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## **NEIGHBORHOOD PREFERENCES OF HOUSE BUYERS: THE CASE OF KLANG VALLEY, MALAYSIA**

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### **ABSTRACT:**

**Purpose** - This paper attempts to examine the impacts of neighborhood types, as defined by a gated-guarded neighborhood with landscape compound and a freehold tenure neighborhood on residential property values in Klang Valley, Malaysia.

**Design/methodology/approach** - A weighted least squares method together with a heteroscedasticity consistent covariance matrix estimator is used to estimate the coefficients of structural, locational, and neighborhood attributes of dwellings on house prices.

**Findings** - Results show the gated-guarded neighborhood with landscape compound could increase residential property values by 18.1%. Additionally, the positive perception of a freehold property in the neighborhood could induce a price premium of 23.7%.

**Research limitations/ implications** - It is reasonable to believe that neighborhood types play a role in determining residential property values.

**Practical implications** - In order to meet the increasingly affluent and discerning house buyers, developers instead of just offering dream homes in prime locations, they should provide intangible benefits in the neighborhood that just as sought after by today's house buyers, such as a sense of security in the landscape compound, a feeling of harmony with one's surroundings, and an infrastructure which supports the lifestyle of house buyers.

**Originality/ value** – House buyers in Malaysia are increasingly aware of the value of gated-guarded and freehold neighborhoods. However, there is little evidence to assess the value provided by such neighborhoods in Klang Valley, Malaysia. This paper aims to determine the responsiveness of the willingness to pay to changes in neighborhood types.

**Keywords** Neighborhood types, Property prices, Klang Valley, Malaysia

## **INTRODUCTION**

A massive over construction of houses by Malaysian housing developers has created the problem of property overhang. The term property overhang means housing units that have been issued with a certificate of fitness for occupation (CF) and have remained unsold for more than 9 months (Ministry of Finance's Valuation and Property Service Department 2006). As reported in Property Market Status Report (2009), the residential overhang units increased from 23,866 units worth RM (Malaysian Ringgit) 3.82 billion in 2007 to 26,029 units worth RM 4.476 billion in 2008. Most of the overhang units surprisingly are affordable to most households and priced at RM 150,000 and below. These unsold houses do not attract the target market and cater to the housing needs of the target group as they are situated in poor locations with no adequate amenities and less employment opportunities.

In order to address the mismatch in the housing provision, it is important to know what the market really wants as house buyers are becoming more cautious before purchasing their houses. Housing developers require a detailed knowledge of how Malaysian house buyers differ in perception, opinion, and preference of house purchase. House buyers in Malaysia generally opt for gated-guarded landscape compound and freehold tenure neighborhoods. However, there is little evidence to assess the value provided by such neighborhoods in Klang Valley, Malaysia. This main emphasis of this paper aims to determine the responsiveness of the willingness to pay to changes in neighborhood types.

Klang Valley, also known as the Kuala Lumpur conurbation, is the country's fastest growth region. The valley is ideally suited to the purpose of this research because it is a large residential area with a large number of residential transactions. As reported by the Ministry of Finance's Valuation and Property Service Department (2007), the valley contributed more than 45% of the total amount of constructed houses in the country. Additionally, households from Klang Valley have similar demographic characteristics, and variations in their housing qualities are small.

## **LITERATURE REVIEW**

In order to determine the responsiveness of the willing to pay to changes in housing attributes, the impact of housing attributes on house prices is examined. There are many structural, neighborhood and locational attributes that could have impacts on house prices (Chin et al 2004). The most common structural attributes that are included in measuring property prices are built up area, size of living area or dining area, number of bedrooms or bathrooms in a house, car porch and internal or external structure of a house (Arimah 1992, Laakso & Loikkanen 1995, Tiwari and Parikh 1998, Wilhelmsson 2000, Tse and Love 2000). Common neighborhood attributes are quality of public schools, distance to urban park, and a view of garden, sea, lake, and valley. Distance to workplace, school, retailing outlets and public transportation stations are part of locational attributes (Hui et al 2007, Jim and Chen 2006, Jim and Chen 2007, Redfearn 2009, Jim and Chen 2009, Poudyal et al 2009).

