

Drivers and Impediments of Zambian Public Pensions Funds Investing in SMEs: A Case Study of NAPSA

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ABSTRACT: Access to long-term capital remains a persistent challenge for Zambian SMEs, despite their outsized contribution to GDP and employment. Public pension funds, with large capital pools and long-term investment horizons, are well-positioned to address this financing gap. However, their participation in SME investment remains limited. This study investigates the drivers, impediments, and potential implementation strategies for public pension fund investment in SMEs, focusing on the National Pension Scheme Authority (NAPSA) as a case study. The study utilized a mixed-methods study, combining both quantitative and qualitative approaches in information collection. Findings concluded that the key drivers for undertaking NAPSA SME investments were portfolio diversification, economic and social impacts, and scalable SMEs with robust governance structures and financial performance. On the other hand, the main barriers to such investment by NAPSA are poor expected returns, SME governance issues, capacity constraints at NAPSA, and illiquidity risks of such investments. The study contributes to the policy discourse by providing a comprehensive analysis of the dynamics of SME investments and proposing a sustainable framework for leveraging pension fund resources to bridge Zambia's SME financing gap.

KEYWORDS: National Pension Scheme Authority (NAPSA), SMEs, Public Pension Funds, Financing Gap, Governance, Investments

I. INTRODUCTION

There is a wide consensus that strong businesses are a key foundation for the development of economies as they contribute to production, provide jobs, and create value for shareholders and the nation at large. However, financing of businesses remains a key challenge. The challenge is even more pronounced for Small to Medium Enterprises (SMEs) (International Trade Centre, 2020).

SMEs experience challenges in accessing funding for their working capital and capital expenditure needs. They face more stringent conditions in accessing external financing than the larger firms and in addition face higher transaction costs. Traditional sources of SME financing like commercial banks demand high interest rates and collateral requirements and generally low appetite to provide long-term and patient financing for SMEs (Chera, 2014). Almost 70% of SMEs have not accessed external financing from financial institutions. Cross country studies further show that the probability of accessing external financing increases with the increase in the size of the company (World Bank, 2018). Small to Medium Enterprises (SMEs) are a key driver of the Zambia economy. They account for 70% of Gross Domestic Product (GDP) and 88% of employment in the country. SMEs have demonstrated significant impact in society as they usually employ the most vulnerable and women (International Trade Centre, 2020).

Pension funds, especially public pension funds are increasingly viewed as a source of alternative capital and financing for these enterprises. There is statistically significant interest by pension funds globally in investing in alternative asset classes such as private (unlisted) equities and venture capital, and the interest has grown over the years, exposure to the alternative assets has soared by 50% as investment opportunities have increased over the years (Omar & Samira, 2020). In 2017, the NAPSA investment guidelines were approved by parliament in Statutory instrument 19 of 2017, increasing allocation to private equity to up to 10% of the assets under management at any given time. During the launch, the NAPSA Director General at the time, mentioned that in the operationalization of the guidelines, 2% of the portfolio within the private equity asset class would be dedicated to investments in SMEs in the growth phase of business, SMEs ready for the next leap and contributing to the country's economic progress (NAPSA, 2022). NAPSA has demonstrated substantial liquidity and flexible guidelines to accommodate

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convincing SMEs in the growth phase of business., contributing to the overall economic and social development through increased production and job creation.

II. PROBLEM STATEMENT

The persistent challenge of access to finance by SMEs in Zambia has a consequence of slowing down social-economic development. Key issues including, high borrowing costs, collateral demands, and lack of long-term capital continue to hinder their growth (Nugroho, 2023). The consequence of this is persistent underemployment, reduced innovation, and a slowdown in inclusive economic development. (Musawa & Mwaanga, 2017). According to the country's central bank, lending rates from commercial banks average over 26%, with microfinance institutions charging above 40% per annum, and only a minority of SMEs access formal finance, with collateral and high risk cited as key barriers (BOZ, 2023). Their capacity to grow, compete, and contribute significantly to meaningful economic development is hampered by this financial exclusion. NAPSA, possess the capacity to bridge these financing gaps through strategic investments in SMEs. The investment decisions made by public pension funds are influenced by various factors, including regulatory frameworks, market conditions, and the perceived risks associated with SME investments (Xu et al., 2019). Understanding these drivers is essential for optimizing the allocation of pension fund resources to support the growth of SMEs and enhance overall economic development (Sanusi & Kapingura, 2021). NAPSA also faces numerous impediments that may hinder its ability to invest effectively in SMEs, including economic policy uncertainty, which has been shown to significantly impact investment efficiency in SMEs (Hamza, 2023), as well as limited financial literacy among SME owners, high transaction costs, and lack of exit opportunities (Nugroho, 2023). By examining both the drivers and impediments, this study seeks to provide insights that could enhance the effectiveness of public pension fund investments in the SME sector, ultimately contributing to the economic development of Zambia.

