Evaluating housing satisfaction based on high and medium housing price

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ABSTRACT

Housing rules and sequencers have long been applied to ensure that all will have access to adequate housing. In order to achieve sustainability in the housing industry, housing providers should control their housing activities to suit households' needs and wants by examining factors which account for housing satisfaction or dissatisfaction. Consequences presented that the degree of housing satisfaction may depend on the types of homeownership externalities that households are expected to receive, as defined by local amenities and social capital investment, and neighbourhood stability of homeownership. Housing and socio-economic and demographic elements are also found to be significant in the study. Additionally, households are generally satisfied if they are given an opportunity to purchase their homes using the Build-then-Sell 10:90 systems.

KEYWORDS: Residential Satisfaction, Social Factors, Housing Price, Architecture, Urbanism

1.0 INTRODUCTION

National housing policies and programs are developed and implemented to ensure that all will have access to adequate housing in Malaysia. Despite efforts by public and private housing developers, there are various issues relating to a housing delivery system that have undermined the success of housing achievement for the past 30 years. First, public and private sectors have been giving low priority to the low-cost housing program, which falls below the targeted level [1-23]. The construction of medium- and high- cost housing, on the other hand, has exceeded the targeted level during the Five-Year Malaysia Plans. Second, a massive over construction of medium- and high-cost housing has contributed to the problem of property overhang. These unsold houses do not attract the target market nor cater to the housing needs of the targeted house buyers. Another issue that undermines the success of meeting housing needs is the problem of abandoned housing projects (Ministry of Finance's Valuation and Property [24-41]. Owning a house is every person's dream, but their dreams have turned into nightmares after the homes they have bought are left uncompleted. There is also evidence of problems created by errant house builders for the house buyers. These problems range from the irritating ones like leaking roofs and uneven flooring to more serious ones like sub-standard house quality and unpleasant neighborhoods [32-47]. In order to achieve sustainability in the housing industry in Malaysia, housing developers should regulate their housing activities to suit households' needs and wants. One possible way to meet households' housing needs is to examine factors which account for housing satisfaction or dissatisfaction [48-59]. The Greater Kuala Lumpur (Greater KL) is ideally suited for the purpose of this research because the conurbation has a total population of 6 million as of 2010 as illustrated in Fig. 1, and is the heartland of Malaysia's industry and commerce. This area contributed more than 45% of the total amount of constructed houses in the country (Ministry of Finance's Valuation and Property Service Department [60-73]. Furthermore, households from this area generally have similar demographic characteristics and variations in their housing qualities are rather small. The term Greater KL was named by Malaysian Prime Minister Najib Razak as one of twelve National Key Economic Areas to spur the country's economy growth in the Economic Transformation Program (PEMANDU, 2010). Based on the Ministry of Housing and Local Government, the house price categories can be divided into low-cost housing (Malaysian Ringgit below 40,000), low-medium cost housing (Malaysian Ringgit 40,001 to 60,000), medium-cost housing (Malaysian Ringgit 60,001 to 100,000) and high-cost housing (Malaysian Ringgit more than 100,001). From the households' viewpoint, the different segments of the Malaysian housing market are not perfect substitutes [74-88]. Previous housing research in Malaysia studied the assessment of the satisfaction level in low- and low-medium cost housing. There has been relatively little research into the determinants of housing satisfaction of medium- and high-cost houses from the private sector. Furthermore, an oversupply of medium- and high-cost housing is a major contributor to the problem of property overhang in the country [83-91]. Therefore, it is relevant to examine factors affecting housing satisfaction of medium and high-cost housing. Factors related to housing satisfaction are numerous and their relationships are

very complex [1-13]. Consequently, the scope of this study will be on selected factors that are relevant to the housing market in Malaysia such as homeownership, housing characteristics, real property gain tax, the 10:90 house buying system, as well as key socio-economic and demographic factors [14-37].

