

Home owning motivation in Malaysia

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ABSTRACT

The residential property industry, which had grown rapidly in the 1980s, however, encountered overhang problems recently. Overhang of residential units has been getting worse and therefore, precautionary measures must be taken by the housing developers before it leads to a property glut. In order to address property overhang in the country, housing developers must recognize the importance of orienting their activities to consider how and why households are motivated to home owning. Factor analysis of the 25 questions was used to support the grouping of these questions into a smaller number of factors. Factors were used as constructs of the motivation of homeownership. The results conclude that Malaysian householders are motivated to become homeowners because they expect home owning will improve the home environment in which a child lives, improve neighborhood stability through higher properties maintenance and improvement, and longer tenure, and improve social capital and local amenities investments in the neighborhood. The motivation of home owning is crucial to housing developers as they have to be cautious before undertaking any new project. Housing developers should know what the market really wants and plan their products to take cognizance of the changing lifestyles of Malaysians.

Keywords: Motivation, Property overhang, Home owning, Housing provision, Malaysia

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INTRODUCTION

Owning a house is a major goal for people who live in Asia. In Malaysia, the residential property industry remained the leading market contributor accounting for more than 60% of the transaction volume from 1990 to 2007. There were 199, 482 transactions worth RM (ringgit) 36.49 billion recorded in 2007 against 182, 555 transactions worth RM 29.45 billion in 2006 (Property Market Status Report 2007).

The residential property industry, which had grown rapidly in the 1980s, however, encountered overhang problems recently. What is property overhang? According to the Ministry of Finance's Valuation and Property Service Department (2005), property overhang means housing units that have been issued with the certificate of fitness for occupation and have remained unsold for more than 9 months.

The Malaysian residential property market is in a good position to withstand the recent global financial crisis. It is because Malaysian financial institutions are well insulated against the global financial meltdown as they have learned well from the last regional financial crisis. Even though the local residential market has not been much affected by the U.S. sub-prime loan debacle and the global financial meltdown, there is a high amount of unsold properties. The majority of houses remain unsold for reasons beyond price factor, ranging from poor location to unattractive house design. Overhang of residential units has been getting worse and therefore, precautionary measures must be taken by the housing developers before it leads to a property glut. In order to address property overhang in the country, housing developers must recognize the importance of orienting their activities to consider how and why households are motivated to home owning.

It is important for housing developers to know what the market really wants as house buyers are becoming more cautious before making any purchase. One way for housing developers to ride out the current challenging market conditions is to create demand for their housing products. This requires a careful determination of home owning motivation of homeowners in Malaysia.

There are several contributions of this study. First, most housing studies and surveys are concentrated in developed countries. Only few are in developing countries. Results derived in other cultures and economies may not be transferable. A detailed analysis of Malaysian householders is required to determine how they differ in the motivation of homeownership. Second, data and information used in the study is important for homeownership decision making. Results of analysis should be interpreted as wholesale support for policies that promote homeownership in Malaysia.

What is the main reason for an individual to own a house? Decisions to own a house might be motivated by a desire to have a property of one's own, a desire for stability, and pride of ownership, things that cannot be easily captured by age, income, or other variables (Colton and Crowe 1998; Bourassa et al 2001).

Derived from the Latin word 'movere', which means "to move", motivation can be described as the willingness to do or achieve something that result in certain behavior and action. According to Robbin et al (1996), the underlying concept of motivation is some driving force within individuals by which they attempt to achieve some goals in order to fulfill some need or expectation.

There are two main theoretical approaches to motivation. One is content theories and the other is process theories. Content theories focus on analyzing what motivates an individual whereas process theories focus on analyzing how motivation is energized and sustained and what underlying thought processes influence an individual's behavior (Robbin et al. 2006).

APPLICATION OF MOTIVATION THEORIES TO HOME OWNERSHIP

Motivation has been an important reason in the explanation of home owning. There is much evidence that home owning is associated with motivation. Psychologist Abraham Maslow generalized a very useful theory of basic human motivation. This theory of human motivation is based on a hierarchy of needs. In fact, owning a home may satisfy more wide-ranging households' needs. Home owning fulfills five types of need. A home offers basic protection from physical discomfort or harm (shelter). A home also can provide protection from unwanted social contact (privacy). As such, shelter and privacy form a "physiological" and "safety" dimensions of needs. Additionally, most households want them located conveniently in relation to place of employment, schools, shops, recreational facilities, and transportation (location). They may also place priority on the characteristics

of the surrounding area, such as the appearance of the neighborhood, the quality and cost of public service available, social environment, absence of noise and pollution, and any prestige attached to the area (amenities). In this aspect, location and amenities combine into a "social", "esteem" and "self-actualization" dimensions of needs.

This paper focuses on why households choose to be home owners. As such, the expectancy theory of motivation is most relevant to the study. The expectancy theory of motivation is close to economic reasoning, and it emphasizes the importance of the link between behavior and performance. Individuals choose how to behave from among alternative courses of action, based on their expectations of what there is to gain from each action. Individuals are motivated when they see a favorable combination of what is important to them and what they expect as a reward for their efforts, and they behave accordingly. An individual's behavior will depend, to some extent, on the types of outcome expected.

Home owners are motivated to home owning because benefits of homeownership to both home owners and society can be found in many housing surveys, ranging from socio-benefits to financial benefits. A number of housing surveys examine the expected outcomes of homeownership.

