THE GENERAL MODEL OF MALAYSIAN HOUSEHOLDS HOUSING BUDGET

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ABSTRACT

There is endless story about the important of housing for human being. Not just one of basic need for human kind, but it provides additional life style value to them. Most of housing practices in Malaysia may classified into four periods that reflect to housing budget needs during renting a room or during renting a house, during buying a house and during living after payment of mortgage loan has been completed. In Malaysia, peoples buy houses through mortgage loans which protected by Mortgage Reducing Term Assurance (MRTA). The buyers with such insurance coverage will benefits from risk of losing the house especially if they die later. This helps their beneficiaries maintain their standard of living in term of housing needs. But, other sad story heard from people who currently renting a house. If the breadwinner of the family die, then their family would face trouble in maintaining their housing needs today and lost opportunity to own or buy a house at least relatively equal to current standard of living if their breadwinner doesn’t die today. It is important to have a model of households housing budget for Malaysian which include the housing periods in order to induce sufficient amount of funds for such needs. So that every beneficiary in Malaysia would never experience depreciating in housing standard of living if they know the exact amount of funds needed throughout their mysterious years. This paper will propose the model and its variables that consistent with Malaysian law environments, common practices and the stages of family life cycle.

Field of Research: Modeling, Housing Budget, Malaysia, Households, Life Insurance
1.0 Introduction: The issue and reason of propose model for improvement

Based on previous research made by Haslifah, (Hasim, 2009) in calculating the amount of life insurance needed for persons or breadwinners through modified/combined of Human Life Value and need analysis methods, the housing cost or budget was treated as general variable in her model. Most of property transactions in Malaysia were in residential sector and most popular common practices to acquire the property are mortgage financing aids from variety of financial institutions, (C H Williams Talhar & Wong Sdn Bhd, 2011). The basis of why her model treat the housing expenses /cost variable were agreed ,accepted and rational since she assumes that every homeowner are protected by Mortgage Reducing Term Assurance (MRTA ) and fire insurance that’s compulsory and usually includes in the loans package since mortgage financing is the popular choice of financing when buying houses by most Malaysian. The fore at that moment, both general insurances coverage is comprehensive enough to exclude from the calculation in accessing an appropriate amount of life insurance’s sum assure Otherwise it could make over insure of life insurance coverage.

But, in other point of view, treating housing budget/expenses/cost as general variable may not suitable and results to less accuracy or under insure in overall calculation because within real life there are stages which different housing needs to deal with. It is common practice by young Malaysian and currently single man; they will start their adolescence years by renting a room instead of a house. A young newly married couple usually will rent a house instead of separate room and further renting the house whether same or different houses until they are confident and comfortable with their recent jobs afterward start buying first house through mortgage loan. During renting years none of tenants are protected by insurance in term of housing needs. If the breadwinner of family dies, its significant loss of household incomes may further shove the unprotected beneficiary to leave their rental house into other less cost/budget house or just back to their ageing parent’s house. Therefore, if we generally assume that all Malaysian will buys house right after getting first job and get protected by Mortgage Reducing Term Assurance (MRTA) or fire insurance coverage, then it should less precise.

Nowhere, we would propose a model of housing budgeting as an improvement for the previous study by treating housing budget as one of the main variable to compromise instead of general plugs. The reason is we could further extend the scope to classify housing need into four periods that reflect to stages of human life cycle. First, renting a room period. Second, renting a house period. Third, buying of a house period. Fourth, living after payment of mortgage loan has been completed. The model will reflect into these periods since each of the periods have different events and means to unique housing needs. We do hope in future that the propose model would be part of modified human life value model as developed by Haslifah, (Hasim, 2009) and give gentle resonance for improvements especially in suggestion amount of life insurance needs to purchase.