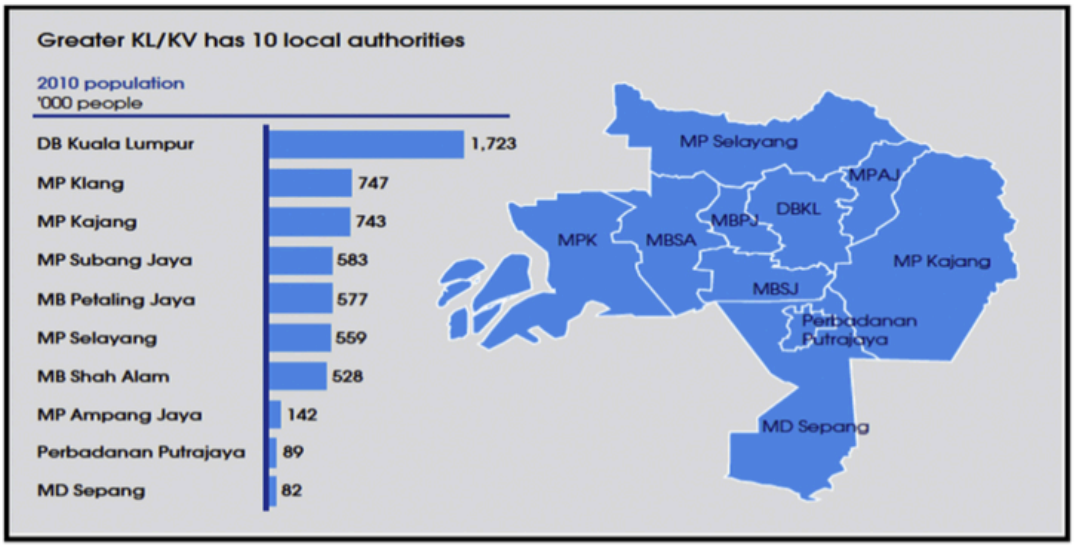

Fig. 1. Greater Kuala Lumpur.

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2.0 LITERATURE REVIEW

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Previous housing research in Malaysia studied the assessment of the satisfaction level in low- and low- medium cost housing. There has been relatively little research into the determinants of housing satisfaction of medium- and high-cost houses from the private sector [50-63]. Furthermore, an oversupply of medium- and high-cost housing is a major contributor to the problem of property overhang in the country. Therefore, it is relevant to examine factors affecting housing satisfaction of medium- and high-cost housing. Factors related to housing satisfaction are numerous and their relationships are very complex. Consequently, the scope of this study will be on selected factors that are relevant to the housing market in Malaysia such as homeownership, housing characteristics, real property gain tax, the 10:90 house buying system, as well as key socio-economic and demographic factors. Housing evaluation is relevant to housing developers as it provides the necessary information to improve the design and development of future housing projects. In order to evaluate the performance of housing, a suitable indicator has to be developed. Amongst the various indicators developed, the concept of satisfaction has become the most widely used indicators to assess the performance of housing [64-79]. As defined by project, housing satisfaction refers to the degree of contentment experienced by a household with reference to the current housing situation, and it is a non-economic and normative quality evaluation approach to assess the quality of housing units. Households judge their housing conditions based on the actual housing situation and housing norms, and they are likely to express a high level of satisfaction with housing if the house- holds' current housing situation meets the norms. On the other hand, incongruence between housing situation and norms may result in a housing deficit, which in turn gives rise to housing satisfaction [80-91]. In order to reconcile the incongruity, households may consider some form of housing adjustment, such as revising their housing needs and aspirations, renovating their housing conditions or moving to another place. The determinants of housing satisfaction often help to explain why some households are more likely to be satisfied compared to others. Many researchers have

