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## Homeownership Conceptual Framework for Urban Livability

Kerangka Konseptual Pemilikan Rumah untuk Dayahuni Bandar

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#### ABSTRACT

House is a basic need for individuals and families. Difficulty in owning a house has always been one of the major issues debated by the government, people and private sectors in Malaysia. Current economic conditions have made house purchasing almost impossible to many people due to drastic increases of house prices since 2000. The increases was influenced by macro and micro factors based on demand and supply of houses. Among them are migration of rural population to urban areas that leads to increasing demand for owning and renting a house. Hence, developers and investors have taken this migration process to their advantage by increasing their housing and rental prices to gain more profit. With the increase of home values, homeowners were also burdened with rising costs of maintenance which includes assessment of property tax, costs of maintenance and service. The increasing of house prices and the cost of home ownership will affect the population livability in the city. A conceptual framework has been developed. First, to identify the parameters that affects the ability of prospective first home buyers for middle-income earners in the home. Second is to evaluate the housing access indicator parameters on affordability of homeowners in reference to population livability in the city. The outcome of this study is the development of capability parameters to own a house and housing access for livability. This study findings highlight important criteria required to ensure home ownership to improve livability of urban community. Finally, the criteria could be used in developing a guideline for the government and developers to comply and support to the need of the National Housing Policy.

Keywords: Affordability; housing; ownership; livability; indicator

### ABSTRAK

Rumah merupakan keperluan asas bagi individu dan keluarga. Kesukaran memiliki rumah telah menjadi salah satu isu utama yang diperdebatkan oleh pihak kerajaan, masyarakat dan pihak swasta di Malaysia. Keadaan ekonomi semasa menyebabkan ramai penduduk tidak mampu untuk membeli rumah akibat peningkatan harga rumah secara drastik sejak tahun 2000. Peningkatan ini dipengaruhi oleh faktor-faktor makro dan mikro mengikut permintaan dan penawaran rumah. Antaranya, perpindahan penduduk dari luar bandar ke bandar telah menyebabkan peningkatan permintaan untuk memiliki dan menyewa rumah. Secara tidak langsung, pihak pemaju dan pelabur mengambil peluang untuk mendapatkan keuntungan dengan menawarkan harga rumah yang tinggi. Dengan peningkatan nilai rumah, pemilik rumah juga menghadapi bebanan kos penyelenggaraan yang semakin meningkat seperti cukai taksiran harta, kos-kos penyelenggaraan dan perkhidmatan. Oleh itu, kenaikan harga rumah dan kos pemilikan rumah akan memberi kesan kepada dayahuni penduduk di bandar. Satu kerangka kerja konseptual dibangunkan iaitu pertama, mengenal pasti parameter-parameter yang mempengaruhi kemampuan bakal pembeli rumah pertama bagi golongan berpendapatan sederhana dalam memiliki rumah. Kedua, menilai parameter-parameter indikator akses perumahan bagi kemampuan pemilik rumah untuk dayahuni penduduk di bandar. Hasil kajian adalah pembangunan parameter-parameter kemampuan memiliki rumah dan akses rumah mampu dimiliki dayahuni perumahan. Kajian ini mengenalpasti kriteria yang dapat membantu masyarakat untuk memiliki rumah bagi meningkatkan dayahuni penduduk bandar. Akhir sekali, parameter ini juga akan berfungsi sebagai asas garis panduan kepada pihak kerajaan dan pemaju agar dapat mematuhi dan menyokong matlamat Dasar Perumahan Negara.

Kata kunci: Kemampuan; perumahan; pemilikan; dayahuni; indikator

### INTRODUCTION

The Malaysian government has identified that home is one of basic human needs and an important component in urban economy (Ministry of Housing and Local Government 2011). According to the National Housing Department (2012), the housing ownership needs should consider factors such as financial capability of the buyers, development cost and selling price. These factors influence

the position of supply and demand in the housing sector. However, Malaysians are facing problems in housing ownership, since the house price has increased significantly, many of them could not afford to own one. According to Bentzien et al. (2012), affordability is the primary determinant for home ownership rate. Housing affordability is the most concerned subject and closely monitored by many countries. Among the countries that highly concern on home ownership affordability, includes city in the United States, United Kingdom, Australia, New Zealand and China.