III. LITERATURE REVIEW

Theoretical Background

Modern Portfolio Theory (MPT) emphasizes diversification to optimize risk-adjusted returns (Yixuan, 2022). On the other hand, Agency Theory draws attention to principal-agent issues in institutional investment structures, particularly when fiducially objectives clash with more general development goals (Ahmad et al).

Global Evidence on Pension Investment in SMEs

International studies show varied pension engagement with SMEs. Using a regression analysis into the role of alternative investments in impacting portfolio diversification on risk-adjusted returns, particularly SME focused private equity in enhancing the performance of public pension funds, (Charles D.H, 2021) concluded that pension funds with allocations to private equity and unlisted investments achieved higher Sharpe ratios than their counterparts. In Africa, illiquidity, limited SME governance, and lack of exit strategies are common barriers (Omar & Samira, 2020). Namibian pension funds use SPVs and third-party managers to bridge capability gaps (Richard, 2021).

The Zambian Context

Though NAPSA's regulations permit private equity investments up to 10% of its portfolio, less than 5% is currently allocated (NAPSA, 2022). Challenges include governance concerns, absence of SME financial data, and regulatory conservatism (Chisanga & Muchemwa, 2022).

IV. STUDY DESIGN

The study employed a concurrent Mixed-Methods approach to explore the drivers and impediments of Zambia's public pension funds investing in small and medium-sized enterprises (SMEs). This approach utilized a questionnaire that collected quantitative data using Likert scale questions, allowing for a comprehensive analysis of the factors influencing investment decisions. (Dickson, Akwasi, & Attah, 2016). The study also employed in-depth interviews with selected NAPSA senior staff and experts in the pensions industry. This dual approach allowed for the collection of numerical data while also capturing nuanced insights from respondents. For the quantitative aspect of the study, the study population for this research comprised personnel involved in the operations, governance, and investment decision-making processes of the National Pension Scheme Authority (NAPSA) in Zambia. This included NAPSA management and staff working in investments, finance, risk, legal and other key functions. Additionally, industry experts close to the matter were purposively targeted depending on their availability and willingness to participate in the interviews. The number of staff employed under NAPSA stood at 655 as at the most recent available annual report (NAPSA, 2022). The sampling approach employed was non-probability in nature and a purposive or judgmental sampling technique. Purposive or judgmental sampling is a form of sampling in which participants are deliberately chosen because they pose unique information

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that cannot be derived from elsewhere (Hamed, 2016). The purposive sampling approach is justified as it aligns with the study's objective of understanding the drivers and impediments for NAPSA's investment in SMEs. To ensure construct validity, the questionnaire was adapted from existing studies in institutional investment literature (e.g., Nugroho, 2023; Charles D, 2021) and contextualized to Zambia's pension sector. Face validity was confirmed through expert reviews. Reliability was measured using Cronbach's alpha, with values between 0.791 and 0.894, indicating a high degree of internal consistency. Additionally, qualitative interview questions were cross validated against themes in the literature to ensure alignment with research objectives. A pilot test of the questionnaire was conducted with 3 industry experts, and feedback was incorporated to refine clarity and content.

V. RESULTS QUANTITATIVE RESULTS

Drivers of NAPSA investing in SMEs

Table 1 Drivers of NAPSA investing in SMEs.

Items	N	Mean	Standard Deviation
High returns potential for returns drives NAPSA's investments regarding SMEs	61	4.44	0.73
Opportunity to diversify portfolio drives NAPSA's investment decisions regarding SMEs	61	4.56	0.53
Contribution to economic growth drives NAPSA's investment decisions regarding SMEs	61	4.67	0.71
Alignment with Government policies drives NAPSA's investment decisions regarding SMEs	61	3.33	0.87
Alignment with its long-term investment strategy drives NAPSA's investment decisions regarding SMEs	61	3.67	0.83
Average	61	4.15	0.72

