Bibliometric Analysis of Retirement Planning and Financial Stability

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ABSTRACT

This study presents a comprehensive bibliometric analysis of global research on retirement planning and financial stability, using data retrieved from the Scopus database and visualized through VOSviewer. The analysis reveals a multidimensional scholarly landscape structured around key themes such as social security systems, financial behavior, psychological readiness, and healthrelated factors. Findings indicate a significant shift in research focus over the past decade-from institutional and policy-oriented approaches to individual-centric perspectives emphasizing financial literacy, retirement planning, and investment strategies. Influential authors including Mitchell, Lusardi, and Hershey have shaped the intellectual development of the field through interdisciplinary contributions. The United States dominates both in publication output and international collaboration, although emerging participation from countries such as India and Thailand suggests increasing global interest. The study identifies critical research gaps in digital financial tools, informal employment contexts, and health-retirement linkages, calling for more inclusive and forward-looking studies. These insights offer valuable guidance for researchers, policymakers, and practitioners in designing effective strategies to promote financial security in retirement.

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1. INTRODUCTION

Retirement planning has become a crucial area of interest within financial research and public policy, particularly in light of changing global demographics and economic uncertainties. As the global population ages, the need for robust retirement planning mechanisms intensifies, prompting governments, financial

institutions, and individuals to reassess longterm financial strategies. The shift from defined benefit pension systems to defined contribution plans in many countries has further transferred the burden of retirement preparedness to individuals, thereby increasing the complexity and urgency of personal financial planning [1]. Moreover, the rising life expectancy has extended retirement periods, necessitating larger savings to ensure financial stability throughout later life [2], [3].

The concept of financial stability in retirement encompasses not only accumulation of sufficient assets but also the effective management of those resources during retirement. This requires multidisciplinary approach, incorporating insights from behavioral economics, financial literacy, investment management, and social policy [4], [5]. The growing prevalence of informal employment in developing nations adds another layer of complexity, as many individuals in such sectors lack access to formal retirement savings programs [6]. These challenges underline the importance of identifying trends and research gaps in the literature on retirement planning and financial stability.

Recent decades have witnessed a surge in academic research focused on the determinants and outcomes of retirement planning. Studies have explored the role of financial literacy, risk tolerance, saving psychological behavior, factors, and institutional frameworks in influencing retirement preparedness [7]–[9]. Additionally, the emergence of fintech solutions and digital financial planning tools has provided new avenues for enhancing retirement outcomes. Despite the increased scholarly attention, the literature remains fragmented across disciplines and lacks a comprehensive synthesis that maps the intellectual structure of this evolving field.

Bibliometric analysis offers systematic method to evaluate the evolution and structure of scholarly output on retirement planning and financial stability. Through citation analysis, co-authorship mapping, and keyword clustering, bibliometric techniques can reveal core themes, influential authors, key publications, and collaborative networks in the field [10]. By using tools like VOSviewer, researchers can visualize the trajectory of research trends, identify thematic gaps, and suggest future directions for academic inquiry. Such an analysis is essential not only for academic purposes but also for informing policymakers and practitioners about the development and priorities in retirement-related financial research.

Given the socioeconomic diversity of global populations, comparative research on retirement planning has also Differences momentum. in retirement systems, social security coverage, and financial behaviors between developed and developing countries highlight importance of contextualized studies. Yet, there is limited bibliometric evidence that maps how these contexts shape scholarly attention and influence research impact. A thorough bibliometric study can uncover whether certain populations or regions are underrepresented in the literature, thereby informing efforts toward more inclusive and globally relevant retirement policy research.

