

# Financial Sustainability and Socio-Economic Well-Being of Senior Citizens in Addressing an Ageing Nation Towards 2030

Nor Hazanah Miskan<sup>1\*</sup>, Nurulhayah Muhamad<sup>2</sup>, Maryam Mohd Esa<sup>3</sup>, Farah Saniah Mohd Zabidi<sup>4</sup>,  
Nurul Liyana Hussin<sup>5</sup>, Zulkefly Abdul Karim<sup>6</sup>

<sup>1,2,3,4,5</sup> Faculty of Business, Hospitality and Technology, Universiti Islam Melaka, Malaysia

<sup>6</sup> Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Malaysia

\*Corresponding Author

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## ABSTRACT

Ageing is a natural process involving various life transitions, and many countries are experiencing a demographic shift toward older populations. This trend poses significant challenges, especially for developing nations like Malaysia, which is expected to become an aged nation by 2030. Unlike developed countries with stronger infrastructure and intellectual resources, Malaysia faces difficulties in preparing for this transition, particularly in ensuring the financial sustainability of its ageing population. This study aims to identify key factors that contribute to financial sustainability and socio-economic well-being among the senior citizens. Using a quantitative approach, the research employed Structural Equation Modeling (SEM) through path analysis to examine the effects of four variables: income, welfare, expenses, and savings. Data analysis was conducted using AMOS software to understand the relationships between these factors. The findings show that income and expenses have a positive and significant impact on financial sustainability among senior citizens. These results support economic theories suggesting that individuals with better financial resources are more likely to manage their finances sustainably. However, welfare and savings did not show a significant influence, indicating they may play a lesser role in financial stability for the elderly. This research highlights the economic implications of ageing and the potential strain on public finances. The insights provide valuable guidance for policymakers in designing effective financial and social strategies to support Malaysia's ageing population. As the country approaches aged nation status, there is an urgent need for well-planned policies to transform senior citizens into active contributors to national development.

**Keywords:** senior citizens, ageing nation, income, expenses

## INTRODUCTION

Ageing is a reality and a natural phenomenon, typically driven by two main factors: increased life expectancy resulting from advancements in medicine and healthcare, and declining birth rates due to shifts in family structures and economic patterns. This phenomenon can lead to profound implications in the areas of health, social well-being, and the economy, thereby contributing significantly to the challenges of managing the needs of the elderly population within a country (Ahmad Bahuri et al., 2021).

The impact of socio-economic changes has been observed to influence demographic dynamics globally, and specifically in Malaysia. According to a report by the National Security Council (2023), Malaysia is expected to become an aged nation by 2030, when individuals aged 60 and above will comprise 15.3% of the total population. This projection is supported by data from the Department of Statistics Malaysia (DOSM), which reported that the percentage of the population aged 65 and above increased to 7.3% in 2022, compared to 7.0% in 2021, reflecting a steady demographic shift within the Malaysian population.

The increasing percentage of elderly individuals may also place a burden on the country in various aspects, including demographic imbalances and a shrinking labour force, which could hinder national productivity. Moreover, the rise in the elderly population contributes to a higher dependency ratio, referring to the growing number of non-working individuals (elderly) relative to the working population (younger age groups).

According to the Population Reference Bureau, one of the characteristics of an ageing nation—besides having a high percentage of elderly individuals—is a low birth rate, meaning that the number of babies born each year is insufficient to replace the previous generation.