Australia is one of the countries that have achieved population affordability and livability in the city. Livability in definition by the Victorian Competition and Efficiency Commission (2007) is a reflection of the people's welfare and consists of variety of features that make these places as locations where people want to live in the present and the future. Livability also defined as "quality of life" experienced by population in the city. The importance of livability in the sustainability context is the ability to maintain the quality of life of each individual (Timmer & Seymoar 2005). Livability involves aspects of environmental, social, culture, infrastructure, and the involvement of higher authorities (Centre for Livable Cities, Singapore 2014). It is also determined by the access that people have to be considered in making decisions to meet their needs, especially their financial capability to own a house.

According to Holden & Scerri (2013), Canada and Australia each have their own city namely Vancouver and Melbourne that reached urban livability status. Vancouver is an example of city that has achieved Community-Based Development (CBD) as a viable place to live in throughout the life cycle. Vancouver Administrative Region has always held dialogue session to discuss important issues such as transportation and affordable housing. As for the federal and provincial levels will take action on the issue and try to manage it in a fair and efficient manner. For example, municipalities have taken steps to zone for 20% of units of affordable housing in Vancouver (City of Vancouver 2011). Melbourne then was still a city in progress, later it expanded its area of 2786 sq. km for affordable housing projects in anticipation for the next 5 years (Holden & Scerri 2013).

In addition, the United Kingdom (UK) received fund by UK housing policy that emphasizes on affordability. Research by Poon and Garratt (2012), found that the UK housing policy has two dimensions that are closely related to 'attainability' and 'sustainability'. This means that 'attainability' is the ability of households to purchase the property, while 'sustainability' is the ability to maintain payments on property that has been purchased. This indicates that property ownership relates with livability in the city. The researchers in this study discussed the aspects of ability to be considered by prospective homebuyers and homeowners. Potential first home buyers and home owners should have financial plan in accordance with their ability to pay for the loan and the tax rates consistently. This scheme is an act to establish the context of livability in the city according to their income.

#### PROBLEM STATEMENT

Homeownership is an important issue often debated abroad especially among populations living in the city. A study by Bentzien et al. (2012) stated that German has the lowest homeownership rates compared to other countries by 43%. Among the reasons for this low rate of ownership due to the population unaffordability and also lack of evidence due to unavailability of accurate data. The number of houses and the number of households are the main cause for German residents' unaffordability. For example, a family has four dependents but only one family members providing the family income. In addition, Bentzien et al. (2012) reported that 76% of German states shows that owning a house is too expensive, 74% of them are worried on excessive debt, and 71% felt that they could not afford to pay for the house. The city of Berlin, Hamburg and Bremen in Germany is an example for their low rate of home ownership. This resulted to income disparities in the capitals as compared to the US Federal.

Malaysia is no exception in facing the same problem of homeownership among Malaysian residents. Since 20 years ago, the drastic increased of housing market prices has failed to be relative to the housing ownership (Wan Nor Azriyanti et al. 2011; Zainal Abidin Hashim 2010; Musa 2013). High house prices, especially in urban areas have been a great concern among buyers to own a home (Hamza et al. 2011). According to Wan Nor Azriyanti et al. (2011) problem to own a house is common issues among the middle-income households in Malaysia and this group was found to be the majority group of population in the city. Musa (2013) states that affordability to own a home is more critical among middle-income earners. This group was found difficult to buy a home because housing prices are higher than their current income. Another problem is the difficulty to get approval for bank loans. This problem forced them to look for joint income to buy an affordable house. Figure 1 shows the index of house prices in Malaysia increased by 70-100%, while affordability is decreasing (Cfa, and Gregorio 2012).

