

A STUDY ON AFFORDABLE HOUSING WITHIN THE MIDDLE INCOME HOUSEHOLDS IN THE MAJOR CITIES AND TOWNS IN MALAYSIA

Dr Wan Nor Azriyati Wan Abd Aziz¹, Assoc. Prof. Dr Noor Rosly Hanif²
and Dr Kuppusamy a/l Singaravello³

Centre for Studies of Urban and Regional Real Estate (SURE)

Faculty of Built Environment

University of Malaya, 50603 Kuala Lumpur

Fax: 603 79675713

Contact address: wyati@um.edu.my, nroslyhanif@um.edu.my and
kuppusamy_s@um.edu.my

Abstract

Housing forms one of the basic needs of human. Maslow's Theory Hierarchy of Needs sees that housing forms the foremost important needs, in addition to security, food and others, at the lowest among the five levels. Acknowledging this importance, the Malaysian government has drawn various policies to facilitate homeownership. This has resulted in the housing industry to tremendously grow over the last 30 years through provision of housing to a large section of the population guided by the vision of "home owning democracy". The growth of the Malaysian housing sector has been underpinned by the interface between three forces; growing population, high rates of urbanisation and growing economy. There are policies currently in place that assist to address housing for needy. However, little is done to attend to the needs of the middle income group (MIG). This is made worse by non-existence of the authoritative definition of the term "middle income household" itself. Against this background, the main objective of this study is to investigate the affordability profiles of middle-income earners in each major city to derive the levels of house prices they can afford. The second key objective is to evaluate accessibility to affordable housing amongst the middle income households. In undertaking this, the study will investigate the profiles of affordable housing supply in terms of prices, the types of houses and the locations. The study discusses the findings and analysis based on the literature review and surveys on respondents from households in each of the major towns and cities of Kuala Lumpur, Penang, Kangar, Alor Setar, Melaka, Johor Bahru, Kuantan, Kota Bharu, Kuching and Kota Kinabalu. It adopted three interview techniques; structured interviews, semi structured interviews and in-depth interviews. The findings of this study establishes that middle income households can be categorised into three main sub-groups; Low-Middle Income, Middle-Middle Income and Upper-Middle Income. The acceptable price range for affordability is between RM120,000 and RM150,000 except for Kuala Lumpur. In Kuala Lumpur the findings demonstrates that a median of between RM180,000 and RM200,000 as the affordable price. For Kota Bharu and Kuantan, the range for affordability is wider to be between RM120,000 and RM180,000. Further analysis on the affordable price by both current MIG home

owners and prospective buyers compared to mean housing price according to state explicitly suggest mismatched between affordability and housing price for the MIG. The study concluded that more government intervention is warranted to address this affordability issue in relation to the types of houses preferred by MIG.

Key words:

Affordability, middle income households, affordable housing, affordable prices

1 Senior Lecturer, Department of Estate Management, Faculty of Built Environment

2 Currently the Dean, Faculty of Built Environment

3 Senior Lecturer, Department of Administrative Studies & Politics, Faculty of Economics & Administration

INTRODUCTION

Over the last decade, housing market have experienced a spiralling of house prices, especially in major cities and this has caused relative inaccessibility to housing. The problem of accessibility to housing becomes more critical among the middle income group earners given that the lower income group housing needs are addressed by the governments in developed and developing countries. The middle income households are concerned because affordability affects not only their ability to become a homeowner, but also the size and type of the home they are able to purchase. Affordability problems can be viewed as operating at different levels, ranging from the narrower direct experience of severe problems of poverty and homelessness, through an intermediate level of risk, to a broader problem of access to the market. Many authors argued that housing affordability is influenced by the levels and distributions of home prices, household incomes and the structure of financing costs.

In the specific context of Malaysia, housing policy has evolved over the years through the number of national development plans. Housing programmes implementing the policy are subject to much of the same administrative regulations as applied to land policy. The objective of the policy is to provide affordable and adequate housing to the low income group. The current housing problem in Malaysia is, however, revolving more around the issue of inadequate provision of affordable housing not only for low income people but most importantly, the middle income households (MIH). The demand for housing in Malaysia has increased in recent years as a result of healthy economic growth. This has been supported by decreasing mortality rates, the number

of persons per household and the growth of nuclear families as against extended families brought about by economic development and decreasing unemployment. In spite of that, it was evident that little research has addressed the affordability problem faced by the middle income households.

Drawing on case studies in major towns and cities in the country, this study seeks to investigate the affordability profiles of middle-income earners in few major cities in Malaysia to derive at the levels of house prices they could afford. The study also investigates the profiles of affordable housing supply (both existing and future supplies) in terms of the prices, the types of houses and the locations. Specifically, this research intends to address key issues with respect to middle income group as follows:

- a. What is an affordable housing – a clear definition of affordable housing in the local context?
- b. What are the affordable prices?
- c. What type of houses is affordable in the market?
- d. Where affordable houses should be supplied or located.
- e. What is the level of housing affordability with respect to ethnicity?
- f. What is the level of housing affordability with respect to occupational backgrounds?
- g. How can the governments play their role effectively in determining the supply of affordable housing? What policies facilitate the supply of affordable housing?
- h. What are the roles of financial institutions in facilitating the supply and demand of affordable housing in the country?