According to Rohe and Steward (1996), a decision to own a house might be motivated by a desire for neighborhood stability. Rohe and Steward (1996) used OLS regression models to explain the relationship between homeownership rate and various indicators of neighborhood stability using the Census of Population and Housing for 1980 and 1990. Two outcome measures of neighborhood stability used in their study are the length of tenure of the current householders and the property value of owner-occupied housing units. Their estimations show that, holding all the other factors constant, there is a positive relationship between homeownership and the length of tenure. The study suggests that householders are motivated to buy their house units only if they are committed to remaining in a community for a long time as the transaction costs associated with buying and selling property are relatively high. Additionally, their studies support the hypothesis that changes in homeownership rates are positively and significantly affected by changes in property values. It is due to the fact that the potential effects of homeownership on economic stability of neighborhood are influenced by the different motivations that homeowners have in their residential properties. They argue that homeowners are motivated to invest in their properties maintenance and improvement at a higher standard. This improvement has been reflected in the value of the household head's

properties in the neighborhood. The motivations of such improvement are that they are interested in both economic and use interest. Economic interests can be obtained from the potential for financial gain and wealth accumulation of owning properties whereas use interests can be obtained from the enjoyment, satisfaction, and other non-economic benefits of residing in a house.

There are concerns of their studies as they only use the length of tenure and property value changes as outcome variables to measure neighborhood stability. There are other expected outcomes of homeownership that may influence neighborhood stability such as homeowners' social participation in and attachment to the local community. Given the shortcoming of Rohe and Steward (1996) studies, Rossi and Weber (1996) and DiPasquale and Glaeser (1999) used other outcome measures to indicate neighborhood stability. They both used local amenity investment which is defined as an investment in local public goods and social capital investment which is defined as a social link among citizens. The conceptual difference between these two investments is that the actions of local amenities investment improve the quality of the neighborhood and the actions of social capital investment improve one's connection to one's neighbors. Homeowners are believed to be motivated to participate in local neighborhood organizations and to associate informally with their neighbors. As Rohe and Steward (1996) pointed out that participation in local organization is able to ward off outside threats by both public and private entities and inside threats such as poor property maintenance by homeowners. In addition, frequent interaction with neighbors may keep homeowners up to date on threats to neighborhood stability.

Rossi and Weber (1996) drew on analysis of data from the General Social Survey (GSS) from 1988 through 1993, the 1988 National Survey of Families and Households (NSFH), and the American National Election Studies (ANES) from 1948 to 1994 to understand the characteristics of home owners in terms of sociability and local amenity provision. The comparisons are made between owners and renters, while holding constant both the age of the householder and the socioeconomic status of the householder. Rossi and Weber (1996) results first suggest that home owners are happier, have a higher self-esteem and well-being. In the NSFH data set, owners score higher than renters in self-satisfaction, are more likely that they can do things as well as anyone else, are sure that their lives will work out as they want, score lower on a scale of depression, show higher levels of happiness with life in general, and rate themselves higher in physical health. However, the findings from NSFH and GSS concerning sociability are not definitive. The two data sets show that renters are more sociable than owners. They offer the possible reasons is that homeowners are not motivated to socialize with

friends, co-workers and neighbors because they rather spend more time with their children in their families which may lead them to center their sociability less outside of their family. Owners and renters may differ in political behavior. The results from ANES and GSS data sets show that owners have a greater motivation of being interested in public affairs; read a newspaper more often than renters; are member of group to solve local problem; serve as a committee member and an officer of local improvement group; give extra money to local improvement group; attend conferences of local improvement group; are more likely to have lobbied a local, state or federal official, given money to candidate, and know the name of their governor, their US Representative, and the school superintendent.

Like Rossi and Weber (1996), DiPasquale and Glaeser (1999) presented regression models to measure the effects of homeownership on social capital and local amenity investments using the 1500 individuals from U.S. General Social Survey (GSS) between 1985 and 1994. In their studies, eight expected outcomes are considered to measure the level of social connection among homeowners and local amenity investment. Overall, their results suggest that homeownership has the effects predicted by the models on both social capital (nonprofessional organization and church membership) and local amenity provision (working to solve local problems and gardening) Similar to Rossi and Weber (1996), results from the survey suggest that homeowners know the name of their U.S. Representative more often than renters; know the name of their local school board heard more often than renters; vote in local election more often; and solve local problems more; join more nonprofessional organizations than non homeowners; enjoy gardening more often and attend church more frequently than renters.

Householders are motivated to become homeowners because homeownership impacts the child's cognitive ability. As neighborhood stability improves, it is possible that children education outcomes will improve and behavior problem will be reduced as several researchers argue that the child will be exposed to a more stable school environment due to a better home environment in which a child lives (Green and White 1997; Aaronson 2000; Haurin et al 2002) and behavior problems (Haurin et al 2002).

Green and White (1997) developed probit estimation home owning models to analyze the relationship between teenagers' outcomes and homeownership and to examine whether children of homeowners stay in school longer than children of renters and whether they are less likely to have

children themselves as teenagers. Three different data sets are used in their studies, namely the Panel Study of Income Dynamics (PSID), the Public Use Microsample of the 1980 Census of Population and Housing (PUMS), and High School and Beyond (HSB). Results from the PSID which consists of children of household who were 17 years old from 1980 to 1987 suggest that home owning has an important effect on the probability of teenagers staying in school until age 17. Similar result is produced using PUMS data which is a one-in-thousand sample of households from the census. The results of the HSB data set which is composed of children of homeowners who were 18 year old support the hypothesis that home owning by parents is a statistically significant determinant of whether their children stay in school. They also studied whether home owning by parents affects the probability of their daughters having a child or children by age 18 and found that daughters of homeowners have much lower incidence of teenage pregnancy. Green and White (1997) also stressed that bad behavior of children either a homeowner's own or his neighbors, may reduce the attractiveness of the neighborhood and threaten the value of homes. As a result, homeowners have a stronger incentive than renters to monitor their own children and their neighbors' children.

