E–B
Environment - Behaviour
Proceedings Journal

KICSS2024
Kedah International Conference on Social Sciences:
https://kicss2024.wixsite.com/kicss2024

e-IPH
e-International
Publishing House Ltd.,
United Kingdom

BizFame 2024: 3rd International Conference on Business Finance Management & Economics
Suan Sunandha Rajabhat University, Bangkok, Thailand, 24 & 25 October 2024
Organised by: Universiti Teknologi MARA, Kedah, Malaysia

Analysing the Relationship between Financial Related Factors and the Adoption of Private Retirement Scheme

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Abstract
Retirement planning is essential to ensure sustainable living for individuals upon retirement. Unlike government pensioners, who are eligible for a pension upon retirement, private sector employees and self-employed individuals rely solely on their limited savings in the Employees Provident Fund. The government has introduced a private retirement scheme to help Malaysians build retirement funds. Hence, this study presents a conceptual framework on the relationship between financial-related factors (financial literacy, financial risk tolerance, financial attitude, financial well-being, and financial behaviour) and adopting the Private Retirement Scheme in Malaysia. Research hypotheses are developed based on the proposed structural relationship.

Keywords: Financial literacy; Financial risk tolerance; Financial attitude; Financial well-being

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1.0 Introduction
Retirement planning is crucial, as adequate funds are necessary to maintain one's lifestyle after retirement. The United Nations projects that the life expectancy of Malaysians will rise to 76.58 years for those born in 2024 (United Nations Population Division, 2022). They expect the trend of increasing to continue in the future. Increased life expectancy has rendered sufficient retirement funds essential (Bank Negara Malaysia, 2022). Moreover, the cost of living, encompassing medical expenses, persistently escalates yearly, corresponding with inflationary trends (PricewaterhouseCoopers, 2024; Tay & Qi, 2024). Compounding the issue, Malaysians experience low-income levels while managing substantial debt obligations (Bank Negara Malaysia, 2022). It highlights the necessity of generating sufficient retirement savings among Malaysians. In Malaysia, private sector employees depend exclusively on their retirement savings in the Employees Provident Fund (EPF), whereas the self-employed lack designated retirement accounts. The analysis suggests

that the savings accumulated in the EPF are insufficient to support the livelihoods of retirees (Kaur, 2024). The issue of inadequate retirement savings is not exclusive to Malaysia; it is a global concern affecting numerous countries worldwide (Bank Negara Malaysia, 2022).