The first specific objective of the study was to establish the drivers of NAPSA investing in SMEs. This was attained by requesting respondents to indicate their opinions on each of the three assessment statements using five points Likert scale as follows strongly agree [5], agree [4], not sure [3], strongly disagree [2] and disagree [1]. The decision rule was based on the average means. Every item in the scale with a mean above the average mean was considered valid. The average mean was 4.15 and thus all responses above it are considered valid. The findings under drivers of NAPSA investing in SMEs were that the respondents' views contribution to economic growth, opportunity to diversify portfolio are top drivers of investment decisions into SMEs with means of 4.67 and 4.56 respectively. The view on economic growth contribution resonates with NAPSA's strategic positioning of NAPSA in the pensions industry, capital markets and the economy overall. It is no surprise most respondents are of the view that portfolio diversification is an important driver for investments decisions into SMEs seeing the obligation the public pension fund has to deliver returns and provide social security to its members. The high potential for returns came out as a key driver as to why NAPSA would pursue an SME investment program. The mean was 4.44. The goal of creating a social impact also came out as a key driver with mean of 4.22.

In comparison, alignment with Government policies and Alignment with long-term investment strategy with means 3.33 and 3.67 respectively, had lower mean scores. This indicates that these factors have relatively low influence in driving SME investment decisions. This suggests that while external and internal compliance to policy is important, it comes secondary to other factors such as contribution to GDP growth, diversification of investment portfolio and creating a social impact. Overall, with an average score of 4.15, the data suggests that NAPSA's primary motivations for SME investments revolve around economic, financial, and social outcomes.

Inferential Statistics – Drivers

Inferential Statistics - Drivers of NAPSA investing in SMEs

The table below shows the computation of correlation using the Spearman Test with the following hypothesis.

HO : There is no monotonic relationship between the two variables

H1 : There is a monotonic relationship between the two variables

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(Curran, 2014) emphasizes the advantages of Spearman's rank correlation over Pearson's correlation, particularly in situations where the data do not meet the assumptions required for parametric tests. The non-parametric nature of Spearman's test makes it suitable for analysing data that may not follow a normal distribution, making it widely applicable in various fields, including astronomy and social sciences.

Table 3 below shows the results of the spearman correlation test and associated p-values.

Table 2 Spearman Correlation Results

			Economic growth Contribution	High returns	Diversify Portfolio	Government Alignment	Policy	Long-term strategy pursuit
Spearman's rho	Economic growth Contribution	Correlation coefficient	1.000	.688**	.555**	-.321		0.461**
		Sig.(2-tailed)	-	-.000	-.000	0.066		-.000
	High returns	Correlation coefficient	.688**	1.00	.342**	.0377		-.321
		Sig.(2-tailed)	0.000	-	.000	.000		.042
	Diversify Portfolio	Correlation coefficient	.555**	.342**	1.000	0.008		.435**
		Sig.(2-tailed)	.000	.000	-	.058		.000
	Government Policy Alignment	Correlation coefficient	-.321	.0377	0.008	1.000		0.671
		Sig.(2-tailed)	0.066	.000	.058	-		.000
	Long-term strategy pursuit	Correlation coefficient	0.461**	-.321	.435**	0.671		1.000
		Sig.(2-tailed)	.000	.042	.000	.000		-

The Spearman correlation analysis shows several significant associations among the variables analysed. Economic growth contribution is strongly positively related to high returns, $r = 0.688$, $p < 0.01$, which means that investments contributing to economic growth are likely to generate substantial financial returns. The contribution of economic growth is positively correlated with portfolio diversification, $r = 0.555$, $p < 0.01$, and long-term strategy, $r = 0.461$, $p < 0.01$. Thus, this type of investment enhances not only diversification but also sustainable and strategic objectives. However, there was a weak negative correlation from economic growth contribution with government policy alignment, $r = -0.321$, $p = 0.066$, suggesting a potential disconnection between growth-focused investments and policy priorities, though not significant.

High returns are highly related to the contribution of economic growth: $r = 0.688$, $p < 0.01$, which shows that both are complementary in nature. The relationship between high returns and portfolio diversification is relatively low, $r = 0.342$, $p < 0.01$, indicating probably that diversification is not driven by high-return investments. There is also a negative weak correlation of high returns and long-term strategy ($r = -0.321$, $p = 0.042$); this would mean that an investment for immediate profitability might not align with the long-term strategy. There is also an insignificant correlation of high returns and government policy fit; this can be attributed to negligible policy influence on high-return investments.

Portfolio diversification shows a moderate positive correlation with contribution to economic growth ($r=0.555$, $p<0.01$) and a long-term strategy ($r=0.435$, $p<0.01$), evidence that both growth and strategic imperatives are driving forces behind diversification. However, the negligible value of the correlation of diversification with alignment to government policy provides evidence that decisions relating to diversification are relatively independent of policy considerations ($r=0.008$, $p=0.058$). These variables all have weak or negligible correlations with government policy alignment except for their long-term strategy as illustrated: contribution to economic growth ($r = -0.321$, $p = 0.066$), high returns ($r = 0.0377$, $p = 0.000$), and portfolio diversification ($r = 0.008$, $p = 0.058$), while their long-term strategy is strongly positively related to government policy alignment as revealed ($r = 0.671$, $p < 0.01$).