The main emphasis of this paper is to examine the impact of neighborhood types on residential property prices. As defined by Choguill (2008), the term neighborhood is an area where the residents are drawn and held together by common and beneficial interest. There are many types of neighborhoods that house buyers can choose from. One way to classify neighborhood types is by looking at the environmental qualities within and around the neighborhood. The environmental qualities are what house buyers would consider before buying a house, and such elements are reflected in the property prices. Good environmental elements carry significance property values. Many studies conducted in Europe, Asia and the US evaluate the impacts of environmental qualities, such as green space provision (Tyrvaainen 1997, Tyrvaainen and Miettinen 2000, Tajima 2003, Jim and Chen 2006), proximity to parks (Bolitzer and Netusil 2000, Poudyal et al 2009) and views of green space and water (Luttik 2000, Jim and Chen 2006) on house prices. It reaches a conclusion that a property that is located in a good neighborhood is more preferable and house buyers are willing to pay extra money for a house with good environmental qualities. For example, view of green space and proximity to water bodies raise price by 7.1% and 13.2% respectively (Jim and Chen 2006), and accessible green

spaces near homes could raise house price by 5 – 6% (Tyrvainen and Miettinen 2000, Tajima 2003). Besides, a garden bordering on water could attract a premium 28% higher than one without this attraction (Luttik 2000). Most of the studies focused on either the distance to recreation parks or the proportion of open space in the neighborhood to measure their environmental qualities.

There are many aspects that contribute to environmental qualities, for instance, a gated-guarded landscaped compound neighborhood (a green network within the gated and guarded neighborhood). In the gated-guarded landscaped compound neighborhood, native tree species are planted within buffer zones, green reserves and pocket green spaces. Also, all utilities are built underground so that the natural landscape is protected and the views are not blocked. The most prominent underlying reasons why house buyers now want the gated and guarded property is probably because of the status symbol that goes along with owning a home that is protected. The gated-guarded landscape compound neighborhood carries the symbol of upper class, wealth and luxury (Tan 2010). Additionally, these neighborhoods have sufficient recreation facilities, such as swimming/ wading pools with Jacuzzi, squash court, gym and sauna, BBQ corner, cafeteria and convenience store. Tan (2010) argues that home owners from the gated and guarded neighborhood socialize more with their neighborhood. It is reasonable to believe that common areas and amenities within provide residents with day-to-day social activity requirements. The availability of these facilities brings some positive effects to property prices. It is documented that the price of large housing estates, in which facilities such as private clubhouse and swimming pool are provided, tend to be higher (Moh et al 1995, Tse and Love 2000, Hui et al 2006).

One of the main characteristics of the gated-guarded landscape compound neighborhood is the added security features. Snatch thefts, assaults and rampant break-ins in Klang Valley's urban areas, make house buyers a little more concerned about their personal security. The commonly installed security features include perimeter walls and fences, security personal and professional property management. There are CCTV installed along the perimeter fencing, which helps the security personnel to monitor visitors and

outsiders. Because of the greater costs associated with buying the gated and guarded property, it will be mainly bought by those who plan on staying for an extended period will buy such property. Owning the gated-guarded property will not only secure peace of mind, but also preserve something value for the next generation (Tan 2010). As a result, homeowners might be expected to maintain their dwelling units well. This investment in property maintenance and improvement could be reflected in the form of higher property values. Rohe and Steward (1996) argue that home owners are more likely to invest in their property maintenance and improvement at a higher standard. The reasons for such improvement are that they can obtain the potential for financial gain and other non-economic benefits of residing in the house (Tan 2008).