Aaronson (2000) augmented the work of Green and White by estimating more detailed specification of the homeownership effect. Samples are based on all children that reach the age of 17 between 1975 and 1993 from the Panel Study of Income Dynamics (PSID) database and its geocode database. Results from probit regression show a strong statistical correlation between homeownership and the likelihood of graduating from high school by age 19. However, Aaronson (2000) argued the findings of Green and White (1997) on the benefits of homeownership are spurious because they do not study specific reason for why homeownership has a significant effect on children's success. It could be the role of neighborhood characteristics play a role in the effects of homeownership on children's outcomes. In order to measure whether neighborhood characteristics matters, Aaronson (2000) included those children who grew up in high and low mobility communities in the sample. He showed that neighborhood residential stability enhances the positive effects of homeownership on high-school graduation, which suggests that some of the positive effects of homeownership found in other studies may be attributed to the greater residential stability of the neighborhood where homeowners live. In other words, homeownership and mobility effects are stronger in low mobility communities with the notion that stable environment positively impact the education outcomes of children. It is the better neighborhoods and school experienced by children of homeowners that account for their better outcomes. Homeowners generally live in communities characterized by greater residential stability, their children will benefit from these positive neighborhood externalities.

As noted before, homeowners are more attached to their communities and more active in community affairs (Rossi and Weber 1996; DiPasquale and Glaeser 1999). Greater community involvement could lead to greater community social capital which may provide better outcomes for children.

In contrast to works of Green and White and Aaronson, Haurin et al (2002) focused on the cognitive and behavioral outcomes of 1000 young children, age five to eight rather than 17-year old teenagers using the National longitudinal Survey of Youth (NLSY79) and the NLSY Child data. Two dependent variables are used to measure the cognitive outcomes, namely reading recognition (PIAT-Reading) and mathematical achievement (PIAT-Math). The reading recognition instrument measures word recognition and pronunciation ability whereas mathematical achievement test begins with basic skills such as numeral recognition and progresses to geometry and trigonometry. In addition to these 2 dependent variables, they measured children's behavior problems based on the index of a child's behavior problem (BPI). Results show that for children living in owned home, mathematical cognitive outcome is higher, reading recognition score is higher, and children's behavior problems are lower, holding constant a large number of social, demographic and economic variables. All studies find that a relationship exists between being raised in an owned home and positive education outcomes and also few behavior problems for the children of homeowners. To explain why homeownership affect children education outcomes, Rossi and Weber (1996) added to the literature and offer the reasons that homeownership increase households' self-esteem and life satisfaction. Increased parental self-esteem has resulted in a greater emotional support for the homeowners' children. The greater emotional support would lead to better cognitive outcomes and few behavior problems. Evan et al (2000) also pointed out that home owners will have less stress and be less isolated. Less stress has translated into an improved level of emotional support for children in the home environment. As mention earlier, a home purchase generally involves one of the largest financial commitments. Homeowners, therefore, tend to minimize bad behavior by their children and those of their neighbors that can negatively impact the value of homes in their neighborhood.

It has become important to consider ownership of a home as an investment for which the home owners will receive an attractive and positive financial return. The financial return from residential housing takes the form of income and capital growth. The income may be actual income through rental payments from tenants. The capital growth is achieved through inflationary gains or through increased price of the property due to higher demand. Because of the large amount of capital

required, homeownership is often regarded as one of the most investment decision of life (Hutchison, 1994). According to empirical studies on housing, property values tend to appreciate over a longer period of time and the income yield is higher than those from other forms of investment, such as shares or bonds. Hutchison (1994) examined whether home owning can be considered a good investment in the short to medium term, both in absolute term and in comparison with shares for the period of 1984 to 1992. In his studies, shares are used as a benchmark as they are possible investment opportunities available to households. The housing data used in this study are extracted from the Inland Revenue Property Market Report and 50 main towns and cities in six regions in the United Kingdom are selected. The share return data are taken from the Barclays de Zoete Wedd (BZW) Equity-Glit Study. The results have shown that the returns from housing exceed the rise in the Retail Price Index, but fall below the return from shares. This is in line with risk/ return theory where it is considered that a rational investor will require different levels of return depending on the risk profile of the investment. The volatility of returns, as measured by the standard deviation, is larger in respect of the shares return than of the housing return. Therefore, a greater level of return is required from equity investment to compensate the investor for the risk of not achieving an expected outcome. Residential housing investment is less volatile and therefore, in theory, a rational investor would accept a lower level of return.