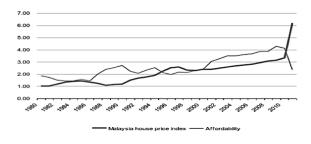


FIGURE 1. Malaysian House Price Index and Affordability Source: CIMB, PMR, MOF, BNM, DOS (Cfa & Gregorio 2012).

In 1997, the economic downturn has affected the real estate sector in Malaysia (Otrok, and Terrones 2004). According to Zainal Abidin Hashim (2010b), macroeconomic policies have been amended due to obstruction of foreign currency and crash of stock market that caused decreasing number of foreign investors to invest in Malaysia. As a result, in 1998 the number of property transactions became lower compared to the previous years (Department of Valuation and Property Services 1998). Between 2007 and 2008, this were the years of inflation at the global level. This event has stunted global economic growth. Global financial markets issues faced by most countries led to some adjustments according to changes in stock prices and interest rates for the long term. As a result, problems arise in the housing market in terms of increasing house prices.

# HOMEOWNERSHIP CONCEPTUAL FRAMEWORK FOR URBAN LIVABILITY

The property market has been considered as the most imperfection market because each property has different characteristics, lacking of latest information, number of buyers and sellers who are not permanent and certain parties are capable to influence the prices of certain properties on the market (Zainal Abidin Hashim 2010a). The characteristics can be observed in 2015, the housing market is still struggling to balance between supply and demand. According to Rosadah & Salleh (2004), the housing market is difficult to balance supply and demand for housing due to its cost. It is also influenced by other factors such as economic, social, political, legal and technological change. Figure 2 shows 'conceptual framework' that discusses the concept of home ownership and livability. The framework focuses on the study of economic theory and the theory of consumer behavior to observe simplicity of livability.

# THEORY OF CONSUMER BEHAVIOR

According to Jamal Ali (2000), this theory is important to determine the expenditure of limited income to obtain satisfaction (utility) in the consumption of goods and services. The basic needs such as food, drink, shelter, and many others are among consumptions needed by each individual. In this study, the theory of consumer behavior will be seen in terms of housing affordability faced by prospective homebuyers and homeowners. Housing affordability is that home ownership influenced by household income were able to choose whether to rent or buy a home. Housing affordability is one of focus area for the livability concept (Hunter New England Population Health 2012). Thus, it's also an important a need to obtain satisfaction (housing) and thus can achieve livability concept.

### DEVELOPER BEHAVIOUR

According to Winarso (2000), the behavior of private housing developers to determine house price includes the process of site selection for the price of land, access to activity centers and availability of infrastructure. Research conducted by Winarso in Jabotabek, Indonesia found that determination of land pricing becomes the most important factor in determining the project site. Gillen & Fisher (2002) have also studied the behavior of developers in the UK, representing eight developers on land pricing during the late 1980s and 1990s. These actions have resulted to instability on changes of land price, benefits to the developers and wider industry composition has slowly recovered the property market.

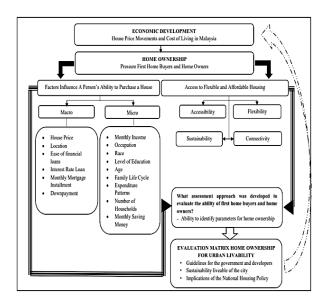


FIGURE 2. The conceptual framework on house ownership for urban livability

Source: Adapted from Wheaton (1996), Rosadah & Khadijah (2002), Hunter New England Population Health (2012)

As for development of housing in Malaysia, private sector developers involved in determining the price of houses based on categories and types of house, such as low cost, medium cost and high cost houses (Ong 2005). According to Hishamuddin et al. (2007) property deals by the property developers or sellers will offer a property at a particular price level. The deals are commonly influenced by prices that reflect demands of that particular property. This shows that developers are guided by the price of land in the site selection since they are taking advantage especially on financial, economic growth and land use regulation to hike land values. The situation can be seen when there is a change of rural use to urban use. Infrastructure provision, particular marketing techniques and construction of large-scale projects that are equipped with urban facilities also provide opportunity for developers to increase the price of land. As a result, uncontrolled activities would exceed the supply of land for residential development than the actual demands.