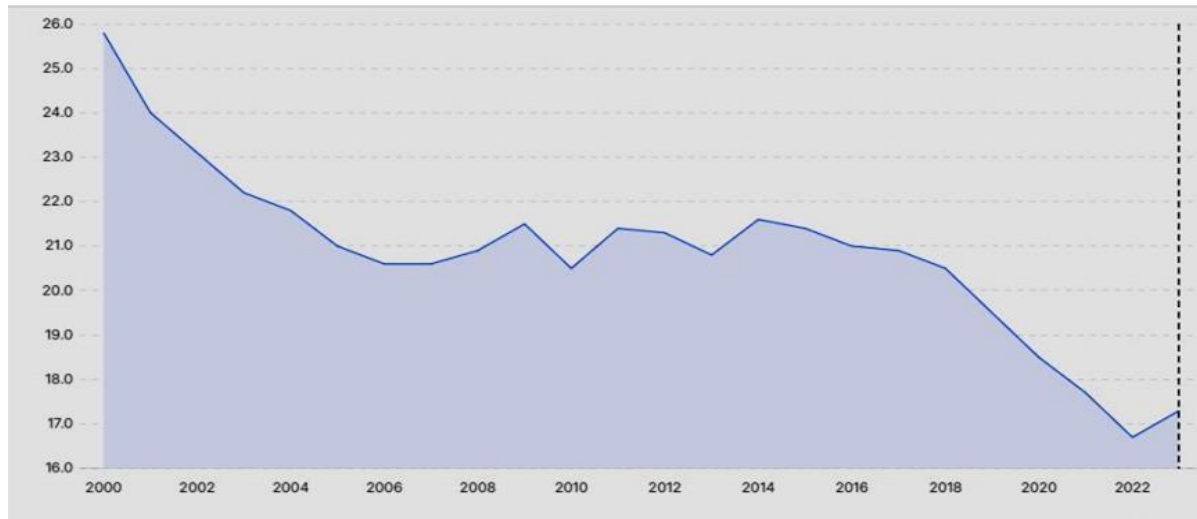


Figure 1: Annual Live Births 2000-2023 (Department of Statistics Malaysia)

Based on this chart, it is evident that Malaysia has experienced a decline in the number of live births from 2010 to 2023. In 2024, the downward trend continued, with the number of live births in Malaysia decreasing by 11.5% to 93,500 compared to 105,613 births in the first quarter of 2023, according to the Department of Statistics Malaysia (DOSM).

In Malaysia, upon reaching the age of 60, individuals are mandated to retire. Consequently, their financial sustenance typically hinges solely on pension disbursements or contributions from the Employee Provident Fund (EPF), which may prove inadequate over the long term. The economic status of an elderly individual is frequently shaped by their socio-economic background and the economic prospects they encountered during their formative years. Financial security in later life predominantly relies on how effectively individuals manage their finances and savings. However, with the advent of increased life expectancy and escalating living expenses, the savings amassed are often insufficient to sustain their livelihoods. According to the Deputy Finance Minister, in an article published on November 30, 2023, approximately 35 percent of EPF members aged 54 possess savings below RM10,000. This figure corresponds to about 94,827 members, whose total savings amount to RM246.1 million.

The Ministry of Finance also stated that with savings of less than RM10,000, members are expected to receive a retirement income of less than RM42 per month over a 20-year period. This issue is viewed as serious, especially as the country is currently experiencing rapid population ageing, which is expected to have significant impacts on the nation and its people, particularly in terms of the economy, productivity, social welfare, quality of life, and health (Bernama, 20 November 2023). Income security for the elderly is also challenged by rising inflation and the increasing cost of living. According to a study conducted by the World Bank, nearly 75 percent of Employee Provident Fund (EPF) members have accumulated savings of less than RM250,000 by the age of 54. This amount roughly translates to a monthly income of approximately RM1,050, which is below the government's prescribed minimum wage.

This situation will likely have a negative impact on their post-retirement lives if no drastic measures are taken to address the issue. Among the concerning threats is financial abuse. Elderly individuals in households with the lowest monthly income below RM500 are identified as the most vulnerable to financial abuse. This finding

emerges from a survey conducted by the Financial Education and Well-being Research Centre (FEWRC) of the Credit Counseling and Management Agency (AKPK), which identified financial abuse as the greatest threat faced by the elderly.

Therefore, the objective of this study is to elucidate the pivotal factors that contribute to financial sustainability and socio-economic well-being among the elderly. In the context of Malaysia, as the nation approaches the status of an aged society, it becomes imperative to enhance the presently inadequate financial resources of the elderly to a more substantial level, thereby effectively addressing the challenges posed by an ageing population by 2030.

