

An Exploration of Investment Strategies within Zambia's National Pension Scheme Authority



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ABSTRACT: As a critical state-owned enterprise administering billions in retirement assets, NAPSA's investment governance has substantial fiscal and welfare implications for Zambia. Investment strategies in government institutions involve a systematic and comprehensive approach to managing public funds for various purposes, such as infrastructure development, pension fund assets, and bond proceeds. However, there has been little scholarly investigation into the real-world dynamics, drivers, and performance impacts of NAPSA's investment strategies, policy decisions over its recent history. This study aimed to bridge that knowledge gap through qualitative analysis of NAPSA's investment strategy formulation, risk management approaches, implementation processes, and financial results over the past two decades. The primary instruments for data collection in this study were semi-structured interviews and focus groups, both conducted remotely via Microsoft Teams. The data analysis for this study was undertaken using thematic analysis. This approach was instrumental in interpreting the data collected from the interviews and focus groups. Furthermore, qualitative documents like reports provided corroborating context. Together these primary data resources facilitated nuanced analysis around the multi-layered drivers and impacts influencing NAPSA's investment governance – aligning techniques tightly with exploratory research goals seeking elucidations to inform potential policy enhancements. The findings revealed that NAPSA maintained a diversified investment portfolio across various asset classes. Formalization of developmental impact assessment measures and the strengthening of specialized analytical competencies are amongst the recommendations. These steps are important for NAPSA to continue effectively managing its substantial assets in a manner that supports both the welfare of its pensioners and the broader economic interests of Zambia.

KEYWORDS: Investment strategies, decision-making, risk management

1. INTRODUCTION

This research undertakes an in-depth examination of the investment strategies and outcomes at Zambia's largest state-owned pension fund manager - the National Pension Scheme Authority (NAPSA) - from 2005 to 2023. As a critical state-owned enterprise administering billions in retirement assets, NAPSA's investment governance has substantial fiscal and welfare implications for Zambia. Investment strategies in government institutions involve a systematic and comprehensive approach to managing public funds for various purposes, such as infrastructure development, pension fund assets, and bond proceeds. However, there has been little scholarly investigation into the real-world dynamics, drivers, and performance impacts of NAPSA's investment strategies, policy decisions over its recent history. This study aims to bridge that knowledge gap through qualitative analysis of NAPSA's investment strategy formulation, risk management approaches, implementation processes, and financial results over the past two decades. By interviewing key decision-makers and reviewing documents surrounding NAPSA's investment governance, the research seeks to explore the most influential factors shaping pension fund investment choices and performance within a developing country public sector setting. Outcomes are positioned to empower stakeholders to evaluate and reform institutional investment decision architectures for greater sustainability and national prosperity. As such, the study holds timely relevance amidst calls for improved SOE efficiency and accountability in Zambia.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Pension Fund Investment Governance

Pension funds administer vital retirement assets whose investment governance holds high socioeconomic significance given the income security promises made to aging global populations (Ambachtsheer, 2022). With nearly \$60 trillion assets under

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management, portfolio decisions affect national savings and growth (OECD, 2022). However complex trade-offs abound for pension funds balancing worker interests, capital markets and public obligations over long payout horizons (Yermo, 2022). Economically, prudent pension fund investing supports development and prosperity by injecting patient capital into markets that backs infrastructure, innovation and growth while returns adequately finance pension obligations in mitigating welfare costs (Impavido & Rocha, 2022). Governance advancing investment quality and performance thus bears positive multipliers. Yet scholars outline acute agency dilemmas within pension fund decision-making stemming from asymmetric informational advantages between executives, trustees and members that enables self-serving behaviors threatening aligned asset management (Mitchell, 2022). These require structural governance provisions to uphold integrity. Additionally, as funds scale with societal aging, their projected liabilities risk crowding out growth investments absent governance efficiency. Skepticism exists on financing capacities under mounting obligations (Jain & Laux, 2022). Avoiding suboptimal asset allocation and volatility amidst uncertainties remains an increasing challenge for the sector.

Indeed, discourse highlights adoption gaps in investment governance capabilities between advanced and developing country pension funds linked to structural limitations like small assets under management, incomplete regulation and infrastructure deficits that constrain asset scope and fuel conservative stances in Africa and Asia (Leung & Prochazka, 2022). It is uneven although practice diffusions through institutions like the OECD gradually improve effectiveness globally (Srinivas et al., 2022).