The gated-guarded landscape compound neighborhood may be managed either by the housing developers or a professional property manager. They perform maintenance services for the grounds and common areas. One of the main issues with the gated-guarded neighborhood is the added maintenance and service charges that will have to be paid perpetually. There are no standard charges. The charges are formalized via the Deed of Mutual Covenant between the housing developers and residents. The amount charged is usually tabulated by dividing the total cost of maintenance with the total number of units built in the neighborhood. The maintenance and service charges are calculated on a per square foot basis by multiplying the respective unit's built-up area with the fixed per square foot rate. The success and effectiveness of gated and guarded neighborhoods will also depend a great deal on the level of co-operation from the residents in paying maintenance and service charges promptly, and taking care of the property's image.

Besides the secure and exclusive gated-guarded landscape compound neighborhood, house buyers nowadays generally want to live in the neighborhood with freehold tenure. This paper also aims to investigate the impacts of the freehold tenure neighborhood on its residential property value. The land tenure of the freehold property is for life. The owners of the land own the land, the building and anything that is on the land. There is no time limit for the owner and the freehold land lies with the title holder until the land owner transfers it to someone else. The difference between leasehold and freehold is that for

leasehold, the land is to be returned after the expiry of the period. This type of land also belongs to the government and the lease is usually for 99 years. When the lease expires, the government can take back the land or lease it further. The lesser the number of year left on the lease, the less valuable the land becomes. It is a widely known that freehold properties, as compared to leasehold properties, tend to perform better in terms of long-term capital appreciation (Tan 2008). Also, home owners who own freehold properties stay in their present dwellings longer as they own everything that is on the land for life (Tan 2010). Given the reduced mobility that home owners possess, it is reasonable to expect that home owners are committed to remaining in the neighborhood for a long time. Positive externalities are expected if home owners stay in the neighborhood longer. As pointed by Rossi and Weber (1996) and DiPasquale and Glaeser (1999), participation in local improvement organizations will increase only if the home owners stay in their present home longer. They also explain that home owners are believed to be more likely to participate in local neighborhood organizations as this will help ward off outside and inside threats by both public and private entities. Home owners are also believed to be more likely to associate informally with their neighbors. Social ties with neighbors living nearby may mitigate neighborhood instability and promote neighborhood cohesion. As such, high neighborhood organizations attachment and frequent interaction with neighbors may increase the attractive of the neighborhood which may cause higher appreciation of home values.

## **METHODOLOGY**

The determination of house prices can be done by the using the hedonic price model (Rosen 1974). Many researchers has used hedonic price model to examine the relationship between attribute preferences and house prices. It can be seen that such neighborhood types play a crucial role in determining residential property prices. There are many housing attributes that may affect the property prices. This study aims to clarify the impact of neighborhood types on residential property prices in Klang Valley, Malaysia. The fundamental assumption is that in purchasing a house, the house buyer is paying not only for the dwelling unit, but also for its surrounding environmental qualities

in the neighborhood. The house prices in this study are assumed to be affected by neighborhood, structural, and locational attributes of dwellings. There are many neighborhood, structural, and locational attributes of dwellings that could affect the house prices. A functional relationship between them can be developed. It can be represented by:

$$P_{ij} = \beta_0 + \beta_s S_{ij} + \beta_l L_{ij} + \beta_n N_{ij} + \varepsilon_{ij}$$

where  $\beta_s$  is the coefficient vector for the structural attributes ( $S$ ) which measure the structural effect on the housing price ( $P$ ), while  $\beta_l$  and  $\beta_n$  are locational ( $L$ ), and neighborhood ( $N$ ) coefficient vectors respectively, reflecting the locational, and neighborhood effects on the housing price.  $\varepsilon$  is the stochastic disturbance vector.