Despite the growing body literature on retirement planning and financial stability, there is a lack of integrative bibliometric studies that systematically examine the evolution, influential themes, and intellectual foundations of this domain. Current reviews are often narrative in nature, failing to leverage data-driven methods to hidden uncover patterns, leading conceptual contributors, and hotspots. stakeholders-including Consequently, researchers, practitioners, policymakers—lack consolidated understanding of the field's development and its knowledge gaps. This limits the ability to design effective financial education programs, optimize policy frameworks, and align academic efforts with real-world challenges. The objective of this study is to conduct a comprehensive bibliometric analysis of the scholarly literature on retirement planning and financial stability using data from Scopus.

2. METHODS

This study adopts a quantitative bibliometric analysis approach to systematically examine the scholarly landscape of retirement planning and financial stability. Bibliometric analysis is a widely used method for mapping the

structure and dynamics of knowledge through statistical analysis of publications, citations, and co-occurrence patterns. The data source for this study is the Scopus database, one of the largest and most comprehensive abstract and repositories for peer-reviewed literature. The search strategy involved querying terms such as "retirement planning," "financial stability," "pension planning," and "retirement savings" in the title, abstract, and keywords fields. The publication time frame was set between 2000 and 2024 to capture recent developments and trends.

After retrieving the dataset, the records were cleaned and filtered to remove

duplicates, irrelevant documents conference proceedings without peer review), and publications outside the scope of the study. Only articles and reviews published in English were included to maintain consistency. The selected records exported in BibTeX and CSV formats for further analysis. Bibliometric tools such as VOSviewer were employed to visualize coauthorship networks, keyword co-occurrence clusters, and citation relationships. VOSviewer's strength lies in its ability to generate distance-based maps that clearly depict the intellectual structure and thematic evolution of a research field.

3. RESULTS AND DISCUSSION

3.1 Keyword Co-Occurrence Network

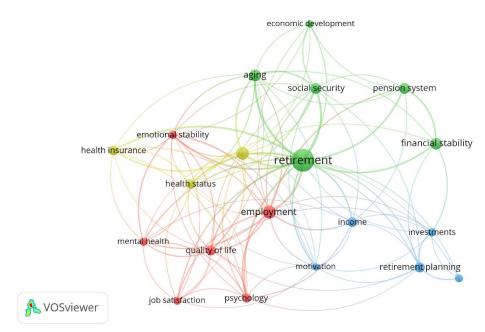


Figure 1. Network Visualization Source: Data Analysis Result, 2025

Figure 1 illustrates the conceptual structure of academic research related to *retirement*, revealing several thematic clusters through keyword co-occurrence mapping. The central node, "retirement", is the most prominent, indicating its pivotal role and high frequency in the literature. Its extensive links to various other nodes suggest that retirement is explored in a highly interdisciplinary

manner, bridging topics across economics, health, psychology, and public policy. This reinforces the complex, multifactorial nature of retirement as both a financial and social phenomenon.

The green cluster primarily focuses on macro-level and policy-oriented aspects of retirement. It includes terms such as *social security, pension system, financial stability,*

economic development, and aging. This indicates that a substantial body of research examines retirement in the context of national economic systems and institutional frameworks. Keywords like pension system and social security highlight the role of government policies in ensuring post-retirement welfare, while the inclusion of economic development suggests that retirement policies are often studied in relation to broader economic performance and demographic transitions.

The red cluster centers around psychological and emotional dimensions associated with retirement, including employment, job satisfaction, mental health, quality of life, and psychology. This reflects growing scholarly attention psychosocial impacts of retiring, particularly how the end of formal employment affects individuals' mental and emotional wellbeing. The close proximity between employment and terms like mental health and quality of life suggests that the transition out of the workforce is a critical factor influencing retirees' overall well-being, with employment status often serving as both a determinant and a buffer against negative outcomes.