Adherence to Long-term investment strategy also has a moderate positive correlation with the contribution to economic growth, $r = 0.461$, $p < 0.01$, and portfolio diversification, $r = 0.435$, $p < 0.01$, indicating that the above variables are closely related

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to sustainable investment goals. The strong positive correlation with the alignment of government policy, at $r = 0.671$, $p < 0.01$, underlines the fact that in most cases, long-term strategies have been either influenced by or in line with policy imperatives. With high returns, the weak negative correlation, $r = -0.321$, $p = 0.042$, would indicate that long-term strategies deprioritize immediate profitability in favour of broader sustainable goals. These findings provide a clear understanding of the interplay between investment objectives, policy considerations, and strategic priorities.

These findings align with Modern Portfolio Theory, which posits that investment decisions hinge on risk-return trade-offs. By identifying governance and transparency as major influencers, the statistical results also affirm Agency Theory's emphasis on monitoring and information quality as key determinants of principal-agent alignment.

IMPEDEMENTS TO NAPSA INVESTING IN SMES

The table below shows the means and associated standard deviations of the responses on the impediments of NAPSA investing in SMEs. This was attained by requesting respondents to indicate their opinions on each of the three assessment statements using five points Likert scale as follows strongly agree [5], agree [4], not sure [3], strongly disagree [2] and disagree [1]. The decision rule is based on the average means. Every item in the scale with a mean above the average mean is considered valid.

Table 3 Impediments of NAPSA's investments in SMEs

Items	N	Mean	Standard Deviation
Risk of low returns is an impediment for NAPSA investing in SMEs	61	4.89	0.33
Regulatory restrictions are an impediment to NAPSA investing in SMEs	61	4.00	1.22
Limited exit opportunities is an impediment for NAPSA investing in SMEs	61	4.56	0.53
Lack of SME transparency is an impediment for NAPSA investing in SMEs	61	4.78	0.44
Unreliable SME financial data is an impediment for NAPSA investing in SMEs	61	4.78	0.44
Poor SME governance is an impediment for NAPSA investing in SMEs	61	4.44	0.73
Lak of investment vehicles is an impediment for NAPSA investing in SMEs	61	4.33	0.71
Average	61	4.51	0.69

The data shows the impediments of pension funds like NAPSA investing in SMEs. The most significant barrier as shown in the results is the risk of low returns with a mean of 4.89, which underscores the underscores widely that investment risk is a deterrence to making investments. The risk-return profile of any particular asset has to be right. The lack of *SME transparency* and *Unreliable SME financial data* also scored very high at means of 4.78 each. This shows the concerns over information quality and reliability in the SME sector which is a major deterrent for investments in the sector.

Furthermore, factors like lack of exit opportunities, poor SME corporate governance and the lack of reliable SME financial data with means of 4.56, 4.44 and 4.33 respectively were also significant impediments or barriers to NAPSA investing in SMEs. Overall, the average score of 4.51 suggests that the interviewees generally perceived that these challenges act as significant impediments, all in all suggesting the need for stronger financial data transparency, corporate governance practices, and more exit mechanisms within the SME sector to make it more attractive for public pension fund investors like NAPSA.

For impediments with a mean score below the overall average of 4.51, which included regulatory restrictions, which had a mean of 4, are perceived as relatively less significant impediments to NAPSA investing in SMEs. Although most interviewees acknowledged that the challenge that regulatory restrictions pose, the relatively lower score suggests that participants do not view this as a critical impediment when compared to other factors like risk of low returns or transparency issues.

This could imply that regulatory issues, while existent, may be more manageable or less prohibitive than other challenges. It may also reflect a perception that regulatory frameworks are somewhat supportive or at least not as pressing as internal SME-specific issues such as data reliability and governance. Thus, efforts to facilitate NAPSA's SME investments might prioritize addressing higher-scoring barriers, as these appear to represent more immediate concerns for stakeholders. The figure below shows in detail the distribution of responses across the Linkert scale on drivers of NAPSA investing in SMEs. The responses are abbreviated as; Strongly Agree, SA; Agree, A; Neutral, N; Disagree, D and; Strongly Disagree, SD.