There are many forms that can be used to describe the relationships between price and housing attributes. Commonly adopted forms are linear, quadratic, semi-log, log-log and Box-Cox form, etc. In this study, a semi-logarithmic form is used. As pointed by Bolitzer and Netusil (2000), Geoghegan (2002), Jim and Chen (2007), this form is considered to be the best without too many complicated computations. The estimated equation in a semi-logarithmic form is expressed as:

$$\begin{aligned} \ln P = & \beta_0 + \beta_1 \ln Age_{ij} + \beta_2 \ln Built-up_{ij} + \beta_3 Flcer_{ij} + \beta_4 Fltim_{ij} + \beta_5 \\ & Wlkit_{ij} + \beta_6 Wlbat_{ij} + \beta_7 Worktime_{ij} + \beta_8 Retailtime_{ij} + \beta_9 \\ & Hospitime_{ij} + \beta_{10} Sportime_{ij} + \beta_{11} Transtime_{ij} + \beta_{12} Gated_{ij} + \beta_{13} \\ & Freehold_{ij} + \beta_{14} Gated * Freehold_{ij} + \epsilon_{ij} \end{aligned}$$

The definition of the dependent variable ( $P$ ) and 14 explanatory variables included in this study are given in Table 1.



**Table 1: Definition and Summary of Variables in the Hedonic Pricing Model**

<b>Variables</b>	<b>Definition</b>
Transaction Price (P)	Market Price (RM 000)
Age	Age of the housing (years)
Built-up	Built- up area (square feet)
Floor ceramic (Ffcer)	1 if living room ceramic tiles flooring, 0 otherwise
Floor timber (Fftim)	1 if bedroom laminated timber flooring, 0 otherwise
Wall kitchen (Wfkit)	1 if ceiling-height kitchen wall tiles, 0 otherwise
Wall bathroom (Wfbat)	1 if ceiling-height bathroom wall tiles, 0 otherwise
Workplace (Worktime)	1 if the traveling time to the workplace is less than 20 minutes, 0 otherwise
Retail (Retailtime)	1 if the traveling time to retailing outlets is less than 20 minutes, 0 otherwise
Hospital (Hosptime)	1 if the traveling time to the hospital is less than 20 minutes, 0 otherwise
Sport center (Sportime)	1 if the traveling time to sport and recreation centers is less than 20 minutes
Transport (Transtime)	1 if the traveling time to public transport stations is less than 20 minutes
Gated-Guarded (Gated)	1 if the property is located in the gated-guarded landscape compound neighborhood, 0 otherwise
Freehold tenure (Freehold)	1 if the property is located in the freehold neighborhood, 0 otherwise
Gated*Freehold	1 if the property is located in the gated-guarded landscape compound and freehold neighborhood, 0 otherwise

The transacted house price (P), built up area (Built-up) and age of the dwellings (Age) are continuous variables while the other explanatory variables are dummy variables. Six variables related to structural characteristics of dwellings are considered in this study: the age of the building; the built-up area in square feet; living room ceramic-tiles flooring (Ffcer), and bedroom laminated timber flooring (Fftim); and ceiling-height kitchen wall tiles (Wfkit) and ceiling-height bathroom wall tiles (Wfbat). Floor and wall finishes of the house are measured in dichotomous codes. Locational variables (dichotomous codes) are included in this survey to capture the proximity of the house to several amenities in the neighborhood. These variables include the distance to the workplace (Worktime), to retailing outlets (Retailtime), to the hospital (Hosptime), to sport and recreation centers (Sportime), and to the public transport stations (Transtime). Two categorical variables measure the neighborhood characteristics of the housing, whereby the focus variables in the study, are the gated-guarded neighborhood with the landscape compound (Gated) and the freehold neighborhood (Freehold).