The yellow cluster bridges healthrelated factors, including *health insurance*, *health status*, and *emotional stability*. This cluster overlaps conceptually with both the red and green clusters, implying that health is a mediating factor between financial systems and quality of life in retirement. The link between *emotional stability* and *health status* indicates that physical and emotional health are often studied jointly, and their interplay significantly influences retirement outcomes. The connection to *health insurance* underlines the importance of healthcare access and affordability as components of retirement security, particularly in countries lacking universal coverage.

primarily The blue cluster is concerned with financial behavior and planning aspects of retirement, incorporating keywords such as retirement planning, investments, income, and motivation. This thematic area focuses on the preparatory phase before retirement, examining how individuals accumulate and manage financial resources. The presence of *motivation* suggests behavioral economics perspectives are also at play, exploring why and how individuals make long-term financial decisions. The strong link between retirement planning and financial stability underscores the critical role of proactive financial behavior in ensuring sustainable retirement outcomes.

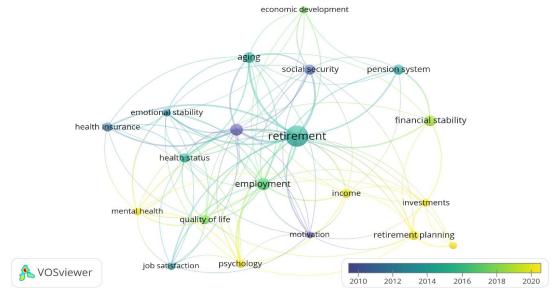


Figure 2. Overlay Visualization Source: Data Analysis Result, 2025

Figure 2 presents the temporal evolution of research themes related to retirement and financial stability. The color gradient, ranging from blue (older average publication years) to yellow (newer), indicates the average year in which keywords appeared in publications. The central term, "retirement", remains thematically consistent and foundational across time, as reflected by its greenish hue, suggesting a stable and continuous focus from 2013 to 2017. This centrality and moderate recency underscore its enduring relevance in academic discourse.

Notably, more recent research fronts are clustered in the bottom-right quadrant, with keywords such as retirement planning, investments, motivation, income, and financial stability appearing in yellow shades, indicating their emergence or growing interest particularly after 2018. This trend suggests a shift in scholarly focus toward proactive individual-level financial strategies,

emphasizing personal responsibility and behavioral economics in securing post-retirement well-being. The growing attention to *motivation* and *planning* reflects a research push toward understanding psychological and behavioral drivers of retirement readiness in the context of changing pension structures and longer life expectancy.

In contrast, terms shaded in blue and purple, such as *social security*, *health insurance*, *emotional stability*, and *health status*, represent earlier waves of research—generally from 2010 to 2014. These keywords highlight the traditional focus on institutional support systems, public policy frameworks, and health determinants of retirement outcomes. While still connected to the core topic, their earlier emergence suggests a foundational phase in the literature where retirement was primarily viewed through the lens of government support and population health.

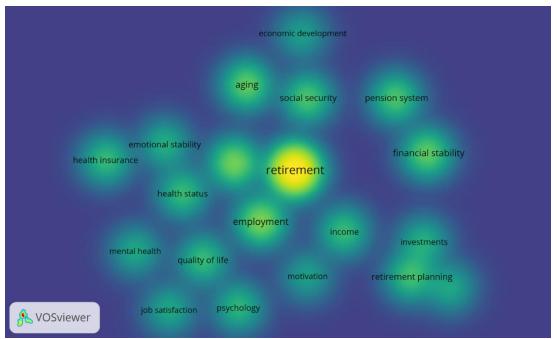


Figure 3. Density Visualization *Source: Data Analysis*, 2025

Figure 3 highlights the frequency and prominence of keywords in the literature on retirement and financial stability. The keyword "retirement" appears at the brightest yellow center, indicating it is the

most frequently occurring and central theme within the dataset. Surrounding it are other high-density (green to yellow) terms like *employment*, *health status*, *social security*, *financial stability*, and *retirement planning*.

These closely linked terms suggest that the literature heavily focuses on both institutional support systems and individual financial preparedness as core components of retirement-related research.

