

# Analysing Shari'ah Compliant Retirement Planning: the Case of Malaysia

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## Abstract

This paper analyses the retirement planning scenario in Malaysia with an emphasis on the Private Retirement Scheme which gives tax deductions of RM 6,000.00 per year for individual taxation. The need for retirement is dire in the country given that more than half of the population have savings of less than RM 50,000.00 in their Employee Provident Fund by the time they are 50. The analysis shows that PRS penetration is low and is only beneficial for those in the top tax bracket. In addition, the returns given by the funds have been insufficient to attract sufficient participation amongst Malaysians.

**Keywords:** Shari'ah Compliant, Retirement Planning

## 1. Introduction

The importance of retirement planning has always been a central issue in personal financial management and wealth planning. This is evident in the issues raised in academic research as well as concerns by regulators on a global scale [1]. The issue has been further compounded due to the increase in ageing segments as observed in most countries. Thus, lack of adequate retirement savings can lead to challenges in ensuring a sustainable pool of funds to draw on after retirement and thus creating strains on the state in the event of increased reliance on a welfare based system.

Although the issue has not been in the spotlight in Malaysia, an increasing shift in the demographics of the population points towards an ever increasing rate of population ageing. Thus, it is important for Malaysians to be aware of the consequences of increased life expectancy which introduces longevity risks into their financial planning needs. In addition, the literature documents an interesting trend of shifting of responsibility of ensuring sustainable retirement planning from governments and employers to individuals [2,3]. This has resulted in an inclination towards a plan which allows flexibility in terms of contribution rather than being based on the expected benefits. Such an approach would however require individuals to have the necessary skills to plan their retirement. Empirical observations from around the world has resonated this precept whereby a positive and causal correlation is observed between financial literacy and retirement planning [4,5]. Empirical studies have further found that behavioural aspects such as expectations on asset riskiness influences the effectiveness of financial decision making in addition to the expected horizon of the investment [6]. In addition, effective retirement planning is also dependent on the ability to cope with risk and uncertainty, where the evidence documented in the literature shows that those with greater levels of risk tolerance tend to be more confident on

retirement planning [7]. In addition, it is found that risk aversion influences investors' participation in assets which carry higher risk levels which include investments in unit trusts as well as investing in share markets [8,9]. In addition, the expectations of investors further influences decision making in financial investments. Most investors are affected by their expectations which is reflected in their investment decision making process [10,11,12] show that in order for investors to efficiently select asset classes to be included in their retirement plans, it is important to have a retirement portfolio allocation strategy.

## 2. Life-Cycle Hypothesis

[13] proposes the Life-Cycle Hypothesis (LCH) which states that individuals keep their real consumption at a constant level by adjusting (i.e. smoothing effect) their expenses over their life-cycle. Based on the prediction of this hypothesis, most individuals tend to set aside a portion of their income during periods of high earning capabilities in order to sustain themselves during periods of low earning capabilities (e.g. retirement). Based on the expectation that most individuals tend to have higher earning potential as their age increases over their working-life, the ability to save for periods of low earning capabilities also increases over time. During retirement, the savings will then be utilised to cover their expenses [14].

The arguments put forth under this hypothesis is based on the assumption that consumers are able to plan their consumption in a rational manner which is balanced with their saving goals throughout their lifecycle [15]. The reality faced by individuals in planning for their retirement diverges from the prediction of this hypothesis given that most people are not equipped with the relevant knowledge and ability to judge their needs during retirement. This problem is further compounded by the fact that an overwhelming majority of consumers are not well prepared to navigate

their retirement life due to insufficient amounts being set aside as well as the lack of a proper plan to manage their funds [16,17]. In addition to the rationality issue in retirement planning, consumers today are faced with a situation where financial products being offered are becoming more complex which could prove to be challenging for individuals without sufficient background knowledge in finance [18]. This could very well lead to adverse selections given that certain technical terms and concepts may lead to inaccurate understanding of product structures and corresponding risks [19,20] modern portfolio theory suggest that selection of assets should be based on the risk and return trade-off where investors would seek to maximise returns for a particular level of risk or minimise risks for a given level of return. [21] provides contention for the ability of investors to maximise returns for their retirement funds given that their decision making process may be flawed leading to sub-optimal decisions.

