

NEXUS BETWEEN PUBLIC SECTOR ACCOUNTING AND PUBLIC INFRASTRUCTURE FINANCING IN ZIMBABWE: PRIVATE SECTOR ACCOUNTABILITY EXPECTATIONS

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Abstract:

Zimbabwe has been actively investing in its public infrastructure over the past decade, undertaking projects like rehabilitating major roads, expanding airports, and increasing power generation capacity. However, financial constraints have led to delays in completing these projects, highlighting a significant funding gap for infrastructure development. To address this, Zimbabwe requires annual investments of approximately US\$2 billion until 2032, with the public sector currently contributing around 20% annually. This study aimed to evaluate the current state and role of public sector accounting in attracting private sector investment to bridge this funding gap. Employing an inductive qualitative approach, the study gathered data through interviews and document analysis. Fifteen interviews were conducted, achieving data saturation, and documents analysed included financial reports, public investment management guidelines, and the Public Finance Management Act (Chapter 22:19). The findings revealed that Zimbabwe's public sector accounting landscape is undergoing reform, including the mandatory adoption of International Public Sector Accounting Standards (IPSAS) through Statutory Instrument 41 of 2019. This move is anticipated to strengthen public sector accounting, disclosures, and accountability, thereby bolstering private sector confidence and encouraging investment in public-private partnerships for infrastructure development. The authors recommend prioritizing skills development to ensure a smooth and efficient transition to IPSAS.

Key Words: Zimbabwe; Accountability; Public infrastructure; IPSAS; Infrastructure Financing.

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1. INTRODUCTION TO THE PROBLEM SETTING

In the 21st century, robust public infrastructure is essential for social and economic progress. The quality and quantity of infrastructure directly impact national and global productivity, economic growth, and output in the long term (Kapesa, Mugano and Fourie 2021; AfDB, 2019). Insufficient infrastructure investment has severe consequences for economic development. For instance, the Civil Engineering Contractors Association (CECA) estimates that the United Kingdom lost approximately 5% of its potential GDP between 2000 and 2010 due to significant infrastructure shortfalls (CECA, 2013). Conversely, the American Society of Civil Engineers (ASCE) projects that increasing public infrastructure investment to US\$281 billion annually between 2020 and 2039 could generate US\$10 trillion in GDP, over US\$23 trillion in total output, and create over 3 million jobs (ASCE, 2021). While infrastructure financing gaps are a global challenge, they are particularly acute in developing countries like Zimbabwe, especially in the wake of the COVID-19 pandemic and its economic fallout (UNCTAD, 2020).

Recognizing the vast infrastructure financing gaps worldwide, governments have been implementing reforms to encourage private sector-led development, including public infrastructure

projects. Zimbabwe's government has targeted an annual investment of US\$2 billion in public infrastructure between 2012 and 2032/2033, a goal it has consistently failed to achieve (AfDB, 2019; Kapesa, Mugano and Fourie 2022). To attract private sector investment, Zimbabwe enacted the Joint Ventures Act (Chapter 22:22) in 2016, but this act was later repealed by the Zimbabwe Investment and Development Agency Act (Chapter 14:37) in 2020 after failing to attract substantial private sector participation in joint ventures due to concerns about investor protection and confidence (Mawere-Sibanda Commercial Lawyers, 2020). These reforms aimed to address the deteriorating state of public infrastructure, characterized by persistent electricity outages, rising waterborne diseases, dilapidated roads, a decrepit national railway system, and a struggling national airline with an outdated fleet (AfDB, 2019; Kapesa, Mugano and Fourie 2022).

Motivated by the need to enhance efficiency, effectiveness, and accountability, public sector accounting reforms have led to the adoption of International Public Sector Accounting Standards (IPSAS) by numerous countries, including Zimbabwe (Nakmahachalasint and Narktabtee, 2019). The introduction of IPSAS marked a shift from cash basis accounting to accrual basis accounting (Jackson and Lapsley, 2003). This standardization allows international investors to assess the financial position and performance of public sector entities and governments before making investment decisions, including infrastructure financing. Consequently, improved public sector transparency and accountability are expected to attract private sector investment in public infrastructure.

The introduction of IPSAS has faced resistance, with some viewing it as an attempt to impose private sector accounting practices on the public sector (Grossi & Steccolini, 2015 and Santis, Grossi, & Bisogno, 2018). Proponents of IPSAS argue that private sector accounting practices are superior to traditional public sector practices, hence the need for adoption (Grossi and Steccolini, 2015). The transition from cash basis to accrual-based accounting is fundamentally driven by the need to improve governance, transparency, and accountability for public sector entities (Lampe, Hilgers, & Ihl, 2015). The implementation of accrual accounting in the public sector benefits public finance management by providing a comprehensive view of the financial position and performance of public sector entities, thereby promoting transparency and accountability (Nakmahachalasint and Narktabtee, 2019). However, public sector accounting reforms have primarily focused on financial accounting and reporting practices.