In addition to the capital and income growth of home owning, residential housing is proved to be an investment instrument to hedge against inflation as compare to other assets. An early study on housing inflation hedging ability was by Fama and Schwert (1977). They compared U.S. government bonds and bills, private residential real estate and common stocks in terms of their ability to hedge against Treasury bill rates, as a measure of expected and unexpected movement in inflation in the 1953 – 1971 periods. The regression results show that expected changes in both government bonds and bill and private housing property rates of return are close to unity with respect to a 1% change in expected inflation rate, common stock returns are negatively related to expected changes in inflation rate, and private housing property has positive and significant of 1.19 and 0.56 relationship in both expected and unexpected inflation rate respectively. They conclude that the expected responses of asset return to inflation for government securities and private real estate are consistent with the Fisher hypothesis and real estate is the only complete hedge against expected and unexpected inflation in the sample period.

Following Fama and Schwert (1977), Rubens, Bond and Webb (1989) also tested the inflation-hedging effectiveness of residential real estate, farmland and business real estate in additional to corporate and government bonds and common stock over the 1960 – 1986 period. The appreciation returns are calculated as the annual change in the home purchase component of US CPI and the income returns are obtained from a rented index. They find that only residential real estate is a complete hedge against actual inflation shocks. Treasury bills have some hedging ability, but other real and financial assets do not demonstrate any significant hedging effectiveness. They also find that by incorporating real estate in portfolios of assets, the risk per unit return is lowered and inflation hedging is improved.

The main concern of the previous works is that researchers calculate the appreciation returns of the property based on the annual change in the home purchase component of U.S. CPI, which may have bias in estimating the Fisher coefficients. Unlike stocks and bonds, returns are calculated based on the actual dividend or interest payment. Given that the total return on housing is fully reflected in housing prices, it is difficult to estimate the long run average rate of return on residential property. Anari and Kolari (2002) excluded housing costs from the CPI to mitigate potential bias in estimating the Fisher coefficient for property for the 1968 – 2000 periods. They examined the long run impact of inflation on homeowner equity by investigating relationship between house prices and price of non housing goods and services rather than house price and inflation as in previous empirical studies on the inflation hedging ability of residential property. The study generates estimated Fisher coefficient of 1.08 for existing house prices and 1.26 for new house prices, which are significantly greater than 1. These results lead to the conclusion that the estimated Fisher elasticities of house prices with respect to non housing goods and services are an inflation hedge in the long run.

RESEARCH STATEMENTS

With this background this paper aims to examine empirically whether:

- a. Homeownership improves the home environment in which a child lives, improves the child's cognitive ability and reduces behavior problems.
- b. Homeownership creates incentives for Malaysian homeowners to improve the local amenities of their communities.
- c. Homeownership creates incentives for Malaysian homeowners to improve homeowners' connection to their neighbors.

- d. Homeownership promotes neighborhood stability through longer stay in the neighborhood.
- e. Homeownership promotes neighborhood stability through better maintenance and improvement in their properties.
- f. Owning a house has proven to be an effective instrument to accumulate wealth.

METHODOLOGY

First, a descriptive analysis was used to identify the general demographic characteristics of households head in the survey. Second, factor analysis through principal component analysis was used to group highly correlated questionnaire variables into a smaller number of composite variables of homeownership.

In this study, factors were used as constructs of the motivation of homeownership. As such, Factor analysis of the 25 questions was used to support the grouping of these questions into a smaller number of factors (see table 1). In this survey, a person's viewpoint of homeownership was reflected in his feeling of agreement or disagreement with the community, family and financial motivations of home owning. Responses were scored on a five-point scale ranging from 1 for "strongly disagreed", 2 for "disagreed", 3 for "neutral", 4 for "agreed" and 5 for "strongly agreed". All questions used in the survey were gleaned from literature reviewed in the field pertaining to the motivation of homeownership. Questions were chosen and selected with slight modifications from several housing studies of Rohe and Steward (1996), Rossi and Weber (1996), Green and White (1997), DiPasquale and Glaeser (1999), Evan et al (2000) and Haurin et al (2002).

Table 1: 25 questions on motivations of home owning

1.	I have participated in the local community project in my neighborhood
2.	I enjoy gardening and cooking at home
3.	I am a member of residential association in my neighborhood
4.	I have contributed money, time and efforts to residential association in my neighborhood
5.	I know name of state assemblymen in my neighborhood
6.	I know the name of the district representative at Parliament in my neighborhood
7.	I have voted for state assemblymen and Parliament member in the past election
8.	I stay longer in the neighborhood because I have deeper commitment to my neighborhood
9.	I stay longer in the neighborhood because I am satisfied with the local amenities
10.	I stay longer in the neighborhood because I am satisfied with my neighbors
11.	I like to interact with my neighbors
12.	I like to take my neighbors out for a drink
13.	I am likely to renovate and maintain my house well if I own that property

I will benefit from renovation of my property as the renovation increases the value of neighborhood
 I will benefit from renovation of my property as the renovation increases the value of property
 My present residential property value has appreciated
 I will invest in residential property only if I expect rental payments from tenants
 I will invest in residential property only if I expect capital growth through increased price
 Residential property is a major source of personal wealth
 Children raised in owned home are more likely to be closely monitored by their parents
 Children raised in owned home stay in school longer than children raised in rented home
 Children raised in owned home are more likely to expose to better home environment
 Children raised in owned home are more likely to have better academic results in school

Children raised in owned home are more likely to have fewer behavioral problems

Factors with eignevalues greater than 1 were considered in the study to have adequate convergent validity. Additionally, questionnaire questions with factor loading less than 0.40 were deleted from the set. Once factors have been extracted, the next step was to rotate them. In this study, oblique (promax) rotation was used because oblique rotation theoretically renders a more accurate solution and yields simple and more interpretable factor patterns. Some correlations among factors are expected since behaviors are rarely partitioned into neatly packaged units that function independently of one another (Hair et al, 1998). Cronbach's alpha (Reliability Analysis) was used to determine the extent to which the questions in the questionnaire are related to each other.