### 3. Impact of Financial Literacy on Retirement Planning

The impact of financial literacy on retirement planning is derived from the ability of individuals to collect and process information regarding risk and returns [22]. Thus it is imperative that individuals have the ability and skills to understand numerical information related to finance in order to manage their retirement planning goals. In addition, it is found that the propensity to plan for retirement is directly related to financial knowledge [23]. Furthermore, it is found that individuals which greater levels of financial literacy are more likely to invest in share markets [24,25]. Thus it is clear that financial literacy plays an important role in the extent of investment that individuals make in sophisticated financial instruments to meet their retirement planning goals. Investors' expectations about the future is also heavily influenced by variations observed in the economic cycles. Investors tend to have expectations about inflationary pressures on the economy, changes in the interest rates as well as its impact on the required rate of return on a particular asset [26]. Inflationary pressures have an adverse effect of savers, typically leading to negative real returns which leads to a significant impact on retirees has given their reliance on savings accounts [27]. Intuitively, during expansionary periods individuals tend to save less whilst increasing their risk exposures. The opposite is observed during recessions where individuals tend to save more whilst reducing their risk exposures by opting to hold a greater proportion of low risk assets in their retirement portfolio.

### 4. Impact of Risk Attitude on Retirement Planning

Individual risk averseness has an impact on the financial decision making process and thus has a substantial impact on his or her investment portfolio. [28] iterates that risk attitude is based on individuals risk aversion which encompasses the extent a person avoids risks. Thus, individuals normally require a sufficient level of returns to induce them to take on risks. This creates a situation of investor heterogeneity which is at odds with the assumption of the Modern Portfolio theory which assumes all individuals are risk averse. Therefore, the required rate of return could vary for risk averse individuals versus risk takers for a given level of risk. Thus, it is expected that individuals with higher levels of risk aversion tend to reduce their exposure to risky assets [29,30]. In addition, it is found that individuals with greater risk tolerance tend to be more assured about retirement planning [31]. Thus the inclination to risk taking behaviour provides for an interesting implication whereby the risk aversion is captured in the asset selection of individuals [32,33] confirm this notion in their empirical findings.

Thus the behavioural aspect of risk aversion plays an important role in financial decision making.

[34] further argue that an individual's perception and ability to tolerate risk tends to influence retirement planning in addition to financial goals. It is found that individuals who are risk averse tend to be more conservative in asset selection and thus are not able to accumulate more assets in their retirement funds [35]. Therefore, risk aversion provides an interesting aspect which is able to explain the differences between aggressive and conservative styles in planning for retirement. Thus, investors who are risk averse would tend to avoid risk and are more likely to plan for retirement as well as have a relatively higher composition of low risk assets in their retirement portfolios.

### 5. Expectations of the Future

Each individual makes financial decisions based on his or her expectations of the future of the economy as a whole. Models for financial planning thus need to account for the element of uncertainty as well as individual expectations given that most retirement plans are allocated over a long period of time based on future expected returns by agents [36]. Fluctuations in the economic growth as well as production cycles tend to influence investor's future expectations. [37] argue that investors are mainly concerned with expectations on inflation rates, changes in the interest rates as well as volatility of returns. [38] further reason that inflation is a major concern for investors given that positive nominal returns may in actuality be negative real returns after accounting for inflationary pressures which lead to reduction in purchasing power. Therefore, it is expected that during expansionary periods, individuals tend to increase spending and save less [39]. In addition, allocation towards risky assets are also more likely. Conversely, if investors are expecting a downturn in the economy, they would tend to save more and reduce their expenses. In addition, their asset allocations are more likely to be in favour of low risk assets.

### 6. Retirement Planning

The Modern Portfolio Theory attributed to the seminal work by Markowitz states that the best way to create a portfolio is by holding different classes of assets. The assets which are selected in the portfolio are dependent on the risk and return of each asset as well as the correlation between assets [40]. Results of different combinations of assets result in a curve which has come to be known as the 'efficient frontier' in the study of portfolio optimisation. Each individual investor would then allocate assets in their own personal portfolio based on any line which intersects with this curve to obtain an efficient portfolio where the level of risk is minimised for a given level of return or expected return is maximised for a given level of return.