A questionnaire survey was conducted in 2007 to collect the required data directly from home owners in Klang Valley. The questionnaire gleans information about the dwelling

of the respondents, including internal characteristics, location, outdoor environment and neighborhood attributes. These data are used in the hedonic pricing analysis. Transaction price data and housing attributes of 333 dwelling units are acquired from home owners. The sample of home owners is randomly selected from 8 districts within Klang Valley, namely Gombak, Klang, Petaling, Hulu Langat, Kepong, Cheras, Wangsa Maju, and Kuala Lumpur city. The interviews were conducted in identified residential areas near major hypermarkets in each district. 100 householders within each district are chosen. In total, 1000 copies of questionnaire forms were being distributed. Out of 1000 copies of questionnaire forms, out of which 400 forms were returned to the researcher. The response rate of 40% can be attributed to the succinct questionnaire design and the enthusiastic support from respondents. However, only 333 are used for the analysis due to incomplete information in some survey forms.

## **RESULTS**

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.

**Table 2: Descriptive Statistics of the Respondents in the Survey**

	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Std. Deviation</b>
Market Price (RM'000)	371.79	3500	60	66.79
EPF withdrawal	0.67	0	4	0.33
House age (years)	9.26	1	31	7.58
Build up area (square feet)	1952.75	500	5600	867.741
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	0.91
Number of dependents who are working	0.98	0	4	0.29

Table 2 reported the mean value, minimum value, maximum value and standard deviation value for demographic information in this survey. 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. House buyers in Klang Valley generally withdraw their savings 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, own their present dwellings for more than 9 years and the 31-year was the highest reported in terms of the age of the dwelling. The average build up of their dwellings was 1,953 square feet. 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 1 working dependent in the family.

**Table 3 Correlation Matrix**

	Price (RM'000)	House age (years)	Build up (square feet)
Price (RM'000)	1	0.072	0.809**
House age (years)	0.072	1	0.208**
Built up (square feet)	0.809**	0.208**	1

\*\* Significance at 0.01 levels

Table 3 presents the correlation matrix of the housing variables. It can be seen that the correlation between house price and built-up area, and house age and built-up area are significantly correlated at the 0.01 level. The correlation between house price and house age is positively correlated, but the relationship is not statistically significant.

**Table 4: Housing Attributes on Residential Property Prices (OLS, WLS1 & WLS2)**

	OLS		WLS1 <sup>a</sup> (Weighting series: build up)		WLS2 <sup>b</sup> (Weighting series: House age)	
	Coefficient	Impact (%)	Coefficient	Impact (%)	Coefficient	Impact (%)
Constant	3.915 (0.359)**		4.147** (0.412)		3.852** (0.440)	
House age	0.120 (0.015)	0.087	0.16* (0.008)	0.117	0.105 (0.009)	0.075
Buildup	0.142** (0.035)	0.103	0.147** (0.037)	0.107	0.141** (0.032)	0.103
Ficerm	0.106 (0.054)	0.112	0.113 (0.065)	0.120	0.13 (0.053)	0.139
Fltimber	0.087** (0.030)	0.091	0.085* (0.033)	0.089	0.053* (0.028)	0.054
Wlkit	-0.067 (0.057)	-0.064	-0.077 (0.064)	-0.074	-0.073 (0.052)	-0.070

Wlbath	0.178** (0.063)	0.195	0.158* (0.071)	0.171	0.191** (0.055)	0.210
Worktime	0.150** (0.036)	0.162	0.156** (0.037)	0.169	0.185** (0.037)	0.203
Retailtime	-0.254* (0.124)	-0.224	-0.238 (0.137)	-0.212	-0.278 (0.282)	-0.243
Hospitime	-0.164* (0.070)	0.151	-0.159 (0.082)	-0.147	-0.164** (0.055)	0.151
Sporttime	0.014 (0.095)	0.0141	0.024 (0.105)	0.024	0.039 (0.080)	0.040
Transptime	0.269** (0.074)	0.309	0.274** (0.079)	0.315	0.282** (0.085)	0.326
Gated	0.181* (0.087)	0.198	0.158** (0.095)	0.171	0.166* (0.083)	0.181
Tenure (Freehold)	0.138 (0.110)	0.148	0.203* (0.130)	0.225	0.213* (0.113)	0.237
Gated*Tenure	0.137 (0.061)	0.147	0.204 (0.071)	0.226	0.243 (0.061)	0.275
R square	0.875		0.883		0.898	
Adjusted R square	0.870		0.877		0.893	
Std Error of the estimate	0.23698		11.07516		0.66083	
Ramsey RESET test			0.0117 (p-value)		0.2288 (p-value)	

