Comparative Studies on Pension Funds: A Global Perspective

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Abstract. In this paper, the examination revolves around pension fund governance and investment specifically asset allocation strategy with current academic publications and reviews to investigate ways to preserve and grow the value of pension portfolios. These articles cover current policy impact on pension fund's best practices in investing and managing pension funds and offer perspectives on an array of countries' pension portfolios (such as China, the US, Switzerland, France, Canada, etc.). The comparative study aims to elucidate future academic research in this area hopefully to better inform researchers and pension fund managers.

Keywords: Pension · Governance · Investment strategy · European Union · the United States · Switzerland

1 Introduction

Pension is never needed more in history while global aging is creeping high. Globally, people 65 years old and senior increased from 6% in 1990 to 9% in 2019 per United Nations' World Population Aging 2019 report. The United Nations projected the proportion to rise further to 16% in 2050.

The world population's age is growing in absolute and relative terms. The UN found that the older demographic accounts for a proportion of one in three and they live in East Asia and Southeast Asia and this trend will continue til 2050 (see Table 1). As populations age, shares of working age (age 25–64) and older persons rise, while shares of kids (age 0–14) and youth (age 15–24) fall. Aging happens the fastest in eastern and southeastern Asia. It is not limited to only Asia; it concerns all people, Americans included. According to Administration for Community Living, back in 2019, People over 65 represented 16% of the American demographic, and that number is projected to a dashing 21.6% by 2040. The 85 and up group is expected to grow to more than double from 6.6 million in 2019 to 14.4 million, with a 118% increase in 2040.

Pension growth needs to keep abreast with the growth in life span because life expectancy is rising in all regions. There are increasingly more people who live beyond 65 years of age.

G. Ali et al. (Eds.): ISEMSS 2022, ASSEHR 687, pp. 274–280, 2022.
https://doi.org/10.2991/978-2-494069-31-2_34

Table 1. Number of People aged 65 and over by geographic region, 2019 and 2050

Region	Number of persons aged 65 or over in 2019 (millions)	Number of persons aged 65 or over in 2050 (millions)	Percentage change between 2019 and 2050
World	702.9	1548.9	120
Sub-Saharan Africa	31.9	101.4	218
Northern Africa and Western Asia	29.4	95.8	226
Central and Southern Asia	119	328.1	176
Eastern and South-Eastern Asia	260.6	572.5	120
Latin America and the Caribbean	56.4	144.6	156
Australia	4.8	8.8	84
Oceania, no Australia and New Zealand	0.5	1.5	190
Europe and Northern America	200.4	296.2	48

2 Pension Overview

2.1 Definition

Merriam-Webster dictionary defines pension as "paid under given conditions to a person following retirement from service or surviving dependents."

2.2 Significance

A pension is a form of national welfare for retirees. It is a payment made regularly during an individual's career towards a fund that the individual sets up, their employers at private companies, or a government to maintain the desired standard of living in retirement and supply income for unforeseen expenses. Anyone who wishes to manage financial risks and sustain a standard of living will need a pension.

Pension governance is important to sustaining a country's wealth reserve and retirees' lifestyle. China considers the pension pool a stable deposit. It helps to stabilize its gigantic national economy and inflation; likewise, European pensions need better management so that inflation does not exhaust their marginal growth.

This paper selects from 21 sources and gives insights on pension fund governance and investment issues for future researchers to explore. To do so, the author outlines the status of pension funds status on governance and investment. Then the exploration lays bare the issues of current practices for further examination and study by forms of ownership and country in terms of risk and investment strategy.

3 Governance and Investment Strategy

No matter public or private, good governance is crucial in the wealth preservation of any pension fund. In Clark and Urwin's study, they state effective governing by institutions that own assets noticeably change the value add as measured by their long-term rate of return adjusted to risk [1].

Good governance can be captured in what they call "organizational coherence," which constitutes an institution's clarity of mission and dimensions like people and expertise, namely the investment decision-making process and implementation and accountability; in other words, how clearly they define governing body's responsibility and delegation when the regulator justifies the need for a qualified delegate who will aid or make best-informed decisions on one's behalf.

3.1 Governance

Primarily two types of pensions exist: public and private. Rules regarding their governance and investment management vary.

OECD is the Organization for Economic Cooperation and Development devoted to the betterment of life and policymaking. They provide extensive research data and reports on pensions worldwide. They help immensely achieve the pension fund's investment regulation through annual reports detailing the legislative impact on member countries, asset allocation, and financial positions. Lebedeva addresses that law imposes caps on pension investments qualitatively and quantitatively to mediate risks [2]. Sustaining growth while keeping risks low sets pension funds apart from more aggressive hedge fund counterparts.

Good governance minimizes conflict of interest and agency problems between governing bodies.

Concerning governance, the World Bank has been extending efforts in this field to better advice and shared experience. It brings together experiences from cohorts to establish policies whether they work. Muslim et al. accentuate the need to manage the sustainability of pension funds. "in some countries as diverse as Sweden and China depend to some extent on how these funds are administered [3]." The pension is their largest deposit of long-term savings in reserve.

3.2 Investment Strategy

3.2.1 Asset Classes

Private and public pension each has a different strategy regarding investment. While public pensions are likely to be more conservative and tend toward safer assets such as government debt instruments, explicitly those issued by developed countries, private pensions' strategies are seemed to be more aggressive in that they pursue growth in stocks from private sectors. Pension funds recently seek to invest increasingly in different asset classes; these are private equity, real estate, infrastructure, and securities that protect against rising inflation.

In search of higher returns, infrastructure is being sought by pension funds diversification and its prospect corresponded with long-term pension assets, according to Inderst [4].