THE RESEARCH

This study is based on a research funded by the Real Estate Research and Development Grant Scheme (NAPREC) represented by National Institute of Valuation (INSPEN). Centre for Studies of Urban and Regional Real Estate (SURE), Faculty of Built Environment, University of Malaya, Kuala Lumpur gratefully acknowledges the financial and other support it has received from the Government of Malaysia, without which this work would not have been possible. Fieldwork took place between April 2008 and July 2009 and additional data collections were carried in April to May 2010. The sampling designs adopted random sampling for households' survey and non-random sampling for the interviews with relevant officers at the identified local authority offices. This quantitative technique of research by the questionnaire-based

survey is considered the first level of primary data collection for this study. This questionnaire was divided into six main sections:

- Part A – household characteristic
- Part B – household employment
- Part C – household preference
- Part D – existing house
- Part E – future plans
- Part F – affordability.

The rationale in designing all these questions was to explore views and perceptions of middle income group (MIG) households toward current affordability and to determine the accessibility of the group to affordable housing.

AFFORDABLE HOUSING POLICY

Housing policies involves a number of complex issues. Various academic and policy contributions highlight the extent to which housing policy is often contradictory and in conflict, rather than following a coherent course. The different forms of tenure, regional variations, the existence of distinct housing classes, and the wide variety in the physical characteristics of dwellings suggest a number of overlapping policy areas rather than a unified policy area for which the state possesses clear objectives (Houlihan, 1988).

In terms of housing analysis, it is important not to assume that markets work in exactly the same way with the exactly the same factors having similar effects in different settings. The very processes by which prices are formed as well as the determinants of prices can vary from place to place (Rodney, 2008). The underlying concept of the market remains valid but contextualising is essential if policy processes are to be better understood and policy ideas well formulated. Any review of policy within one country has to take account of both specific national economic and political factors and wider forces at work in the global economy (Haworth, 2004). This has been neatly summed up in the formula that each country is affected by these twin factors: the force of epochs, which cuts across the particularities of circumstance, and the force of national trajectories, which expresses the features specific to each nation's history.

Housing is firmly embedded in the social, economic and political fabrics of most countries that it cannot be studied in isolation from the wider dimensions of governance and policy. Housing is influenced by a wide range of forces in society operating over long times. Kajimo and Evans (2006) argued that besides being a very valuable asset, housing has much wider economic, social, cultural and personal significance. Housing has two important dimensions: its materiality as shelter and real estate, and its social importance as a spatial locus of personal and familial life where access to social and economic structural opportunities begins, and where privacy and security are located (Bratt *et al*, 2006; Thalmann, 2003). While there is a broad

consensus that housing has a central importance to everyone because it provides one of the basic needs of all members of society, namely shelter, some authors have argued that its importance goes far beyond this. Van Weesep (2000), for instance, stressed that housing gives the occupants an opportunity to develop a desired way of life. Its location determines opportunities for work and access to service and facilities. Many people are sensitive to the physical and social characteristics of a residential environment when they choose a place to live. Indeed, housing is of immense psychological importance since it is an integral part of our definition of what is a desirable quality of life and social status. Housing is not significant for what it is, but for what it allows to develop through it. King (1996), on the other hand, observed that through the habit of dwelling the individual integrated into their environment, and this practice differs radically over time and across cultures and communities.

Despite the social implications of the importance of housing as a foundation for civic life, its real estate value necessitates a relatively large portion of one's income. While housing's role in providing a stable family life, citizenship, security, privacy and opportunity is undisputed, the framing of housing policy in terms of affordability has been developed rhetorically based only on its value as a material (and exchangeable) good.

Since housing is generally perceived positively being provided through the market, there are two alternative options for the state to assist their citizens in housing provision. Firstly, to allocate housing specifically to households those are unable to provide for themselves in the general market. Secondly, to intervene in the functioning of the general market in order to make it more likely to fulfil the housing needs of all households (Bengtsson, 2000). These two approaches correspond to the distinction between a supplementary and a comprehensive housing policy as suggested by Lundqvist (1986). Lundqvist (1986) argued that these two distinct patterns of state intervention in housing concern the scope of intervention. He suggests that the more broadly supplementary mode of housing policy is limited in scope whereby state interference is geared towards meeting particular needs and solving specific problems.

The main objective of housing policy in most countries was once simply to build more houses. This was a response to a lack of market-driven supply on a situation of socially perceived large scale housing need (Priemus and Dieleman, 2002). The role of economics in these circumstances is fairly straightforward. It suggests policy instruments that would promote production. In modern circumstances housing policies have many more objectives and are rarely confined to a box labelled 'housing'. They encompass, for example, macroeconomic and environmental objectives and they reach into the territory of policies that come under such headings as 'health', 'social exclusion' and 'urban regeneration'. Policy interest in house prices may not be simply for housing access and affordability reasons but because of the effects of housing expenditure on inflation, growth and economic stability.