Despite the benefits of adopting and implementing IPSAS, it is also acknowledged in literature that there are several challenges. The adoption of IPSAS in developing countries presents unique challenges due to limited resources and capacity. A key complexity is the requirement for accrual-based accounting, which is a significant departure from the cash-based systems commonly used in these regions (IFAC, 2018). Transitioning to accrual accounting necessitates substantial changes to financial management systems, processes, and the skills of accounting personnel, vis-a-vis resources that are often scarce in developing countries (World Bank, 2019). Additionally, IPSAS implementation demands robust financial data and reporting capabilities, which most developing countries frequently lack due to inadequate information technology infrastructure and underdeveloped financial management practices (OECD, 2017).

Another significant challenge is the cost of IPSAS adoption. Developing the necessary accounting policies, procedures, and controls, as well as upgrading financial systems, requires substantial investment that many developing countries struggle or can hardly afford (IFAC, 2018). This is further complicated by the need to develop specialized IPSAS expertise, which is in short supply in these regions (IFAC, 2017). Without sufficient funding and technical capacity, the effective implementation of IPSAS becomes an immense challenge for developing country governments and their public sector entities.

Despite public sector accounting reforms, the anticipated benefits, particularly in attracting financing for public goods and services through enhanced accountability, remain elusive in Zimbabwe. The country is currently implementing public sector reforms, including the adoption and implementation of International Public Sector Accounting Standards (IPSAS), driven by the advocacy of numerous international financial institutions and development partners (Tawiah and

Soobaroyen, 2022). Key institutions promoting IPSAS-based reforms include the World Bank, IMF, African Development Bank, Asian Development Bank, and others. Empirical studies have demonstrated that IPSAS adoption and implementation contribute to improved financing from international financial institutions, development partners, and donors (Tawiah and Soobaroyen, 2022).

It is therefore, crucial to assess the impact of public sector accounting on attracting private sector financing for public infrastructure. Providing adequate and high-quality public infrastructure is essential for achieving the Sustainable Development Goals (SDGs), especially considering the additional challenges posed by the COVID-19-induced economic crisis and global recession. Public sector entities require robust accountability mechanisms to attract sufficient infrastructure financing, including from the private sector, to facilitate economic recovery in the aftermath of the pandemic.

2. REVIEW OF LITERATURE ON PUBLIC SECTOR ACCOUNTABILITY AND INFRASTRUCTURE FINANCING

This section reviews the existing literature on the role of public sector accountants in the decision-making processes of public sector entities. The purpose of this review is to guide the study and identify the gaps that this research aims to fill. The literature on the concept of accountability in the public sector and its application in public infrastructure financing is examined from both theoretical and empirical perspectives.

2.1. ACCOUNTABILITY IN THE PUBLIC SECTOR

The concept of accountability is complex and multifaceted, with interpretations varying widely based on roles, institutional contexts, historical periods, and political viewpoints (Fombad, 2014). Musavengane & Siakwah (2019) define accountability as the process of taking ownership for decisions and actions, and demonstrating whether and how those responsibilities have been fulfilled. Whilst, Nuesiri (2016) defines accountability as the obligation of individuals to acknowledge their responsibilities and be answerable for their actions. The definitions above emphasise concepts contained in a definition by Bovens (2007:450) who defined accountability as:

“... a relationship between an actor (accountor) and a forum (accountee), in which the actor is obligated to explain and to justify their behaviour, the forum can pose questions and pass judgement, and the actor may face penalties.”

As a result, Nuesiri (2016), synthesises various definitions and deduce that accountability can be vertical, or horizontal, or diagonal. Similar perspectives to accountability are given by Fombad (2014), who however gives four perspectives to accountability, which are applicable in the public sector, in transactions involving Public Private Partnerships (PPPs) involving development of public infrastructure as shown in (Figure 1).