2.0 The factor affecting housing budget in Malaysia?

First factor is family life cycle. The family life cycle concurrently reflect from biological family life cycle which have two periods; prenatal and postnatal. The period of prenatal cycle start from zygote followed by blastocyst (blastula), embryo and fetus. The biological developments continue through postnatal period that start from newborn, infant, child, pubescent, adult scene, adult, and old-age (Cecie Starr, 2009). While family life cycle involve six phases ; “separating unattached of young adult from his or her parent; marrying and establishing an identity as part of a couple instead of individual; having and raising young children, dealing with adolescence children striving for independence and refocusing on a couple relationship as adolescence gain that indolence; sending children forth into their new relationship, addressing midlife crisis, coping with disabilities of aging
parents; adjusting to aging and addressing the inevitability of one’s own death” (Charles Zastrow, 2010). The stages of family life cycle arrive in ages to fulfill human biological needs. None of human in earth lives without taking its physical and emotional needs in place by what they are doing now. For example, marriage start from young adult and impossible start just after it’s born, or it’s wrong if kids leave homes for working. To clear this, the needs of human being derive from natural physical and emotional needs of human. Without taking the needs in place, human can’t survive or living as ordinary. Therefore family life cycle follows its biological life cycle. Housing is one of basic need for human in earth. As their natural physical limits, they cannot stand for climate changes without shield by house. The family life cycle will be influence the ways of financial budgeting and spending for most people especially in the world. It term of housing budget, most people manage their budget by fitting to its family life cycle needs. For example, housing budget for individual in Malaysia may start as early adolescent or after completing tertiary education or right after getting his or her first job. In contrast, it is unlawful if kids or teenage being obligate to pay housing/room fee to their parent or other else.

Second factor is housing standard of living. In general, standard of living is subjective and different to every ones. But nowhere, in term of housing standard of living we means to the highest opportunity to buy first house by current total household incomes if both husband and wife survive then we may classify Malaysian households into groups of housing standard of living on which also fit to their current housing needs & wants. For example, currently if a person with minimum income of MYR 3000 may have opportunity to buy house through mortgage loan with “My First House Scheme” where he or she is eligible to get 100% mortgage financing on the price of the house in between MYR 150,000 to MYR 400,000 subject to their monthly mortgage loan repayment limit, (CIMB Bank, 2012). Later, the family’s housing standard of living may describe as that house price range. This is how housing standard of living affects housing budget for Malaysian households.

Third factor is national rule and regulations. Nearly everyone who is single in Malaysia truly start their adolescent living right after getting their first job. At that moment they satisfy their housing needs by renting a house or just a room that meet their geographical requirement which near to their work place. Renting practices in Malaysia is pro-tenant while its law is pro landlord (Global Property Guide, 2006). But there’s no restriction for both parties to make up tenancy agreements as long as they mutually agreed with their terms and conditions. There are a lot of acts in Malaysian law systems may relates to housing matter such Stamp Act 1949, Control of Rent (Repeal) Act 1997 and Solicitor’s Remuneration Order: Legal Profession Act 1976. The variety of law, rule and regulation directly affects the formulation and calculation of Malaysian households housing budgets.

Forth factor is changes in housing market variables. There are lot of variable determine the housing market in Malaysia. Market changes would seem to play a concrete impact on housing budgets among households. Most of Malaysian housing owner buys their first house for living, while keen to buy their second house for investment purpose. For that reason, the rental fees must be at least would cover their monthly mortgage loan repayment. If not the landlord would face bad cash flow on their monthly incomes. For example changes in rental yield rate would give an impact to sheltering budgets during rental period. If rental yield rate high, then housing budget would also goes high and vice versa.

3.0 The General Model of Malaysian Housing Budget

The model is build by refer to housing needs in family life cycle in the form of time its take place. The model consists of both renting period and buying period until death of husband and wife.
Consent to a single or married man at current age $x$ and woman at current age $y$ will or already finish their tertiary education both at age $a$. He or she was single at age $a$ will live at their parent house until getting their first job at age $b$. Now, they will move from their parent house and start renting a room which strategically meets their need to live near to their work place. After few years or moment they have their own savings and getting married at age $c$. At that time they need a house instead of separate room to satisfy their family living needs. They will move from rooms and start renting a house just right to the age of marriage.