THE AFFORDABILITY ISSUE

It is argued that affordability features in two substantially separate policy arenas: one dealing with the mainstream tenure of owner occupation and its relation with the national economy, and the other dealing with the financing of the social rented sector. The former arena is more potent in its impact on policy. Affordability is mainly defined by the relationship between household's housing expenditure and income. The affordability of housing has become a common way of summarising the nature of the housing problem in many market-based housing systems. Many authors argued that housing affordability is influenced by the levels and distributions of home prices, household incomes and the structure of financing costs (Bramley, 1994; Ludwig *et al*, 2002). Home ownership affordability has traditionally been defined by the rules of access to mortgage finance (Wilcox, 2003). Affordability in the owner-occupied market has been increased mainly as a result of interest rates (albeit there has been significant house price inflation). Affordability is also perceived as related to incomes, housing costs, housing availability, employment, maintenance of the existing affordable housing stock, and patterns of new construction.

The affordability problem with regard to housing market is one of the most controversial issues within most developed and developing countries (Nguyen, 2005). Several attempts have been made to understand how and why affordability problems are created. What is meant by affordable housing and who might be served by it is interpreted differently by different people. The practice of providing assistance for housing to improve housing affordability for lower income households, most of whom are recipients of social security payments and are on incomes well below median, is well established through the provision of rent assistance to those in the private rental market and through the provision of income geared subsidies to those in public housing (Turner *et al*. 2009). Increasingly, however, concerns have been expressed about affordability outcomes for working households who are finding it difficult to rent or purchase private sector housing that is accessible to their place of work and who, as a result, bear the burden either of significant housing costs or of significant transport costs. Many of these households may not be covered by housing assistance programs in most countries. This middle income group were left on their own to face the challenge in entering home ownership, a dream aspires by all. The spiralling of house prices, especially in major cities has aggravate the caused to inaccessibility to housing for this group. These households are concerned because affordability affects not only their ability to become a homeowner, but also the size and type of the home they are able to purchase. Affordability problems can be viewed as operating at different levels, ranging from narrower direct experience of severe problems of poverty and homelessness, through an intermediate level of risk, to a broader problem of access to the market. Many authors (Yates and Gabriel,2006; Disney, 2006; Cairney and Boyle, 2004) argue that housing affordability is influenced by the levels and distributions of home prices, household incomes and the structure of financing costs.

Underpinning this, the term 'affordable housing' then refers to those housing intended generally to meet the needs of households whose incomes are not sufficient to allow

them to access appropriate housing in the market without assistance. This study adopted that the primary determinants of the affordability of housing: household income, housing prices, and mortgage rates. Since affordability is greatly influenced by the levels and distributions of home prices, household incomes and the structure of financing costs, affordable housing for middle income households is therefore defined as a housing where house payment is no greater than 33 percent of gross household income. The study also subscribes to the expression "affordable housing" which is connected to the relationship between median incomes and market prices within a given community. Most fundamentally, it is an expression of the social and material experiences of people, constituted as households, in relation to their individual housing situations. Affordability expresses the challenge each household faces in balancing the cost of its actual or potential housing, on the one hand, and its non-housing expenditures, on the other, within the constraints of its income.

Affordability problems for middle income households in Malaysia are widespread in most major cities and towns in Malaysia where many of them find it difficult to purchase a home. The exploding of new growth centres such as new townships, commercial hubs, industrial parks and offices complexes inevitably result in an increase in the working population. With the increasing population in urban centres, the shortage of affordable housing unit is becoming more acute. Continuous efforts are undertaken to ensure that Malaysians of all income levels will have access to adequate, quality and affordable homes, particularly the low-income group (Ninth Malaysia Plan, 2006-2010). However, to cite an example, the Kuala Lumpur Structure Plan 2020 (CHKL, 2004) does not include low medium/medium cost housing category in the projection of houses unit to be built by year 2020. Although the emphasis of Structure Plan is to provide more houses in medium cost range (including low medium cost), specific policies were not clearly stated.

In this study, the middle income households are identified on the basis of family income. It is based on both economic and cultural consideration. In addition, the cultural view of the middle income household seems to be one in which the family is the typical income unit. Significant structural changes have taken place among families in the last two decades, most importantly, due to large scale participation of married women into the labour force. This increase among family types gives added impetus to using the family unit in examining changes in the size of the middle income household.

THE FINDINGS AND DISCUSSIONS

This study divided the findings into two sections; the current home owners amongst the middle income households and the prospective buyers amongst this group currently resided in renting units.

Total number of respondents from the current home owners amongst the middle income households according to the cities surveyed is as shown in Table 1. In sum, 1,162 households were surveyed. With the exception of Kuala Lumpur, all other cities were each represented by at least 120 respondents. Reflecting the size of its population, Kuala Lumpur was represented by 171 respondents (14.7% of total respondents).

Table 1: Distribution of Survey Respondents by City

| City | Frequency | Percentage |
|---------------------|-----------|------------|
| Kuantan | 131 | 11.3 |
| Kota Bharu | 120 | 10.3 |
| Kota Kinabalu | 130 | 11.2 |
| Kuching | 120 | 10.3 |
| Johor Bahru | 120 | 10.3 |
| Kuala Lumpur | 171 | 14.7 |
| Pulau Pinang | 120 | 10.3 |
| Melaka | 120 | 10.3 |
| Alor Setar & Kangar | 130 | 11.2 |
| Total | 1162 | 100.0 |

The original set of respondents comprise of Malays, being the majority (57.3%), Chinese (29.8%), Indians (7.1%), Other Bumiputerans (5.2%) and Others comprise the remaining 0.7 percent (Figure1).