The Private Retirement Scheme (PRS) was introduced on 18 July 2012 (Private Pension Administrator, n.d.) to help Malaysians, especially private sector employees and the self-employed, build their retirement funds (Federation of Investment Managers Malaysia, n.d.). Professional fund managers of the PRS providers manage the PRS, investing the retirement funds following the investors' risk appetite (Federation of Investment Managers Malaysia, 2015). Figure 1 shows the mechanism of PRS.
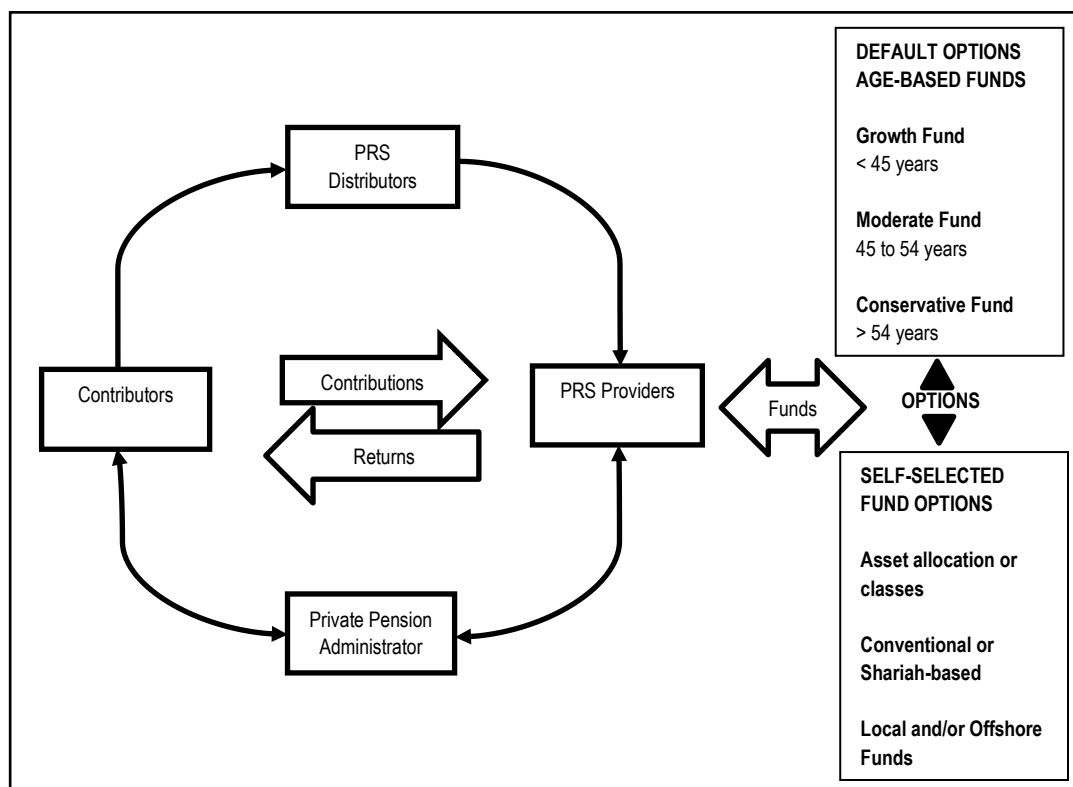

Fig. 1: Mechanism of PRS
(Source: Private Pension Administrator, n.d.)

As of August 2024, the Securities Commission Malaysia has approved nine management organisations in Malaysia to serve as PRS providers, as indicated in Table 1.

Table 1. List of PRS providers in Malaysia
(Source: Private Pension Administrator, n.d.)

No.	Name of PRS Providers
1	AHAM Asset Management Berhad
2	AIA Pension and Asset Management Sdn. Bhd.
3	AMFunds Management Berhad
4	Hong Leong Asset Management Bhd
5	Kenanga Investors Berhad
6	Manulife Investment Management (M) Berhad
7	Principal Asset Management Berhad
8	Public Mutual Berhad
9	RHB Asset Management Sdn. Bhd.

Through the subscription of the PRS, the well-being of the private sector retirees and the self-employed can be enhanced as they would have an adequate amount of funds for living during retirement (Federation of Investment Managers Malaysia, n.d.). The following are the benefits of contributing to PRS (Private Pension Administrator, n.d.):

1. Contributors can contribute to only one or multiple PRS providers, making fund diversification easy and affordable. Furthermore, the investor's contributions to a pool of funds will be invested into a diversified portfolio of diverse investment instruments based on default options according to age or the contributor's preference.
2. The specialised fund managers of PRS providers effectively manage the funds, ensuring effective management for the benefit of contributors.
3. Ease of transaction on the part of the contributors as the professional fund managers of the PRS providers manage the funds. Contributors do not have to be active in managing the investment of the PRS funds.

4. Tax reliefs to the contributors for contributions made up to RM3,000 annually or other amounts as determined by the authority. Employers contributing to the PRS for their employees are also eligible for a tax deduction of up to 19% of their employee's remuneration.
5. Income generated from the fund is exempted from Malaysian income tax, causing the income distributed to the contributors to be exempted from Malaysian income tax, too.

