results of the analysis show that eight (8) from nine (9) types of expenditure studied are significant (value <0.05) for both ownership status. On exception, the expenses for Household Equipment shows insignificant contribution towards the homeownership status (0.451; Owner). Other expenditures generated significant correlation value between expenditure and homeownership status.

**Table 5: Chi-Square Tests between expenditures and ownership status**

Types of expenditures by household per month	Ownership Status			
	Owner		Tenant	
	Value	Asymp. Sig. (2-sided)	Value	Asymp. Sig. (2-sided)
Other Loan Commitment	41.514 <sup>a</sup>	.001	56.768 <sup>a</sup>	.000
Food and Beverages	46.142 <sup>a</sup>	.000	49.304 <sup>a</sup>	.000
Monthly Utilities	35.166 <sup>a</sup>	.009	40.660 <sup>a</sup>	.002
Transportation	51.988 <sup>a</sup>	.000	59.067 <sup>a</sup>	.000
Household Equipment	18.071 <sup>a</sup>	.451	29.099 <sup>a</sup>	.047
Saving	91.647 <sup>a</sup>	.000	108.061 <sup>a</sup>	.000
Communication	117.005 <sup>a</sup>	.000	70.190 <sup>a</sup>	.001
Miscellaneous	89.180 <sup>a</sup>	.000	106.231 <sup>a</sup>	.000
Healthcare and Education	75.621 <sup>a</sup>	.000	80.469 <sup>a</sup>	.000

Figure 3 shows the allocation of monthly expenses by households from two different categories of homeownership status. Through the results collated, the homeowners are more likely to allocate their income on the communication expenditure category (117%). This is due to the usage of sophisticated communication tools utilised by the households especially for those who work from home. In contrast, the results indicated that tenants are likely to allocate their income on the other eight (8) expenditures as presented in the table. Comparatively, the expenditure for Health and Education has indicated 80.5% by the tenant as opposed to 75.6% by the homeowners. Interestingly, tenants were also found to be too concentrated on miscellaneous expenses (106%). The result further signified that the tenant's expenditure behaviour is likely to be in tandem with the current lifestyle. Most of them are engaged with modern lifestyle and tied to various gadgets with advanced technologies. Correspondingly, as stated by Bohari & Md Zan (2011) today's society is more focused on their lives with information and communication technology. This further indicates that those under the tenant category are more likely to spend their current income on entertainment matters.



**Figure 3: Influence level of expenditure towards homeownership**

Based on the empirical findings collated, tenants also spend their income on Food and Beverages (49.3%), followed by Monthly Utility (40.7%), Transportation costs (59.1%) and Household Equipment (29.1%). Those who are still renting are also bound by the current monthly payment commitment on Other Loan Commitment (56.8%), such as personal loans and vehicle financing loans. Despite there is a great provision on Saving (108.2%), this savings rate does not contribute to the purchase of property due to the pattern of high spending rates on various other matters. In general, the spending behaviour pattern between homeowners and tenants has indicated a different portion of expenditure allocation. A large allocation of less essential expenditures which become a priority by household has affected their ability to own their own homes.

## CONCLUSION

The ability to own a home is often dependent on the spending behaviour of household existing income. The household expenditure of those under the tenant's category should be balanced up with the cost of homeownership in determining the level of affordability. The right spending behaviour amongst the potential buyers could serve as a reference in determining their capability in owning their housing unit. Efficient spending practices will contribute to a high chance of buying a home. Meanwhile, failure to plan daily expenses may reduce the affordability level of homeownership. Therefore, in getting opportunities towards owning a home, the household must be capable of managing their daily expenses in particular on the non-housing cost factor. Priority should be allocated to the essential expenditures that form the basis of life's needs in which, expenses on the fulfilment of 'want' rather than 'needs' should be reduced. This is because, based on the overall findings presented, prudent spending for non-housing costs certainly



contributes to the high level of the residual income, as well as contributing a high allocation to the housing cost, at the same time provides a high opportunity for home purchase as suggested by Ghani et al., (2019).

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