The mean size of the household is 4.74 persons while the median is 5 persons (Table 2). This is relatively higher than the average national figures of 4.3 persons for private households in 2005 (Malaysia, 2006). Majority of the households had between 3 and 6 persons totalling 71.4%.

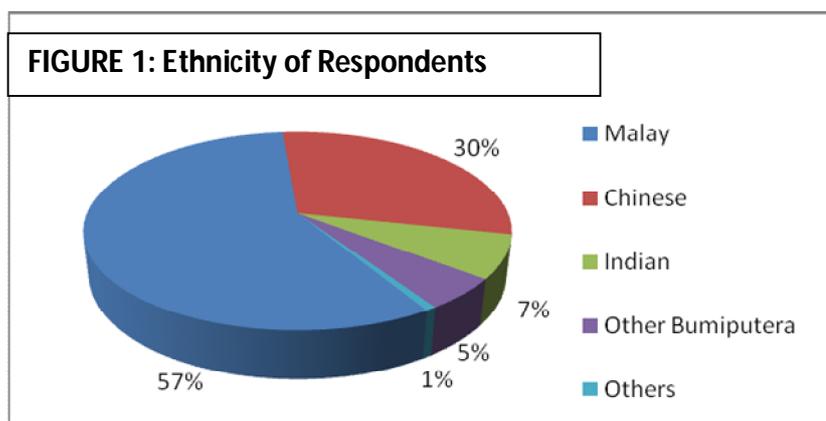


Table 2: Distribution of Survey Respondents by Household Size

| Household Size | Frequency | Percentage |
|-----------------------|------------------|-------------------|
| 1 – 2 persons | 140 | 12.8 |
| 3 – 4 persons | 366 | 33.6 |
| 5 – 6 persons | 412 | 37.8 |
| > 6 persons | 172 | 15.8 |
| Total | 1090 | 100.0 |
| Raw Mean (persons) | 4.74 | |
| Raw Median (persons) | 5.00 | |

For the prospective buyers amongst this group currently resided in renting units, the new set of data of more tenants, were specifically searched for tenanted houses in Kuantan, Kota Bharu, Kuala Lumpur, Pulau Pinang, Melaka, and Alor Setar and Kangar. The data were analysed to determine the affordability amongst the middle income households currently resided in tenancy sector. As this process had to be done subject to time and budget constraints, further surveys were not carried out in Kota Kinabalu, Kuching and Johor Bahru. Nevertheless, data from existing tenant respondents were included in the analysis under this chapter. In the additional survey, a total 190 respondents were obtained but reduced to 133 following the skimming process of including only the middle income households. Added with those from the first survey, the total number of tenants analysed is 284.

The findings illustrates that the distribution of respondents for the survey on MIG tenants is highest in Kota Bharu (57 respondents or 20.1%) followed by Kota Kinabalu (19%) and Kuala Lumpur (15.8%).

Table 3: Distribution of Survey Respondents by City

| City | Frequency | Percentage |
|---------------------|------------------|-------------------|
| Kuantan | 33 | 11.6 |
| Kota Bharu | 57 | 20.1 |
| Kota Kinabalu | 54 | 19.0 |
| Kuala Lumpur | 45 | 15.8 |
| Pulau Pinang | 34 | 12.0 |
| Melaka | 33 | 11.6 |
| Alor Setar & Kangar | 28 | 9.9 |
| Total | 284 | 100.0 |

The middle income tenant respondents selected comprises Malays, being the majority (77.3%), Chinese (12.8%), Indians (5.7%), Other Bumiputerans (3.5%) and 'Others' comprise the remaining 0.7 percent (Figure 2). In terms of household size, the findings demonstrates the almost 45 percent of the households had 3 or 4 persons. To a certain degree, this suggests a relatively smaller household size as compared to that of the first survey on home owners group (see table 3).

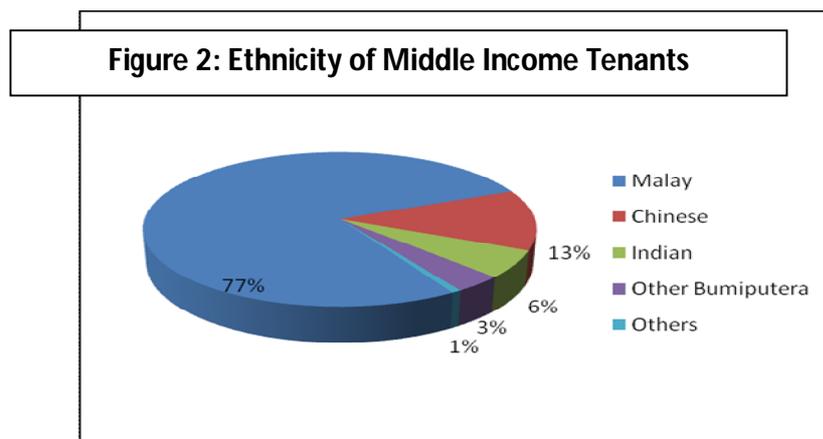


Table 3: Distribution of Middle Income Survey Respondents by Household Size

| Household Size | Frequency | Percentage |
|----------------------|-----------|------------|
| 1 – 2 persons | 52 | 18.6 |
| 3 – 4 persons | 125 | 44.6 |
| 5 – 6 persons | 77 | 27.5 |
| > 6 persons | 26 | 9.3 |
| Total | 280 | 100.0 |
| Raw Mean (persons) | 4.12 | |
| Raw Median (persons) | 4.00 | |