In addition, the theory further implies that investors should further diversify within a particular asset class by holding minimally correlated securities [41]. For instance, investors should opt to invest in a combination of differing maturities when investing in the bond market. Based on the diversification principle, investors are eliminating unsystematic risk and minimising systematic risk. [42] provides a dynamic model of portfolio optimisation which allows investors to adjust for multi-periods.

However, it can be observed that many investors do not opt to optimise their portfolios due to cognitive or behavioural biases. Although, there have been cases of successful investors as well as individuals who have been able to defy the wisdom brought about by the MPT, it is important to note that observation of these individuals are only possible given that they are successful which in itself introduces a survival bias. In addition, [43] argues that modern integration of financial markets has increased the correlation between markets and asset classes, thus making it far more difficult to obtain the benefit of diversification. In addition, empirical

studies on market efficiency show that markets to a certain extent are considered to be efficient given that most fund managers are unable to consistently outperform a market index [14].

## 7. Malaysian Scenario

The longevity risk is starting to become an important issue in retirement planning. This is based on the increase in life expectancy where estimates in 2015 show that the life expectancy of Malaysians have increased to 75 years which is attributed to 72 years for men and 77 for women [25]. In addition, 5.8% of the population were above 65 years of age and it is expected that by 2016, the figure would cross the 6% mark. This is closing in on the official definition of an ageing society where more than 7% of the population are above 65 years old [36].

In addition to the increasing longevity risk, the awareness level of for the requirements of adequate retirement planning is severely lacking in Malaysia [37]. Current reports by the Employees Provident Fund (EPF), a national forced retirement savings scheme in Malaysia, indicate that more than 70% of members aged 54 have less than RM 50,000.00 accumulated in their retirement accounts [28]. The overall picture points towards an alarming scenario of potential poverty amongst the elderly in the future in Malaysia.

There are two types of retirement schemes observed in financial markets across the world where the classification is based on either a defined benefit or a defined contribution scheme [39]. The former is normally based on the number of years in service and is adopted in the public sector in Malaysia where the benefit is based on the last drawn salary. The latter requires regular contribution in a retirement savings plan which receives contributions from both, the employer and a salary deduction from the employee. In Malaysia, this is adopted in the private sector which is a statutory requirement based on the EPF Act of 1991. Current statistics show that the public pension scheme covers 6.2% of the working population, the private sector scheme via contributions to EPF accounts for 52% of the working population whilst the balance 42% are not covered by any retirement scheme [10]. In addition to the problem of coverage, the issue of inadequate savings for retirement is also an alarming issue for Malaysians, especially those in the low-income and middle-income group.

## 8. Deferred Annuities

The deferred annuity scheme in Malaysia is offered mainly by insurers and takaful operators which provide periodic payments upon maturity of the scheme in exchange for a lump sum investment made today. In addition, current schemes in the Malaysian market also allow periodic contributions (monthly, quarterly or yearly basis) during the accumulation stage and payments are made starting from a minimum of one year after participation. The payments however do not continue in the event of death, where a lump sum payment is made where the amount invested as well as the profit is paid out to the beneficiary. The payments are made during the dissipation period, i.e. upon maturity over a number of years with monthly annuities.

In addition to the private providers of deferred annuities, the EPF has also introduced a similar scheme in the year 2000 which was eventually handled by insurance and takaful operators. This scheme was later abandoned.

## 9. Malaysia Retirement Savings Scheme

In tabling the 2010 annual federal budget, the finance minister of Malaysia (also the Prime Minister) had announced the introduction of a retirement savings scheme in collaboration with the EPF which was aimed at providing retirement savings to those who are self-employed. Contrary to those who are wage earners, the con-

tributions were voluntary and only requirement a minimum contribution of RM 50.00. The government also provided an additional 5% of contribution to replace the employer contribution which was later increased to 10% given the low participation rate [11].