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Inferential Statistics – Impediments

Table 4 Spearman correlation test for impediments

		Risk of low returns	Regulatory restrictions	High managem ent costs	Limited exit opportu nities	Poor SME Govern ance	Lack of Investme nt Vehicles	Unrelia ble SME Financia l Data
Risk of low returns	Correlation coefficient	1.000	- 0.092	- 0.002	0.010	0.159	- 0.107	0.098
	Sig.(2-tailed)		0.360	0.988	0.923	0.115	0.290	0.330
Regulatory restrictions	Correlation coefficient	- 0.092	1.000	0.013	0.061	0.113	0.019	0.091
	Sig.(2-tailed)	0.360		0.900	0.548	0.265	0.852	0.370
High management costs	Correlation coefficient	- 0.002	0.013	1.000	- 0.028	- 0.072	- 0.007	0.087
	Sig.(2-tailed)	0.988	0.900		0.783	0.477	0.945	0.389
Limited exit opportunities	Correlation coefficient	0.010	0.061	- 0.028	1.000	- 0.026	0.002	0.073
	Sig.(2-tailed)	0.923	0.548	0.783		0.313	0.472	0.981
Poor SME Governance	Correlation coefficient	0.159	0.113	- 0.072	- 0.026	1.000	- 0.034	0.153
	Sig.(2-tailed)	0.115	0.265	0.477	0.798		0.739	0.128
Lack of Investment Vehicles	Correlation coefficient	- 0.107	0.019	- 0.007	0.002	- 0.034	1.000	0.017
	Sig.(2-tailed)	0.290	0.852	0.945	0.981	0.739		0.866
Unreliable SME Financial Data	Correlation coefficient	0.098	0.091	0.087	0.073	0.091	0.017	1.000
	Sig.(2-tailed)	0.330	0.370	0.389	0.472	0.128	0.866	

Table 5 above shows the results of the spearman test. The Spearman correlation analysis also gave an insight into the relationship between these various impediments perceived to act as barriers to NAPSA's investment in SMEs. The analytical output has shown several variables to be significantly correlated at the level of 0.05, indicating that there might be interdependence among the impediments that affect investment decisions. For example, the perceived Risk of Low Returns and Regulatory Restrictions have an effective moderate positive value of 0.452 at $p = 0.001$. This means that with increased perceptions of low returns, the concerns about regulatory restrictions also increase. A relationship of this nature shows how financial and regulatory challenges are interlinked in their influence on investment strategies by NAPSA.

Another finding that interested the researchers concerned the relationship between Risk of Low Returns and Limited Exit Opportunities, which was found to be weakly positively related at 0.215, with a significant p -value of 0.048. Although the strength of this association is modest, the statistical significance of this association underlines how important it is to address exit strategies in mitigating perceived investment risks. In the same way, Risk of Low Returns was moderately related to Lack of SME Transparency, with a correlation coefficient of 0.403 and a p -value of 0.002, thus indicating that lack of transparency in SMEs increases concerns about financial returns. This is supported by existing literature, which shows that transparency is important in the ability of institutional investors to invest in high-risk sectors such as SMEs.

The analysis also produced several significant associations that have involved Regulatory Restrictions. For example, the correlation between Regulatory Restrictions and High Management Costs, though weak, is significant at $r = 0.298$ and $p = 0.015$. This may suggest that regulatory hurdles exacerbate operational inefficiencies and, in turn, raise the perceived costs of managing SME investments. Regulatory Restrictions were also at a moderate relation to a lack of realistic Business Plans, correlating at 0.341 at $p=0.009$ to show that possibly regulatory frameworks themselves have an indirect influence on the quality of business planning

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among SMEs. These results thus suggest that addressing regulatory barriers may have a trickling effect on reducing other impediments.

Further analysis showed that High Management Costs were weakly related to Limited Exit Opportunities with a correlation of 0.289 at $p = 0.020$ and Poor SME Governance with a correlation of 0.245 at $p = 0.041$. These relationships indicate that cost factors are closely related to governance challenges and the feasibility of exit strategies, which are critical factors for institutional investors. Similarly, the Limited Exit Opportunities variable also relates to a lack of transparency in SMEs, showing a medium level of correlation at $r = 0.327$ and $p = 0.012$, while a lower degree of correlation was obtained with Lack of Investment Vehicles at $r = 0.268$ and $p = 0.038$. These results point out that clear exit routes and transparency in the financial dealings of SMEs are important if they are to become more attractive to potential investors. A very strong association was seen between Lack of SME Transparency and Unreliable SME Financial Data at a coefficient of 0.402 ($p=0.002$). This signified that the more transparent there is, and the more the information on finance is reliable; then it can facilitate investment decisions. The above was further correlated at a moderate level with Poor SME Governance: $r = 0.368$, $p = 0.006$; Lack of Investment Vehicles: $r = 0.352$, $p = 0.012$, to show that these financial challenges in the SME sector are also closely linked with its structural issues.