Further analysis on the income distribution of the households from the current home owners demonstrates that up to 13 percent of the households had income RM1500 or less. To a certain degree, this suggests a general feature of poor families. Nevertheless, almost 15 percent of the respondents had a total income between RM1501-2000, and a further 34 percent had a total income of between RM2001-4000. Thus, this category formed the majority of the households. A higher income category of RM4001-6000 represents about 21 percent of the respondents. The remaining 17.5 percent had household income above RM6000 per month (see table 4).

Table 4: Distribution of Respondents Monthly Household Income by City (the current home owners)

| Total Household Monthly Income (RM) | City | | | | | | | | | Total |
|-------------------------------------|-----------|------------|---------------|-----------|-------------|--------------|--------------|-----------|---------------------|-----------|
| | Kuantan | Kota Bharu | Kota Kinabalu | Kuching | Johor Bahru | Kuala Lumpur | Pulau Pinang | Melaka | Alor Setar & Kangar | |
| RM1000 or less | 1.5 | 0.8 | - | - | 0.9 | 3.7 | 2.6 | 5.0 | 25.4 | 4.5 |
| RM1001-1500 | 9.2 | 3.4 | 9.2 | 8.3 | 6.8 | 3.7 | 7.0 | 11.8 | 16.7 | 8.4 |
| RM1501-2000 | 16.9 | 23.5 | 9.2 | 19.2 | 15.4 | 7.4 | 16.7 | 14.3 | 12.7 | 14.7 |
| RM2001-4000 | 30.0 | 43.7 | 48.5 | 35.0 | 36.8 | 32.7 | 25.4 | 26.9 | 25.4 | 33.9 |
| RM4001-6000 | 20.0 | 27.7 | 19.2 | 18.3 | 22.2 | 23.5 | 24.6 | 23.5 | 11.1 | 21.1 |
| RM6001-8000 | 11.5 | 0.8 | 8.5 | 5.8 | 12.8 | 10.5 | 10.5 | 11.8 | 7.9 | 9.0 |
| RM8001-10000 | 7.7 | - | 3.8 | 5.8 | 3.4 | 6.2 | 7.9 | 4.2 | - | 4.4 |
| RM10001-15000 | 3.1 | - | 0.8 | 5.0 | 0.9 | 6.8 | 3.5 | 1.7 | .8 | 2.6 |
| More than RM15000 | - | - | 0.8 | 2.5 | 0.9 | 5.6 | 1.8 | 0.8 | - | 1.5 |
| Total | 130 | 119 | 130 | 120 | 117 | 162 | 114 | 119 | 126 | 1137 |
| Raw Mean (RM) | 4207.69 | 3216.39 | 3865.38 | 4414.58 | 4021.37 | 5473.77 | 4592.11 | 3981.09 | 2593.25 | 4083.77 |
| Median Group (RM) | 2001-4000 | 2001-4000 | 2001-4000 | 2000-4000 | 2001-4000 | 4001-6000 | 2001-4000 | 2001-4000 | 1501-2000 | 2001-4000 |

Note: This is not representative of actual population as a purposive sampling of potential middle-income households was surveyed.

Kuantan, Kota Bharu, Kota Kinabalu, Kuching, Melaka, Alor Setar and Kangar are deemed to share a lower income limit of RM1,500 per month. This would form the category that the study calls 'lower-middle income' category. This is followed by the income category being RM2,001 – RM4,000 to form the core income for 'middle income' group. The category RM4,001 – RM6,000 thus forms the upper-middle income category for these cities. In Kelantan, the upper income limit for Kota Bharu is deemed to remain as RM2,001 – RM4,000. In other words for Kota Bharu, there will only be two sub-categorisation of income categories for middle income group in Kelantan. Hence, RM1,501 – RM2,000 forms the lower-middle income category and RM2,001 – RM4,000 forms the middle-to-upper middle income category in Kota Bharu. The median household income remains between RM2,000 and RM4,000 for all cities except for Kuala Lumpur which records between RM4,000 and RM6,000 while

Alor Setar and Kangar which recorded a lower median income of between RM1,500 and RM2,000. The overall median income for all cities remains at RM2,001 - 4,000.

The distribution of household income for respondents in renting sector (Table 5) illustrates that respondents from Kuala Lumpur have the highest total household income of RM4,022 per month. Respondents from Kota Kinabalu, Pulau Pinang, Melaka, and Alor Setar and Kangar have a lower mean household income between RM3000 and RM4,000, while Kuantan and Kota Bharu tenants have below RM3,000 per month. The city in east coast of peninsular of Malaysia, Kota Bharu earned the lowest at RM2,517. Overall, the median household income maintain at between RM2,001 and RM4,000 for all cities.