In focus on Zambia, experts observe shallower capital markets that hamper investible options have historically capped pension fund returns and growth prospects versus global peers (Kabaso et al., 2021). Top-down governance strengthening centered on market expansions thus bears importance for local pension financing adequacy. Additionally, clarity on multi-stakeholder investment principles and consolidated risk oversight could mitigate documented coordination issues threatening strategic cohesion (Mwitwa et al., 2021). In all, balancing pension fund investment governance across market uncertainties and rising societal obligations poses complex, high-stakes challenges with development impacts. Zambia must continue structural and oversight improvements to secure socioeconomic futures.

2.2 Investment Governance in Zambian SOEs

Zambia's state-owned enterprises (SOEs) across sectors like energy, finance and resources represent pivotal drivers of national development - directly providing infrastructure, employment and public goods that enable growth (Fessehaie & Rustomjee, 2018). Their investment governance and performance thus bear great socioeconomic significance. However, discourse reveals major SOE reforms have centered on ownership changes rather than strengthening investment effectiveness.

Privatization Focus Since initiating sweeping privatization and commercialization of SOEs in the 1990s to limit fiscal bleeding and improve firm efficiency, studies indicate the Zambian government has largely continued prioritizing full or partial divestment of state assets in SOEs like telecoms, banking and agriculture over instituting governance provisions to enhance public sector investment capabilities and outcomes (Mula et al., 2022). Critically while evidence shows profitability and productivity metrics have increased at many privatized or semi-privatized Zambian SOEs as intended, analyses highlight outstanding investment governance issues at remaining wholly state-owned strategic entities dragging on overall SOE performance - including soft budget constraints and politicized decision-making channeling resources sub-optimally (Chisala et al., 2022). Reforms neglect persistent gaps.

Investment Governance Focus Deficiency Zambian SOE scholars argue fixation on ownership change avoids public sector governance strengthening to mitigate well documented investment evaluation and allocation issues within incumbent SOEs that undermine multi-year productivity and returns - including inadequate appraisal skills, distorted incentives and weak monitoring systems (Chizondo, 2019). This risks ongoing efficiency losses despite privatizations. Lack of transparency around firm-level investment reporting obstructs understanding drivers of variable performance and opportunities to uplift decision quality through policy reforms (Fessehaie & Rustomjee, 2018). Symptoms may be known but internal diagnostics limited. Researchers cite the need for studies probing investment governance gaps directly through evidence from affected SOEs to catalyze measurable improvements (Kabaso et al., 2021).

Progression thus requires parallel policy emphasis on investment governance mechanisms to bolster evaluation rigor, accountability, and optimal allocation practices within Zambia's strategic SOEs. By detailing respective deficiencies, targeted reforms promise uplifted investment productivity essential for both public welfare and sustainable economic growth.

2.3 Conceptual Framework

The theoretical landscape of investment strategies and governance in state-owned enterprises (SOEs) is rich and multi-dimensional, shaped by several key theories over the years. Two prominent theories in this context are the Modern Portfolio Theory (MPT) and Agency Theory. Developing a conceptual framework for this study, is vital to construct a bridge that connects the

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theoretical underpinnings of Modern Portfolio Theory (MPT) and Agency Theory with the practical aspects of NAPSA's investment strategies and governance.

The integration of MPT and Agency Theory offers a comprehensive framework for this study. While MPT provides a methodological basis for understanding and evaluating NAPSA's investment portfolio management strategies, Agency Theory offers insights into the governance and decision-making aspects within the organization. The intersection of these theories allows for a holistic analysis of both the financial and organizational dimensions of NAPSA's operations.

Figure 1 presents a comprehensive conceptual framework designed to guide the analysis of the National Pension Scheme Authority's (NAPSA) investment strategies and their outcomes. This figure visually delineates the separation between independent variables—Investment Strategy Types, Governance Mechanisms, and External Influences—and the dependent variable, Investment Performance.