#### CONSUMER BEHAVIOUR

There are several approaches made by buyers or investors who need to review the property market before they could decide on the house price (Zainal Abidin Hashim 2010a). The overall view of the current property market refers to type, location, characteristics and target market. This is because type of home is the most expensive segment from selling revenue by the developers for the housing market. Shapiro (2001) stated that the purchase of houses nowadays is expensive and risky. It becomes risky if the buyer has no experience. Through psychological variables, buyers will survey in terms of trust, hope and expectation that influence their decisions. According to Amri & Bossomaier (2005), the type of household appliances also affects the buyer's decision. Furthermore, there are some consumers who buy houses either for their own use or investment purposes. Buyers can invest in financial assets to increase revenue in the future (Gwin & Ong 2008).

#### ECONOMIC DEVELOPMENT

Economic development was influenced by macroeconomic and microeconomic factors, for example the supply and demand issues are fundamentals in economy of housing price. According to Nor Aini & Ishak Yussof (2009), the Malaysian economy has undergone rapid development over the past few decades. However, this development does not guarantee fair and equitable benefits among the people. Property demand is a desire to have an interest in the existence of the use of the property (Hamzaid 1991; Hishamuddin et al. 2007). It is the ability to buy a home at a price within a certain time frame. While the supply refers to stock of properties on the market that still has not been purchased or leased to the buyer or tenant (Hishamuddin et al. 2007). The actual performance of the property market can be described through a combination of demand and supply analysis. Economic theory is influenced by two factors, namely the macro and micro factors.

Macro factors are the factors that influence supply and demand on national level (Hamid 2002). It usually refers to overall economic activity and it is related to international business cycles, inflation, loan interest rates, government policies and numerous others (Hishamuddin et al. 2007). The micro factors are factors that affect the demand and supply of property directly at project (site) level. Micro factors refers to factors related to the characteristics of the property, the surrounding development and economic activities around the property such as building location, building conditions, accessibility (Hee 2005) as well as profile and demography of the buyer (Hamid 2002). Zainal Abidin Hashim (2010a) in his study discussed this area in terms of supply and demand for residential property. Factors that affect demand are demographic, income, property, zoning and borrowing costs. As for supply factors refers to existing stock, the current price and zoning.

## FACTORS INFLUENCING CHANGES OF HOUSE PRICE

According to Amri & Bossomaier (2005), the changes of house prices are also influenced by micro and macro-economic factors and human behavior in decision-making. At the macro level, reduced interest rates and grants to homeowners have increased the demand for housing and contribute an increase in home prices. At the micro level, there was an increase in the price of physical structure, the location and the buyers' perception.

While Zainal Abidin Hashim (2010a) stated that the increase in housing prices is caused by excess in demand rather than supply. In addition, the basic elements of demand also affects the house price in accordance with the current state of population, income, facilities, financial costs and changes of price. Furthermore, the change of house price relates to regional economy and demographics such as income, capital costs, share prices and number of residents. According to Hamzah et al. (2011), the sharp increase in house prices is due to internal factors and external factors in the construction, such as increasing prices of construction materials at the international level, increasing rate of labor force, complex house designs and many others.

## LIVING COSTS

In reality, the pressure of living in the city such as high cost of living which includes increasing of prices of goods and services, transportation and other needs leads to increasing urban poverty. This situation affected to the middle and low-income groups, and they are the one who could not afford to buy a house in urban areas. According to Musa et al. (2013) the price of houses are mostly beyond reach, if to be compared with the population total income and increase of price for basic necessities. This matter has stunted efforts by young people, especially in urban areas to own a property. Zainal Abidin Hashim (2010a) states that there are some groups who live in the suburbs and have to overcome many challenges such as high cost of travel, waste of excessive time and energy to get to the city. At a press discourse held by The Malaysian Insider (2013), Tun Dr Mahathir Mohamad stated that "increase in the cost of living should be in line with total income". However this is not happening as many middle and low income groups currently have a problem to have enough funds to buy a house.