Table 5: Distribution of Tenant's Total Monthly Household Income by City

| Total Household Monthly Income (RM) | City | | | | | | | Total |
|-------------------------------------|-----------|------------|---------------|--------------|--------------|-----------|---------------------|-----------|
| | Kuantan | Kota Bharu | Kota Kinabalu | Kuala Lumpur | Pulau Pinang | Melaka | Alor Setar & Kangar | |
| RM1501-2000 | 39.4 | 38.6 | 9.3 | - | - | 30.3 | 25.0 | 20.1 |
| RM2001-4000 | 45.5 | 61.4 | 72.2 | 60.0 | 76.5 | 48.5 | 50.0 | 60.6 |
| RM4001-6000 | 15.2 | - | 18.5 | 28.9 | 20.6 | 21.2 | 25.0 | 17.3 |
| RM6001-8000 | - | - | - | 11.1 | 2.9 | - | - | 2.1 |
| Total | 33 | 57 | 54 | 45 | 34 | 33 | 28 | 284 |
| Raw Mean (RM) | 2,810.61 | 2,517.54 | 3,254.63 | 4,022.22 | 3,529.41 | 3,045.45 | 3,044.64 | 3,164.61 |
| Median Group (RM) | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 |

The distribution of household income for respondents who are deemed to represent the middle income group (MIG) is shown in Table 6. The income categories that fit into this group is deemed to be between RM1,500 and RM6,000 for Kuantan, Kota Kinabalu, Kuching, Melaka and Alor Setar and Kangar. With special reference to Alor Setar and Kangar, this category fits well as a large proportion had income below RM1,500 per month. For Kota Bharu which recorded lowest proportion having income below RM1,500 per month, incomes of more than RM4,000 are deemed to represent the high income category well, thus excluded from the MIG category. Kuala Lumpur, Penang, and Johor Bahru had proportion in the higher income bracket, and thus the MIG category that befits these cities is deemed to be between RM2,000 and RM8,000 per month commensurate with the high level of urbanization and high per capita income in these cities.

Table 6: Distribution of Middle Income Respondent's Monthly Household Income by City

| Total Household Monthly Income (RM) | City | | | | | | | | | Total |
|-------------------------------------|-----------|------------|---------------|-----------|-------------|--------------|--------------|-----------|---------------------|-----------|
| | Kuantan | Kota Bharu | Kota Kinabalu | Kuching | Johor Bahru | Kuala Lumpur | Pulau Pinang | Melaka | Alor Setar & Kangar | |
| RM1501-2000 | 25.3 | 35.0 | 12.0 | 26.4 | - | - | - | 22.1 | 25.8 | 15.6 |
| RM2001-4000 | 44.8 | 65.0 | 63.0 | 48.3 | 51.2 | 49.1 | 42.0 | 41.6 | 51.6 | 51.1 |
| RM4001-6000 | 29.9 | - | 25.0 | 25.3 | 31.0 | 35.2 | 40.6 | 36.4 | 22.6 | 27.5 |
| RM6001-8000 | - | - | - | - | 17.9 | 15.7 | 17.4 | - | - | 5.8 |
| Total | 87 | 80 | 100 | 87 | 84 | 108 | 69 | 77 | 62 | 754 |
| Raw Mean (RM) | 3281.61 | 2562.50 | 3350.00 | 3175.29 | 4306.55 | 4402.78 | 4507.25 | 3451.30 | 3129.03 | 3593.83 |
| Median Group (RM) | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 2001-4000 | 4001-6000 | 4001-6000 | 2001-4000 | 2001-4000 | 2001-4000 |

With these grouping of income, Table 7 shows the sub-categorisation by city and its representation in terms of income bracket. The sub-categorisation is performed as follows:

- a. Low-Middle Income
- b. Middle-Middle Income
- c. Upper-Middle Income

Table 7: Categorisation of Income for Middle-Income Group for Selected Cities

| City | Income Category | | |
|---------------------|-----------------|-------------|--------------|
| | Lower-Middle | Middle | Upper-Middle |
| Kuantan | RM1501-2000 | RM2001-4000 | RM4001-6000 |
| Kota Bharu | RM1501-2000 | RM2001-4000 | |
| Kota Kinabalu | RM1501-2000 | RM2001-4000 | RM4001-6000 |
| Kuching | RM1501-2000 | RM2001-4000 | RM4001-6000 |
| Johor Bahru | RM2001-4000 | RM4001-6000 | RM6001-8000 |
| Kuala Lumpur | RM2001-4000 | RM4001-6000 | RM6001-8000 |
| Pulau Pinang | RM2001-4000 | RM4001-6000 | RM6001-8000 |
| Melaka | RM1501-2000 | RM2001-4000 | RM4001-6000 |
| Alor Setar & Kangar | RM1501-2000 | RM2001-4000 | RM4001-6000 |

Against this scenario, the acceptable range for affordability current middle income home owners is between RM120,000 and RM150,000 except for Kuala Lumpur. In

Kuala Lumpur the MIG reported a median of between RM180,000 and RM200,000 as the affordable price for their property. For Kota Bharu and Kuantan, the range for affordability is wider to be between RM120,000 and RM180,000. For the prospective middle income buyers currently in the renting sector, the study established that tenants in Kuantan, Melaka and Alor Setar and Kangar could afford a property of RM100,000 or below. Whilst those resided in Kuala Lumpur could afford more as the proportion of those in this city who could afford a property that is priced above RM120,000 is higher than in other cities.