## 10. Private Retirement Scheme in Malaysia

In addition to these two schemes, most countries adopt a third tier which is based on a voluntary savings mechanism on an individual basis [22]. In Malaysia, the Private Retirement Scheme (PRS) was introduced as the third pillar in 2012 by the federal government. The main aim was to provide an avenue for meeting the shortfall in the minimum expected required amount for retirement as well as allow inclusion of those in the informal sector who are currently not covered by the EPF. The PRS is aimed to provide a tool for investing in the long-term for Malaysians which is provided by private fund managers and regulated by the Securities Commission (SC). Currently there are eight providers of the scheme:

- AmInvest Management Sdn Bhd
- American International Assurance Berhad
- CIMB Principal-Asset Management Berhad
- Hwang Investment Management Berhad
- ING Funds Bhd
- Manulife Unit Trust Bhd
- Public Mutual Bhd
- RHB Investment Management Sdn Bhd

The PRS has been designed in order to suit the retirement needs of the general population in mind where allocation of funds is done based on the age of the participant. Allocation is made into three different funds with differing financial goals: growth fund, moderate fund as well as conservative fund. In addition, individuals are able to choose their investment priorities by selecting funds on their own. The federal government has mandated that investors are only able to withdraw from these funds upon reaching the age of 55. However, investors are given the option of withdrawing up to 30% of their investments at an earlier stage, subject to a tax penalty of 8% to compensate for the annual tax deductions given for up to RM 3,000.00 per annum per taxpayer.

On the surface level, the initiative by the government is commendable. However based on the figures provided by the SC, as of December 2015 the scheme has only attracted about 251,000 contributors i.e. only about 2% of the working population [33] attributes a lack of awareness as well as the current structure of the scheme as reasons for lack of participation from the general working population. Furthermore, the uncertainty of returns acts as an inhibitor for Malaysians from saving for retirement via the PRS [14]. In addition, investors are unable to fully judge the historical returns provided by the scheme given that it has been in the market for less than 7 years. Besides, the scheme is not appropriate for the self-employed given that a majority of them are from the low income group such as farmers and fishermen. In order to attract more participants to contribute towards the scheme, the government further provides an incentive of RM 500 which was later increased to RM 1,000 for youth investors in terms of contribution. The lacklustre participation for both the PRS as well as the deferred annuity scheme has been attributed to a lack of comprehensive coverage as well as guaranteed returns which is offered by the EPF via the EPF Act [15]. Thus, it does indicate that further reforms are needed in order for the scheme to be attractive as well as provide sufficient coverage for the self-employed, especially those in the low-income group. [36] suggests that one potential solution for the current conundrum faced by Malaysia could lie in introduction of social pensions which are linked to formal pension schemes such as the EPF.

## 11. Islamic View on Retirement Planning

Islam provides an alternative view on wealth where Allah owns all wealth and human beings are Caliphs entrusted to manage the wealth in His behalf in this world [27]. Thus, it is the responsibility of Muslims to administer and manage wealth in a sustainable way which leads to the Islamic wealth management view [26]. Furthermore, prevention of poverty is clearly indicated in Quranic and Hadith sources.

This leads to the need for retirement planning for Muslims in order to be able to sustain their wellbeing given that it is imperative to plan for old age from a young age as advocated by Islam. In addition, the religion further encourages Muslims to set aside savings during bountiful times to be utilised during hardship.

## 12. Shari'ah Compliance

PRS funds which are Shari'ah compliant are managed based on the Wakalah contract whereby the fund manager act as agents of investors in return for a fee [32]. Their responsibilities are to ensure that financial instruments are recognised as Shari'ah compliant by the SC. Similar to the conventional funds, the current offerings by PRS allocate three different funds namely the aggressive fund, moderate as well as the conservative fund. The funds are allocated based on differing proportions into equities which are Shari'ah compliant, Sukuk as well as Islamic money market instruments. [42] finds that the awareness of Shari'ah compliant PRS funds are dependent on demographics where men are more alert on the offerings whilst those who are in the higher age bracket also tend to have higher awareness levels.

