Determinants of Pension Fund Assets on Economic Growth and Its Link to Fiscal Position and Monetary Conditions in Malaysia

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ABSTRACT

This study conceptualized the impact of pension asset investments on Malaysia's economic growth as well as its fiscal and monetary sustainability, while considering the influence of key control variables such as gross fixed capital formation, domestic credit to the private sector, inflation, public debt, population, and interest rates. The econometric analysis is based on secondary data sourced from the Department of Statistics Malaysia (DOSM), and other relevant institutions including the Ministry of Finance, Ministry of Economy, Central Bank of Malaysia (BNM), Employees Provident Fund (EPF), Retirement Fund (KWAP), Armed Forces Fund Board (LTAT), and international organizations such as the World Bank Group and the International Monetary Fund. This research holds scientific significance as it offers robust empirical evidence on the role of pension fund investments in financial markets and their implications for Malaysia's economic growth and fiscal health. Uniquely, this study incorporates all three major public pension funds, rather than focusing on a single entity, thereby offering more comprehensive insights and strategic policy recommendations. Given Malaysia's status as an emerging and transitioning economy, the findings emphasize the critical role of pension fund investments in driving economic development and enhancing fiscal sustainability.

Keywords: economic growth; pension; investments; KWSP; KWAP; LTAT

INTRODUCTION

In recent years, numerous scholarly studies have highlighted that the structure of a pension system significantly influences private savings and, through pension fund investments, contributes to a country's overall foreign asset position. For instance, Staveley-O'Carroll and Staveley-O'Carroll (2017) examined how different pension system structures affect the global allocation of financial capital. Their empirical analysis demonstrated that government-administered pension systems can shape private saving behaviours and influence how international capital is distributed. Investments made by pension funds not only impact a country's net foreign asset position but also alter its overall portfolio risk profile.

Pensions serve as a form of social protection designed to safeguard individuals against the financial risks associated with aging, poverty, and other life uncertainties. Essentially, a pension represents a financial reserve allocated for workers upon retirement, contingent on their years of service to a specific organization. Employees who have dedicated a significant period to an employer are eligible for retirement benefits, such as pensions or gratuities, which are typically disbursed by the employer upon retirement. As emphasized by Onyeonoru, Egharevba, and Imhonopi (2013), pensions are a legal and financial obligation rooted in the contractual relationship between employers and employees. They are provided by private companies as well as by various levels of government (Johnson and Johns, 2018).

Accordingly, a pension fund refers to the pool of money set aside to fulfil these retirement obligations. Funded through contributions by employers, employees, or both, these resources are managed prudently by professional fund managers who invest them strategically to ensure long-term sustainability. Barr and Diamond (2009) contend that pension expenditures must align with a country's financial capacity to support retirees' consumption needs, fund investments for future economic growth, and sustain public revenue collection. They caution that unsustainable pension spending poses a serious fiscal risk.

In Malaysia, the government has actively introduced policy measures such as public awareness campaigns and tax incentives to encourage greater participation in retirement savings. Despite these efforts, the extent to which the expansion of pension fund assets contributes to national economic growth remains insufficiently understood, particularly given Malaysia's context as a developing nation facing distinct fiscal and monetary limitations. The effectiveness and returns of pension fund reinvestment strategies are not yet adequately captured in macroeconomic analyses, which often overlook key variables such as fund performance indicators, asset allocation practices, and the influence of policy frameworks (Abidin et al., 2019).

Compounding these challenges is the scarcity of detailed, disaggregated data across various pension schemes which including civil service pensions, the Employees Provident Fund (EPF), and private retirement plans. This lack of granular data makes it difficult to assess the unique economic impacts of each fund type. Moreover, the fiscal burden of pension obligations and the government's dual function as both a regulator and a participant in the pension system highlight the urgent need for more comprehensive, policy-driven research to inform sustainable pension and economic strategies.

LITERATURE REVIEW

Davis (2002) investigated the relationship between institutionalisation which measured by the proportion of corporate equity held by institutional investors, including pension funds and life insurance companies and using macroeconomic performance indicators such as GDP growth and Total Factor Productivity (TFP). His findings indicate no direct correlation between GDP growth and the level of equity ownership by these institutions. However, the study did reveal a positive association between increased institutional equity holdings and improvements in TFP, suggesting an indirect contribution to economic performance.

In contrast, Hu (2005b) applied Panel Granger Causality tests, based on the methodology developed by Hurlin and Venet (2001) and Hurlin (2005), to examine data from 38 countries. The results showed a consistent causal relationship from pension asset growth to GDP growth across the full sample, as well as within subgroups of OECD (18 countries) and Emerging Market Economies (EMEs, 19 countries). The reverse causality from GDP growth to pension asset accumulation was found to be significantly weaker, especially in emerging markets.