QUESTIONNAIRE DEVELOPMENT

The questionnaire contained information relating to general background of homeowners, housing attributes, home preferences and demographic information as well as householders' viewpoints of home owning. All the questions asked were close-ended questions. Care was taken to prevent from leading questions in order to avoid bias.

Questionnaire layout was designed keeping in view that people from the sampling population can answer them without difficulty in order to maintain a high response rate. The language of the questionnaire also kept simple so the respondents can participate in the survey easily. A covering letter was included in the questionnaire so that the respondents know the purpose of the study. An assurance of confidentiality of the answers provided by them was mentioned in the survey form.

SAMPLING

The respondents, who were eligible for answering the questionnaire, were householders in Malaysia; therefore, the sampling frame for any probability sample is a complete list of all householders in the population from which the sample is drawn. According to the 2000 Population and Housing Census of Malaysia, there were 4.9 million householders in Malaysia. However, a list of householders is difficult to make, so samples are selected from a multistage area sampling procedure. The multistage area sampling was used because it involves more than two or more probability sampling techniques. The sample of householders was randomly selected in a series of step.

First, the area sample, the most popular type of cluster sample, was used to sample economically while retaining the characteristics of a probability sample. In this study, householders from 2 main states – Kuala Lumpur state and Selangor state were selected as Selangor and Kuala Lumpur states contributed more than 45% of the total amount of constructed residential units in the country (Property Market Status Report, 2005). Also, the total number of householders in these two states accounted for 31% in the country, which were 926, 747 householders in Selangor and 305, 154 householders in Kuala Lumpur (Population and Housing Census of Malaysia, 2000).

Second, districts (mukim – district in Bahasa Malaysia) within these two states were chosen to ensure that different areas are represented in the sample. In this case, 4 districts each were identified in two states, namely Gombak, Klang, Petaling, and Hulu Langat in Selangor state and Kepong, Cheras, K.L city and Wangsa Maju in Kuala Lumpur state. As a final step, householders within these 8 districts were interviewed by using stratified sampling. Stratification was based on house types. In Malaysia, a terraced house is the most popular type, follow by a high rise apartment, and a semi-detached and a detached house. The interviews were conducted in identified residential areas near major hypermarkets in each district.

METHOD OF SURVEY

The survey was designed to gather socioeconomic as well as housing information from homeowners in Malaysia. A pilot survey was conducted in order to check for the relevance of the variables selected, to check for the validity of the questionnaire, and to see the reliability of the questionnaire.

60 questionnaires were personally distributed to the respondents who were selected from the

sampling frame. Only twenty five were received. The respondents of the pilot study were requested to give feedback about the questions after answering the survey and it was conducted to determine the content validity. In addition, comments and suggestions from the experts, who were considered knowledge in the same area of interest has confirmed the content validity of the questionnaire items. Thus, the instrument provides adequate coverage of the topics included in the study.

The pilot study helped the researcher to make a few amendments in the arrangement of the questions. In some places the wording were also changed. In the first version of the questionnaire, missing information found in most of open-ended questions as the majority of respondents did not complete answering all required questions. In the later version of the questionnaire, questions formats were changed to close-ended questions. The improved questionnaire forms were delivered by hand to each of the respondents and collected them back later.

In this survey, 70 householders within each district were chosen. In total, 560 copies of questionnaire forms were being distributed in identified residential areas near major hypermarkets in each district. Out of 560 copies of questionnaire forms, 400 questionnaire forms were returned to the researcher. The response rate of 71% can be attributed to the succinct questionnaire design and the enthusiastic support from respondents. However, only 333 were used for the analysis due to incomplete information in the survey forms.

GENERAL CHARACTERISTICS OF THE SAMPLE RESPONDENTS

The data used in the estimations were derived from the sample households. A summary of the basic characteristics of the respondents in the study was summarized in Table 2 and Table 3.

Table 2 • Descriptive Statistics of the Respondents in the Survey (n = 333)

	Mean	Minimum	Maximum	Std.
				Deviation
Market Price (RM000)	371.79	3500	60	366.79
EPF withdrawal	0.67	0	4	0.73
Years of staying at current residence	9.26	1	31	7.58
Housing consumption (%)	21.46	2	50	11.04
Age of the head of household	44.50	25	66	10.38
Number of years in the present job	16.58	1	40	10.06
Number of dependents in the family	3.06	0	9	1.91
Number of dependents who are	0.98	0	4	0.99
working				

Table 2 reported the mean value, minimum value, maximum value and standard deviation value for demographic information in the study. The mean reported price of dwelling unit in the survey was RM 371, 790. On average, 0.67 times of Employee Provident Fund (EPF) withdrawal to purchase house was reported in the survey and the higher number of EPF withdrawal was 4 times. Homeowners in Malaysia generally withdraw their funds from EPF account for house purchases. They can withdraw their Account II savings of EPF to purchase their houses and to reduce or settle their housing loans every year with a minimum amount of RM 500 throughout their loan tenure. Respondents in the survey, on average, have lived in their present residence for more than 9 years and the 31-year was the longest duration of stay reported. The respondents in the survey had an average of 21.46 percent of household income spent on the monthly housing consumption, were 45 years old, had 17 years of working in the present job, had 3 dependents and had almost 1 working dependent in the family.