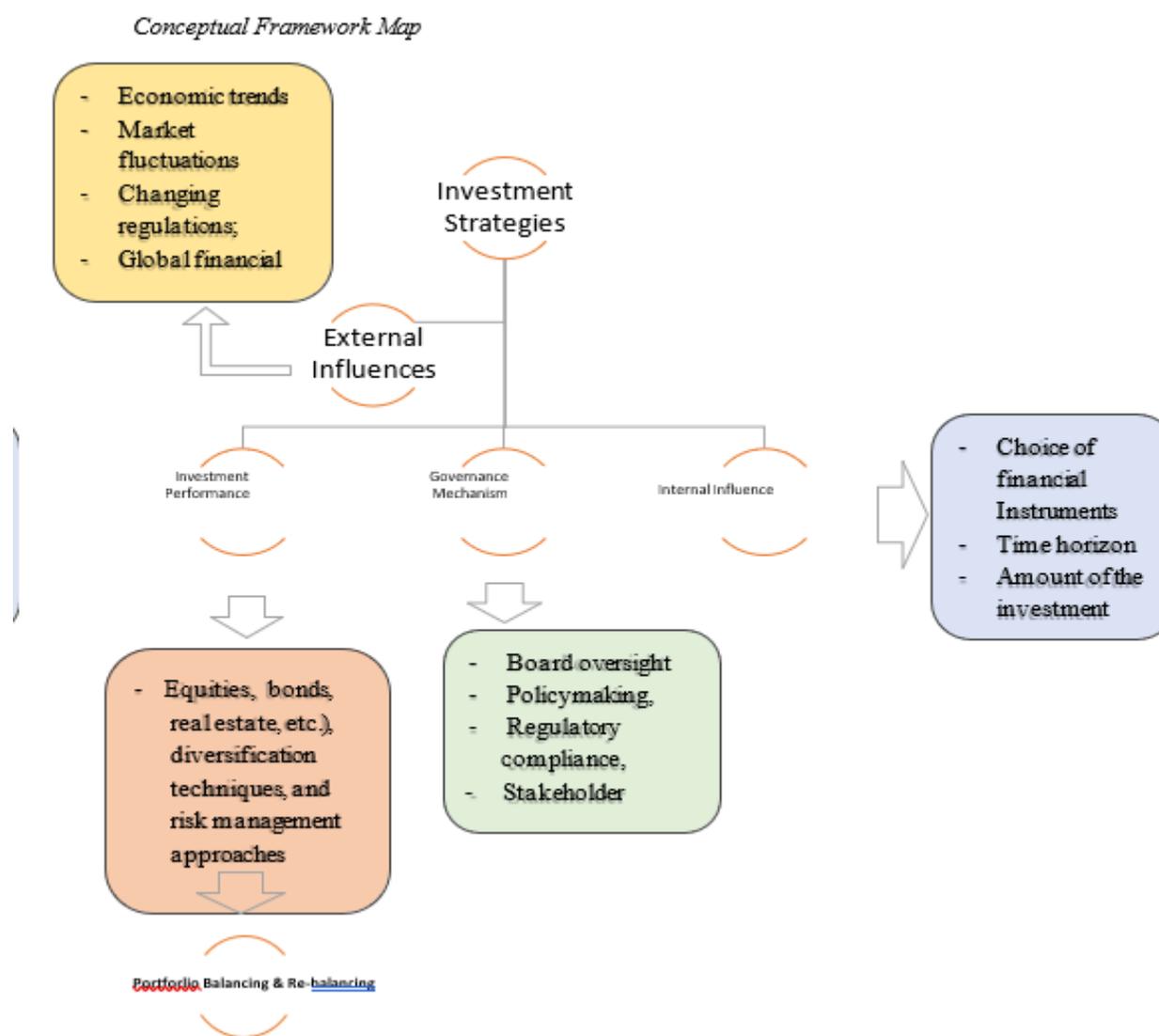


Figure 1 Conceptual framework

3. METHODOLOGY

This study adopted an interpretivist philosophical approach to understanding the investment strategy practices and decisions within NAPSA. This research adopted an exploratory design using qualitative techniques of in-depth interviews and a focus group for data gathering to achieve the key objectives of detailing and evaluating NAPSA's investment strategies, decision drivers, risk management and outcomes. As Denzin and Lincoln (2011) outline, exploratory qualitative studies centered on discovering and understanding phenomena through close practitioner encounters suits unpacking dynamics around real-world behaviors and processes where existing insights remain limited.