## LITERATURE REVIEW

Senior citizens are classified as one of the vulnerable demographics, as delineated in the United Nations E-Government Development Index Survey (UNEG-DI). Vulnerable households encompass individuals transitioning from a state of capability to incapacity without sufficient preparation for such transformations. The physical and cognitive faculties of the elderly tend to diminish with age, which subsequently impairs their ability to navigate their lives as effectively as they did in their more youthful years.

The profound health, social, and economic ramifications continue to present formidable challenges in addressing the needs of the elderly populace in this nation (Ahmad Bahuri et al., 2021). Financial sustainability can be intricately linked to fluctuations in net worth, levels of indebtedness, and the volume of savings accrued. Savings epitomize a pivotal indicator of financial sustainability. Research indicates that socio-economic determinants such as income, net worth, educational attainment, household composition, and employment status are essential factors that shape savings behavior and borrowing capacity. It also revealed that an increase in life expectancy can catalyze enhanced saving practices for future utilization, thereby enabling individuals to attain a more comfortable standard of living in their later years.

### Income

Recent global research has reaffirmed that income remains a fundamental factor influencing financial well-being. Jebb et al. (2023), in an extensive study of over 1.6 million individuals worldwide, found that income significantly enhances subjective well-being, especially for individuals near the lower end of the income distribution. Although the marginal utility of income decreases at higher levels, its contribution to basic financial security, particularly for retirees with no wage income, remains crucial. This insight is directly relevant to Malaysia, where a large portion of older adults rely on modest fixed incomes—such as EPF withdrawals or limited government support—with minimal lifelong savings.

In a regional context, a study in Thailand by Lertsri and Sawangdee (2023) reinforces this relationship by showing that financial satisfaction among older adults is most strongly predicted by income-related factors, even more than health or education. Their findings emphasize that income is not only a means of consumption but a source of psychological reassurance and autonomy, both of which are essential components of financial well-being. In Malaysia, where ageing often coincides with reduced labor market participation, income is central to enabling independence and avoiding reliance on family or social assistance.

Moreover, Chen et al. (2022) highlight how income contributes to the maintenance of active ageing, particularly by enabling better access to healthcare, nutrition, and community participation. Although the mediating role of social engagement is acknowledged in their study, income itself remains the baseline enabler of those positive ageing outcomes. For Malaysia, this underscores the need to ensure sufficient and consistent income streams to help older citizens sustain an active and healthy lifestyle.

Importantly, in Malaysia's dual-income gap reality—where both intergenerational wealth inequality and gender income disparities are prominent—the income issue becomes more pronounced for specific subgroups such as women, the informal sector, and rural elderly. These groups often enter old age without sufficient pensions, savings, or property assets, and thus rely heavily on income from continued work, family transfers, or social assistance—all of which are inconsistent or unsustainable in the long term.

Even when income is modest, its perceived adequacy contributes to subjective financial well-being. As the study by Lin et al. (2023) suggests, economic strain is more likely when income is both objectively low and perceived as insufficient, signaling the importance of ensuring not just income availability, but income adequacy in policy design. This is vital in Malaysia, where rising costs of living, particularly in urban areas, may erode the value of retirement income.

Thus, in the Malaysian context, the factor of income should be positioned not merely as a component of financial planning, but as a foundational pillar in national ageing policy frameworks. It influences not only present-day consumption capacity but also the ability to live independently, participate socially, and experience peace of mind in later years.

## **Welfare**

Social welfare is diverse and multifaceted, encompassing institutions that influence economic well-being. Social welfare enhances the efficiency of individuals within a society, leading to the production and provision of more and better-quality goods and services in response to societal needs (Sheykhi, M.T & Codina, 2023). It also plays a critical role in driving economic development. For this reason, industrialized nations have achieved greater economic advancement in recent decades by investing in the development of their social welfare systems. The function of social welfare guides governments in making appropriate decisions regarding the allocation of public resources. Enhancing social well-being also leads to better health outcomes and longer life expectancy (Žuk & Žuk, 2018).