Building on this, Davis and Hu (2008) found a positive impact of pension fund growth on economic development, using output per capita as a proxy for economic performance. Their study further indicated that this positive effect was more pronounced in EMEs compared to OECD countries. Supporting this trend, Morina and Grima (2022) employed econometric techniques such as linear regression, fixed effects, and random effects models to analyse the relationship in several non-OECD countries. Their findings confirm a positive and upward trend between pension asset investments and economic growth. The study concludes that incentivizing institutional investors to increase pension fund allocations strengthens the efficiency and growth of financial markets, enhances pension fund performance, and boosts financial returns which ultimately contributing to the overall economic development of these nations.

Theoretical models suggest that inflation interacts with pension fund performance through its influence on interest rates, investment returns, and fiscal expenditures, including pension liabilities (Feldstein, 1980). High inflation typically leads to tighter monetary conditions, affecting both the valuation of fixed-income securities in pension portfolios and the government's ability to finance long-term pension obligations. Empirical studies in emerging markets suggest inflation has a dual role. While moderate inflation may coincide with growth and expanding financial sectors, excessive inflation introduces macroeconomic volatility that undermines investment outcomes (Levine & Zervos, 1998). In Malaysia, managing inflation has been a consistent focus of monetary policy, with Bank Negara Malaysia playing a key role in ensuring macroeconomic stability.

Empirical studies present mixed findings on the population-growth nexus. Kelley and Schmidt (1995) found that high population growth in developing countries may exert downward pressure on income levels in the absence of sufficient investment in education and health. Conversely, Bloom and Williamson (1998) introduced the concept of the demographic dividend, where falling fertility rates and a growing working-age population can significantly enhance economic growth, provided there is appropriate policy support and labour market flexibility. In more recent studies, Lindh and Malmberg (2007) emphasized the impact of age structure on

economic performance. They found that a higher proportion of working-age individuals relative to dependents positively affects GDP growth. This finding is particularly relevant for pension systems, as the financial sustainability of pension funds depends on a favourable ratio between contributors and beneficiaries. In the Malaysian context, demographic trends have shifted notably. Malaysia is moving toward an aging society, with increasing life expectancy and declining fertility rates (DOSM, 2021). These trends pose challenges for pension systems, as a shrinking workforce could undermine contribution flows while simultaneously increasing the number of retirees reliant on pension disbursements.

Kumar and Woo (2010) provide evidence suggesting that only elevated levels of public debt specifically those exceeding 90% of GDP have a statistically significant adverse effect on economic growth. Similarly, Checherita-Westphal and Rother (2012) identify a concave, or inverted U-shaped, relationship between the public debt-to-GDP ratio and long-term growth, indicating that growth tends to decline when debt levels surpass the 90–100% threshold. Panizza and Presbitero (2013) argue that the relationship between public debt and growth is not straightforward, emphasizing that its direction and magnitude are highly sensitive to data selection and methodological approaches. They highlight a non-monotonic association between the two variables, suggesting the impact may vary across different contexts. Supporting this view, earlier studies such as those by Smyth and Hsing (1995), Cohen (1997), Pattillo, Poirson, and Ricci (2002), and Clements, Bhattacharya, and Nguyen (2003) also report a non-linear relationship between external debt and economic growth. Furthermore, Dreger and Reimers (2013) find that the negative effects of the debt-to-GDP ratio are particularly pronounced in cases where debt levels are deemed unsustainable.

Theoretically, sustained economic growth enhances fiscal sustainability by increasing government revenue through higher tax receipts, which can help reduce budget deficits and stabilize or reduce debt levels (Tanzi & Chalk, 2000). In turn, a sound fiscal framework that avoids excessive borrowing and ensures efficient allocation of public resources can promote investor confidence, stimulate private investment, and create a stable macroeconomic environment conducive to growth (Alesina & Perotti, 1996).

However, the direction of causality is not always straightforward. While economic growth can support fiscal sustainability, unsustainable fiscal policies, such as persistent deficits and rising public debt can undermine growth by crowding out private investment, raising interest rates, and increasing inflationary pressures (Elmendorf & Mankiw, 1999).

Monetary stability fosters economic growth by ensuring price stability, which enhances the efficiency of resource allocation and reduces the risk premium required by investors (Barro, 1995). In stable monetary environments, consumers and firms are better able to make long-term financial decisions, which facilitates investment and productivity improvements. Moreover, stable monetary conditions reduce exchange rate volatility, improve financial intermediation, and enable central banks to act as credible anchors for inflation expectations (Mishkin, 2007).

Conversely, monetary instability could be characterized by high or volatile inflation, which can distort relative prices, deter investment, erode purchasing power, and contribute to macroeconomic uncertainty. This instability may also force central banks into pro-cyclical policy actions that worsen economic fluctuations and undermine long-term growth prospects (Bruno & Easterly, 1998).