developed housing satisfaction models and found varying assortment of determinants to be significant to housing satisfaction ranging from housing, demo- graphic, to socio-economic variables. Homeownership has been shown to exert a profound influence on residential evaluation. The most likely explanation for this is that homeownership gives homeowners a greater sense of control over their housing units [1-23]. Homeownership also provides a feeling of security and personal achievement, and therefore higher self- esteem. Previous housing studies have focused on the relationship between homeownership and housing satisfaction and test whether homeowners are satisfied with their housing and neighborhood conditions. Majority of the studies show that homeowners generally are satisfied with their housing. However, these studies do not explain to what extent homeownership affects housing satisfaction [24-37]. It is reasonable to believe that the degree of housing satisfaction may depend on the types of homeownership externalities that households are expected to receive, as defined by local amenities and social capital investment, neighborhood stability and financial benefits of homeownership. There is little empirical evidence to explain to what extent expected homeownership externalities influence housing satisfaction in the Malaysian context. Therefore, one of the objectives of this paper is to develop an understanding on which expected homeownership externalities contribute to the overall satisfaction of households in Malaysia. Homeownership programs have been often justified by claims that homeownership creates incentives for homeowners to improve the quality of their communities and to improve home- owners' connection to their neighbors [38-44]. Researchers, found that homeowners are believed to be more likely to invest in local amenities and social capital. The equity homeowners have in their homes is affected by conditions in the surrounding neighborhood, thus homeowners work to influence these conditions through participating in local amenities and social capital investment. There are reasons to explain why homeowners are more likely to participate in voluntary and local political organizations. Homeowners generally have a larger financial stake in their communities as their wealth tie up in their homes and communities [45-63]. As a result, they are often more involved in their communities compare to renters. Furthermore, participation in local improvement organizations is able to ward off outside threats by both public and private entities and inside threats such as poor property maintenance by homeowners as a mean of protecting their properties. Although there are little specific studies in literatures to examine the effect of local amenities investment on housing satisfaction in the Malaysian context, the case seems to be that increased local amenities investment may lead to higher satisfaction as local improvement organizations, such as residential associations will perform their duties to solve the problems of negative externalities on their housing and neighborhood conditions [64-78]. Homeowners will benefit both economically and socially if these types of neighborhood organization attachments are successful. As defined by projects, social capital consists of all the networks, norms, structures and institutions which facilitate social interaction. Homeowners invest in social capital by interacting frequently with their neighbors [79-84]. Social ties with neighbors living nearby may mitigate neighbor- hood instability and promote neighborhood cohesion by encouraging households to stay on as they can derive financial and emotional supports from its social networks. Additionally, frequent interactions with neighbors are found to be associated with positive health outcomes of households. As investment in social capital grows, it is possible that children of homeowners do better in school and are less likely to be involved in social crime. Children of home owners normally have more social capital to draw on as they interact with neighbors in their communities who are more likely to monitor their behaviors and activities [85-92]. The evidence about the relationship between social capital investment and housing satisfaction has shown that homeowners evaluate their housing situation based on social interaction with others confirmed that a higher rate of homeownership is often thought to promote the stability in the neighborhood. Households choose to stay in the neighborhood for a long time because they will not incur transaction costs associated with buying and selling houses. As neighborhood stability improves, it is possible that education outcomes and behavior of the children of homeowners will improve [1-14]. It is the better neighborhood and relatively stable school environments experienced by children of homeowners that account for their better outcomes. Researchers further supported that residential stability reduces the effort necessary for children to adapt to the new social network. Residential mobility has been shown as a key threat to the maintenance of social capital. Homeowners generally live in communities characterized by greater residential stability, their children will benefit from these positive neighborhood externalities through active involvement in community social capital which may provide better outcomes for children. Neighborhood stability may be shown to have a positive association with housing satisfaction. The longer the homeowners stay the more satisfied they become [15-26]. One possible explanation is that through the passage of time homeowners are adapted to the living conditions of their housing environment. Given the reduced mobility that homeowners possessed, it seems that the neighborhood stability of homeownership is a