The benefits of PRS, especially to the private sector employees and the self-employed, cannot be realised unless the private sector employees and the self-employed adopt it. Therefore, it is crucial to study the determinants of PRS adoption. This research will assess the possible determinants of PRS adoption, including financial literacy (FL), financial risk tolerance (FRT), financial attitude (FA), financial well-being (FW), and financial behaviour (FB). This research has the following objectives:

Research objective 1:　　To examine the effect of financial literacy on the adoption of PRS.
Research objective 2:　　To examine the effect of financial risk tolerance on adopting PRS.
Research objective 3:　　To examine the effect of financial attitude on adopting PRS.
Research objective 4:　　To examine the effect of financial well-being on the adoption of PRS.
Research objective 5:　　To examine the effect of financial behaviour on the adoption of PRS.

2.0 Literature Review and Hypotheses Development

2.1 Private Retirement Scheme
Reputable journals have published a few research studies on PRS in Malaysia, including Zabri et al. (2016), Mohd Ali et al. (2016), Yeon et al. (2016), Chua and Chin (2022), and Shah et al. (2023). Table 2 presents the research from the oldest to the most recent.

Table 2: Summary of past research on PRS in Malaysia

Authors	Objective	Methodology	Scope	Findings
Zabri et al. (2016)	To assess the awareness level of PRS among private-sector employees	Quantitative, questionnaire survey, descriptive analysis	The private sector employees in Malaysia	There is a low level of awareness of PRS among private sector employees. There is low interest in investing in PRS among private sector employees.
Mohd Ali et al. (2016)	To analyse existing legislation of PRS in Malaysia	Qualitative, library-based research	The regulations governing PRS in Malaysia	There is no standard agreement between the PRS provider and the investor. There is a lack of uniformity in implementing governance policies among PRS providers.
Yeon et al. (2016)	To examine the perception of PRS providers on the existing legal framework governing PRS	Qualitative, interviews, thematic analysis	The PRS providers in Malaysia	The existing legal framework is inadequate in protecting PRS providers and investors.
Chua & Chin (2022)	To examine drivers of retirement preparation	Quantitative, questionnaire survey, descriptive analysis, regression analysis	The working adults in Malaysia	Financial behaviour has a positive relationship with retirement preparation.
Shah et al. (2023)	To compare retirement plans in Malaysia and Indonesia. To explain the benefits of EPF and PRS to private sector employees in Malaysia	Qualitative, library-based research	The retirement plans for private sector employees in Malaysia and Indonesia	Both countries have mandatory and voluntary retirement plans. The EPF fund is inadequate for retirement and needs to be supplemented by PRS.

Researchers have been focusing on examining the legal and regulatory aspects of PRS, requiring a qualitative methodology (Mohd Ali et al., 2016; Yeon et al., 2016). Zabri et al. (2016) conducted quantitative research to assess the awareness level of private sector employees on PRS using descriptive analysis. Chua and Chin (2022) investigated the correlation among financial literacy, financial attitude, financial well-being, financial conduct, and retirement preparation, concluding that financial behaviour correlates positively with retirement preparation. Researchers have not undertaken any study to investigate the association between financial-related parameters (FL, FRT, FA, FW, FB) and the adoption of PRS in Malaysia. This research aims to address the gap in the current literature by identifying the financial elements (FL, FRT, FA, FW, FB) influencing the adoption of PRS in Malaysia. Figure 2 shows the conceptual framework of this research.
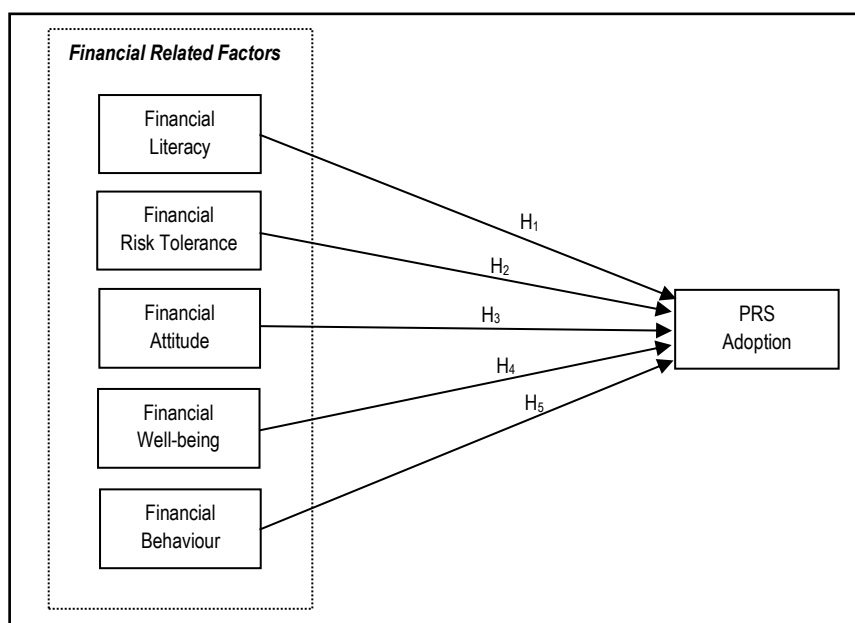
Fig. 2: Conceptual framework
(Source: Authors' work)