Keywords in darker green or blue surroundings—such as psychology, job satisfaction, mental health, and economic development—appear less frequently but are

still relevant and connected to the core concept. These peripheral terms indicate areas of **emerging or supportive interest**, suggesting that while they may not dominate the literature, they provide important interdisciplinary insights into how retirement is influenced by psychological well-being, quality of life, and macroeconomic factors

3.2 Co-Authorship Network

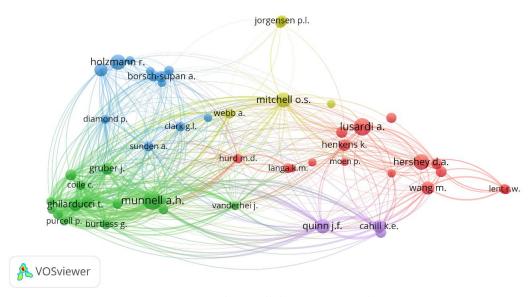


Figure 4. Author Collaboration Visualization Source: Data Analysis, 2025

Figure 4 visualization reveals the collaborative structure among leading scholars in the field of retirement planning and financial stability. The most prominent authors—Mitchell O.S., Lusardi A., Hershey D.A., Munnell A.H., and Holzmann R.—occupy central positions within distinct clusters, indicating their pivotal roles in shaping thematic subfields. For instance, Mitchell and Lusardi serve as intellectual bridges between multiple clusters, linking

institutional, behavioral, and financial aspects of retirement. The red cluster, centered on Hershey and Wang, focuses more on psychological and behavioral research, while the blue and green clusters, associated with Holzmann and Munnell respectively, reflect institutional and policy-related studies. The density and interconnectivity of the nodes suggest strong intra-group collaboration, with a few key figures facilitating interdisciplinary connections across clusters.

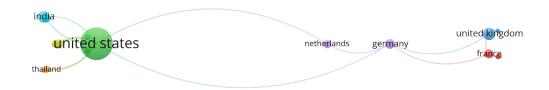




Figure 5. Country Collaboration Visualization Source: Data Analysis, 2025

Figure 5 illustrates international coauthorship networks in research on retirement planning and financial stability. The United States stands out as the dominant hub, exhibiting the largest node and most connections, indicating its central role and high research output in this field. It collaborates actively with both developed and developing countries, including Germany, India, Thailand, and the Netherlands, demonstrating a global outreach. European countries such as Germany, the United Kingdom, France, and the Netherlands form a secondary cluster of collaboration, interconnected through mutual coauthorships. However, the relatively small node sizes of countries outside the U.S. suggest that while international cooperation exists, the field is still heavily U.S.-centric, with emerging participation from Asian countries like India and Thailand.

3.3 Citation Analysis

Table 1. Top Cited Research

Citations	Authors and year	Title
240	[11]	The Financial Diaries: How American Families Cope in a World of Uncertainty
200	[12]	Building blocks of successful aging: A focus group study of older adults perceived contributors to successful aging
77	[13]	Prevalence and correlates of physical inactivity in community- dwelling older adults in Ireland
63	[14]	The cost of HIV/AIDS to businesses in southern Africa
54	[15]	The influence of money attitude, financial practices, self-efficacy and emotion coping on employees' financial well-being
48	[16]	Savings, assets, credit, and banking among low-income households: Introduction and overview
44	[17]	Systematic map of the literature on carbon lock-in induced by long-lived capital

Citations	Authors and year	Title
40	[18]	When I'm sixty-four: The plot against pensions and the plan to save them
33	[19]	Investor flows to asset managers: Causes and consequences
32	[20]	Beyond health and wealth: Predictors of women's retirement satisfaction

Source: Scopus, 2025

Discussion

This bibliometric analysis provides a comprehensive overview of the intellectual structure, research themes, authorship networks, and geographical contributions in the field of retirement planning and financial stability. The findings reveal a dynamic and evolving scholarly landscape marked by interdisciplinary engagement, thematic diversification, and a strong concentration of influence in specific regions and author groups.