predictor of housing satisfaction. As pointed by many articles, homeowners are more likely to maintain their properties well because they can obtain potential financial benefits of owning a house [27-38]. It has become important to consider homeownership as an investment for which homeowners will receive financial returns. It is argued that the decision of purchasing a home is driven by consumption and investment motives. Housing investment is important for asset accumulation and portfolio choice compare to stocks and treasury bills [39-46]. Residential property is also proved to be an effective instrument to hedge against inflation compared to other assets. General trend data on housing prices confirm that property has performed well as long term investment. Although there is little empirical evidence to support the claim that financial benefits of homeownership have positive effects on housing satisfaction in the Malaysian context, it is reasonable to believe that housing satisfaction might be expected to rise with higher housing returns. Homeowners are more likely to maintain and improve their properties at a higher standard because the condition and overall attractiveness of their houses reflect their social status and they are generally satisfied if these investments and maintenances are reflected in the form of higher property values when the time comes to sell their homes. Most empirical studies have identified a number of housing characteristics, namely structural, locational and neighborhood attributes of housing. Housing characteristics can be measured objectively and subjectively [47-58]. Most housing satisfaction studies have integrated both objective and subjective attributes of housing characteristics for the assessment of housing satisfaction. Previous studies have shown that structural attributes of housing is a significant factor affecting housing satisfaction. These attributes include objective physical characteristics of housing such as kitchen space, laundry and washing areas, size of living area and dining area, morphological configuration of residence hall, number and level of sockets, number of bedrooms and bathroom, and other aspects of housing such as housing quality, privacy (social densities), housing services provided by developers such as garbage disposal and safety, and brightness and ventilation of the house [59-67]. Location of housing is also an important factor contributing to housing satisfaction among households. Favorable locational attributes generally refer to accessibility to central business district, local amenities such as shopping centers, schools and transportation centers. Thus, housing developers to provide quality self-containing housing projects within a functional residential development in the location where households can find the place within the neighborhood to work and fulfill recreation needs. Neighborhood conditions such as neighborhood upkeep, pollution, and crime are also found to be important to the assessment of households' surroundings. According to data from National Housing Policy, 9% of housing projects are classified as problematic. Problematic housing projects include houses that have been delayed, stalled or abandoned [68-74]. Problems caused by problematic housing projects have given rise to calls for house builders to adopt a more equitable housing delivery system to protect the interest of buyers, particularly from falling victims to the abandoned projects. One of the causes of the problematic housing projects lies with the current Sell-then-Build (STB) housing delivery system. Under STB, buyers pay a 10% deposit of the property price upon signing of the sale & purchase agreement and take up a bank loan to pay for the balance sum. With the STB, the cost of financing the property's construction is largely borne by the buyers. For decades, the STB delivery system has managed to deliver homes to meet the housing needs of Malaysia's growing population. But along the way, this model of buying houses has met with undesirable outcomes [75-86]. This progressive payment system offers no protection to failed projects and financially unsound housing developer as house buyers are saddled with housing debts that are partially disbursed and for which they have to continuously pay interests. One measure to address the problem is to change the housing delivery system from the Sell-then-Build system (STB) to the 10:90 Build-then-Sell system (BTS). The push for more sweeping changes in the local housing delivery system to better protect buyers is due to the dissatisfaction over the STB. In the 10:90 system buyers sign the sale & purchase agreement and pay a deposit of 10% of the selling price [83-91]. There is no empirical evidence to assess whether the BTS 10:90 housing delivery system will contribute to housing satisfaction of home- owners. Therefore, this paper is undertaken to examine the relationship between the BTS 10:90 system and housing satisfaction. The effect of the real property gain tax (RPGT) on housing satisfaction is also taken into consideration in this study. The Malaysian government has imposed the RPGT on various occasions depending on the prevailing market conditions. Previously, investors had to pay 30% RPGT if the property was disposed off within the first two years; 20% within the third year; 15% within the fourth year and 5% within the fifth year. Profits earned from disposal in the sixth year and beyond would not be taxed. From April 2007 until January 2010, all gains from property transactions have been exempted from the tax. The exemption was granted in as a support measure to reverse the flagging property sales during the market downturn. The reintroduction of the RPGT has caught some by surprise. Effective from 1 Jan 2010, the gains rising from property disposal within the first five years are subject to five percent tax. The

government's vision is to house everyone in the country. However, the recent speculative buying in the Greater KL area has contributed to the escalation of property prices. The price increase in properties has made afford- ability a serious issue among first-time house buyer [1-11]. In order to ensure the sustainable housing delivery system, the RPGT was reintroduced to curb speculation in the market and prevent the housing market from overheating. Although there is no empirical study being conducted to investigate the effect of the RPGT on housing satisfaction in Malaysia, it is reasonable to believe that the 5% RPGT contribute to lower housing satisfaction among households. In addition to the housing determinants, households' socio- economic and demographic variables ought to be taken into consideration in evaluating housing satisfaction [12-19]. Empirical studies have identified a number of important demographic determinants, such as age, educational attainment and life cycle changes. Among the individual and household characteristics, age shows a positive effect. Older people tend to be more satisfied with their dwelling than do younger people, ceteris paribus. A study by some researches, however, argued that age of the households is negatively related to housing satisfaction. Previous works, indicated that higher income households are generally satisfied with their housing. Others explained that higher income enables households to move to a suitable house in an attractive neighborhood, which may result in a relatively higher level of satisfaction. Similarly, the higher the education level of the heads of the household, the more satisfied they are with their housing compared to household heads with lower educational attainment [20-43]. However, projects found that education appears to have insignificant effects on housing satisfaction. EPF withdrawal appears to be an important determinant of homeownership in Malaysia . From 1 January 2008, households can utilize their saving from their EPF Account 2 to pay for their monthly installment of a housing loan. This withdrawal is in addition to the withdrawal to reduce or redeem their housing loan balance for the purchase or building of a house [44-61]. This paper also aims to determine whether EPF (employee provident fund) withdrawal is a predictor of housing satisfaction in Malaysia. With the existing literature in supporting the relationship between determinants and housing satisfaction, the research question is to assess whether homeownership externalities, structural, locational and neighborhood attributes of housing, socio-economic and demo- graphic characteristics, the Built-then-Sell 10:90 system and the RPGT exhibit statistically significant relationships for housing satisfaction of medium- and high-cost housing in the Greater KL (Fig. 2) [62-76].