## 13. PRS Fund Performance

The judgement of fund performance is normally done versus a benchmark. The data for PRS fund performance obtained from fundsupermart.com is presented in Table 1 – Table 3 as of April 2018. Benchmarks for fund performance are presented in Table 4. Thus, the analysis shows that over a three year period for conservative funds it can be seen that only the top three are able to outperform yields from MGS. This does indicate that investors are not sufficiently being compensated from taking on additional risks posed. In addition, the returns have not yet taken into account other costs such as transaction costs and management fees. Changing to a savings benchmark which is the SSPN, it can be seen that a similar situation is observed where only the top three funds are able to outperform the returns given by SSPN. This is rather unflattering for the PRS fund providers given that the tax incentive given to SSPN savers is larger (i.e. RM 6,000.00 per annum per person per child). In addition, the SSPN is backed by the federal government and thus would be expected to pay consistent returns over a long period of time. For the SSPN-i, capital guarantee is provided via a third party guarantee mechanism in order to ensure Shari'ah compliance.

For the moderate funds, only the best performing fund is able to outperform EPF returns over a period of three years. Similarly to the conservative fund, investors are not getting sufficient returns for addition risks as suggested by Efficient Market Hypothesis and the Capital Asset Pricing Model. The risk premium is quite small given that EPF is risk free and has a minimum return requirement of 2.5% based on statutory requirements. In addition the EPF has no transaction costs nor any management fee.

The growth fund providers under the PRS exhibit a different pattern whereby all of the top three performers are able to outperform their benchmarks based on Bursa Malaysia over a three year period. In addition, only the bottom two are unable to outperform the returns provided by Index benchmarks on Bursa Malaysia. To a

large extent the performance above the Index returns of the benchmarks is likely as a result of international diversification by these funds where the portfolio efficiency is further increased and thus expected returns are able to remain high without severely affecting the risk levels. Thus, investors are benefiting from investing in these funds over the three year period whereby the funds have been able to benefit from international diversification. This has been especially important given that returns from Bursa Malaysia in 2015 and 2016 have been negative.

## 14. Conclusion

Based on the arguments provided above, Malaysia is heading towards an ageing society which introduces the element of longevity risk in their retirement planning. In addition, the increasing levels of cost of living has been further documented whereby EPF has raised its minimum target of savings in Account 1 to RM 228,000.00 by the time contributors reach the age 56. This target is based on sustaining life at a minimum RM 950.00 per month (just above the poverty line) for 20 years after retirement. However, it is likely this figure will need to be further revised upwards given that the life expectancy is expected to further increase. Current research shows that Malaysians lack awareness about retirement planning, have low levels of financial literacy, are risk averse and have mixed expectations about the future. The introduction of the PRS scheme is viewed as the third pillar to resolve the potential pension crisis that might unfold in the future. However, the current take-up rate is quite low. The situation could decline further in terms of investor participation after the tax incentive expires in 2021. In addition, the funds are not performing above their benchmarks (except for the growth funds). Furthermore, to benefit from the PRS scheme it is imperative that investors start at a young age based on the analysis. Based on the analysis most of the PRS funds are struggling to beat their benchmarks, this pointing towards a significant level of market efficiency [61]. It does seem that investors are better off investing in exchange traded funds or any extra savings for retirement should instead be channelled to the EPF which has been providing consistent dividends which investors could enjoy without worrying about the downside potential. The returns from the SSPN also has been consistent, which coupled with the tax exemptions and government capital guarantee does provide another interesting avenue for savings especially for parents planning for their children's education funds. The only potential benefit from the PRS scheme at the moment seems to be from the tax incentive, which may attract those in the top bracket. The impact after accounting for a horizon of 20 to 30 years would lead to 50 bps increase in potential returns from PRS investments which could be negligible in the long-run. Although the analysis does not paint a favourable scenario for the PRS funds, it has to be noted that most funds are relatively new given that the PRS initiative has just been introduced in recent years where figures for longer horizon are not available to perform a comprehensive analysis. In addition, the SSPN and EPF does distort the market equilibrium given government intervention which makes a pure analysis of fund performance quite perplexing (i.e. guarantees for both, a minimum of 2.5% dividend for the EPF).

