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The Importance of Financial Literacy on the Malaysian Household Retirement Planning

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Abstract: The purpose of this study, is to provide a comprehensive personal retirement planning based on the level of financial literacy in Malaysian household. We identify the importance of financial literacy to make financial decision on Malaysian household retirement planning. Measurements used consist of inflation-adjusted interest rate, future value of the expenses and present value of total retirement fund needed. Therefore, we are able to identify retirement gap that need to be considered immediately. The findings show financial literacy is vital to household retirement planning as with the adequate financial literacy, we conclude that there is no retirement gap where the future value of financial assets is bigger than the total needs during retirement. The financial assets should be prepared in early age to accumulate substantial funding to support household retirement life. Future researches may explore to non-professional and professional to differentiate the level of financial literacy. The financial position may vary when time pass over the time. Therefore, it must be reviewed from time to time to get higher accuracy. The outcome of this finding will be beneficial to society especially to Malaysian working adults. It highlights the importance of financial literacy to retirement planning. It is also a milestone for Malaysian to achieve developed country if Malaysian has sufficient retirement funding. There is currently lack of in-depth research on financial literacy related to household retirement planning. Further, the study also focusses on financial literacy as a means to assist those in funding retirement resources, in order to fulfil the retirement gap.

Key words: Financial literacy, retirement planning, retirement resources, retirement gap, malaysian household, focusses, developed country

INTRODUCTION

Financial literacy on retirement planning is gaining more concern today. According to Department of Statistic Malaysia, report shows that a male with 65 years have a life expectancy of 14.9 years in 2016 whereas a female with 65 years have a life expectancy of 16.9 years. These figures are increasing from 14.3 and 16.1 for male and female, respectively in the year 2010. As a result, Malaysian is experiencing longer retirement life as compared to the past. Therefore, it requires Malaysian to plan their retirement planning mindfully to sustain higher cost of living.

The prevalence of technological advancement, Malaysian is able to access and expose to financial information easily. Being a financial literate person, Malaysian is able to plan and apply the financial knowledge and accumulate wealth more effectively (Pg-Md-Salleh, 2015). Furthermore, financial institution offers variety of financial products with different investment options to Malaysian. Consequently, this enhances the retirement planning as Malaysian is exposed to various investment opportunities (Boon *et al*., 2011). Therefore, Malaysian household should be able to equip sufficient financial literacy level and well-prepared for retirement.

In contrast, there is Malaysian who are not ready for retirement because lack of financial literacy. According by Moorthy *et al*. (2012) the younger generation is having misconception that retirement planning is a burdensome long-term investment for them. They believe too young for them to plan for retirement and lack of interest to know the compounding effect of investment. In addition, middle-aged generation assuming that Employee Provident Fund (EPF) is sufficient to fund for their retirement life. Consequently, the retirees realize that they have insufficient funding to support their retirement needs at the retirement age.

According by Ibrahim *et al*. (2012) claims that the awareness level of retirement saving among Malaysian is

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relatively low. Malaysian is contributing 9-12% from the income earned to pension fund. Furthermore, Mansor *et al*. (2015) suggests that Malaysian prefers to rely on their children, saving and EPF to support retirement life. It is a challenge for Malaysian household where not pro-active involved in retirement planning. Most critically, Malaysian household do not have comprehensive financial plan to accumulate retirement fund. It causes retiree suffers in their retirement life and they are forced to continue to work.

Literature review

Financial literacy: Financial literacy is essential for individual and business to make financial decision. It appears to be necessary in our life. According by Ali *et al*. (2013), financial literacy can be defined as the extent of person to understand the financial concept and knowledge and apply that knowledge to make financial decision. A person with high level of financial literacy is able to plan for their spending and saving in order to achieve financial independence for retirement.

Similar by Githui and Ngare (2014), financial literacy is where the individual equips with sufficient financial knowledge for personal financial planning that assist in making decision. In addition, a person with financial literacy is able to identify the problems, access the right information and analyze all information before any decision making. A person with low level of financial literacy expose to greater financial problem and bankruptcy. Therefore, financial literacy is important because it will affect the welfare of a person, especially during retirement life (Ali *et al*., 2013).

Financial literacy is always used interchangeably with financial knowledge or financial education. However, these are conceptually different and financial literacy is deeper than financial education (Potrich *et al*., 2016). According by Huston (2010), there are two dimensions in the financial literacy. The first is to equip and understand the personal financial knowledge of financial education. The second is the ability to use manage and apply the personal financial knowledge. In this context a person may equip with financial knowledge, however to be considered as financially literate, should be able to apply the financial knowledge to make financial planning decision (Potrich *et al*., 2016).