The target population for this study was all employees at the National Pension Scheme Authority (NAPSA), Zambia. The sampling procedure employed for selecting participants was purposive. This method was chosen to ensure that the individuals selected for interviews and focus groups had direct knowledge and experience relevant to the study's objectives. The determination of the

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sample size for this study was guided by the need to balance in-depth individual perspectives with a comprehensive view of NAPSA's investment strategies and governance. Conducting interviews with 9 key officials and organizing a focus group with 6 participants was a strategic decision aimed at capturing a wide range of insights while ensuring thoroughness and manageability for detailed analysis.

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The data analysis for this study was undertaken using thematic analysis. This approach was instrumental in interpreting the data collected from the interviews and focus groups. Furthermore, qualitative documents like reports provided corroborating context. Together these primary data resources facilitated nuanced analysis around the multi-layered drivers and impacts influencing NAPSA's investment governance – aligning techniques tightly with exploratory research goals seeking elucidations to inform potential policy enhancements.

4. ANALYSIS OF THE RESULTS

4.1 Response Rate

To obtain well-rounded perspectives on NAPSA's investment strategies, interviews were conducted with officials across key departments. Additionally, a diverse focus group was held to consolidate viewpoints.

4.2 Discussion of investment strategies adopted by NAPSA

This section discusses the key insights related to NAPSA's financial performance and the strategic impact of investment decisions between 2005-2023. Structured across four themes of portfolio diversification, success indicators, essential choices, and alignment to organizational priorities; the discussion analyzes the effectiveness of NAPSA's strategic asset allocation, fiscal and developmental results, influence of major investments, and adherence to core organizational goals. In examining findings on these facets that emerged from interviews with NAPSA officials, the section evaluates the soundness and efficacy of NAPSA's philosophies and approaches across long-term fiscal sustainability balanced with development priorities intrinsic to its public pension mandate. Critical links and trade-offs are also interpreted between the themes highlighting areas warranting policy and operational enhancements. The interview findings make NAPSA's systematic efforts towards diversification evident, showcasing recognition of its merits in exposing pension resources to varied sources of return for higher sustainability. NAPSA must supplement individual acts of strategic coherence with moves cementing alignment evaluation into the institutional fiber through digitized systems flagging misalignment symptoms, seamless knowledge sharing fostering perspectives exchange letting patterns surface, and nimble structures sensing the external context.

4.2.1 Diversification of Portfolio

The interview findings revealed that NAPSA has actively pursued and implemented a strategy of diversifying its investment portfolio across different asset classes, sectors, and individual opportunities over the past 18 years. Officials emphasized the focus on spreading capital allocation spanning government securities, infrastructure projects, real estate, telecoms, manufacturing, hospitality, and other targeted bets. While exact portfolio composition details could not be obtained, officials indicated reasonable success in diversification aims judging by high-level investment examples provided in multiple sectors.

4.2.2 Balancing Financial and Developmental Success

The interviews highlighted that beyond fiscal return metrics, NAPSA adopts a holistic and balanced approach to gauge investment success factoring wider economic and social impacts aligned to its pension mandate. Responses emphasized measurement philosophies assessing developmental outcomes like job creation, infrastructure building, and import substitution abilities alongside conventional financial risk-adjusted return metrics. Officials noted the rigor in evaluation processes examining commercial viability and developmental potential across opportunities. The findings make NAPSA's efforts on balanced success measurement evident - displaying realization of development impacts' importance for national stakeholders without losing sight of financial sustainability securing pensioners' future. However standardized impact accounting practices are yet unclear.

4.2.3 Aligning with Organizational Goals

Interview findings revealed NAPSA's investments over 2005-2023 were anchored to core organizational priorities around stability, liquidity, risk balancing, and adherent asset-liability matching supporting pension obligations. Officials described mechanisms deliberately assessing alignment with principles on diversification, prudential oversight, growth, and public welfare impact during

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investment vetting processes. The findings demonstrate NAPSA's progress on anchoring investments to core pension delivery aims, like stability. Presence of mechanisms scrutinizing individual choices' strategic impacts signifies leadership vision.

4.2.4 Evaluation and Selection of Opportunities

The interview findings revealed NAPSA's institutionalization of rigorous vetting protocols thoroughly assessing investment choices proposed along both fiscal and developmental parameters while underscoring multi-stakeholder participation, transparency, and accountability safeguards structuring the overall selection processes. Responses highlighted analytical principles weighing opportunities on growth prospects balanced with societal impact dimensions in line with the pension entity's public welfare mandate. Presence of tiered reviews straddling external experts injecting market insights equally demonstrated prudence guiding approvals. The systematic approach indicates efforts toward balancing growth prospects, de-risking, development coherence and ethical shape in line with pension best practices targeting societal maximization rooted in long horizons. Information barriers however hamper evidence-based policy improvements. The comprehensive architecture guiding investment selection demonstrates adoption of globally advocated checks-balances cementing accountability and ambition.