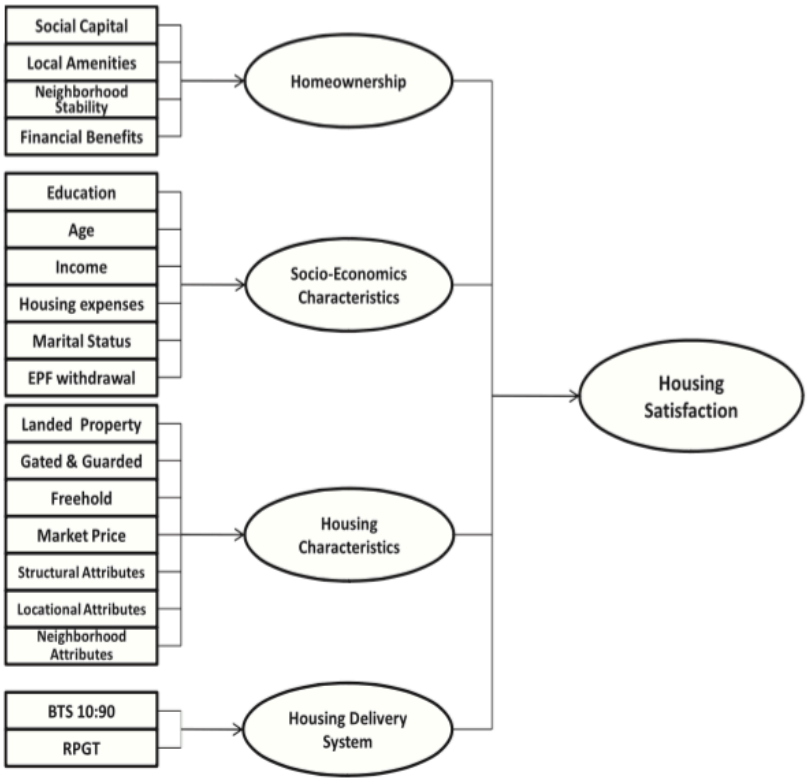

Fig. 2. Conceptual framework.

3.0 METHODOLOGY

In order to investigate the determinants of housing satisfaction, a series of statistical techniques are performed. First, exploratory factor analysis and reliability analysis via Cronbach's alpha are used in the study [1-42]. Confirmatory factor analysis is then conducted to assign variables to manifest a construct. The strength of the manifestation is measured by factor loadings in the complex factor structure. Results that are obtained from confirmatory factor analysis subsequently led to the construction of the composite indices of home- ownership externalities and housing satisfaction [77-91].

Table 1
Summary of the housing and socio-economic & demographic variables.