Table 3 ■ Frequency Tables

House type	Frequency	Percent			
High rise apartment/ condominium	88	26.4			
Terrace house	171	51.4			
Semi-detached house	47	14.1			
Detached house	27	8.1			
Age of the household head					
Less than 30	33	9.9			
30 - 40	76	22.8			
40 - 50	113	33.9			
More than 50	111	33.3			
Gender of the household head					
Male	260	78.1			
Female	73	21.9			
Education background of the household head					
Primary	9	2.7			
Secondary	97	29.1			
College degree	130	39.0			
Postgraduate	97	29.1			
Monthly income of the household head					
Less than RM 2500	41	12.3			
RM 2500 – RM 4000	97	29.1			
RM 4000 – RM 8000	107	32.1			
More than RM 8000	88	26.4			
Organization that the household head attaches to					

Public sector	78	23.4	
Private sector	232	69.7	
Non-for-profit sector	18	5.4	
others	5	1.5	
Do you own a house?			
Yes	319	95.8	
No	14	4.2	
Marital status			
Single	45	13.5	
Married	288	86.5	
Do you live in a strata-titled property?			
Yes	83	24.9	
No (Individual titled property)	250	75.1	
Do you live in a gated and guarded community?			
Yes	105	31.5	
No	228	68.5	
Do you live in a freehold property?			
Yes	203	61.0	
No	130	39.0	
The floor finishes for bedrooms are timber strips			
Yes	224	67.3	
No	104	31.2	
The wall finishes for bathrooms are ceiling height ceramic tiles			
Yes	282	84.7	
No	51	15.3	
Traveling time to workplace – less than 30 minutes			
Yes	65	19.5	
No	268	80.5	

Of these households head, about 96% of the households head in the sample were home owners. Obviously, owner occupation is the predominant form of housing in Malaysia, where the ownership rate is greater than 90%. Table 3 showed that about 51.4 percent of the respondents lived in a terraced house, 26.4 percent in a high rise apartment or a condominium, 14.1 percent in a semi-detached house and lastly 8.1 percent in a detached house. Malaysian generally preferred to own a freehold property (61 percent) rather than a leasehold property (39 percent). Table 3 also indicated that, in general, landed properties were the most common type of properties in Malaysia with a total of over 75 percent in the survey. Only 31.5 percent of households head currently stayed in the gated and guarded community.

The distribution of households head over the specification of the dwelling unit indicate that 84.7 percent and 67 percent of the householders were reported to be living in the house with the ceiling height ceramic tiles bathrooms and the timber strips bedrooms. In addition, most of respondents spent more than 30 traveling minutes to their workplace as most of them live in sub-urban areas.

Majority of the respondents came from the age group of 40 - 50 and more than 50, each comprised of 33.9 percent and 33.3 percent of the respondents in the survey respectively. 22.8 percent of household head were in the age group from 30 to 40 while only 10 percent was reported from the age group less than 30. Most of them were married (86.5 percent) compare to singles (13.5 percent). Table 3 also indicated that the monthly income of the households head was in the range from RM 4000 to RM 8000 (32.1 percent), then followed by the range of RM 2500 to RM 4000.

Out of the total respondents, 21.9 percent of the households head were female head of household. Households head with primary education level comprised only 2.7 percent of the sample, while 29.1%, 39% and 29.1% had secondary, college and postgraduate education respectively. The majority of the households head in the survey mostly worked in the private sector with a total of 70%.

MEASUREMENT ASSESSMENT OF MOTIVATIONS OF HOMEOWNERSHIP

Table 4 • Total Variance Explained

	Extractio	Rotation		
	Total	% of Variance	Cumulative %	Total
1	3.189	17.715	17.715	2.351
2	2.489	13.829	31.544	2.186
3	1.920	10.666	42.210	2.331
4	1.405	7.807	50.017	2.033
5	1.222	6.789	56.805	1.907
6	1.012	5.623	62.429	1.585

Extraction Method: Principal Component Analysis

Table 5: Motivational Factors of Homeownership

Motivational Factors	1	2	3	4	5	6
F1:						
I have participated in the local community project in my neighborhood	0.776					
I am a member of residential association in my neighborhood	0.769					
I have contributed money, time and efforts to residential association in my neighborhood	0.739					
F2:						
I am likely to renovate and maintain my property		0.814				
well if I own that property		0.01				
I will benefit from renovation of my property as the renovation increases the value of neighborhood		0.764				
I will benefit from renovation of my property as the renovation increases the value of property		0.613				
F3:						
I stay longer in the neighborhood because I am satisfied with the my neighbors			0.756			
I stay longer in the neighborhood because I have a			0.737			
deeper commitment to my neighborhood						
I stay longer in the neighborhood because I am			0.656			
satisfied with the local amenities/ facilities						
F4:						
Children raised in owned home are more likely to have fewer behavioral problems				0.801		
Children raised in owned home are more likely to have better academic results in school				0.721		
Children raised in owned home are more likely to be				0.570		
closely monitored by their parents F5:						
I like to take my neighbors out for drink					0.843	
I like to interact with my neighbors					0.843	
F6:					0.001	
I will invest in residential property only if I expect						0.756
rental payments from tenants						0.730
My present residential property value has						0.710
appreciated						0.710
I will invest in residential property only if I expect						0.553
capital growth through increased price						
Eigenvalues	3.189	2.489	1.920	1.405	1.222	1.012
% of Variance Explained	17.715	13.829	10.666	7.807	6.789	5.623
Cumulative % of Variance Explained	17.715	31.544	42.210	50.017	56.805	62.429
Cronbach's Alpha (Reliability)	0.7654	0.6640	0.6716	0.6091	0.6420	0.4529