In Malaysia there are 2 types of renting contract whether tenancy and leasing. Tenancy contract agreed between tenant and landlord for period of 3 years. Leasing contract period are more than for than 3 years, (The Commissioner of Law Revision, Malaysia, 1997). In common residential renting practices most Malaysian used to tenancy contract and not leasing contract since leasing contract is more suitable for commercial use and has obligation on legal administration by local authorities. Then, the young family are assume to have tenancy contract with landlord, they will move from current house to another house or just renew the contract at age $d$. Both husband and wife would possible to change their first job to another job until they get satisfy with benefits and working environment or other possible career development factor. They will start buying a house at age $e$ when they feel confident to work until retirement age. Most Malaysian buys their house through mortgage financing from local banks or other financial institution. They family will finance their house for tenure of 30 years or until retirement age of 60 years old whichever come first. They will live in the house until death. So, the model consists of renting period, buying period and completing payment on mortgage period that fit to most Malaysian family life cycle. The time diagram below illustrates time frame of the model.
Diagram 1: The time diagram of housing needs in family life cycle

After identifying generally five periods of housing needs in the time diagram above, we only consider four out of five periods. We do not include the period of “live in parent house, PH” because the budget of housing during that period is incurred to their parent and not that young adult. Further, we will propose a general model of housing budget for Malaysian households per year as follows:

Let:

\[ TH = \text{Total housing budget per year} \]
\[ THR = \text{Total housing budget for year during room renting period} \]
\[ THH = \text{Total housing budget for year during house renting period} \]
\[ THB = \text{Total housing budget for year during buying period} \]
\[ THC = \text{Total housing budget for year after completing repayments of mortgage loan} \]

Then:

\[ TH = THR + THH + THB + THC \]

**Time Legend**
- x: Current age of a man single or married
- y: Current age of a woman single or married
- a: Age at completing tertiary education
- b: Age at getting first job
- c: Age at getting married
- d: Age at renting second house
- e: Age at buying a house
- f: Retirement age
- g: Age of expected death
- t: Time in years

**Period Legend**
- PH: Live in parent house
- RR: Renting a room
- RH: Renting a house
- BH: Renting a second house or renewing previous house
- CM: Buying a house through mortgage financing
- CH: Completed repayments of mortgage loan
Determining the sub-variables involve in THR;

Let;

\[ R_1 = \text{Monthly rental fee} \]
\[ L_1 = \text{Legal fee on professional legal services for tenancy agreement} \]
\[ S_1 = \text{Stamp duty on tenancy agreement} \]
\[ S_6 = \text{Stamp duty for copy of legal document} \]
\[ D_1 = \text{Deposit for monthly fee} \]
\[ D_2 = \text{Deposit amount for utility} \]
\[ A = \text{Advance payment for monthly rental fee} \]
\[ T_1 = \text{Assessment Tax} \]
\[ T_2 = \text{Quit Rent Tax} \]
\[ n_1 = \text{Number of renting year}; n_1 \neq 0 \]
\[ n_2 = \text{Number of copies for tenancy agreement to required} \]
\[ n_3 = \text{Number of month/s for monthly fee deposit} \]
\[ n_4 = \text{Number of month/s for advance payment} \]
\[ n_5 = \text{Number of month/s for utility deposit} \]
\[ n_6 = \text{Number of room/s in a house} \]

Therefore;

\[
\text{THR} = \frac{1}{n_6} \left[ (12n_1 - n_3 - n_4)R_1 + \frac{n_5}{3}(L_1 + n_2S_6 + S_1 + n_2D_1 + n_3D_2 + n_4A) + n_1(2T_1 + T_2) \right]
\]

Where \( n_1 = 1 \) if THR per year for every period of 3 years.