2.2 Financial literacy

Financial literacy is an individual's capacity to manage money (Remund, 2010). Financial literacy is the understanding and application of personal money management (Huston, 2010). Financially literate individuals can use economic and financial knowledge, as well as financial abilities, to manage their financial resources effectively. When making financial decisions, financial knowledge is essential. Educating youngsters between 13 and 21 about financial matters is critical because they will eventually be responsible for them. Financially literate people can make prudent financial decisions. We expect financially knowledgeable individuals to make sound financial decisions. Financial literacy empowers individuals to make informed financial decisions. Previous research has demonstrated that financially literate people save for crises. This research will investigate the effect of FL on PRS adoption. The researchers formulate a hypothesis regarding the relationship between FL and the adoption of PRS as follows:

H_1 There is a positive and significant direct relationship between FL and the adoption of PRS in Malaysia.

2.3 Financial risk tolerance

An investor's willingness to expose themselves to financial risk with unknown outcomes is their risk tolerance (Grable et al., 2024). According to Rodrigues & BV (2024), financial risk tolerance is a behavioural perception that explains investors' propensity to face investment risks. It also refers to the degree of uncertainty an investor is willing to endure in a situation that requires financial decisions with the possibility of loss. Risk tolerance is essential in financial planning, investment suitability, and investors' decisions. It varies from one individual to another and influences their investment decision. People have argued that FRT significantly influences investment decision-making (Rodrigues & BV, 2024). This research will investigate the impact of FRT on the adoption of PRS. The researchers formulate a hypothesis regarding the relationship between FRT adoption of PRS as follows:

H_2 There is a positive and significant direct relationship between FRT and the adoption of PRS in Malaysia.

2.4 Financial attitude

Financial attitude refers to an individual's attitude towards money, comprising financial planning, savings for emergencies, and future consumption (Amagir et al., 2020). It encompasses economic and non-economic emotions and perceptions about the potential outcomes of a particular action (Potrich et al., 2018). It indicates a person's conceptualisation of a specific matter, which shapes their action accordingly. Previous research has found that a person's financial attitude affects their financial capabilities. Individuals with a high FA would realise the importance of having adequate retirement funds. These individuals have a higher tendency to save for retirement or be involved in private retirement schemes. This research will investigate the impact of FA on the adoption of PRS. The researchers formulate a hypothesis regarding the relationship between FA and the adoption of PRS as follows:

H_3 There is a positive and significant direct relationship between FA and the adoption of PRS in Malaysia.