As shown in table 4, six factors were extracted by Principal Component Method with eigenvalues greater than 1. Eigenvalues were used to show the proportion of variance accounted for by each factor. The first and second factors always explain the greatest amount of total variance. In this case, the first factor and the second factor explained 18

percent and 14 percent of the total variance respectively. The third factor only accounted for 11 percent of the total variance. The last three factors accounted for 8 percent, 7 percent and 6 percent of total variance respectively. Based on all six factors, 62 percent of the total variance was reported. The Promax rotation sorted 17 questionnaire questions into 6 groups. There were three questions each in Factor 1, Factor 2, Factor 3, Factor 4 and Factor 6 respectively, and only 2 questions in Factor 5.

Motivation 1: Local Amenities Investment

The most important factor of home owning by Malaysian home owners was "Local Amenities Investment". Factor 1 comprised of 3 questions with 17.715% of variance. The eigenvalue for this factor was 3.189. Out of the three questions, the question "I have participated in the local community project in my neighborhood" was the most significant statement with a loading of 0.776. The next highest statement was "I am a member of residential association in my neighborhood" with a loading of 0.769. This was then followed by "I have contributed money, time and efforts to residential association in my neighborhood" with a loading of 0.739. In line with the findings of William and Leslie (1996), Rossi and Weber (1996) and DiPasquale and Glaeser (1999), Malaysian homeowners are motivated to be more involved in civil affairs, such as participating in local community projects and becoming committee members of residential association. As indicated earlier, a participation in local organizations is able to give homeowners capacity to ward off outside and inside threats in the community. These activities, in turn, are thought to lead more stable neighborhoods which will benefit homeowners both economically and socially. The Cronbach's alpha value (0.77) of this construct was reported in table 5, which suggests that there is construct reliability.

Motivation 2: Properties Maintenance and Improvement

The second factor was referred to as "properties maintenance and improvement", consisted of "I am likely to renovate and maintain my house well if I own that property",

"I will benefit from renovation of my property as the renovation increases the value of neighborhood" and "I will benefit from renovation of my property as the renovation increases the value of property" with factor loadings of 0.814, 0.764, and 0.613 respectively. The eigenvalue for the second factor was 2.489. The Cronbach's alpha value of this construct (0.66) was considered reasonable; thus, there is construct reliability. In the survey, Malaysian householders are motivated to promote neighborhood stability through higher investment in their properties maintenance and improvement. As Rohe and Steward (1996) pointed out the stability of the neighborhood will increase only if homeowners improve and maintain their properties at a high standard. The motivations for such improvement are that they are interested in both economic and use interests. Economic interests can be derived from the potential for financial gain and wealth accumulation of owing properties whereas use interests can be derived from the enjoyment, satisfaction and other non-economic benefits of residing in a house.

Motivation 3: Length of Tenure

Factor 3 comprised survey items regarding improved neighborhood stability through longer commitment to stay in the neighborhood. In this survey, "I stay longer in the neighborhood because I am satisfied with my neighbors ", "I stay longer in the neighborhood because I have a deeper commitment to my neighborhood" and "I stay longer in the neighborhood because I am satisfied with the local amenities" were associated with longer tenure length, which have factor loadings of 0.756, 0.737, and 0.656 respectively. Again, the Cronbach's alpha value was greater than 0.67, which suggests that these 3 questions are one-dimensional and might be combined in a scale. As expected, Malaysian householders are likely to stay longer only if they are satisfied with their neighbors and local amenities in the neighborhood.

Motivation 4: Children Cognitive Ability and Behavior Problems

Malaysian householders believe that children's education outcome will improve and behavior problem will be reduced if the children live in owned home due to the fact that they live in a better home environment. In line with the findings of Green and White (1997), they are motivated to monitor their own children and their neighbors' children as bad behavior of children may reduce the attractiveness of the neighborhood and threaten the value of homes. As shown in table 5, Factor 4 consisted of "Children raised in owned home are more likely to have fewer behavioral problems", "Children raised in owned home are more likely to have better academic results in school" and "Children raised in owned home are more likely to be closely monitored by their parents" with factor loadings of 0.801, 0.721, and 0.570 respectively. The Cronbach's alpha value of these 3 questions was 0.61, which indicated that these 3 questions were measuring a similar concept.

Motivation 5: Social Capital Investment

The greater commitment that Malaysian householders have toward their neighborhood shows clearly in greater socialization with neighbors in the neighborhood. In this survey, the fifth factor was "social capital investment", which consisted of the questions, such as "homeowners always interact with their neighbors" and "homeowners take their neighbors out for a drink" with factor loadings of 0.843 and 0.801 respectively. The Cronbach's alpha value of these questions was 0.64, which was considered acceptable. Thus, these questions were measuring a similar concept.