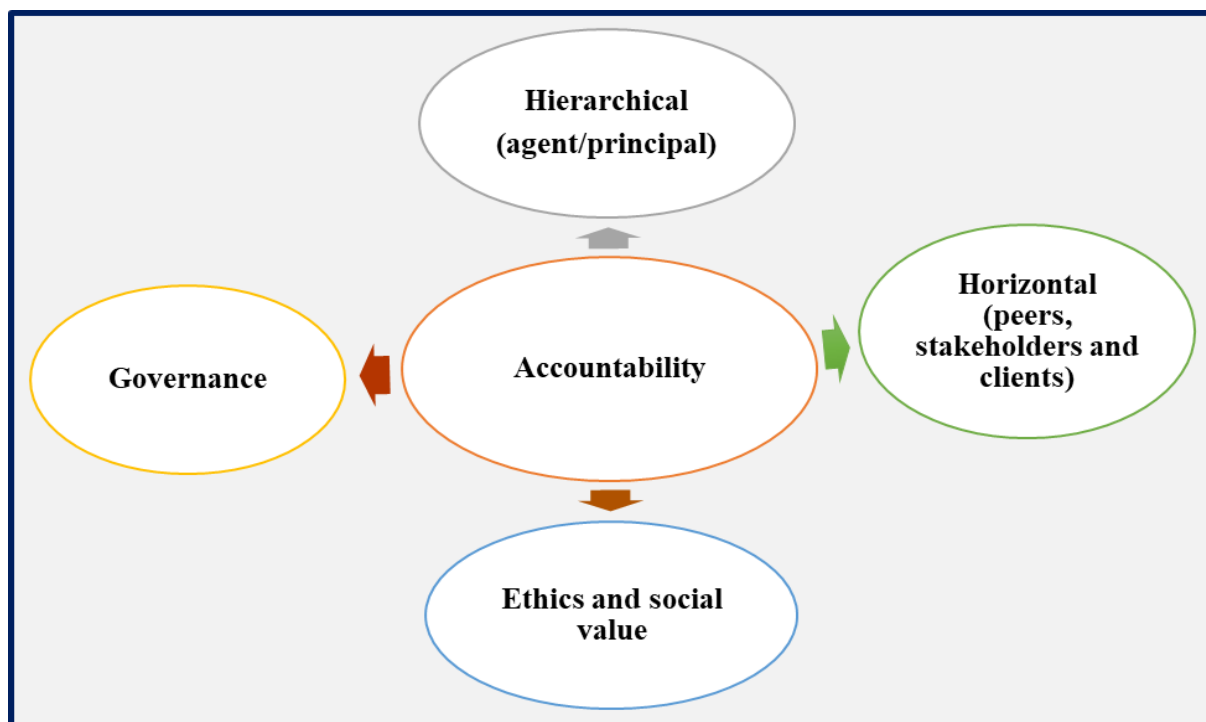


Figure 1. Approaches to accountability (Source: Developed by authors based on Fombad, 2014)

The approaches to accountability shown in (Figure 1) define accountability differently, which results in the establishment of varying accountability structures that have evolved over time. For instance, the traditional hierarchical approach considers accountability as an obligation for public officials to report on their use of public resources and be answerable for failing to meet specified performance objectives (Fombad, 2014). The hierarchical approach to accountability is best explained by the agency theory. Other perspectives, however, have different definitions of accountability.

Accountability, through various approaches, empowers public sector stakeholders, including private investors and government entities, to make informed decisions about investment. Schaltegger and Zvezdov (2015) emphasize the critical role of public sector accounting in this process, highlighting that informed decision-making relies on accountants' careful preparation and dissemination of financial information. Similarly, financial reports and their accompanying disclosures work to bridge the information gap between management and stakeholders, such as financiers, customers, employees, and suppliers (Ball, 2011). Public sector accountants are expected to provide accurate financial reports that reflect the true financial situation of public entities, thereby enhancing decision-making by public infrastructure financiers, including those within the public sector.

Public sector organizations in the 21st century operate within a complex web of accountability, involving diverse actors such as politicians, regulatory agencies, media, citizens, specialized commissions, administrative and financial regulators, and the auditor general, among others (Schillemans, 2016). Theoretically, public sector accountability is crucial for regulating the behavior of public officials and ensuring public sector entities perform as expected. However, in practice, there have been instances where targets have not been met due to the complexities of the accountability web, which can sometimes overwhelm public officials. Accountability failures have been observed in both the private and public sectors, as exemplified by scandals like the Enron debacle and the failure of the National Bank of Fiji (Lodhia and Burritt, 2004). Despite the existence of accountability frameworks, such as legal frameworks and professional accounting standards like IPSAS, accountability failures persist (Ellwood & Newberry, 2016 and Lodhia &

Burritt, 2004). The interaction between public sector accountability and infrastructure financing is reviewed hereunder.