Variables	Descriptive	Mean (%)
Landed	1 if you own a landed property; 0 otherwise	0.8587
G & G	1 if you own gated-guarded property; 0 otherwise	0.4647
Freehold	1 if you own freehold property	0.6022
Price	Market price (RM 000)	520.798
EPF	1 if you have withdrawn EPF funds for home purchase; 0 otherwise	0.5279
S10–90	1 if you prefer the BTS 10–90 buying system; 0 otherwise	0.6952
RPGT	1 if the imposition of the 5% real property gain tax (RPGT) starting from 1 Jan 2010 will not discourage me from buying property; 0 otherwise	0.6097
Workplace	1 if the distance to the workplace is less than 5 km; 0 otherwise	0.5019
Retailing	1 if the distance to retailing outlets is less than 5 km; 0 otherwise	0.5613
Hospital	1 if the distance to the hospital is less than 5 km; 0 otherwise	0.5130
Sport	1 if the distance to sport and recreation centers is less than 5 km; 0 otherwise	0.5130
H. Exp	1 if your monthly housing expense is more than RM 2500; 0 otherwise	0.1933
Own	1 if you are owner; 0 otherwise	0.7600
Married	1 if you are married; 0 otherwise	0.7063
<RM 2500	Monthly income < RM 2500 (reference group)	0.5193
RM 2500–RM 4000	Monthly income RM 2500–RM 4000	0.2602
RM 4000–RM 8000	Monthly income RM 4000–RM 8000	0.3383
>RM 8000	Monthly income > RM 8000	0.1822
Age < 30	Age of the respondents in years	0.2491
Age 30–50	Age of the respondents in years	0.5613
Age > 50	Age of the respondents in years (reference group)	0.1896
Primary	Primary education	0.0149
Secondary	Secondary education (reference group)	0.2453
Tertiary	Tertiary education	0.7398

Questionnaire questions with factor loading less than 0.40 are deleted from the set. 28 questionnaire items have sorted into 5 factors. Homeownership externalities are composed 4 factors: Factor 1, which refers to as Social Capital Investment, has 7 items, Factor 2, which refers to as Financial Benefits, consists of 6 items, Factor 3 comprises 5 survey items regarding Local Amenities Investment, and Factor 4, which is defined as Neighborhood Stability, consists of 5 items. The housing satisfaction factor consists of 5 items. All the reliability values were above the 0.7 (ranging from 0.715 to 0.8560), indicating sufficient reliability of the measurement used. In the second phase, 28 questionnaire items are then confirmed to manifest a specific construct, where the factor loadings are the highest. Items are then omitted from further analysis if they do not show a unique manifestation of a single factor [1-27]. Analysis based on confirmatory factor analysis show 4 'social capital investment' items, 5 'financial benefit' items, 4 'local amenities investment' items, 3 'neighborhood stability' items, and 2 'housing satisfaction' items respectively (see Table 2). The index value is computed as an average score of values for all variables included in each construct. Finally, regression analysis is performed to estimate he coefficients of homeownership externalities, housing, and households' socio-demographic characteristics on housing satisfaction [3-18]. Housing and demographic characteristics used in this

study are measured in a dichotomous code. The respondents of this study are households in the Greater KL of Malaysia. Four municipalities within the Greater KL were chosen in this study as the total number of these households in this area accounted for 31% of overall households in the country (Department of Statistics Malaysia, 2000), namely KL City in Kuala Lumpur and Klang, Kajang and Petaling Jaya in Selangor. To ensure sufficient variations in responses among respondents in this study, households were interviewed by using stratified sampling. The stratification criteria were: (1) each respondent is the head of the household, (2) each respondent resides in either medium- or high- cost housing, and (3) there are roughly the percentages of respondent in each of the house type. Terrace house are the most popular types, followed by high-rise and semi-detached and detached houses. The data were collected by face-to-face inter- views [44-56]. The final sample consisted of 269 respondents from these four municipalities. However, 19 of them were discarded due to missing information in the survey forms. All survey questions relating to the determinants of housing satisfaction are guided by previous housing studies with slight modifications. In this survey, responses are scored on a five-point scale. The advantage of Likert scale is that it is easy to construct and it allows the respondents to answer the questionnaire according to their degree of feelings toward the statements. Likert scale also provides a highly reliable scale compared to the open-ended question. The degree of housing satisfaction may tend to vary by house types, property types, and life cycle attributes. These variables are included in the analysis to control for possible differences in the assessment of housing satisfaction by homeowners with different housing and neighborhood preferences and household backgrounds. The estimation of the relative price of dwelling is also included in this study [57-71]. Some relationships are expected between housing satisfaction with the BTS 10:90 systems, and the imposition of the RPGT. Table 1 shows the summary and definition of housing and socio-demographic variables included in this study.