Next, further determine the sub-variables involves in THH;

Let;

\[ R_1 = \text{Monthly rental fee} \]
\[ L_1 = \text{Legal fee on professional legal services for tenancy agreement} \]
\[ S_1 = \text{Stamp duty on tenancy agreement} \]
\[ S_6 = \text{Stamp duty for copy of legal document} \]
\[ D_1 = \text{Deposit for monthly fee} \]
\[ D_2 = \text{Deposit amount for utility} \]
\[ A = \text{Advance payment for monthly rental fee} \]
\[ T_1 = \text{Assessment Tax} \]
\[ T_2 = \text{Quit Rent Tax} \]
\[ n_1 = \text{Number of renting year; } n_1 \neq 0 \]
\[ n_2 = \text{Number of copies for tenancy agreement to required} \]
\[ n_3 = \text{Number of month/s for monthly fee deposit} \]
\[ n_4 = \text{Number of month/s for advance payment} \]
\[ n_5 = \text{Number of month/s for utility deposit} \]

Therefore;

\[ \text{THH} = (12n_1 - n_3 - n_4)R_1 + \frac{n_1}{3} (L_1 + n_2S_6 + S_1 + n_2D_1 + n_3D_2 + n_4A) + n_1(2T_1 + T_2) \]

Where, \( n_1 = 1 \) if THH per year for every period of 3 years.

Next, further determine the sub-variables involves in THB;

Let;

\[ R_2 = \text{Monthly repayment amount for mortgage loan} \]
\[ R_3 = \text{Last repayment amount for mortgage loan} \]
\[ d = \text{Down payment amount} \]
\[ I_{MRTA} = \text{Gross single premium for Mortgage Reducing Term Assurance} \]
\[ I_{Fire} = \text{Gross annual premium for fire insurance} \]
\[ L_2 = \text{Legal fee on professional legal services when buying a house} \]
\[ S_2 = \text{Stamp duty on Sale & Purchase Agreement} \]
\[ S_3 = \text{Stamp duty for Deed of Assignment} \]
\[ S_4 = \text{Stamp Duty for Memorandum of Transfer} \]
\[ S_5 = \text{Stamp duty for Memorandum for a Charge/Mortgage} \]
\[ S_6 = \text{Stamp duty for copy of legal document} \]
\[ C = \text{Other Charge impose when during registering process} \]
\[ M = \text{Housing maintenance, minor repair \& furnishing per year} \]
\[ D_3 = \text{Deposit amount for electricity} \]
\[ D_4 = \text{Deposit amount for water supply} \]
\[ D_5 = \text{Deposit amount for telecommunication} \]
\[ T_1 = \text{Assessment Tax} \]
\[ T_2 = \text{Quit Rent Tax} \]
\[ n_7 = \text{Number of year from date of buying the house} \]
\[ n_8 = \text{Number of tenure for mortgage loan} \]
\[ n_8 = \text{Number of copies for legal documents} \]
\[ n^{th} = \text{n year from the beginning of mortgage loan} \]
\[ W^1 = \text{Weight value for first year of mortgage loan; } W = 1 \text{ or } 0 \]
\[ W^2 = \text{Weight value for final year of mortgage loan; } W = 1 \text{ or } 0 \]

Therefore in general form:

\[
\text{THB} = (12 - W^2)R_2 + W^2R_3 + W^1(d + I_{MRTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5) + 2T_1 + T_2 + I_{Fire} + M
\]

While in calculation of THB per year as below:

For first year only, \( n^{th} = 1 \);

\[
W^1 = 1 \quad \text{And } W^2 = 0
\]

Then,

\[
\text{THB} = (12 - 0)R_2 + (0)R_3 + 1(d + I_{MRTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5) + 2T_1 + T_2 + I_{Fire} + M
\]

\[
= 12R_2 + d + I_{MRTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5 + 2T_1 + T_2 + I_{Fire} + M
\]

For second year or any \( n^{th} \) year until a year before final year of mortgage loan tenure, \( 1 < n^{th} \leq (n_8 - 1) \);

\[
W^1 = 0 \quad \text{And } W^2 = 0
\]