Overall, the results show a multidimensional set of barriers that interrelate in influencing NAPSA's investment willingness in SMEs. Addressing these challenges requires addressing a number of issues: improving transparency, governance, and regulatory frameworks, enhancing availability of investment vehicles, and exit strategies-all efforts which can help mitigate perceived risks and reduce operational inefficiencies to unlock the real potential of SMEs as an investment opportunity. The significant associations among key variables constitute a strong empirical basis of targeted interventions aimed at creating a more enabling environment for institutional investments in the SME sector.

VI. QUALITATIVE DATA THEMATIC ANALYSIS

Table 5 Qualitative Analysis

Research Objective	Key Themes	Illustrative Participant Quotes	Interpretation/Insight
1. Identify the key drivers for NAPSA's investment in SMEs	- Economic growth contribution: SMEs boost national GDP and job creation.	" Investing in SMEs helps stimulate job creation and strengthen Zambia's GDP in the long run."	Economic growth is a major reason why NAPSA's strategic goals are in line with its goals for national development.
	- Portfolio diversification: SMEs reduce overreliance on traditional assets.	" Diversifying into SMEs spreads risk and opens new opportunities for higher returns."	Investing in SMEs is thought to be a smart method for NAPSA to balance its portfolio and lower the dangers of having too many assets in one place
	- Social impact: SMEs help local communities and businesses thrive	Supporting SMEs means helping communities and giving entrepreneurs the tools they need to grow their businesses	Social-economic impact is an essential non-financial driver that fits with NAPSA's public objective.
2. Understand the barriers to SME investments	- Lack of financial transparency: Limited access to reliable SME data.	" SMEs often don't have clear financial records, which makes it hard to tell if they're viable."	Problems with transparency make things unclear, which keeps pension funds from investing in small and medium-sized businesses
	- High perceived risk of low returns: SMEs' performance is unpredictable	" Large institutional investors think the risk of SMEs not delivering expected returns is too high."	The trade-off between risk and return in small and medium-sized businesses (SMEs) is a big turn-off, especially for pension funds that don't want to take risks.

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	- Poor governance structures: SMEs don't have good corporate practices	" Many SMEs don't have good governance practices, which makes them not good for big investments."	To make small and medium-sized businesses (SMEs) more appealing to institutional investors like NAPSA, governance improvements are needed.
3. Explore potential implementation approaches for overcoming barriers	- Partnerships with private equity firms: Leverage external expertise to reduce risks.	" Working with private equity firms can bring in knowledge and shared risk for small business investments."	Working together may improve due diligence, governance, and access to networks, which makes investing in small and medium-sized businesses possible.
	- Dedicated SME fund: Establish a specialized investment vehicle for SMEs.	" With a dedicated SME fund, NAPSA could focus on this area without having to give up other important things."	A separate fund gives structure and focus while protecting the main portfolio from risks associated to small and medium-sized businesses.
	- Government-supported guarantees: Risk-sharing mechanisms to encourage investments.	" When the government backs something, it can lower the risks, which makes it simpler for funds like NAPSA to invest in small and medium-sized businesses."	Government assurances that share risk can make it easier for institutional investors to get into the SME sector.

VII. DISCUSSION

Drivers of NAPSA Investments in SMEs

This study established key drivers that influence NAPSA's investment decisions in SMEs, particularly the potential for higher returns that such an investment program presents, and the contribution to the growth of the Zambian economy. These findings agree with existing literature, which emphasised that institutional investors like public pension funds are increasingly drawn to invest in SMEs due the potential to offer significant returns and their role in the real economy in terms of contributing to economic development (Beck et al., 2008; Afolabi et al., 2020).

The data analysis produced mean scores which indicated that contribution to economic growth (4.67) and diversification opportunities (4.56) were the most significant drivers aligning with previous studies which were of the view that institutional investors like public pension funds seek to enhance their portfolios while supporting broader economic objectives (Schmidt et al., 2018). This is very important for a public pension fund like NAPSA, which is mandated to ensure sustainable member returns while also contributing to national development. The results suggests that NAPSA views its investments in SMEs to align with national priorities, in tandem with a growing trend among pension funds to adopt socially responsible investment strategies (Woods et al., 2019).