### PRESSURE AMONG POTENTIAL FIRST HOME BUYERS FOR MIDDLE-INCOME GROUP

House prices is the main issues faced by the potential first home buyers in the city. Most of them are beyond their financial ability, especially for the middle and lower income groups. Amri, & Bossomaier (2005) argued that houses that are located in the city is more expensive than those located in the suburbs. In fact, allocation of affordable houses is not enough, in the city, especially to cater the need of the middleincome earners (Wan Nor Azrivanti et al. 2011). According to Musa (2013), there is limited chance for this group to own a house despite their pressing needs because they are not qualified to buy low-cost houses. The price offers for medium-cost houses nowadays are still too high. Furthermore, the ability to own a house is also difficult because the buyers need to cover other expenses in terms of their cost of living, transportation, prices of goods and services that are increasing from day to day.

There are a number of home ownership initiatives carried out by the government, yet the issue still needs to be given further attention. The housing issue have resulted many people live in the suburbs because they could not own a house in the city (the National Housing Department 2012). Their affordability is based on their balance of income to pay for service loan and house deposit. This group needs to think about type of house that suits their financial capability to own a house. The potential buyers are divided into two which are unrealistic potential buyers and realistic potential buyers. For prospective unrealistic buyers, they are unaware of their affordability level. They do not make any future plan, and this will be difficult to create livability. As for realistic potential buyers, they are aware that there is capability to own a home. Guest (2005) also noted that optimal planning, savings and consumer decisions are important parts in buying a house. Consequently, it can create a livability context in society because livability means life in moderation that always concerned about continuous affordability.

### PRESSURE AMONG HOME OWNERS

Some homeowners are having difficulty to maintain their house ownership, particularly in urban areas. Some of the possible problems are capability and accessibility. According to Lehning & Harmon (2013), limited income and assets will require homeowners to keep working even after retirement. This is because they have to spend on cost of living, taxes and service costs that keep increasing that they need to live independently and look for extra money. Refer to Chaplin & Freeman (1999), there are three factors which influenced homeowners in maintaining their house, and these are uncertainty of interest rate, risk of income and price volatility. These factors will affect affordability due to high mortgage payments which would result to excessive debt and eventually risking house for auction. In addition, lack of accessibility also affects home ownership with regard to safety of walkways, inefficient and uncomfortable transport due to maintenance failure.

According to research by Lehning and Harmon (2013), most homeowners have used more than 30% of their income on housing costs (including rent / mortgage, taxes, utilities and maintenance). This suggests that affordability is an important concern. One third from the study respondents said that homeowners are not confident whether they can afford to maintain their house ownership. Buying a far more expensive house when the buyers are getting older is making it more difficult for them to maintain or renovate their houses.

# FACTORS AFFECTING AFFORDABILITY TO BUY A HOUSE

The macro-micro factors also affect their house purchasing affordability. Macro factors are house prices, location, financial loan facilities, financial loan interest rates, monthly payments and money or deposit process. The micro factors are monthly income, occupation, age, spending patterns, number of dependents, monthly saving surplus and many others (Wheaton, & Dispasquale

1996; Rosadah & Khadijah 2002). According to Gwin, and Ong (2008), affordability is based on 'cross-sectional' differences classified into three general categories: demographic, geographic and psychographic. Dimension demographics include age, gender, family size, family life cycle, income, occupation, education, religion, race, generation, and nationality. Geographical dimension refers to national, provincial, city, density, and climate. Finally, psychographic dimensions, includes social class, lifestyle, and personality. This was proposed by President Bush to the people to promote home ownership. While Bentzien et al. (2012) reported that the capability of home ownership is also influenced by characteristics of the household, price-rent ratio, social, political, legal, cultural and demographic trends.