In consonance with the finding from Fraczek and Klimontowicz (2015), financial literacy includes few categories such as knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, skills in making appropriate financial decisions and confidence in planning effectively for future financial needs. It requires for Malaysian to achieve long term financial goal such as retirement planning.

Retirement planning: Retirement planning is a complex process and requires certain level of financial literacy for planning (Sabri and Juen, 2014). A financially literate person tends to be more confident in their retirement planning as compared to those who are financially illiterate. A financially literate person aware the importance of retirement planning and will plan early for their future retirement. In contrast he has further explained that a financially illiterate person tends to overestimate their financial position. They believe that they are able to afford their retirement needs with existing saving and pension fund.

According by Rosle *et al*. (2013), retirement is a stage in which an individual is forced or allowed to leave the labor market. The statistics published by Finnish Centre for Pension in 2016 indicating an upward trend of the retirement age for the world over the next decade. For instance, UK will be from 65 (2015) to 67 (2028), Canada will be from 65(2015)-67(2029) and USA will be from 66(2015)-67(2027). The upward trend of the retirement age indicate that Malaysia is facing the transition towards aging population (Rosle *et al*., 2013).

In consonance with the statistical finding by DSM (2016), the average life expectancy of Malaysian rise from 72.2-74.7 years from 2000-2016. Therefore, retirement planning is critical as the life expectancy has increased as well as the cost of medical (Rosle *et al*., 2013). For instance, it is more obvious to sustain a better quality of life when a person starts his new stage of retirement life (Rosle *et al*., 2013). Retirement phase requires early planning specifically in the financial aspect due to the increasing of life expectancy and medical cost that a person needs to spend in retirement phase (Rosle *et al*., 2013).

There are several studies reveal that financial literacy has a positive relationship with retirement planning (Bashir *et al*., 2013). They have concluded that an individual with financial knowledge are able to undertake financial calculation and analyze the concept of risk diversification, inflation and compounding effect that needed for their retirement (Bashir *et al*., 2013).

Apparently, there are some key components that are lacking in the past research pertaining to financial literacy towards the retirement planning in Malaysian household.

In respect to this gap of research, this study will examine the importance of financial literacy to the retirement planning in Malaysian household context.

MATERIALS AND METHODS

This study use a real case of a working couple to obtain financial information. The description of the background study, consist of a married couple with one child. The husband ("M") is 38 years old, working as a finance manager. His wife ("F") is 38 years old, working as a part time tuition teacher. "M" is driving to work every day and his job scope needs him to support US and Europe operation. During weekend he will spend his time with his family for outdoor activities.

The history of family health his mother is suffering from breast cancer and his grandparent also passed away due to the lung cancer. His father is currently under hypertension and diabetes medication. He went for medical checkup regularly and the latest medical report shows that he is healthy except for mild diabetes and high blood pressure. Both of them expect to be retired on the age of 60. They have set one of the financial goals is to establish retirement fund and to be able to accumulate sufficient resources to support their retirement life.

The instrument used for data collection was obtained from Malaysian Financial Planning Council (MFPC). Based on the financial information collected, the annual expenditure is RM 95.720 and RM 48.500 and the total assets value is RM 500.000 and RM 585.000, respectively. A few key financial indicators and assumption such as inflation rate and investment expected rate of return were provided based on their past history record and future prospect.

This study adopts few approaches such as inflation-adjusted interest rate, future value of the expenses and present value of total retirement fund needed to identify retirement gap:

$$FV_A = PV(1+i_1)^{n_1} \tag{1}$$

$$FV_E = PV(1+i_2)^{n_1} \tag{2}$$

$$i_3 = \left[\frac{(1+IRRRA)}{(1+IR)}-1\right]\times 100 \tag{3}$$

$$PV_A = \frac{PMT}{i_3}\left[1-\frac{1}{(1+i_3)^{n_2}}\right]\times(1+i_3) \tag{4}$$

Where:

FV_A = The value of an asset at a specific time in the future
FV_E = The value of an expense at a specific time in the future
PV = The value of an assets as of the date of current valuation
n_1 = The number of period of compounding
i_1 = The interest rate to the value of an asset at a specific time in the future
i_2 = The inflation rate to the value of an expense at a specific time in the future
i_3 = The required rate of return after factoring the inflation rate and interest rate
IRRRA = The investment rate of return at retirement age refers to the average rate of return from the investment activities during the retirement life
IR = The inflation rate refer to percentage of the prices for goods and services is rising
PV_A = The present value of annuity due
PMT = The annual payment of retirement resources needed
n_2 = The number of years for retirement

All approaches take into the consideration of current expenditures, factor it to retirement needs for more accurate estimation on future expenditure patterns. The computation for the future annual expenditure will be used as pivot to factor in present value annuity due formula to get the total assets needed that support the next 15 years of retirement life.