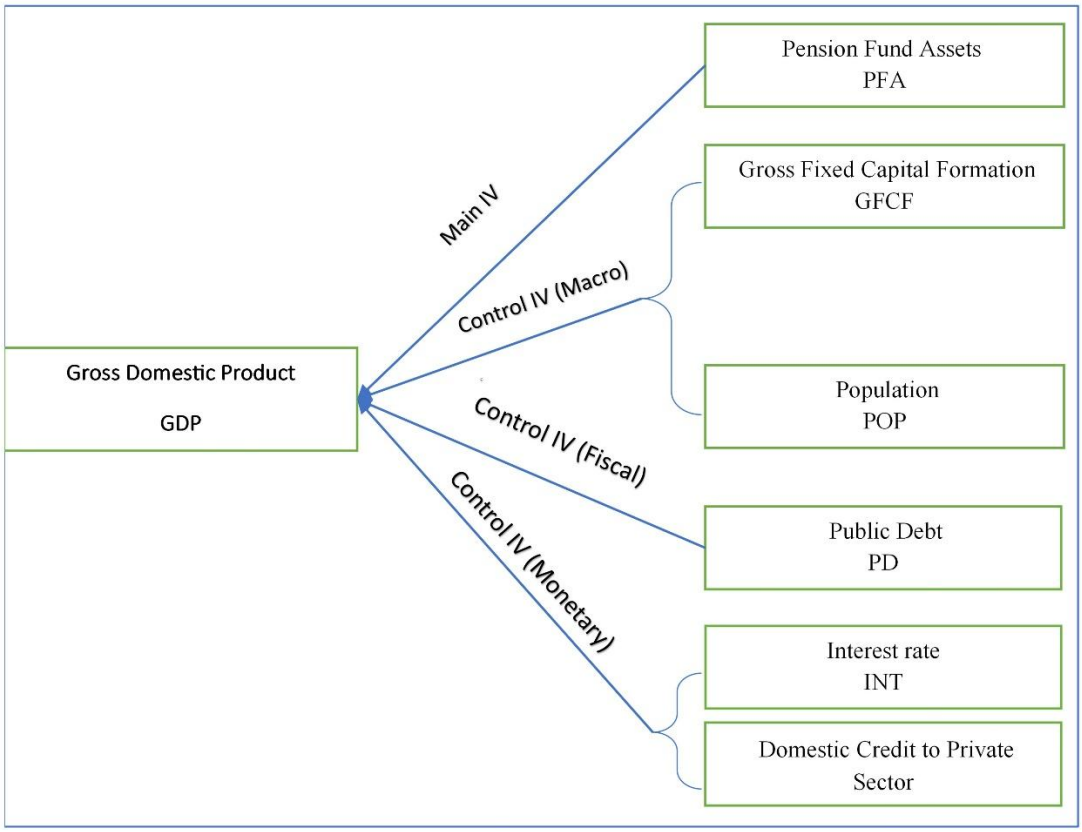
METHODOLOGY

This paper is conceptualizing the framework of economic growth relationship with the pension funds' assets as the main variable with consist of first, the Employees Provident Fund (EPF) which is Malaysia's largest retirement savings institution, which manages mandatory contributions from the private and public sector employees under a defined contribution scheme. Second Retirement Fund Incorporated (KWAP) which is the main pension fund for public sector employees, operating under a hybrid defined benefit system. Finally, the Armed Forces Fund Board (LTAT), which is a statutory body managing pension savings for members of the Malaysian armed forces.

The samples selected in this study are taken across the major pension schemes available in Malaysia with unique

characteristics (public, private and military workforces) and the data sets in twenty years (2005 – 2024). This bring the opportunity for each sample sets of data from different type of pension schemes to be analysed both individually and by aggregate. The framework also consisting the macroeconomic control independent variables which are, Gross Fixed Capital Formation (GFCF), Inflation (INFL) and Population (Pop). For the fiscal control independent variable, this study deploys Public Debt (PD). Finally, the control independent variables for monetary condition are Interest rate (INT) and Domestic Credit to Private Sector (DCPF).

Figure 01: The Conceptual Framework



CONCLUSION

While numerous studies have examined national savings, institutional asset investments, and their effects on economic growth, empirical research specifically addressing the relationship between pension fund expansion and economic performance remains limited and often employs varying indicators to measure economic outcomes. The existing literature presents mixed findings which some studies report weak or no correlation between pension fund assets and economic growth, whereas others identify a positive association. Acknowledging the policy relevance of this topic which particularly in relation to pension fund investment strategies and fiscal sustainability. This study focuses on Malaysia to assess the impact of pension fund assets on economic growth and fiscal stability. Given the variety of variables that can serve as proxies in such analyses, this research conceptualized a selective approach to variable inclusion, aiming to identify the most significant factors relevant to the Malaysian context. The empirical findings are intended to provide valuable insights that can guide the formulation of effective investment strategies aimed at enhancing economic growth.

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