One of the central findings from the co-occurrence and density visualizations is that "retirement" serves as the dominant and integrative keyword around which various subthemes are organized. The keyword mapping shows that retirement research encompasses four major thematic domains: institutional and policy frameworks (e.g., social security, pension system, economic development), individual financial behavior (e.g., retirement planning, investments, income, motivation), health and psychological wellbeing (e.g., mental health, emotional stability, quality of life), and employment transitions (e.g., job satisfaction, employment, aging). This multidimensionality confirms that retirement cannot be examined solely from a financial perspective but requires integration with public health, labor economics, and psychology [21], [22].

The temporal overlay map reveals an important transition in scholarly focus over time. Earlier research, typically between 2010 and 2015, focused on public systems and social safety nets, including social security, health insurance, and emotional stability. These topics, indicated by bluish hues, reflect an era where much of the academic concern revolved around government responsibility, aging populations, and pension reform. In

contrast, terms such as *retirement planning*, *investments*, and *motivation*, which appear in yellow shades, suggest a more recent interest (post-2018) in individual agency and proactive financial preparation for retirement. This shift aligns with broader socioeconomic trends, including the move from defined benefit to defined contribution pension schemes, growing financial autonomy, and the emergence of fintech tools that enable individuals to plan and manage retirement savings independently [23].

The co-authorship network highlights several influential scholars who have played a pivotal role in shaping the research field. Among them, Olivia S. Mitchell, Annamaria Lusardi, and David A. Hershey stand out as central connectors across thematic domains. Mitchell's work is well-known for its focus on pension systems, labor markets, and international retirement policy, while Lusardi has extensively contributed to the study of financial literacy and its impact on savings behavior. Hershey's research emphasizes psychological readiness and motivation in retirement planning. These scholars not only contribute high-impact publications but also foster academic collaboration, as shown by their linkages across multiple author clusters. This supports the idea that the field is being advanced by a core group of thought leaders, often affiliated with research institutes or policy advisory bodies.

Moreover, the author clusters can be interpreted as representing different disciplinary entry points into the retirement discourse. The green and blue clusters (including authors like Holzmann, Munnell, and Gruber) are largely rooted in economics and public policy, focusing on systemic pension reforms, demographic projections,

and macroeconomic modeling. The red cluster (with Hershey, Wang, and Lenton) is oriented toward psychological and behavioral studies, while the yellow-to-purple authors (such as Jorgensen and Cahill) appear to bridge gaps between sociology, labor studies, and economics. These inter-cluster connections are vital, as they reflect growing interdisciplinary convergence—a necessary evolution given the complex nature of retirement issues that transcend any single domain of expertise.

The geographical collaboration network further reinforces the dominance of the United States in retirement planning research. Not only does the U.S. generate the most publications, but it also functions as the primary hub for international scholarly partnerships. Collaborations between the U.S. and countries like Germany, India, and Thailand demonstrate an increasing globalization of retirement research, though the intensity remains unequal. European nations such as the Netherlands, Germany, France, and the United Kingdom form a smaller but interconnected regional hub, often influenced by the European welfare state model and aging-related policy challenges. The presence of India and Thailand, although smaller in scope, signals emerging interest from developing countries where retirement issues are compounded by informal labor markets and limited social protection.

These geographical patterns point to both opportunities and imbalances. The overrepresentation of Western institutions, particularly from the U.S., may lead to a theoretical and empirical bias that overlooks the realities of retirement in low- and middleincome countries. In these settings, issues like informal employment, lack of financial literacy, and absence of pension infrastructure pose significant challenges to retirement security [24]. Future research should aim for greater inclusivity by incorporating data from underrepresented regions contextualizing findings to different socioeconomic systems.