Motivation 6: Financial Benefits of Home Owning

Factor 6 consisted of items relating to improved financial benefits through home owning. This factor yielded with three questions with the eigenvalue of 1.012. From the results obtained, it showed that "I will invest in residential property only if I expect rental payments from tenants" was the most important item in this factor with 0.756 factor loading compared to two other questions. The second important item was "my present

residential property value has appreciated" with a loading of 0.710. In line with the previous housing surveys, Malaysian householders are motivated to home owning because they believe that they will receive financial returns in the form of income and capital growth through home owning. Home owning has proved to be a good investment instrument to accumulate wealth as property values tend to appreciate over a longer period of time.

CONCLUSIONS AND IMPLICATIONS

The following section highlights the main implications from this study before conclusions are drawn. From the analysis, housing developers should be concerned about what motivates Malaysian households to home owning before constructing houses for them. As noted earlier, property developers tend to follow the crowd without proper product planning and design which have created property overhang in the country. The majority of houses remain unsold for reasons beyond the price factor, ranging from poor location to unattractive houses with lack of adequate amenities and facilities. It is important for property developers to orient their activities to consider how and why householders are motivated to home owning. Home owning is highly associated with the expectancy theory of motivation because householders think about what they must do to be rewarded and how much the reward means to them before they actually behave. Factor analysis revealed that six motivational factors which affect Malaysian householders, namely local amenities and social capital investment, properties maintenance and improvement, length of tenure, children's cognitive ability and behavior problems, and financial benefits.

As shown in the research, homeowners are keen to be involved in civil affairs, such as participating in local community services, and becoming active committee members in the community. In order to address property overhang, efforts are needed by housing developers to provide housing in the target area that must be accompanied by investment in local facilities and amenities. Housing is more than just bricks and mortar and it is the building block of a community. A good housing scheme should be designed to help

households develop a sense of community. The greater commitment that householders presumably have to the community will manifest itself in greater socialization with neighbors. In this study, Malaysian households generally like to fulfill their social needs by interacting with their neighbors. This could be one of the reasons that gated and guarded properties receive so much attention recently. Today, housing is a lifestyle issue. A house is no longer just a dwelling. It is now described as a lifestyle or space to reflect the owner's personality, self-image and character. Houses in gated and guarded communities nowadays are highly in demand by most of Malaysian households where recreation facilities within provide them day-to-day social activity requirements. It is highly recommended that housing developers should consider gated and guarded properties rather than just unattractive properties in their housing development plans.

The results also show that Malaysian households prefer to stay in the neighborhood longer. As such, housing developers must supply adequate and affordable housing for householders with growing families who want to reside in the community into their older years. Provision of housing and services to meet individuals' and families' needs across the life span is critical to those who wish to remain in the neighborhood longer. Homeowners stay longer in the neighborhood because buying a house involves a lot of upfront costs. These include legal fees, stamp duty, and mortgage processing fees, as well as hidden costs such as time it takes to find the right house. Householders become home owners only when they are reasonably sure that they will not incur such costs again for a long time. Additionally, housing developers should pay attention to house designs that capture the differences in life-cycle pattern of housing consumption of Malaysian households.

Home owners are more often married couples and have children living at home. They are interested in residential areas where they can easily access school facilities in their neighborhoods. Housing developers are required to include primary and secondary schools in the master development plan before undertaking any new launching. Malaysian households generally agree that good schools may enhance the attractiveness of the neighborhood and increase the value of homes. Thus, they have a stronger incentive to

monitor their own children and their neighbors' children. These activities have obvious external benefits for the neighbors, who can free ride on others efforts to make the community a better place to live.

According to the survey, Malaysian households reap the rewards of any improvement on their properties. Malaysian households benefit directly from enhancement in their neighborhood if the improvement will increase the value of their properties. They also see a return on any maintenance and care they may put into their properties. When it comes time to sell their houses, the price will reflect the wear and tear to the residence and any deterioration to the neighborhood. Housing developers are urged to work closely with local authorities and councils in providing upkeep in the neighborhood.

Malaysian households in the survey agree housing is an important source of wealth. Although the need for housing is clear, it has become fashionable to consider ownership of a home as an investment for which the home owners will receive an attractive financial return. Several housing studies have indicated that property values tend to appreciate with time and the income yield is higher than those from other forms of investment, such as shares. Property can also be used as security against which loan financing can be raised.

In summary, these studies are crucial to housing analysts and developers as they have to be cautious before undertaking any new housing project since property overhang becomes the central concern to the Malaysian residential property industry. Instead of focusing merely on price competitiveness to drive price, Malaysian housing developers should adopt a longer term and more holistic vision of value adding to their housing products. Housing developers should plan and design their products to take cognizance of the changing lifestyles of Malaysians. Over the past two decades, housing developers have brought new living concepts, such as lifestyle resort living in well-planned residential developments. Besides offering new living concepts, they also provide new standards in home design and quality. This includes giving quality ceramic tiles and timber strips replacing old-fashioned broken marble and parquet, double-volume ceiling height to

houses and more interesting façade and interior layout. Home owners nowadays appreciate developers' efforts to promote neighborhood bonding through community events such as festival and other family activities. Instead of merely building properties, developers should embrace the concept of building communities by envisioning the process from a community builder's viewpoint. Property developers also are advised to provide integrated amenities in a single location. Mass townships are equipped with all the elements of healthy living, learning, work and play will become more sought-after, as householders find it more cost-effective to move into well-connected suburban townships with main highway arteries. Based on experience from Singapore, the Housing Development Board provides quality self-contained housings within a functional residential development where householders can find the place within the new residential township to work, shop, school and fulfill social needs.

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