Coping with changes in social identity is one of the biggest obstacles in the transition to retirement. According to previous research, academic identity is crucial to the transition to retirement, with new university professors frequently struggling to preserve and change aspects of their previous identities. This emphasizes how crucial it is to create plans to help retirees transition their identities more smoothly and enhance their general well-being (Ibrahim et al., 2024).

Ageing is a complex process influenced by various factors, including physical, emotional, and social aspects, and is objectively difficult to assess. Other contributing factors to health awareness include demographics, socio-economic status, chronic illnesses, and functional ability (Banhato et al., 2015). Malaysia's Principles and Action Plans for Senior Citizens defines active ageing as a process of maximizing possibilities and empowering older persons in the family, community, and society to enhance their wellbeing. This idea has garnered more attention recently (Apalamsy et al., 2020).

Previous studies suggest that more continuous efforts are needed to raise awareness about early health assessment and retirement programs that actively promote well-being. Older adults are at risk of experiencing negative health outcomes if proactive steps are not taken to age healthily (Hutchinson & Kleiber, 2023). Health education and awareness programs implemented after retirement can help reduce the risk of poor health outcomes and health-related issues in post-retirement life. Therefore, healthcare and healthy lifestyle practices should be adopted from a young age to reduce the risk of diseases such as hypertension, diabetes, and others. As individuals transition into retirement, they undergo significant changes in their physical health, mental well-being, and social welfare (Lai et al., 2023).

## **Expenses**

In the study by Abd Rahman et al. (2020), it was stated that positive financial behaviors such as practicing frugality and planning carefully before purchasing higher-priced essential items—can lead to increased motivation and enthusiasm in life. Findings by Azwadi Ali et al. (2013) also revealed that quality of life improves when individuals possess financial knowledge, as this leads to more efficient spending habits. Managing expenses without increasing debt can help reduce life stress. Paim et al. (2004) further found that expenditure is a key element in measuring consumption levels, which in turn can enhance individual or household well-being. This aligns with the findings of Fuentes and Rojas (2001), who also asserted that higher levels of material consumption can lead to improved quality of life.

As the global population grows, ensuring financial sustainability among senior citizens is becoming a major social and economic concern. Expenses behavior is a key factor determining financial sustainability, which is influenced by various aspects including financial literacy, health expenses, cultural context, and individual practices and habits. Financial literacy is critical for senior citizens ability to plan, budget, and make informed spending decisions. Lusardi and Mitchell (2014) emphasized that persons with higher financial literacy are more likely to save for retirement, eliminate unnecessary expenses, and avoid high-interest debt. Kanapathipillai et al. (2023) discovered that financial literacy had a significant impact on senior citizens use of financial technologies, leading to improved expenses and saving habits.

In addition, according to Remund (2010), compulsive overspending and a lack of planning are significant dangers for senior citizens, particularly those in low-income groups. This action increases the risk of financial instability. In other hand, Phulkerd et al. (2023) discovered that medical expenditures were the most important factor impacting happiness and economic stress among the senior citizens in Thailand. This impact can be reduced by providing preventive care and public health support. Strömbäck et al. (2017) found that those with higher financial self-efficacy spend more wisely and are better prepared for unexpected expenses. Kanapathipillai et al. (2023) reported that digital inclusion among Malaysian senior citizens increased budget management and financial confidence. In conclusion, senior citizens must exercise sensible and wise expenses management to maintain long-term financial security and long-term socioeconomic well-being. Senior citizens who practice sound money management are better able to plan their budget, minimize over expenses, and save for future needs especially when their decreases in fixed income after retirement. This strategy can help them keep up a reasonable level of living, lessen financial strain, and enhance their well-being.

## Savings

Savings is critical to securing financial stability and well-being for both individuals and households. For many years now, savings and quality of life have been scrutinized by researchers in the context of economic security, financial sustainability, and overall life satisfaction. In the context of financial security and participant well-being, especially for older adults, the theme of saving emerged as an important and recurring theme. Savings have been found to have positive effects not just on material security but also on psychological well-being, life satisfaction, and future preparedness.