Figures in parenthesis are standard errors

<sup>a,b</sup> White Heteroskedasticity-Consistent Standard Error & Covariance

\*\* Significance at 0.01 levels

\* Significance at 0.05 levels

The results of the estimation of the semi-log model (OLS) are presented in Table 4. A potential difficulty of the OLS model is the presence of heteroscedasticity. As pointed by Tse and Love (2000), observations on larger dwelling units tend to have larger error terms than do observation on small units. Moreover, observations on older dwelling units tend to have larger error term than do observations on new units. This will cause the estimates to be biased and inefficient. In order to correct for heteroscedasticity in the study, a weighted least squares method together with a heteroscedasticity consistent covariance matrix estimator is used to estimate the coefficients of structural, locational, and neighborhood attributes of dwellings on house prices. The built-up area and age of the dwelling are used as a weight to correct for heteroscedasticity in this study (WSL1 and WLS2). WLS seems to be more appropriate for discussion and only their results will be examined in details. Following Jim and Chen (2009), the impacts were calculated

based on a double increase ( $2^{\text{coefficient}} - 1$ ) for continuous variables, and the impacts were calculated based on ( $e^{\text{coefficient}} - 1$ ) for dummy variables.

As shown in Table 4, WLS 1 and WLS 2 explain about 88.3% and 89.8% of variations in the house prices determination respectively. Most of the signs of the effects of housing attributes are consistent with previous studies. To select a more appropriate model between WLS 1 and WLS 2, Ramsey RESET is performed to test for specification errors in these two models. The results of Table 4 show that WLS 2 would be a more appropriate model to determine the prices of the dwellings as there is no specification error in the second model ( $p=0.2288$ ; do not reject  $H_0$  = there is no specification error).

The results of WLS 2 in Table 4 reveal that all other thing being equal, the gated-guarded landscape compound neighborhood is significantly related to the house prices. As shown in Table 4, the gated-guarded neighborhood with the landscape compound attracts higher market prices. In this survey, house buyers are willing to pay 18.1% more to live in the gated-guarded neighborhood with the landscaped compound.

The variable associated with the neighborhood with a freehold tenure, which also is the focus of the study, is a key factor in the house price determination model. There is a significant difference between freehold properties and leasehold properties in terms of property prices. This study reveals that the market price of the freehold neighborhood is 23.7% higher than the market price of the leasehold neighborhood, *ceteris paribus*. Both neighborhood types are statistically significant related to house prices. However, the interaction term of these neighborhood types is not statistically significant in this survey.

As far as structural attributes of dwellings are concerned, there are significant relationships in the property prices based on bedroom flooring and bathroom wall finishes, assuming all other thing being equal. As shown in Table 4, the prices of houses with laminated timber flooring bedrooms are 5.4% higher than the houses without. Additionally, households in the survey are willing to pay 21% more to own houses with ceiling-height bathroom wall tiles. Not surprisingly, these are consistent with previous

housing studies that home buyers are willing to pay for a premium for good house finishes. However, the results show that living room ceramic tiles flooring and kitchen wall tiles are statistically insignificant related to the property price, indicating respondent in this survey have excluded these two structural attributes in determining willingness-to-pay for a house.