Then,

\[
\text{THB} = (12 - 0)R_2 + (0)R_3 + (0)(d + I_{MRTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5) + 2T_1 + T_2 + I_{Fire} + M
\]
For final year of mortgage loan only, \( n^{th} = (n_{8} - 1) \);

\[ W^1 = 0 \quad \text{And} \quad W^2 = 1 \]

Then,

\[
\text{THB} = (12 - 1)R_2 + (1)R_3 + (0)(d + I_{MTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5 + 2T_1 + T_2 + I_{Fire} + M)
\]

\[
= 12R_2 + R_3 + 2T_1 + T_2 + I_{Fire} + M
\]

Finally for THB per year;

\[
\text{THB} = \begin{cases} 
12R_2 + d + I_{MTA} + L_2 + S_2 + S_3 + S_4 + S_5 + S_6n_8 + C + D_3 + D_4 + D_5 + 2T_1 + T_2 + I_{Fire} + M, n^{th} = 1 \\
12R_2 + 2T_1 + T_2 + I_{Fire} + M, 1 < n^{th} \leq (n_{8} - 1) \\
12R_2 + R_3 + 2T_1 + T_2 + I_{Fire} + M, n^{th} = (n_{8} - 1) 
\end{cases}
\]

The sub-variables involves in THC;

Let;

\[ I_{Fire} = \text{Gross annual premium for fire insurance} \]

\[ M = \text{Housing maintenance, minor repair & furnishing per year} \]

\[ T_1 = \text{Assessment Tax} \]

\[ T_2 = \text{Quit Rent Tax} \]

Therefore in general form per year;

\[ \text{THC} = 2T_1 + T_2 + I_{Fire} + M \]

4.0 Discussions

There a lot of variables involves in determining housing budget for Malaysian households. During renting period the important variables to determine are monthly rental fee, legal fee on professional legal services for tenancy agreement, stamp duty on tenancy agreement, stamp duty on copy of tenancy agreement, deposit for monthly fee, deposit for utility, advance payment for monthly rental fee, assessment tax and quit rent tax. Monthly rental fee is the agreed amount of fee monthly payable by tenant to their landlord. There is no exact standard method to estimate the amount of monthly rental fee in Malaysia. The formal services of rental valuation exclusively provided to federal and state government agencies, statutory bodies and recognized social
organizations by Valuation and Property Services Department (Valuation and Property Services Department, Ministry of Finance Malaysia, 2012). For most independent landlords in Malaysia valued their monthly rental fee by weighed against to fair rental market (FRM) rates, cost of financing and cost of maintenance the house while at the same time the fair rental market (FRM) rates usually monitor by Valuation and Property Services Department. The concrete factors in determining the monthly rental fee by most landlords are cost of financing a house through mortgage loan, tax on rental incomes, expected or average market rental yield and maintenance of house while the fair market rental (FRM) being a general benchmark with less influence to tag alone as one single factor.

It is a good practices if both landlord and tenant to set up tenancy agreement in order to protect the right of both parties if anything goes wrong in future as suggested in Control of Rent (Repeal) Act 1997, (The Commissioner of Law Revision, Malaysia, 1997). In order to have a protected tenancy agreement it is a good practice to have professional legal consultation from professional lawyer. The tenant would pay for legal fee where the fee rate are fixed, no discount and determine by Solicitor’s Remuneration Order 2005: Legal Profession Act 1976 (The Commission of Law Revision, Malaysia, 2006). A secure and legal tenancy agreement must pay for stamp duty which determine by Stamp Act 1949 (The Commissioner of Law Revision, Malaysia, 2006). Deposit for monthly fee, utility and advance payment of monthly fee usually compulsory and collected by most landlord to secure the agreed fee payment and to protect interest on property if the tenant doing something wrong such leaving the house without any notice to the landlord. In usual practice the deposit amount was in times of monthly fee. For example two months utility deposit equal to two months of rental monthly fee.