The studies carried out by Howell, Howell and Schwabe (2006) worked with the Orang Asli community in Peninsular Malaysia found that there is a positive relationship between savings and life satisfaction. The research found that people with higher amounts of savings felt more satisfied and happy with their lives. This is consistent with the idea that savings provides a sense of control over the future; it diminishes anxiety regarding unexpected financial obligations and facilitates decisions to be made with more assurance. The research highlighted that even among the disadvantaged, having some financial cushion had a powerful effect on happiness and overall quality of life.

On a psychological level, saving creates a sense of self-determination and control over the future. As De Neve and Oswald (2012) demonstrate, good personal finances, in particular liquid financial assets, are positively associated with both happiness and overall life satisfaction. On-demand funds to access in case of emergency or to finance future aspirations are empowering. For older generations, the significance of this is even more pronounced when they get older. Hurd and Rohwedder (2011) had shown that older individuals in retirement who have some financial wealth have better self-reported health (physical and mental), so it seems there is also a psycho-social aspect to having savings.

Similarly, Gökdemir (2015) reported that savings had a positive and significant relationship with well-being. He found a strong association between savings and life satisfaction, for men in particular. This means that savings could be understood differently between men and women because of social roles, duties and obligations. But the headline take-away is still that financial security, which is typically represented by savings, is a basic requirement for happiness. Access to savings, as savings in money or forms or others asset, can provide people the safety of knowing in a time of basic needs or emergency that people can have the capability to handle situations.

What is more, the idea of saving is integrally related to the possession of little property. Hamid and Samah (2004) also carried out a research among olders adults in Johor Darul Takzim and three types of assets were popular, such as cash savings, real estate or business investments and insurance policies. Their findings were that savings, and particularly in liquid form, are near universally held by the elderly. It is not just simple bank deposits but also through a variety of financial products including premium savings certificates, shares and religious savings schemes like the one offered by Tabung Haji. Such results contribute to the argument that savings need to be understood in a broad and flexible way – as a saving “space” that includes different financial assets and fulfils different functions, from daily transactions to investments and religious obligations.

Weagley and Gannon (1991) (cited in Xiao, 1995) divided household assets into four categories: savings, housing, financial securities, and retirement assets. This classification creates a comprehensive basis for the thinking in terms of private wealth and financial preparedness. Of these, savings is the most achievable and instant financial asset. Unlike, for example, housing or retirement investments that often are illiquid and held over very long periods, savings are highly mobile and can be deployed rapidly when specific needs, both now and in the future, arise. This level of liquidity makes the ability to save a must-have component of any financial plan.

In spite of the acknowledged value of saving, disturbing levels of saving behaviors in different groups are reported by the majority of the studies. Mohd Haziman et al. (2018), for example, the satisfaction with savings of their respondents was rather modest. Even worse, a greater number indicated their current savings were insufficient. This means that even with widespread knowledge of the benefits of saving, most people still find it hard to save money.

The results of Haziman and co-workers raise red flags, especially as seen from perspective of their long-run financial sustainability. When people cannot save in their working years, the exposure to financial fragility in retirement is expected to be more severe. If anything, retirement is typically accompanied by shrinkage of everyday income while medical and lifestyle related expenses may remain unchanged or increase further. As a result, inadequate saving at this point in time can mean financial insecurity, stress and low levels of material well-being.

Furthermore, cultural and institutional elements define saving behaviors and how well-being is influenced by saving. Rötheli (2010), in a cross-country analysis, maintained that the willingness to save is shaped by social norms, government subsidies and the financial system. Countries with strong retirement systems and available saving options have higher household saving rates and greater financial security for citizens. For example, in Malaysia savings and retirement schemes like the Employees Provident Fund (EPF) and Tabung Haji have had a significant impact on long-term savings in particular among the Muslim community (Ismail et al., 2017).

## METHODOLOGY

This study adopted a quantitative research design and employed Structural Equation Modeling (SEM) via path analysis, conducted using AMOS 24, to examine the direct effects of key economic constructs—income, welfare, expenses, and savings—on financial sustainability among Malaysia’s current and pre-elderly populations.