Pensions have been exposed themselves to infrastructure through listed utility companies or real estate. However, a cohort of funds with massive assets under management worldwide begin to invest via private-equity funds indirectly or sometimes directly. Of all funds in this cohort, Dutch, Australian, and Canadian pension funds are leading.

Andonov discovers that mandate size and investment approach. There is a higher chance that more considerable pension funds put their money in real estate internally by way of their own agency, yielding higher gross returns and costing less. Smaller pensions direct their primary investment directly into real estate through outside managing agencies and fund-of-funds. In this process, property companies are not considered [5].

In the study by Rauh, empirically, some companies have underfunded pension plans and their credit ratings are questionable, so less risky securities are to which they choose to direct a sizable portion of their investment. These include bonds issued by governments and cash/cash equivalents. In contrast, having pension plans with more money and robust ratings on credit, the other companie's portfolios lean more heavily on equity [6].

3.2.2 Risk

From a risk perspective, in conventional wisdom, the final pension wealth is proportional to the investor's time horizon.

Having used their financial reserves efficiently, smooth shocks will be rendered powerless in their asset returns. Pension funds can thus help customers share risk over many generations to diversify risk in time horizon and asset allocation to take more significant advantage of equity premium.

Pennacchi and Rastad examine the implications of their model. They collect annual data on the portfolio allocations and plan characteristics from 125 state pension funds between 2000 and 2009 [7]. Evidence reveals that funds are subject to higher overall portfolio risks when they fail to manage cash flows to make payment on liabilities, ensuing windows of investment performance's low tide by public pension fund management. Additionally, pension plans tend to choose riskier portfolios if they select a relatively high rate to discount their liabilities. Moreover, pension management takes larger risks when they achieve a greater representation. They are better represented when they are supported by plan participants on their Boards of Trustees.

3.3 Countries

3.3.1 The United States

In Bauer's study, managing a total north of 6 trillion dollars, whose 60% is dedicated to equities, pension funds are a leader in the American financial services sector [8]. There is a lack of pension fund data as they often have poor quality and focus on a few particular types of funds or asset classes. This scarcity restricts studies to gross return performance before fees, managed accounts rather than plan performance, and benchmark comparison with market indices like S&P 500 and Dow Jones. Lacking data results in low generality of pension fund performance, so managers can not form a consensus on how a pension fund performance is measured and improved.

3.3.2 China

Zhu observes that the Chinese state government strives to set up a national pension system that supplies far-reaching coverage, foundational security, multilevel options and sustainability' by 2020 [9]. Zhu concludes in their study that it is imperative to promote equality and de-stratification once full pension coverage is achieved. There is extreme inequality in pension schemes in China. This inequality stems from the local pooling of money hinders redistribution, and the disparity widens.

3.3.3 European Union

Hinrichs notices that for the last 3 decades, European Union has reformed its pension systems [10]. As introduced in Background, there is ongoing and intensifying population aging worldwide. The EU's efforts have aimed to infuse taxes or other financial instruments into the system. Additionally, The year 2000 marks the commencement when multi-pillar pension system begins to gain popularity in countries where a dominant-pillar system was prevalent: private pre-funded employment pensions that employers and employees co-contribute and individual stipends for seniors. They start to grow in significance within the public-private retirement income mix. He concludes that pension reforms may put seniors at a greater risk of poverty later in life and potentially trample on a core objective of pension plans if stressing on financial sustainability over the long haul.

Hinrichs observes that domestic pension arrangements change government preferences and the European Parliament's preferences and key agents in commerce [10]. Businesses are too divided internally if they want to set up a full-blown liberal Europe regarding occupational pensions. But their push suffices to safeguard liberal principles on investing.

3.3.4 Switzerland

The Swiss is known for their financial services and confidentiality, yet they became the cynosure of the public after a number of instances of mismanagement and fraud. In response, the Organization for Economic Co-operation and Development (OECD) enacted a set of rules for pension fund governance in April 2005. The guidelines comprise 12 basic principles to set international standards to better govern corporate pension funds. There are Swiss Pension Fund Association (ASIP) and the Swiss Insurance Association (SVV). These two organizations created how pension management should be conducted in 2000. Still, OECD's code restricts itself to preventing misuse.

Ammann investigates how governance and investment performance of pensions are correlated [11]. Zhe designs the Swiss Pension Fund Governance Index (SPGI) to do so. SPGI works as a benchmark for the governance measurement of Swiss pension funds, that is to say, how well governing bodies run the funds. The empirical analysis is drawn from 96 pension funds, totaling assets of more than 190 billion Swiss Franc.

The findings support the longstanding hypothesis that pension fund governance and investment performance are positively correlated.

4 Conclusion

Researchers see many European citizens who live on a traditionally strong pay-as-you-go (PAYG) pension system now perceive their social security benefits. Unfortunately, they are unlikely will be sufficient to maintain plan beneficiaries' current lifestyles after retirement. Consequently, there is a growing demand for individual long-term savings plans for consumers who used to save only for the short-term.

Currently, many pension plans adopt what is known as "time-diversification" in which short-term plans lean toward conservative assets. Still, this argument relies on a misinterpretation of the law of large numbers, which maintains that repeating an investment pattern over many periods does not necessarily reduce risk in the long run.

The exploration was first purposed to investigate the effectiveness between investment strategy and pension fund performance. However, it came to the author's notice that most research and data are still kept in confidence by private wealth managers and banks. To reach a consensus on the best portfolio assemblage and pension governance and to improve the efficacy of pension rules and investment portfolios, it would be beneficial if private institutions could share their findings.

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