4.0 RESULT

In the first phase, principal component analysis with varimax rotation is performed to examine whether all variables relating to housing satisfaction and homeownership variables can be grouped into a smaller number of factors.

Table 2
Confirmatory factor analysis.

	Factors				
	1	2	3	4	5
Social Capital Investment (SCI)					
I socialize with my neighbors	0.720				
My neighbors are friendly	0.770				
My neighbors are helpful	0.700				
My neighbors look after my property when I am away	0.688				
Financial Benefit (FB)					
Property has the potential for income gains		0.800			
Property has the potential for capital gains		0.890			
Property is a good investment to hedge against inflation		0.797			
Property is a good investment for retirement		0.783			
Property is a good investment for children education		0.676			
Local Amenities Investment (LAI)					
I have participated in the local community project			0.761		
I am a member of residential association			0.779		
I contribute time and efforts to improve my neighborhood			0.819		
I involve in local improvement groups			0.849		
Neighborhood Stability (S)					
I stay in the neighborhood longer due to my neighbors				0.687	
I stay in the neighborhood longer due to amenities				0.814	
I stay in the neighborhood longer due to high relocation costs				0.691	
Housing Satisfaction (HS)					
I intend to buy another property in the same neighborhood					0.653
I will recommend my friends/ relative to move into my neighborhood					0.644

Of 28 questionnaire items, 10 items are dropped for further analysis. Results that are obtained from Confirmatory Factor Analysis subsequently led to the construction of five composite indices. For example, the composite index of social capital investment construct is the average of 4 survey items. Correlation analysis is performed to examine the strength of association between homeownership externalities and housing satisfaction. Table 3 presents the correlation matrix of homeownership externalities and housing satisfaction. It appears that all homeownership externalities, as defined by social capital investment, property appreciation, local amenities investment and neighborhood stability are significantly and positively correlated to housing satisfaction at the 0.01 level. Correlations are also used to examine the presence of multicollinearity, where a correlation of greater than þ0.7 and less than 0.7. From Table 2, there is no evidence of multicollinearity within the data.

Table 3
Correlation analysis.

	HS	SCI	FB	LAI	S
HS	1	0.502**	0.162**	0.472**	0.455**
SCI	0.502**	1	0.239**	0.441**	0.464**
FB	0.162**	0.239**	1	0.213**	0.270**
LAI	0.472**	0.441**	0.213**	1	0.431**
S	0.455**	0.464**	0.270**	0.431**	1

**Significant at the 0.01 level; *significant at the 0.05 level.

5.0 CONCLUSIONS

Meeting housing needs is an important objective in the country's social and economic development goals. The efficiency and effectiveness of housing provision to meet their housing needs requires an estimation of the determinants of housing satisfaction as different households have different perception of housing satisfaction based on their requirements and needs. Results from previous studies show housing satisfaction is much higher among homeowners compare to renters. However, these relationships may be spurious because the degree of housing satisfaction may depend on the types of positive externalities that homeowners are expected to receive. From the analysis, home- ownership externalities, as defined by social capital investment, neighborhood stability and local amenities investment, seem to enhance the relationship between homeownership and housing satisfaction. It may suggest that some of the effects of homeownership on housing satisfaction may be attributed to these types of homeownership externalities. For example, increased social links may lead to higher housing satisfaction as homeowners are able to reach a desired social status by interacting and socializing with neighbors in the public space. Similarly, neighborhood stability may enhance the positive relationship between homeownership and housing satisfaction. Households choose to be homeowners because they may not consider relocating or shift to another neighborhood. Therefore, they have the tendency to conform or adapt to their housing and environment situations over time, which may result in a higher level of housing satisfaction. Since home- owners have an interest in their neighborhoods, they are expected to improve the quality of their neighborhoods by contributing time and effort into local pressure groups. Thus, active involvement in local improvement groups has significant effect on housing satisfaction. From the result, the BTS 10:90 system appears to be a significant predictor of housing satisfaction. The respondents generally believe that the system is said to be a fool-proof system to protect the rights of house buyers from abandonment. Furthermore, the quality of houses will improve with this system as developers will be more vigilant and responsible to ensure timely delivery of housing projects. An assortment of determinants found to be significant in this study. These include age of the household, land tenure (freehold), gated-guarded property, price of owning, EPF withdrawal, and proximity to the workplace.

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