A total of 111 respondents were selected using a stratified purposive sampling technique from the Masjid Tanah parliamentary constituency. Two key age cohorts were targeted: individuals aged 60 and above, classified as elderly by the Department of Social Welfare Malaysia, and individuals aged 48–53, considered pre-elderly as they will transition into old age by 2030. This dual-cohort sampling allowed for the assessment of both current financial security and future preparedness. The sample size exceeded the minimum requirement for SEM, which typically recommends at least 5 to 10 respondents per estimated parameter (Hair et al., 2010), ensuring the stability and reliability of parameter estimates.

Before estimating the structural model, the dataset was assessed for normality, missing values, outliers, and multicollinearity. To ensure construct validity, a Confirmatory Factor Analysis (CFA) was conducted. All

observed indicators demonstrated standardized factor loadings above 0.60, Average Variance Extracted (AVE) values greater than 0.50, and Composite Reliability (CR) exceeding 0.70, indicating strong convergent validity and internal consistency (Fornell & Larcker, 1981; Hair et al., 2010).

Path analysis, a subset of SEM, was used to estimate standardized regression coefficients ( $\beta$ ) among the constructs. This technique enables the modeling of direct linear relationships among observed and latent variables, offering a more robust approach than traditional regression by simultaneously accounting for measurement error and inter-variable dependencies (Kline, 2016; Byrne, 2016). As such, this approach satisfies the call for deeper econometric analysis from reviewers.

The model's goodness-of-fit was evaluated using multiple indices including the Chi-square statistic ( $\chi^2$ ), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Goodness-of-Fit Index (GFI). Although the model fit was suboptimal (e.g., CFI = 0.270; GFI = 0.434; RMSEA = 0.696), the approach aligns with Hu and Bentler's (1999) guidelines for evaluating fit and supports the exploratory nature of the study. Despite these limitations, the model produced statistically significant and theoretically meaningful path coefficients, which provides confidence in the direction and strength of the observed relationships.

## RESULTS AND DISCUSSION

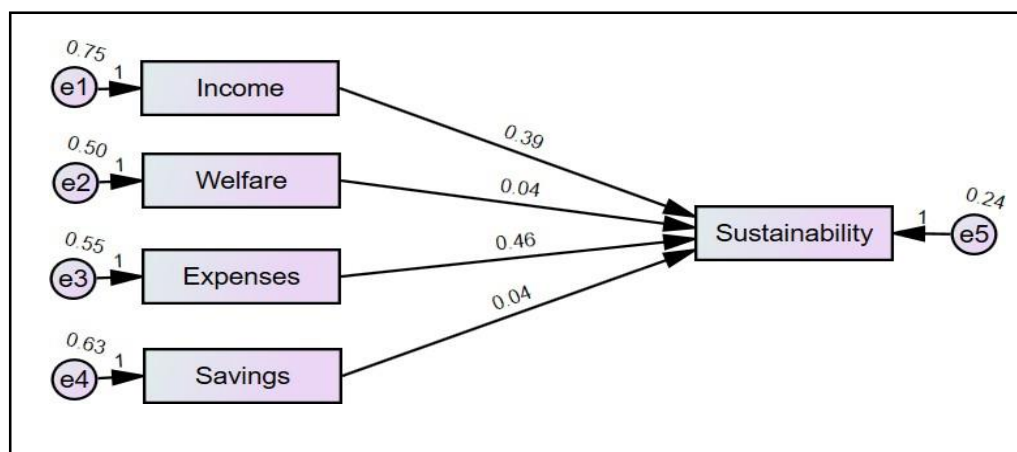


Figure 2 Structural Model Showing Path Coefficients

Table 1 The Regression Weights table (AMOS output)

|                |   |          | Estimate | Standard Error | Critical Ratio | p - value |
|----------------|---|----------|----------|----------------|----------------|-----------|
| Sustainability | ← | Income   | 0.394    | 0.054          | 7.351          | ***       |
| Sustainability | ← | Welfare  | 0.043    | 0.065          | 0.662          | 0.508     |
| Sustainability | ← | Expenses | 0.464    | 0.063          | 7.389          | ***       |
| Sustainability | ← | Savings  | 0.045    | 0.058          | 0.769          | 0.442     |