2.5 Financial well-being

Financial well-being refers to an individual's ability to manage personal and family financial matters, survive during a financial crisis, accomplish financial goals, and achieve financial liberty (Consumer Financial Protection Bureau, 2015). It portrays an individual's expectations, preferences, and satisfaction regarding his financial situation (Birkenmaier et al., 2023). It is the highest accomplishment of financial capacity, indicating the security and ability of a person to manage his finances freely. FW can be assessed objectively in figures or subjectively through perception-based measures on general well-being and satisfaction. Research has shown that individuals with higher financial well-being have better health conditions (Birkenmaier et al., 2023) and higher satisfaction and happiness. Past research found that FW significantly affects quality of life, general well-being, and mental health. Individuals with high FW would have positive minds and attitudes, including building funds for their retirement. This research will investigate the impact of FW on the adoption of PRS. The researchers formulate a hypothesis regarding the relationship between FW and adoption of PRS as follows:

H$_4$ There is a positive and significant direct relationship between FW and the adoption of PRS in Malaysia.

2.6 Financial behaviour

Financial behaviour refers to decisions made on budgeting, borrowing, saving, investing, and spending (Fan, 2020). It is the actions of a person that affect their financial condition over a short and long-term period. Financial behaviour is essential in achieving financial stability and security and financial goals in the long run (Aryan et al., 2024). Chua and Chin (2022) argued that financial behaviour deters financial mistakes and affects income generation and wealth accumulation throughout our life cycle. It involves individuals' behaviours, decisions, and patterns in managing and allocating their financial resources into investments. FB transforms financial knowledge into positive actions (Chua & Chin, 2022). Past research has shown that FB has contributed significantly to an individual's income and returns from investment. Therefore, FB will influence the Adoption of PRS among Malaysians. This research will investigate the impact of FB on the adoption of PRS. The researchers formulate a hypothesis regarding the relationship between FB and the adoption of PRS as follows:

H$_5$ There is a positive and significant direct relationship between FB and the adoption of PRS in Malaysia.

3.0 Research Design

This research will utilise a quantitative survey methodology. The research population comprises private sector employees and self-employed individuals in Klang Valley, Malaysia. The researchers meticulously crafted a collection of survey questionnaires to facilitate the measurement of the variables in this research. Existing measures of FL, FRT, FA, FW, FB, and intention to adopt will be adopted or adapted accordingly when constructing the questionnaire for this research. Table 3 shows the source of the scale of each construct and the questions/items for each scale. The questionnaire also contains demographic measures, including age, gender, race, religion, income, and education. The researchers send the final questionnaire draft to the experts, including academicians and unit trust agents who sell PRS. The researchers will use comments and feedback from the experts to rectify and improve the questionnaire and obtain content validity. The researchers will use the mall-intercept method and online survey tool to distribute the questionnaire to the respondents. The questionnaire will ask these individuals about their financial literacy, risk tolerance, attitude, financial well-being, financial behaviour, and adoption of the PRS. This research upholds ethics, as the identity of the respondents will remain anonymous. The researchers will not link the responses given to any respondents. This research will use the Statistical Package for the Social Sciences (SPSS) to analyse the preliminary data collected and produce a descriptive analysis of the samples, including means, standard deviations, and frequencies. This research will employ the structural equation modelling (SEM) technique to identify the causal interrelationship between FL, FRT, FA, FW, FB, and PRS adoption.