## ACCESS TO FLEXIBLE AND AFFORDABLE HOUSES

This access is a key element in the livability context. This access is in terms of capability of homeowners to maintain their house ownership. According to Hunter New England Population Health (2012), adequate housing and accessibility has many health benefits. It is also a key component for a quality and healthy lifestyle. As quoted from Vinson and Cooper (2006) 'The Commission on Social Determinants of Health' states that access to quality housing and shelter is part of human rights and also essential for a healthy life. Evaluation on access to population livability in this study has adapted the Livability Assessment Tool that was developed by Hunter New England Population Health (2012). This assessment refers to four population livability principles namely accessibility, flexibility, sustainability and communication. Accessibility is the provision of infrastructure and services used by the population. Flexibility can be defined as the ability to change which means ability to adjust in any situation and to support the various needs according to different populations. Sustainability is the ability to provide the needs of the population based on current situation without compromising the ability of future generations to meet their needs later. Finally, connectivity which refers to providing routes for public use such as walkways, bicycle paths and public transport.

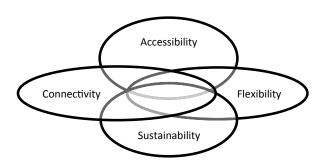


FIGURE 3. Principles for Population Livability

Source: Wells et al. (2007) & Hunter New England Population Health (2012)

These principles were designed and developed, and was later put into practical resource entitled 'Building Liveable Communities in the Lower Hunter Regions' by Well et al. (2007) and used for local government, urban planners and developers Hunter New England Population Health (2012). Therefore, the four principles have been considered and taken into account by the researchers of this study to develop evaluation matrix to be adapted in Malaysia. According to Well et al. (2007), there are three things to consider in designing to increase housing options, namely first, provide affordable housing for low and middle income earners. Second, diversity and density appropriate housing that promotes friendly environment among the young and old buyers. Third, provide a suitable location that is close to areas of business development, services and public transport.

# EVALUATION APPROACH DEVELOPED TO ASSESS AFFORDABILITY FOR HOME OWNERSHIP

According to Lowe et al. (2013), indicator for housing concerns on quality and affordability, as well as population and housing density and land use mixture. It also available for the diversity and the adaptability of the housing stock and housing tenure. Lowe has proposed that the livability area will be achieved if the extended land use mixture and access to affordable housing are relative to income. Although the parameters and challenges of home ownership in the city as mentioned above have been studied by researchers of the housing industry, the effort to collect and list the parameters of home ownership was yet to be found. Listing the parameters of home ownership is important because it can be used as measurement for affordability. Therefore, an assessment technique will be developed to measure the capability of prospective

homebuyers and to evaluate access and capability of homeowners. The technique will also be able to help in identifying the parameters for homeownership.

## DEVELOPMENT OF HOME OWNERSHIP ASSESSMENT MATRIX FOR URBAN LIVABILITY

Therefore, a proposal was made to develop an assessment housing matrix for urban livability. This matrix measures the presence or absence of housing parameters and urban livability parameters related to access as a first step. It is one of the potential indicators that will help the prospective buyers to determine their ability to have a home and be able to maintain their house ownership. Indicator for urban livability is based on the access that requires additional evaluation on cost of facilities and services such as home renovation services. This assessment indicates that homeowners also need accessibility equipment in order to meet their needs to maintain their house ownership. Guidelines could help the government and private developers to revise the parameters needed in house ownership.

## CONCLUSION

Overall, the urban livability concept has been introduced and worked abroad. Various initiatives have been undertaken by many countries to ensure that their citizens are living with capability to own a house and maintain their house ownership. Livability concept has the potential to benefit the generations of today and the future to remain in the community as residence living in the city. It also handles health, economic and social development in the long run. This study was carried out to ensure that Malaysians can afford and have the accessibility to maintain their house ownership. Next, these parameters will be used to develop a framework for homeownership assessment matrix for urban livability preservation. It also serves as guidelines for the government and private developers and will be implemented in the National Housing Policy. This is in line with the objectives of the National Housing Policy to improve the sustainability of livability to provide adequate, comfortable and affordable houses. The housing sector can contribute to economic growth and towards making Malaysia a developed and high-income country by 2020.

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