Another notable insight arises from the keyword co-occurrence and proximity of

concepts. Keywords like employment, health status, mental health, and job satisfaction show close proximity to retirement, indicating an important research interest in retirement transitions and the pre-retirement phase. This includes studies on delayed retirement, phased withdrawal from the labor force, and psychological impact of ceasing employment. The appearance of terms like motivation, psychology, and emotional stability shows that contemporary studies increasingly recognize the non-financial dimensions of retirement preparedness, including emotional readiness, life satisfaction, and personal identity after leaving the workforce.

In parallel, the growing appearance of investments and financial stability in recent years underlines a heightened emphasis on asset accumulation and risk management. includes studies on portfolio diversification, annuity preferences, and the role of employer-sponsored plans. The integration of income and motivation into this cluster further suggests that researchers are exploring not just how much people save, but why and how they make those saving decisions—a theme strongly aligned with behavioral finance [25].

Despite these advancements, some gaps remain. First, there is a relative underrepresentation of studies linking digital tools and fintech platforms with retirement behavior. As financial technology becomes increasingly integrated into daily life, its role in promoting retirement literacy, automating savings, and managing post-retirement disbursement deserves deeper exploration. Second, while health status appears in the network, the interplay between chronic illness, healthcare access, and retirement adequacy-especially in aging populationsrequires further attention. Lastly, the limited mention of climate risk, housing, and caregiving responsibilities suggests potential blind spots that intersect with financial stability in later life.

4. CONCLUSION

This bibliometric study provides a comprehensive overview of the scholarly landscape surrounding retirement planning and financial stability, highlighting key themes, influential authors, and collaborative networks. The analysis reveals that research in this domain is highly interdisciplinary, with evolving trends that shift from institutional and policy-driven discussions toward more individualized approaches emphasizing financial literacy, investment

behavior, and psychological readiness. The United States emerges as the dominant contributor, both in terms of research output and international collaboration, although growing participation from other regions signals increasing global interest. Influential authors such as Mitchell, Lusardi, and Hershey bridge critical areas of economics, public policy, and behavioral science. Despite the field's maturity, gaps remain in emerging topics such as fintech, digital financial tools, and the intersection of healthcare and retirement security.