Table 3: Sources and items for each scale

Constructs	Sources	Items
Financial literacy (FL)	Perry and Morris (2005)	Item 1: I know what the interest rate is.
		Item 2: I know what the finance charge is.
		Item 3: I know what credit ratings are (e.g., ratings given to customer's background and credit history).
		Item 4: I am knowledgeable about credit terms (e.g., loan tenure, grace period, penalty).
		Item 5: I know how to manage finances.
		Item 6: I know how to invest money.
		Item 7: I understand the contents of the credit report (e.g., BNM's CCRIS report).
Financial risk tolerance (FRT)	Rahman et al. (2023)	Item 1: If an investment will carry profit, I am willing to borrow money to make this investment.
		Item 2: I must take more risks to improve my financial position.
		Item 3: I want to be sure my investments are safe (reverse coded).
Financial attitude (FA)	Godwin and Carroll (1986)	Item 1: I should concentrate on the present when managing my finances (reverse coded).
		Item 2: Financial planning for retirement is not necessary for assuring one's security during old age (reverse coded).
		Item 3: Having a financial plan makes it difficult to make financial investment decisions (reverse coded).
		Item 4: A savings plan is unnecessary in today's world to meet one's financial needs (reverse coded).
		Item 5: It is essential to plan for the possible disability of a family wage earner.

		Item 6: Planning is an unnecessary distraction when families are just trying to get by today (reverse coded).
		Item 7: Keeping records of financial matters is too time-consuming to worry about (reverse coded).
		Item 8: Saving is not essential (reverse coded).
		Item 9: I must develop and stick to a regular saving pattern.
		Item 10: Thinking about where I will be financially in 5 or 10 years is essential for financial success.
Financial well-being (FW)	Munisamy et al. (2022)	Item 1: I am satisfied with my current financial situation.
		Item 2: I am confident I have enough money to live comfortably in old age.
		Item 3: I am confident I have control over my finances.
		Item 4: I am confident I know how to manage my finances.
		Item 5: I can quickly get MYR1,000 to cover emergency needs.
		Item 6: I am worried about my financial situation today (reverse coded)
		Item 7: I can plan my financial aspects well.
		Item 8: I am satisfied with my financial situation.
		Item 9: I am confident that my financial resource situation is stable.
		Item 10: I often have trouble paying monthly bills (electricity, telephone, instalments) (reverse coded).
		Item 11: I often run out of money before receiving my next paycheck (reverse coded).
		Item 12: I am worried about my overall financial position.
Financial behaviour (FB)	Fitzsimmons et al. (1994)	Item 1: I have a weekly or monthly budget that I follow.
		Item 2: I review and evaluate spending regularly.
		Item 3: I live from paycheck to paycheck (reverse coded).
		Item 4: I regularly set aside money for savings.
		Item 5: I write down where I spent my money.
		Item 6: I estimate household net worth.
		Item 7: I set aside money for retirement.
		Item 8: I create financial goals.
		Item 9: I make plans on how to reach my financial goals.
		Item 10: I developed a plan for my financial future.
		Item 11: I regularly review my total financial situation.
		Item 12: I often spend more money than I have (reverse coded)
		Item 13: I usually pay the credit card bills in full.
		Item 14: I get into more debt each year (reverse coded).
		Item 15: I compare my credit card receipts with monthly statements.
		Item 16: I evaluate my risk management (insurance) strategies.

4.0 Conclusions

Further research is required because there is a lack of research and inconclusive evidence on the effect of financial-related factors (FL, FRT, FA, FW, FB) on PRS adoption. Hence, this research will design and distribute a questionnaire survey to empirically examine the effect of the financial-related factors (FL, FRT, FA, FW, FB) on PRS in Malaysia. Responses from the private sector employees and the self-employed will be analysed using structural equation modelling (SEM) to test the research hypotheses. We hope the research findings will help PRS providers strategically market and deliver PRS to the targeted contributors. We also anticipate that the results will aid the government in formulating its policies and help researchers craft their upcoming research, specifically focusing on PRS.

Acknowledgements

Paper Contribution to Related Field of Study

Besides contributing to the body of knowledge on financial behaviour literature, this research's findings would benefit both the government and PRS providers. The government can leverage the findings to improve policy formulation that benefits Malaysian citizens, especially by educating private sector employees and self-employed individuals on the importance of retirement fund accumulation. The findings will shed light on PRS providers in designing PRS, besides developing strategies necessary for PRS providers to encourage private sector employees and the self-employed to contribute to PRS for retirement fund accumulation.

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