RESULTS AND DISCUSSION

This report assesses the retirement needs from the future expenses computed based on cash outflow in today value. The current cash outflow will be adjusted to reflect retirement lifestyle. The total future cash flow as at today value are RM38,000 and 24,600 an shown in Table 1 and 2.

Table 1 and 2 show the total retirement resources needed is RM1,954,596 at their age of 60 to sustain their retirement life. However, it is important to investigate on how they are capable to accumulate sufficient retirement saving for retirement. As such this study further

Table 1: The total retirement resources needed for "M" (i_3 is 1.92%)

	PV		
Parameters	For age 38 (RM)	Changes	For age 60 (RM)
Cash outflow	95.720	-57.720	38.000
FV at the age of 60 (RM)	90.060	Total retirement resources needed	1, 186, 512

Table 2: The total retirement resources needed for "F" i_3 is 1.92%

	PV		
Parameters	For age 38 (RM)	Changes	For age 60 (RM)
Cash outflow	48.500	-23.900	24.600
FV at the age of 60 (RM)	58.300	Total retirement resources needed	768.084

Table 3: The future asset value of the retirement resources for "M"

Retirement resources	"M" in RM (PV)	"M" future asset value (RM) in age 60
Saving and current account	130,000.00	130,000.00
Fixed deposit	50,000.00	97,872.00
Equity	30,000.00	244,208.25
Bont unit trust	40,000.00	217,461.62
Employee Provident Funt (EPF)	250,000.00	999,151.58
Total	500,000.00	1,688,693.00

Table 4: The future asset value of the retirement resources for "F"

Retirement suorcess	"F" in RM (PV)	"F" future asset values (RM) in age 60
Saving and current account	70,000.00	70,000.00
Fixed deposit	20,000.00	39,149.00
Equity	15,000.00	122,104.12
EPF	180,000.00	719,389.14
Employee Provident Fund (EPF)	300,000.00	2,442,082.48
Total	585,000.00	3,392,725.00

All the unrealized future assets such as unearned EPF are not factor into this financial planning

extrapolates their future financial position based on existing investment. The future value of the total assets owned by them is RM 1,688,693 and 3,392,725, respectively.

Table 3 and 4 show "M" is ready for his retirement life with a total asset of RM1,688,693 which is exceeding his retirement needs of RM1,186,512 at his age of 60. In addition his wife is ready for her retirement life with a total of RM3,392,725 asset value at the retirement age which is exceeding her retirement needs o f RM768,084 at her age of 60.

Both of them are having sufficient assets to fund their retirement life. There is no retirement gap as such that needs extra diligence care to cater for their retirement life. From the retirement planning they are capable to plan for their spending and saving to achieve financial independence. As a result they are financially literate because able to plan for their retirement successfully. This is consistent with the finding by Githui and Ngare (2014) that defines financial literacy as the individual that equips with sufficient financial knowledge for personal financial planning and to make the strategic investment decision.

CONCLUSION

Financial literacy appears to be interpreted differently. Some of the researchers argue that the technological advancement, financial knowledge or education and more variety of financial products will enhance financial literacy for better retirement planning. In contrast, the awareness for the retirement saving among Malaysian is relatively low and not capable to make financial decision for retirement.

Our results show Malaysian is well-prepared for their retirement life. The available future assets value appeared higher than retirement needs. This study concludes that the financial literacy is important to plan ahead their retirement planning and achieve their retirement goal at the early age. If everyone financially literate, they are aware and able to appraise the basic financial concept such as risk diversification, inflation and interest, the effect of interest compounding for saving.

LIMITATIONS

There are a few limitations regarding the study. First, we should explore to non-professional and professional to differentiate the level of financial literacy. Second, the personal financial planning research should also extends to broader contexts such as investment planning, insurance planning, education planning and estate planning. Third, the financial position of the respondent may change over the time. The retirement planning needs to be reviewed from time to time, therefore the future research should be conducted to reflect the financial literacy towards retirement planning in Malaysia.

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