2.2. ACCOUNTABILITY AND PUBLIC INFRASTRUCTURE FINANCING

Globally, the annual infrastructure financing gap ranges from US\$3 trillion (WEF, 2013) and US\$6 trillion (United Nations, 2015). Developing countries similarly face challenges in financing infrastructure, with the financing gap estimated to be between US\$1 trillion and US\$1.5 trillion annually (United Nations, 2015). At the same time there are accountability challenges in developing countries, due to weak regulatory and governance frameworks, as this has been noted to be a major challenge in financing public infrastructure through public private partnerships (PPPs) (Williams, 2010). Developing countries face challenges in developing policies that can attract private sector investors at the same time there are financial challenges for investing into the development of such frameworks (Oinarov, Eshimova, & Adilbekova, 2019). The golden question is, what should come first between development of frameworks and access to finance?

One school of thought advocates for public sector entities developing accountability frameworks attractive to private sector financiers into public infrastructure. For instance, the UNDP (2019), advocates for accountability as a critical success principle for financing public infrastructure using PPPs. Accountability requires clear definitions of roles and responsibilities for partners, followed up by monitoring. This viewpoint is anchored on the perspective that most PPP financed projects fail due to poor accountability by the public sector entities involved (Williams, 2010). As a result, implementing IPSAS is viewed as one way of enhancing public sector accountability (Upping and Oliver, 2012). So that the public sector can attract private sector investors for financing public infrastructure.

Literature and practice also highlight some complexities and challenges faced in implementing IPSAS and therefore, points to challenges likely to be encountered after deciding to adopt and implement IPSAS as a mechanism for enhancing public sector accountability. The implementation of IPSAS in developing countries is plagued by numerous complexities and challenges. One of the primary obstacles is the significant gap between existing cash-based accounting systems and the accrual-based requirements of IPSAS (IFAC, 2018). This transition poses a major hurdle, as developing countries often lack the necessary financial management systems, skilled personnel, and technical infrastructure to effectively adopt accrual-based accounting practices (World Bank, 2019). A study conducted across several African nations found that the lack of adequate information technology systems and the shortage of qualified accountants were key barriers to IPSAS implementation (Brusca et al., 2016).

Additionally, the high costs associated with IPSAS implementation further complicate its full implementation in developing countries. Developing and implementing new accounting policies, procedures, and controls, as well as upgrading financial systems, can be financially burdensome for resource-constrained governments (IFAC, 2017). This is exacerbated by the need to provide extensive training and capacity building for public sector accounting personnel, who may be unaccustomed to the complexities of IPSAS (OECD, 2017). A study in Latin American countries revealed that the high costs of IPSAS implementation, including the need for specialized expertise, were significant barriers to full adoption (Mazzi et al., 2019).

An alternative approach to enhancing public sector accountability focuses on incorporating accountability requirements directly into financing mechanisms. This involves including specific clauses, terms, and conditions in financing contracts that mandate recipients to account for the funds received, either at predetermined intervals or upon reaching project milestones. These contracts may also include incentives and penalties to strengthen accountability (Fombad, 2014). Fombad (2013) further suggests that public sector accountability can be achieved through public-private partnerships (PPPs) for public infrastructure projects. PPP contracts should incorporate multi-layered accountability systems, encompassing internal (managerial), community, and public accountability frameworks (Fombad, 2014). This perspective emphasizes that private sector

investments should be accompanied by contractual mechanisms to ensure accountability and manage associated risks. Therefore, accountability is seen as essential for improving the delivery of public infrastructure, especially when private sector entities are involved in financing. Studies on the relationship between public sector accountability and infrastructure financing are reviewed next.

2.3. EMPIRICAL EVIDENCE ON PUBLIC SECTOR ACCOUNTING NEXUS WITH INFRASTRUCTURE FINANCING

Historically, governments and public sector entities have primarily been responsible for financing public infrastructure (Kapesa, Mugano and Fourie 2021). However, this landscape has shifted with the emergence of privatization, commercialization, and innovative financing approaches (Chan et al., 2009). The diverse sources of financing for public infrastructure development come with varying accountability and risk management requirements, reflecting the different levels of financial innovation involved (O'Neill, 2017). Therefore, it is crucial to understand how accountability influences the success of infrastructure projects financed by the public sector, private sector, or through innovative financing mechanisms.

In many developed countries, the financing of public infrastructure by the private sector and/or through innovative instruments like public-private partnerships (PPPs) has been facilitated by enhanced transparency, accountability, and governance mechanisms (Ball, 2011; O'Neill, 2017; White & Wahba, 2019). Several African countries, including South Africa, Nigeria, Ghana, Kenya, and Ethiopia, have strong public sector accountability frameworks and have successfully financed transport infrastructure using PPPs or attracted private sector investment in public infrastructure (Osei-Kyei & Chan, 2016). Developing countries like Zimbabwe must strengthen their public sector accountability frameworks to attract private sector financing.