Overall median affordability house price is between RM120,001 and RM150,000. This is also the median affordability house price in Kota Bharu and Kota Kinabalu. However, the median value of RM80,001-100,000 is lowest at Melaka and Alor Setar and Kangar. As for Kuantan and Pulau Pinang, the median affordability house price prevail at a mediocre level with median RM100,001-120,000. Kuala Lumpur list highest median value at RM150,001-180,000.

The conclusions on the above is summarised below in Table 8.

Table 8: Acceptable range for affordability according to state

| State | Middle Income Home Owners | Prospective Middle Income Buyers (tenants) |
|----------------|---------------------------|--|
| Pahang | 100,000 - 120,000 | 100,000 - 120,000 |
| Kelantan | 120,000 - 150,000 | 120,000 - 150,000 |
| Sabah | 120,000 - 150,000 | 120,000 - 150,000 |
| Sarawak | 120,000 - 150,000 | - |
| Johor | 120,000 - 150,000 | - |
| Kuala Lumpur | 180,000 - 200,000 | 150,000 - 180,000 |
| Pulau Pinang | 120,000 - 150,000 | 100,000 - 120,000 |
| Melaka | 100,000 - 120,000 | 80,000 - 100,000 |
| Kedah & Perlis | 120,000 - 150,000 | 80,000 - 100,000 |

Our findings demonstrates that single storey housing is perceived as the type of house most affordable in Kuantan, Kota Kinabalu and Melaka. This is evident from the preferred choice of housing in these cities. Double storey housing appeared to be the type of houses most affordable amongst the households in Kota Kinabalu, Johor Bahru, Kuala Lumpur, Penang and Melaka. Bungalows are preferred in low cost of living cities such as Kuantan, Kota Bharu, Alor Setar and Kangar.

In addition, the study demonstrated that the mean monthly instalment payment deemed to be affordable by current middle income home owners is about RM 800 per

month. This forms about 20 to 25 percent of their total monthly income. Furthermore, the mean down payment that the group is able to commit is about RM 14,000.

It is also observed that the affordability of prospective buyers currently in renting sector is lower than those currently reside in their own residence. The overall mean affordable mortgage payment per month prevails at about RM650 for the men and RM680 for the female tenants. While the overall mean deposit payment is about RM10,500. Further analysis on the affordable price by both current MIG home owners and prospective buyers compared to mean housing price according to state explicitly suggest mismatched between affordability and housing price for the MIG (see table 9 and table 10).

Table 9: Affordability compared to mean housing price for current middle income home owners

| State | Type of Perceived Affordable Housing | Affordable Price - Owner (RM)* | Mean Housing Price (RM) 2007** | Mean Housing Price (RM) 2008** | Mean Housing Price (RM) 2009** |
|--------------|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Pahang | Single storey terrace house | 100,000 - 120,000 | 118,967 | 134,672 | 133,374 |
| Kelantan | Bungalow | 120,000 - 150,000 | 216,412 | 257,750 | 293,448 |
| Sabah | Single storey terrace house | 120,000 - 150,000 | 161,065 | 166,373 | 205,450 |
| Sarawak | Single-storey Semi-detached house | 120,000 - 150,000 | 189,583 | 222,909 | 233,360 |
| Johor | Double storey terrace house | 120,000 - 150,000 | 190,101 | 177,880 | 201,996 |
| Kuala Lumpur | Double storey terrace house | 180,000 - 200,000 | 437,398 | 432,876 | 518,628 |
| Pulau Pinang | Double storey terrace house | 120,000 - 150,000 | 299,565 | 317,664 | 386,617 |
| Melaka | Single Storey terrace House | 100,000 -120,000 | 102,763 | 106,418 | 111,921 |
| | Double storey terrace house | 100,000 - 120,000 | 195,777 | 187,688 | 204,439 |
| Kedah | Bungalow | 120,000 - 150,000 | 234,966 | 326,800 | 609,450 |

Source: * Our Analysis

**Malaysia, Residential Property Stock Report (Q4- 2007; Q4- 2008; Q4- 2009)

Table 10: Affordability compared to mean housing price for prospective buyers currently in renting sector

| State | Type of Perceived Affordable Housing | Affordable Price – Tenant (RM)* | Mean Housing Price (RM) 2007** | Mean Housing Price (RM) 2008** | Mean Housing Price (RM) 2009** |
|--------------|--------------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Pahang | Single storey terrace house | 100,000 - 120,000 | 118,967 | 134,672 | 133,374 |
| Kelantan | Bungalow | 120,000 - 150,000 | 216,412 | 257,750 | 293,448 |
| Kuala Lumpur | Double storey terrace house | 150,000 - 180,000 | 437,398 | 432,876 | 518,628 |
| Pulau Pinang | Double storey Semi-detached house | 100,000 - 120,000 | 526,931 | 511,057 | 586,678 |
| Melaka | Single storey terrace house | 80,000 - 100,000 | 102,763 | 106,418 | 111,921 |
| Kedah | Bungalow | 80,000 - 100,000 | 234,966 | 326,800 | 609,450 |