REFERENCES

- [1] M. Vivel-Búa, L. Rey-Ares, R. Lado-Sestayo, and S. Fernández-López, "Financial planning for retirement: the role of income," *Int. J. Bank Mark.*, vol. 37, no. 6, pp. 1419–1440, 2019.
- [2] E. Kim, "The Financial Stability of Before-and-after Retirement-Expectation and Support for the Quality of the Elderly Life," *Korean J. Soc. Welf.*, vol. 66, no. 1, pp. 61–85, 2014.
- [3] A. S. Ghadwan, W. M. Wan Ahmad, and M. Hisham Hanifa, "Financial planning for retirement: the moderating role of government policy," *Sage Open*, vol. 13, no. 2, p. 21582440231181300, 2023.
- [4] H. M. Kelly, "Financial Planning for Retirement," J. Educ. Sociol., vol. 31, no. 8, pp. 306–317, 1958.
- [5] J. M. Jacobs-Lawson and D. A. Hershey, "Perceptions of financial stability in retirement: Do Americans really know what to expect," *Adv. Psychol. Res.*, vol. 22, no. 1, pp. 123–136, 2003.
- [6] S. Sundarasen, U. Rajagopalan, and I. Ibrahim, "Financial Sustainability Through Literacy and Retirement Preparedness," *Sustainability*, vol. 16, no. 23, p. 10692, 2024.
- [7] G. Topa, G. Lunceford, and R. E. Boyatzis, "Financial planning for retirement: a psychosocial perspective," *Front. Psychol.*, vol. 8, p. 2338, 2018.
- [8] A. Ghadwan, W. M. Wan Ahmad, and M. H. Hanifa, "Financial planning for retirement: the mediating role of culture," *Risks*, vol. 10, no. 5, p. 104, 2022.
- [9] Y. Thanakijborisut, "Financial planning for sustainability in retirement of university employee," in INTERNATIONAL ACADEMIC MULTIDISCIPLINARY RESEARCH CONFERENCE IN MUNICH 2023, 2023, pp. 48–53.
- [10] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, pp. 285–296, 2021.
- [11] J. Morduch and R. Schneider, *The financial diaries: How American families cope in a world of uncertainty*. Princeton University Press, 2017.
- [12] J. Reichstadt, C. A. Depp, L. A. Palinkas, and D. V Jeste, "Building blocks of successful aging: a focus group study of older adults' perceived contributors to successful aging," *Am. J. Geriatr. Psychiatry*, vol. 15, no. 3, pp. 194–201, 2007.
- [13] E. M. Murtagh, M. H. Murphy, N. M. Murphy, C. Woods, A. M. Nevill, and A. Lane, "Prevalence and correlates of physical inactivity in community-dwelling older adults in Ireland," *PLoS One*, vol. 10, no. 2, p. e0118293, 2015.
- [14] S. Rosen, J. R. Vincent, W. MacLeod, M. Fox, D. M. Thea, and J. L. Simon, "The cost of HIV/AIDS to businesses in southern Africa," *Aids*, vol. 18, no. 2, pp. 317–324, 2004.
- [15] M. Sabri, R. Wijekoon, and H. Rahim, "The influence of money attitude, financial practices, self-efficacy and emotion coping on employees' financial well-being," *Manag. Sci. Lett.*, vol. 10, no. 4, pp. 889–900, 2020.
- [16] M. S. Barr and R. M. Blank, "Savings, assets, credit, and banking among low-income households: Introduction and overview," Insufficient Funds Savings, Assets, Credit Bank. Among Low-Income Households. New York Russell Sage Found., 2009
- [17] V. Fisch-Romito, C. Guivarch, F. Creutzig, J. C. Minx, and M. W. Callaghan, "Systematic map of the literature on carbon lock-in induced by long-lived capital," *Environ. Res. Lett.*, vol. 16, no. 5, p. 53004, 2021.
- [18] T. Ghilarducci, "When I'm sixty-four: The plot against pensions and the plan to save them," in When I'm Sixty-Four, Princeton University Press, 2008.
- [19] S. E. K. Christoffersen, D. K. Musto, and R. Wermers, "Investor flows to asset managers: Causes and consequences," *Annu. Rev. Financ. Econ.*, vol. 6, no. 1, pp. 289–310, 2014.
- [20] C. A. Price and S. Balaswamy, "Beyond health and wealth: Predictors of women's retirement satisfaction," *Int. J. Aging Hum. Dev.*, vol. 68, no. 3, pp. 195–214, 2009.
- [21] H. Wang, J. Huang, and Q. Yang, "Assessing the financial sustainability of the pension plan in China: The role of fertility policy adjustment and retirement delay," *Sustainability*, vol. 11, no. 3, p. 883, 2019.
- [22] A. Abdullah et al., "Retirement Financial Planning: Strategies and Challenges in Avoiding the Incidence of Poverty,"

- **3** 883
- $in\ Artificial\ Intelligence\ (AI)\ and\ Customer\ Social\ Responsibility\ (CSR), Springer, 2024, pp.\ 101-109.$
- [23] W. D. Pfau, "An overview of retirement income planning," J. Financ. Couns. Plan., vol. 29, no. 1, pp. 114–120, 2018.
- [24] W. M. W. Mustafa, M. A. Islam, M. Asyraf, M. S. Hassan, P. Royhan, and S. Rahman, "The effects of financial attitudes, financial literacy and health literacy on sustainable financial retirement planning: The moderating role of the financial advisor," *Sustainability*, vol. 15, no. 3, p. 2677, 2023.
- [25] A. S. Ghadwan, W. M. Ahmad, and M. H. Hanifa, "Financial Planning for Retirement Models: An Integrative Systematic Review.," *Pertanika J. Soc. Sci. Humanit.*, vol. 30, no. 2, 2022.