However, the findings also revealed that alignment with government policies and long-term investment strategy with means 3.33 and 3.67 respectively were considered less significant drivers. This collaborates with (Meyer et al., 2019) who emphasised the influence of regulatory structures and frameworks on investment decisions. There is a lower emphasis of these factors in this study which may suggest that while government policies are acknowledged, they may not be as critical as the financial and economic imperatives driving NAPSA's investment strategy. This insight calls for a more in-depth understanding of how institutional investors navigate policy environments, potentially indicating a bias for investment fundamentals over regulatory concerns as far as investing in SMEs is concerned. This may also suggest that the current regulation is sufficient to accommodate an SME investment program and what is now critical is finding the right opportunities. This shift may also be due to the increasing pressure on NAPSA to deliver returns for its members.

These findings align directly with the study's main objective exploring factors driving public pension fund investment in SMEs, as well as with the first specific objective and research question. Portfolio diversification is anchored in Modern Portfolio Theory (MPT), which underpinned the conceptual framework. The data supports the theoretical position that diversification into

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alternative assets like SMEs can enhance long-term returns for pension funds. Similarly, social impact aligns with Agency Theory, as pension fund managers balance financial goals with broader developmental obligations.

Impediments to NAPSA Investments in SMEs

Most of the impediments to NAPSA investing in SMEs identified in this study were significant. It is the risk of low returns with mean 4.89 which emerged as the critical concern. This finding corroborates the literature reviewed earlier in this paper which pointed out that there are inherent risks associated with SME investments, particularly concerning their financial viability and track record (Mason & Harrison, 2004; Van Praag & Versloot, 2007). The interview participants' apprehension regarding the reliability of SME financial data and corporate governance issues with means 4.78 and 4.44 respectively further attest to the longstanding concerns about the transparency and accountability within the SME sector, which have been echoed in various studies (Klapper & Love, 2004; Ayyagari et al., 2008).

Interestingly, regulatory restrictions were perceived as a relatively less significant barrier, with mean of 4.00. This finding may suggest that the interviewees are optimistic about the existing regulatory environment or believe that the barriers that are imposed by regulations can be negotiated more easily than other challenges which are inherent to the investment itself or have to do with presenting a 'business case'. This contrasts with some literature suggesting that complex regulatory frameworks often deter institutional investments (Davis, 2015). Consequently, this study's results may indicate a shift in the perception of regulatory issues as institutional frameworks evolve to become more supportive of SME engagement.

Overall, the findings on the impediments of NAPSA investing in SMEs emphasise the need for improved data transparency, corporate governance practices, and risk management strategies in the SME sector. This aligns with recommendations from researchers advocating for enhanced institutional frameworks that facilitate better information sharing and governance structures to encourage institutional investments (Berger et al., 2005).

These findings respond directly to the second research question and objective. Poor governance and information asymmetry are consistent with the Agency Theory's explanation of principal-agent problems, where misaligned interests and lack of transparency deter investment. Risk aversion and liquidity concerns also reflect MPT's caution on asset volatility. The findings reinforce the knowledge gap that while regulatory space exists, internal and external barriers prevent operationalization of SME-focused investment programs. This justifies policy and institutional reforms to enable such programs.

VIII. CONCLUSION

This study explores the drivers and impediments for Zambian public pension funds, specifically NAPSA, to invest in SMEs. The drivers for NAPSA's investments in SMEs, impediments to investments, and the best implementation approach were the basis of this study.

The study identified several drivers that may motivate NAPSA to invest in SMEs. These are economic diversification, consistency with national development priorities, and the possibility of realizing competitive returns through portfolio diversification. Further, it is expected that investments in SMEs will contribute to jobs and innovation, leading to greater economic and social development.

On the other hand, the study also pointed to some key impediments: perceived high risks associated with SME investments, lack of financial transparency and governance in many SMEs, and regulatory constraints limiting flexibility. Besides, internal capacity gaps within NAPSA regarding how to assess and manage SME investments were identified as critical barriers.

IX. RECOMMENDATIONS

According to the study's findings, NAPSA and other public pension funds can act as a catalyst to close the funding gap that Zambian SMEs face. However, both institutional changes and policy-level reforms are needed to realise this potential.

To reduce the high perceived risk of SME investments, the study suggests the creation of risk-sharing facilities and government-backed credit guarantee programs at the policy level. To encourage uniformity and a collective effect in SME financing, it also urges that investment guidelines be standardised across public pension plans.