Source: * Our Analysis

**Malaysia, Residential Property Stock Report (Q4- 2007; Q4- 2008; Q4- 2009)

In respect of the level of housing affordability with respect to occupational backgrounds, our analysis on the current middle income home owners indicate that a large proportion of the men had professional or managerial positions in all the cities studied. It demonstrated that there are a significant proportion of men in the technical positions in Kuantan, Kota Kinabalu and Melaka. The proportion in clerical and other categories are small except for Penang. Among the women, there is a consistent pattern of them in professional or managerial positions in Kota Bharu, Kuching, Kuala Lumpur and Melaka. Others are showing significantly but in disarray across cities in managerial, technical and clerical positions. Overall, 30.9 percent of the respondents had professional positions, 27 percent had managerial positions, 19.6 percent had technical positions and 12.8 percent had clerical positions. Further analysis suggested that most of the men in the lower-middle group had professional, managerial or technical positions while a larger proportion of the women are in the clerical positions. By city, the study captured majority of the men having managerial or technical positions in Kuantan, Kota Bharu and Kota Kinabalu. Almost 72 percent of the men had occupations in the professional or managerial positions in Kuala Lumpur and Kuching. In Johor Bahru, almost 88 percent were professionals, managers or technicians. Majority of the men in Melaka were managers. In Penang, they were either professionals or businessmen.

In respect of the level of affordability by category of employment for both men and women, it is concluded that for men, as expected, professionals could afford a higher bracket than those in the clerical and 'others' category. Similar observations are noted for category of employment of women. The affordability levels are also related to the

sector at which men and women work. Further findings demonstrated that their affordability is higher when they were employed in the private sector, possibly due to higher salaries in the private sector. The affordability for men is slightly higher among those in the private sector but the difference is not significant ($t = 1.105$, $df = 476$, $p > 0.05$).

As for the prospective buyers currently in renting sector, the study indicated that the men are employed in the professional, managerial and technical positions in all the cities studied. The women's position is professional positions are highest in Kota Bharu and Kota Kinabalu and all cities except Kota Kinabalu where their contribution is high in clerical positions. The men in the private sector could afford better mortgage payment than those in the public sector. The respective mean values being RM705 and RM623. It is also observed that men in the professional and managerial positions are also able to fork out higher mortgage payments per month commensurate with their higher salaries. Those in the professional positions could afford RM725 a month as compared to RM664 by those in managerial positions.

Similar to the above trend, it is noted that amongst the group of working women, those employed in the private sector could afford larger mortgage payments compared to those in the public sector. The respective mean values is at RM812 and RM599. Likewise, women in managerial positions tend to offer better mortgage payments per month than those in other categories.

In terms of location of affordable houses should be supplied or located, the findings further suggested that affordable houses for middle income households should be supplied 'close to workplace'. To be near centre of economic activity such as shopping and leisure areas and schools and colleges are generally another reason in some cities. They may mean that housing is required near the urban centres. To a great extent, this suggests that the concept of work and live and the same place should be seriously considered by the authorities' concerned. Perhaps, more areas should be planned for development for affordable houses in any area identified as close to workplace and at the same time is also the centre of many activities such as shopping, leisure and education. At the same time, this may raise economic viability of such projects as these are expected to be more costly in the urban centre especially due to high land costs.

CONCLUSIONS

Affordability expresses the challenge each household faces in balancing the cost of its actual or potential housing, on the one hand, and its non-housing expenditures, on the other, within the constraints of its income. In this study, the middle income households are identified on the basis of family income. This choice is based on both economic and cultural consideration. In addition, the cultural view of the middle income household seems to be one in which the family is the typical income unit.

The study has established that the median household income across the major towns and cities of Penang, Kangar, Alor Setar, Melaka, Johor Bahru, Kuantan, Kota Bharu, Kuching and Kota Kinabalu is between RM2,000 and RM4,000. The median household income Kuala Lumpur has between RM4,000 and RM6,000 and Alor Setar and Kangar which recorded lower median income of between RM1,500 and RM2,000. The overall median income stayed at RM2,001- RM4,000. This suggests that urban population in major cities and towns enjoy a higher income compared to those living in smaller cities. Further analysis demonstrated that single storey housing is perceived as the type of house most preferred in Kuantan, Kota Kinabalu and Melaka. This is evident from the preferred choice of housing in these cities. Double storey housing appeared to be the type of houses most preferred amongst the households in Kota Kinabalu, Johor Bahru, Kuala Lumpur, Penang and Melaka. Bungalows are preferred in low cost of living cities such as Kuantan, Kota Bharu, Alor Setar and Kangar. In terms of ethnicity, the study suggested that majority of the Bumiputeras, like the ethnic Chinese and Indians could afford between RM120,000 and RM180,000. However, the ethnic Chinese could afford more than other ethnic groups.

The study concluded that affordability is an expression of the social and material experiences of MIH in relation to their individual housing situations. Affordability expresses the challenge each household faces in balancing the cost of its actual or potential housing, on the one hand, and its non-housing expenditures, on the other, within the constraints of its income.

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