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**Table-1:** Performance of top three and bottom three conservative funds for PRS

Fund	1-mth	3-mths	6-mth	1Y	3Y*	3Y Vol
Am PRS Tactical Bond Fund - Class D	0.1%	0.9%	1.8%	2.6%	6.9%	3.3%
Am PRS Tactical Bond Fund - Class D	0.0%	1.1%	5.1%	7.5%	5.1%	3.2%
Kenanga One PRS Conservative Fund	0.3%	0.9%	2.4%	5.3%	4.4%	2.2%
Am PRS Islamic Fixed Income Fund - Class D	0.3%	0.9%	2.4%	4.1%	2.9%	2.4%
Manulife PRS - Conservative Fund - Class D	0.2%	0.2%	1.0%	0.9%	2.5%	1.8%
Manulife Shariah PRS - Conservative Fund - Class A	0.2%	0.2%	1.0%	-0.3%	1.9%	1.7%

\* annualised.

**Table 2:** Performance of top three and bottom three moderate funds for PRS

Fund	1-mth	3-mths	6-mth	1Y	3Y*	3Y Vol
Affin Hwang PRS Moderate Fund	-0.1%	1.3%	3.5%	9.5%	6.7%	4.5%
AIA PAM Moderate Fund	-0.1%	1.9%	5.3%	11.4%	5.8%	4.8%
CIMB Principal PRS Plus Moderate - Class C	0.1%	1.9%	5.2%	10.8%	5.6%	6.0%
AmPRS Moderate Fund - Class C	-0.8%	4.5%	10.1%	12.9%	3.1%	6.4%
Manulife Shariah PRS - Moderate Fund - Class A	0.3%	0.3%	2.1%	3.6%	2.8%	4.9%
Manulife PRS - Moderate Fund - Class A	-0.4%	0.1%	1.6%	4.4%	2.6%	4.5%

\* annualised.

**Table 3:** Performance of top three and bottom three growth funds for PRS

Fund	1-mth	3-mths	6-mth	1Y	3Y*	3Y Vol
CIMB Principal PRS Plus AP Ex Jpn Equity - Class C	-1.7%	2.5%	9.7%	19.2%	14.1%	10.8%
CIMB Islamic PRS Plus AP Ex Jpn Equity - Class C	0.4%	8.3%	14.9%	20.0%	14.1%	9.1%
AmPRS Islamic Equity Fund - Class D	1.6%	4.3%	8.8%	17.7%	9.3%	7.8%
CIMB Principal PRS Plus Equity - Class C	-0.1%	0.4%	4.3%	9.9%	1.6%	8.4%
AmPRS Asia Pacific REITs - Class D	0.4%	-0.2%	2.2%	6.6%	0.5%	8.9%
CIMB Islamic PRS Plus Equity - Class C	-0.3%	-1.0%	-1.1%	1.8%	-0.2%	7.6%

\* annualised.

**Table 4:** Performance of Benchmark indicators

Benchmarks	1-mth	3-mths	6-mth	1Y	3Y*	3Y Vol
MGS Yields (Islamic) (7 months instead of 6 months)	-	3.3%	3.4%	3.4%	3.4%	-
MGS Yields (Cnvntl) (7 months instead of 6 months)	-	3.3%	3.3%	3.3%	3.7%	-
EPF Returns	-	-	-	6.9%	6.3%	-
SSPN	-	-	-	4.0%	4.0%	-
FTSE KLCI Index	-0.7%	8.1%	4.7%	9.5%	1.6%	8.6%
FTSE Emas Index	-1.1%	6.5%	4.8%	10.6%	5.3%	8.6%
FTSE MidS Cap Index	-2.3%	-1.0%	0.0%	4.7%	0.6%	5.2%
FTSE Small Cap Index	-2.1%	-0.4%	-0.2%	6.1%	0.2%	13.5%
FTSE Hijrah Shariah Index	-1.5%	5.4%	6.2%	8.3%	-0.8%	8.8%
FTSE Emas Shariah Index	-1.7%	3.9%	5.3%	8.4%	0.8%	8.0%
FTSE MidS Cap Shariah Index	-1.6%	-0.5%	-1.4%	2.8%	0.3%	4.8%

\* annualised. Source: FTSE Russel, BPAM, SSPN, EPF.