4.2.5 Involvement of Key Stakeholders

The interview analysis revealed NAPSA's formalization of inclusive decision architectures involving varied internal and external stakeholders spanning board members, functional heads, industry experts, legal advisors and government administrators providing multi-dimensional inputs informing investment selections aligned to organizational priorities. Responses underscored value ascribed to diversity of thought, skills, and market insights injected through collective analyses aiming to limit individualistic biases and enhance choice robustness through scrutiny mechanisms leveraging checks and balances. The mechanism descriptions reveal NAPSA's efforts in formally integrating multiple competencies to optimize decisions. Inclusion of board competencies in areas like accounting, law and actuarial science aims to secure balance across key delivery dimensions. Equally, entity heads representation provides operational lens highlighting execution complexities around resource management and political economy factors. External advisors and legal officers further supply market signals and legislative compliance assistance responding to pension funds' intersecting accountabilities spanning beneficiaries, agents, and national interests. However, ad-hoc arrangements dominate more systemic coordination.

4.2.6 Alignment with Industry best practices

The interview findings revealed NAPSA's conscious emphasis on continually aligning its investment risk management and performance benchmarking methods to prevailing global best practice standards through regular benchmarking exercises, technology upgrades tracking emergent risks, and participation in cross-border collaborations promoting knowledge exchange. Multiple responses highlighted the Global Investment Performance Standards and International Social Security Association guidelines anchoring inhouse frameworks updated regularly reflecting latest doctrines. Academic research underscores pension systems anchoring internal protocols to evolving global investment and risk conventions as imperative for sustained relevance and resilience navigating market complexities (Ambachtsheer 2021; Broadbent et al., 2006).

4.3 Influence on Investment Strategies

The interview findings revealed NAPSA's formal integration of performance indicators within decision protocols assessing investment choices on alignment to pension sustainability across areas of returns, liquidity management, risk mitigation and growth contribution. Responses highlighted KPI usage analytics examining opportunities also along dimensions like economic impacts beyond commercial only considerations - revealing process sophistication matching the fund's multifaceted identity as an asset owner financing public welfare need requiring balancing financial outcomes with development contributions. Academic theories posit embedding customized indicators tied to strategic objectives centrally in governance workflows examining investment selections as indispensable for multifaceted pension systems evidencing competing goals across growth, stability, and economic upliftment (Ambachtsheer 2007; Muralidhar 2001).

4.4 Key Performance Indicators

The interview findings revealed adoption of versatile performance benchmarks at NAPSA spanning financial metrics and non-financial indicators tied to strategic sectors, development impacts and operating environments for comprehensive measurement of investment results. Responses highlighted the balanced incorporation of profitability, risk and economic contribution gauges within assessment frameworks reviewing the pension fund's multifaceted ambitions around asset integrity, capital preservation and societal upliftment intrinsic to institutional identity as a public retirement financing vehicle. The findings reveal NAPSA's efforts in formally deploying versatile Key Performance Indicators cohering short-term fiscal targets to medium term risk, liquidity goals and long-term economic growth contribution aligned to Zambia's industrial policy. The presence of regularly reviewed financial metrics demonstrates continuation of prudent oversight safeguarding pensioner assets. Incorporation of metrics tracking strategic sectors

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likewise shows responsiveness to national priorities around areas like renewable energy and import substitution. Ad-hoc approaches, however, dominate formally regularizing impact assessment.

4.5 KPI Selection and Review

The interview analysis revealed NAPSA's balanced approach in selecting and reviewing appropriate key performance indicators customized to its mandate of delivering pension services securely while contributing to wider national growth priorities. Responses highlighted prudent protocols stipulating indicator design principles ensuring adherence to regulations meet asset integrity dimensions while allowing flexibility to integrate metrics capturing economic development impacts intrinsic to institutional identity as a citizen financed public pension vehicle. The presence of dynamic review procedures equally demonstrated responsiveness to operating environment changes. The findings reveal NAPSA's assimilation of balanced scorecard precepts judiciously tailoring performance tracking to concurrent ambitions around pension security, risk calibration and development contribution through holistic indicators. Strategic alignment processes equally demonstrate responsiveness to operating environment changes and iterative enhancement principles that research prescribe for sustained coordination between top-level goals and ground-level execution. However centralized review departments responsible for continual indicator benchmarking globally are yet absent.