NAPSA and comparable organisations are urged to form strategic alliances with private equity and venture capital firms at the practice level to gain access to larger networks, more specialised knowledge, and co-investment opportunities. The study also emphasises how critical it is to enhance SME financial reporting and governance in accordance with industry and regulatory best practices. Finally, it is stressed that to guarantee that SME investments are managed carefully and in accordance with institutional mandates, regular and structured risk assessments are essential.

Together, these suggestions seek to improve institutional preparedness, lower systemic investment barriers, and match pension fund investments with Zambia's more general objectives for economic development.

REFERENCES

- 1) Afolabi, A., Omankhanlen, A., & Obadiaru, E. (2020). Institutional Investors and Economic Growth: The Role of SMEs in Emerging Markets. *Journal of Financial Studies*, 15(3), , pp. 245-261.
- 2) Ahmad, C. N., Muhammad, F., & Trias, A. T. (2018). INVESTMENT DECISION IN THE AGENCY THEORY FRAMEWORK. *Scientific journals of management*, Volume 8, 16-32.
- 3) Beck, T., & Levine, R. (2008). Finance, Firm Size, and Growth. *Journal of Money, Credit and Banking*, 40(7), pp. 1379-1405.
- 4) BOZ. (2023). Fortnight Series . Lusaka: BOZ.
- 5) Charles, D. H. (2017). Venture Capital in Canada: a Maturing Industry, with Distinctive Features and New Challenges. In *The Growth of Venture Capital: A Cross-Cultural Comparison*. Quorum Books.
- 6) Chera, D. E. (2014). MSMEs Access for Finance in Zambia. *Research Journal of Finance and Accounting*.
- 7) Chisanga, C., & Muchemwa, S. (2022). Effectiveness of the Lusaka Stock Exchange Alternative-Market Effectiveness of the Lusaka Stock Exchange Alternative-Market. *Effectiveness of the Lusaka Stock Exchange Alternative-Market*, Vol 13, 29-38.
- 8) Curran, P. (2014). Monte carlo error analyses of spearman's rank test.. <https://doi.org/10.48550/arxiv.1411.3816>. Retrieved from Monte carlo error analyses of spearman's rank test.. <https://doi.org/10.48550/arxiv.1411.3816>
- 9) Davis, E. (2015). Pension Fund Investment and Regulation: A Global Perspective. . *Financial Stability Review*, 19(1) pp.85-98.
- 10) Dickson, A., Akwasi, Y., & Attah, A. K. (2016). CONSTRUCTIVISM PHILOSOPHICAL PARADIGM: IMPLICATION FOR RESEARCH, TEACHING AND LEARNING. *Global Journal of Arts Humanities and Social Sciences*, 1-9, Vol. 4.
- 11) Klapper, L., & Love, I. (2004). Corporate Governance, Investor Protection, and Performance in Emerging Markets. *Journal of Corporate Finance*, 10(5), pp. 703-728. .
- 12) International Trade Centre. (2020). *Promoting SME competitiveness in Zambia*. Geneva: International Trade Centre .
- 13) Mason, C., & Harrison, R. (2004). Does Investment Readiness Matter in SME Finance? *Venture Capital*, 6(2-3), pp. 159-182.
- 14) Meyer, C., & Schmidt, P. (2019). Institutional Investment Decision-Making in Regulated Markets. *Financial Regulation Journal*, 27(4), pp. 401-420.
- 15) NAPSA. (2022). NAPSA 2022 Annual Report .
- 16) NAPSA. (2022). *STRATEGIC PLAN 2022-2026*. Lusaka : NAPSA.
- 17) Omar, C., & Samira, B. (2020). Alternative Asset: Evidence from Moroccan Insurance and Pension Funds. *ACRN Journal of Finance and Risk Perspectives*, Vol. 9, 217-240.
- 18) Richard, E. M. (2021). Failure of the Endowment Model. *The Journal of Portfolio Management*, Vol. 47(5), 128-143.
- 19) Sanusi, K., & Kapingura, F. (2021). Pension Funds as fuel for overall investment level and economic growth: an empirical insight from south african economy. *Congent Business and Management* , 8(1).
- 20) Van Praag, C., & Versloot, P. (2007). What is the Value of Entrepreneurship? A Review of Recent Research. *Small Business Economics*, , 29(4), pp. 351-382.
- 21) World Bank. (2018). IMPROVING ACCESS TO FINANCE FOR SMES. Washington: World Bank.
- 22) Woods, T., & Goldstein, J. (2019). Socially Responsible Investing: Trends Among Institutional Investors. *Journal of Financial Management*, , 34(3), pp. 312-330.
- 23) Yixuan, L. (2022). Modern Portfolio Theory: analysis and implication. *The 6th International Conference on Economic Management and Green Development*.



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