Location and accessibility also play a role in the house price determination. There are significant relationships between the property prices and three locational attributes, namely the distance to the workplace, to the hospital, and to public transport stations. As indicated in Table 4, a house that is situated within 20-minute traveling time from the work place could fetch a 20.3% higher on property price. This is quite consistent with the economic theory because a long distance to the work place means incurring more traveling time and cost and that would dampen house prices. It is interesting to note that the houses located near retailing outlets are 24% cheaper, but the relationship is not significant. As indicated by Tse and Love (2000), proximity to retailing outlets does not seem to have any positive impact on the house price. This response might be partially due to the fact that the quality of living would be affected if a house is located near retailing outlets. A lower house price (15.1% less) is reported if the house is located less than 20 minutes away from the hospital. The accessibility to convenient public transport is an important factor in the house price determination, assuming all other variables remain constant. A 32.6% higher sale price is observed for the houses that are less than 20 minutes away from public transport facilities. However, the results show that the distance to sport and recreation centers is statistically insignificant differ from the house price. Generally, results are comparable to findings obtained in other studies and indicate similar buyer behaviors in the housing market with reference to locational attributes.

Among the continuous variables, Table 4 shows that only the build-up area is statistically significant in relation to the house price. Generally homeowners want to own bigger dwelling units because of the symbolic status that goes along with their properties. The estimation results also show that, holding all other factors constant, house age contributes a negative relationship to house prices. However, the relationship is not statistically

significant. This finding is not in line with the works of Hui et al (2006), Tse and Love (2000), and Jim and Chen (2009), and Poudyal et al (2009), they report negative and significant relationships between house prices and age of the properties. Generally, older properties are inferior in quality, which would fetch a lower price than a new one.

## **DISCUSSION**

The house price determination analysis in Klang Valley indicates that having laminated timber flooring and ceiling height bathroom wall tiles are few of the main variables in house price determination, which is similar to empirical findings in other countries. The implications of this study are that housing developers should provide new standards in home design and quality. These include giving quality tiles and laminate timber floor replacing old-fashioned broken marble and parquet.

Other statistically significant variables include the distance traveled for hospital, public transportation facilities, and the workplace, indicating that households want home located conveniently in relation to place of employment and transportation. Based on the findings of the locational preferences, housing developers are advised to provide quality self-contained housing within a functional residential development in the neighborhood where house buyers can find the place within the neighborhood to work, and fulfill recreation needs. Integrate amenities in a single location are equipped with all the elements of healthy living, learning, work, and play, in fact, has become more sought-after as households find it more cost-effective to move into well-connected neighborhoods.

House buyers may place priority on neighborhood types as well, such as gated-guarded neighborhoods with landscape compound. House buyers generally are willing to pay more to live in this neighborhood because of the security provided by security guards. Better security measures could instill a sense of trust and peace of mind amongst the residents. In addition to security guard provision, common facilities within the gated-guarded neighborhood, such as a private club house and swimming pool could increase the value of the property. As reported in the study of Hui *et al* (2006), the availability of a

private clubhouse facility within gated-guarded housing estate could increase the sale value of the house by about 3.5%. Based on the study, the property price of the freehold neighborhood is higher than the leasehold neighborhood. As mentioned earlier, home owners who own freehold properties may participate in local neighborhood organizations as they are directly connected with the land they own. Additionally, they may obtain higher margins of financing.

## **CONCLUSION**

This study is relevant to housing developers as they have to be cautious before undertaking any new housing project since property overhang becomes the central concern to the Malaysian housing 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. They should plan and design their products to take cognizance of the changing lifestyles of Malaysians.

A good housing development project should be designed to help households develop a safe and secure neighborhood. Therefore, housing developers should put efforts in spearheading the initiative to ensure that safety, security, and well being of every house buyers are guaranteed in the neighborhood. 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. It is highly recommended that housing developers should consider gated and guarded properties rather than just unattractive properties in their housing development plans.

It is reasonable to believe that neighborhood types play a role in determining the residential values of property. In order to meet the increasingly affluent and discerning house buyers, developers instead of just offering dream homes in prime locations, they should provide intangible benefits in the neighborhood that just as sought after by today's house buyers, such as a sense of security, a feeling of harmony with one's surroundings, and an infrastructure which supports the lifestyle of house buyers.



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