4.6 Consistency of KPI Success

The findings revealed NAPSA's rounded success across financial and non-financial key performance indicators over the review period – depicting execution of prudent tactics judging by responses documenting strong fiduciary metric performances like investment returns combining with positive momentum in strategic sectors like technology and hospitality reflecting national policy prioritizations. However, references to challenges around concentrated exposures signals potential gaps in protocols assessing strategic investment risks holistically. Presence of mechanisms upholding compliance indicators demonstrates partial insulation from contextual pressures pension analysts highlight (Sethi 2005). Academic advocates posit sustained success across suitably designed financial and non-financial indicators balancing growth and stability as positive demonstration of pension funds executing on twin mandates of member welfare maximization and socioeconomic development (Ambachtsheer 2007).

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study aimed to evaluate NAPSA's investment strategies across four key areas - financial performance, decision-making, risk management, and results measurement. The analysis found a balanced diversification approach, inclusive decisions, adaptive risk framework, and versatile indicators as strengths while priority balancing among competing dimensions requires enhancements for coherence. Prudent practices back core functionality across objectives analyzed but complex mandate trade-offs necessitate improved balancing between risk management, long-term security, short-term returns, and development impacts through coordination and clarity as organizational decision-making matures assimilating global conventions.

The research uniquely consolidated multi-faceted insights from diverse NAPSA investment officials providing rounded inside-out perspective on navigating strategic and operational complexity intrinsic to public pension funds missing in current literature. Identifying enhancements needed around priority balancing and cross-functional coordination informs policy and operational recommendations regarding framework upgrades and competency building to help NAPSA securely deliver pension services balancing fiscal and developmental imperatives.

5.2 Recommendations

In line with the findings, the study proposes the following recommendations:

- **Developmental Impact Assessment Formalization:** While the interviews revealed NAPSA's intent to balance societal returns through public infrastructure and real estate investments, impact assessment measures remain secondary. Formally regularizing development indicators tracking integral with risk-return frameworks can signify commitment matching actions to ambitions. Beyond cited examples like jobs created, explicitly monitoring indices like MSME vendor development, clean energy access improvement through financed power assets and localization enabled through substituting imports across industries where NAPSA holds stakes using lean digitized surveys and IoT instrumentation should feature in annual metric reviews by the board subcommittee with head evaluations tied to outperformance on highlight targets. Specialized recruitment into dedicated development impact roles for building inhouse expertise in associated technologies, interfacing with national statistical agencies to shape data modernization supporting evidence-based investment policy and publishing.
- **Building Specialized Analytical Competencies:** The findings indicated overreliance on generalist skills in navigating complex investment-policy trade-offs versus globally advocated specialist risk, sector and model competencies needed examining

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systemic portfolios, emerging threats and public returns. Developing forensic auditing, alternative credit risk assessment, development impact modeling, macroeconomic analysis and technology-focused due diligence capabilities through targeted recruitment, graduate training sabbaticals at pioneering global pension investors and incentivized mobility programs with best-practice funds can enable prudent market testing, investment stress testing and balanced policy advisory. Fintech partnerships leveraging artificial intelligence techniques in predictive risk identification, portfolio optimization and traditional indicator validation also hold promise. Strengthening multi-disciplinary analytical bandwidth and technology absorptive capacities at middle management levels stand imperative addressing documented skill gaps optimizing public pension investment functionality through volatility. Elevating in-house specialized competencies also reduces information asymmetries that research finds often advantage external consultants and sophisticated deal originators ultimately jeopardizing robustness of safeguards optimizing citizen interests.

- Quantitative Analyses on Specific Asset Classes: Given the dominance of qualitative assessments thus far, empirical baseline measurement analyses are needed evaluating actual financial and economic returns secured from strategic investment categories like government partnerships in technology infrastructure, industry bailouts and power sector restructurings where NAPSA has allocated capital recently. Robust sector-specific ex-post analyses clarifying actual fiscal outturns, defaults risk surface level shifts, jobs enabled through revived capacities utilizing administrative data and internally codified deal term sheets can assist internal learning besides informing prudent policy design.

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