There are two types of tax related to housing which is assessment and quit rent tax. Assessment tax usually paid twice a year to local authority while quit rent tax paid once a year to land office, (Inland Revenue Board Malaysia, 2011) & (Zakaria, 2010). Both taxes are compulsory to homeowners or tenants whether live in strata buildings or landed houses. A special variable namely “number of room/s in a house, \( n_6 \)” was inserted into the model during period of renting a room. The main basis to keep the variable by reflects to common practices of equal sharing of housing cost among tenants in a house. In simple words, every tenant should pay an equal amount of any housing cost incur and common room usage equal to one room per person. The variables of legal fee, stamp duty, and deposits incur only in the first year on the period of 3 years of tenancy agreement. Here we assume both tenant and landlord arrange tenancy contract and not leasing contract because leasing contract were deal for any period of more than 3 years and not a common practice in residential arrangement. Then we divide the variables into 3 years in order to determine equal cost for a year in every period of 3 years. If the needs of renting still exist after 3 years, then the agreement should be renew/rearrange (if move and renting into another room/house) and the said variables will be incur again. In tenancy agreement arrangement, the both parties need to keep his/her original copy of stamped agreement, each copy would be charge for a stamp duty of MYR 10 (The Commissioner of Law Revision, Malaysia, 2006). Therefore the variable of stamp duty on copy of tenancy agreement and number of copies for tenancy agreement required will include into the model.

During buying period the important variables involve are monthly repayment amount for mortgage loan, last repayment amount for mortgage loan, down payment amount, gross single premium for Mortgage Reducing Term Assurance (MRTA), gross annual premium for fire insurance coverage, “legal fee on professional legal services when buying a house; stamp duty on Sale & Purchase Agreement; stamp duty on Deed of Assignment; stamp duty for Memorandum of Transfer; stamp duty for copy of legal document; other charge impose when during registering process”, (REHDA Institute, 2012); yearly housing maintenance, minor repair and furnishing, deposit for
electricity, deposit for water supply, deposit for telecommunication, assessment tax and quit rent tax. Each of variables may dependent or independent to another. Therefore it will help enough if we able to forecast certain rates such rental yield rates, base lending rates for mortgage loan and other. The structures of this model subject to assumptions of buying a house through mortgage loan from developer. The model are not dealing with situation when buying a house by using own cash or other financing instruments except mortgage loan or buying direct from owner of a house where the house already previously have "title". The model separately arranges formula into different period for the reason that there are different budget for the first year to second year and final year of mortgage tenure. The initial budgets only incur in the first year and not on the years after such legal fee, down payment, stamp duty etc. Final budget such last repayment amount will not happen in beginning years of mortgage loan tenure since the amount for last mortgage repayment/installments usually differ from previous months. There are budget that always repeat yearly along the tenure of mortgage loan such taxes and gross premium on fire insurance coverage. While there is budget incur in specified time frame such monthly repayment amount of mortgage loan repeats equally by monthly except the last month of mortgage tenure. Thus, it is important to us to separate the budget right for its conditions and constraints.

After completing the mortgage loan, the house owners feel financially peace of mind because their most of huge liability of housing budget are reduced in numbers and amounts. But, there are still have several housing budgets to think about. The variables involves are gross annual premium for fire insurance, yearly housing maintenances, minor repair & furnishing, assessment tax and quit rent. These variables will always require and compulsory event the house owner was dying and the payment obligation should be continue by his/her beneficiary.

5.0 Conclusion

In conclusion, the proposed general model of Malaysian Households Housing Budget consist of four periods reflect to any budget needs to allocate during renting a room or house, buying a house through mortgage loan and after completing payments of mortgage loan. The model generally referred to needs of housing along family life cycle until their expected year of death. The model is fitted and consistence to Malaysian law environments, common practices and the stages of family life cycle. Hopefully by using this model in estimating the amount of households housing budget would induce sufficient amount of funds needs to allocate by breadwinner in their sum insured of life insurance, so that every beneficiary would never experience depreciating in housing standard of living throughout their mysterious years.

Reference