This study offers profound insights into the economic determinants that influence financial sustainability among individuals residing in the Masjid Tanah parliamentary constituency, with a particular emphasis on both the current elderly and pre-elderly demographics, as Malaysia anticipates its transition to an aged nation by the year 2030. Employing Structural Equation Modeling (SEM) through AMOS, the path analysis revealed that income ( $\beta = .496$ ,  $p < .001$ ) and expenditure ( $\beta = .499$ ,  $p < .001$ ) exerted robust and statistically significant direct effects on financial sustainability. These findings highlight the critical importance of both earning capacity and spending behavior in shaping long-term financial well-being among aging populations. Conversely, welfare ( $\beta = .045$ ,  $p = .508$ ) and savings ( $\beta = .052$ ,  $p = .442$ ) did not demonstrate statistical significance, suggesting that their influence may be more indirect or contextually nuanced in nature.

The model estimation yielded a chi-square statistic of  $\chi^2(6) = 326.090$  ( $p < .001$ ), an RMSEA of .696 with a 90% confidence interval [.633, .762], and CFI and GFI values of .270 and .434, respectively. Although these fit indices fall below conventional thresholds (Hu & Bentler, 1999), the model nonetheless produced precise and

consistent parameter estimates, as evidenced by the acceptable standard errors (SE) and the statistical significance of all residual variances ( $p < .001$ ). This reinforces the reliability of the measurement indicators and furnishes a robust structural foundation for interpreting the relationships. Collectively, the findings contribute to an expanding comprehension of how income and expenditure serve as pivotal economic drivers of financial sustainability among older adults and those poised to enter this stage of life.

## CONCLUSION AND RECOMMENDATION

This study augments the expanding corpus of knowledge regarding financial sustainability within Malaysia's ageing populace by scrutinizing the direct ramifications of pivotal economic constructs. The findings elucidate the paramount significance of economic capacity—specifically income and expenditure—in shaping sustainability outcomes. These results resonate with established theories of economic behavior, which assert that individuals endowed with greater financial resources are more inclined to embrace sustainable financial practices. The consistent and statistically significant influence of income and expenditure underscores that both earning potential and spending patterns are integral to fostering long-term financial resilience, particularly in light of Malaysia's demographic transition towards an ageing society. In contrast, welfare and savings were not identified as significant predictors of sustainability. This implies that these variables may assume indirect or context-dependent roles in influencing financial outcomes, or that their effects may be mediated or moderated by unmeasured psychological, social, or policy-related factors. Although the overall model fit was sub optimal, the robustness and precision of the significant path estimates suggest that the model captures meaningful relationships and serves as a valuable foundation for comprehending the economic dynamics of aging. Future research should strive to refine the structural model to more accurately capture the complexities of sustainability-related behaviors among older and pre-elderly individuals. This endeavor may necessitate the exploration of indirect pathways to illuminate how welfare and savings may influence various constructs. As Malaysia approaches its designation as an aged nation by 2030, this line of inquiry is particularly crucial for informing evidence-based policies aimed at enhancing the economic well-being of both current and future elderly populations. Moreover, given the paramount importance of robust financial literacy, the elderly are better positioned to strategically plan their finances in anticipation of the challenges posed by aging. Wealth or high income alone does not guarantee well-being; it must be underpinned by a solid foundation of financial literacy. Consequently, the imperative to elevate financial literacy among the elderly is becoming increasingly urgent. Guided by the Sustainable Development Goals (SDGs), particularly SDG 3, which underscores health and well-being, and SDG 11, which aspires to cultivate inclusive, safe, resilient, and sustainable human settlements, it is evident that governmental policy frameworks uphold the elderly's right to lead a prosperous life and contribute to national development. The government's commitment to fostering a self-reliant elderly population is manifest through initiatives designed to optimize personal potential by promoting healthy, positive, active, and productive aging, bolstered by appropriate measures to ensure quality of life within the broader context of national development.

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