While PPPs have been successful in financing public infrastructure in South Africa, Fombad (2013) identifies several accountability challenges associated with this approach, including a lack of public consultation, transparency, and competition, as well as corruption, ineffective contract management, inadequate performance monitoring, failure to ensure value for money, inequitable risk allocation, and accounting issues like off-balance sheet financing (Kapesa, Mugano and Fourie 2021). One potential solution to address accountability challenges related to corruption and fraud is the implementation of whistleblowing mechanisms (Okafor, Adebisi, Opara, & Okafor, 2020). The methodology used in the study is presented in the following section.

3. RESEARCH METHODOLOGY

This study adopted an interpretivist research paradigm, acknowledging the inherent complexity and uniqueness of the social phenomena being investigated (Saunders et al., 2015). This approach recognizes that research involving human participants, as social actors, derives meaning from their interpretations of their roles and the surrounding context (Saunders et al., 2015). The researchers employed a descriptive multi-case study design (Yin, 2014; Saunders et al., 2015) to gain a deep understanding of the roles played by public sector accountants in government ministries, departments, and parastatal enterprises in Zimbabwe, specifically in the financing processes and decision-making for public infrastructure projects. The study also explored the extent of the accountability expectation gap between private sector investors and the public sector prior to investment in these projects.

Data was collected through semi-structured interviews (Seidman, 2013) with 20 participants, purposively selected (Etikan et al., 2016) from senior directorial positions in accounting/finance, economics, and engineering across key government ministries and agencies responsible for economic infrastructure. These included the Ministry of Finance and Economic Development (MoFED), Ministry of Energy and Power Development, Ministry of Information Communication Technology and Courier Services, Ministry of Transport and Infrastructural Development, Ministry of Tourism, Environment and Water Resources Management, as well as the

District Development Fund (DDF), City of Harare, Postal and Telecommunications Regulatory Authority of Zimbabwe, and the Zimbabwe Electricity Transmission and Distribution Company (ZETDC).

The extended data collection period from 2021 to 2022 was necessary due to COVID-19 restrictions that limited physical interactions. In addition to the primary interview data, supplementary secondary data was obtained through documentary analysis (Cardno et al., 2017) to triangulate and corroborate the findings. Unlike quantitative studies that emphasize sample representativeness, this qualitative study prioritized the selection of key informants and the achievement of data saturation, the point at which additional interviews no longer yielded new insights (Elmusharaf, 2012). Data saturation was reached with 15 participants out of the targeted 20, as the level of participants selected was deemed appropriate for the study's objectives (Elmusharaf, 2012).

4. RESEARCH HYPOTHESIS

Public sector accountants in government ministries, departments, and parastatal enterprises in Zimbabwe hold a crucial role in the financing processes and decision-making for public infrastructure projects. This role is influenced by the accountability expectation gap that exists between private sector investors and the public sector entities involved in these projects (Saunders et al., 2015). The hypotheses tested in the study are:

H₁: Public sector accountants in Zimbabwe play a significant role in the financing of public infrastructure projects.

H₂: The accountability expectation gap between private sector investors and the public sector affects the role played by public sector accountants in the financing of public infrastructure projects.

The hypothesis statement aligns with the research, which focuses on understanding the roles played by public sector accountants in the financing of public infrastructure projects, and evaluating the extent of the accountability expectation gap between private sector investors and the public sector entities involved (Saunders et al., 2015). The adoption of an interpretivist research paradigm and the use of a descriptive multi-case study design (Yin, 2014; Saunders et al., 2015) support the exploration of the inherent complexity and unique situations faced by public sector accountants in this context. Results of the data collected are included in the following sections.

5. RESULTS PRESENTATION AND ANALYSIS

This section presents and discusses findings obtained from the interviews conducted and interpretations drawn therefrom as well as from documentary analysis conducted. Firstly, demographic data of the interviewees is shown in (Table 1).

Table 1. Respondents' demographic information (n=15)

Gender	Male	Female	
Frequency	12	3	
Education	Diploma	First Degree	Postgraduate degree
Frequency	2	9	4
Designation	Economists (Directors)	Engineers (Directors)	Finance Directors (Accountants)
Frequency	4	3	8

Source: Primary data (2023)

As shown in (Table 1) the majority of the interviewees were male (12/15), while in terms of educational achievements, most interviewees held undergraduate degrees (9/15) followed by postgraduate degree holders (4/15). The interviewees had directorial responsibilities in finance/accounting, engineering, or economics in the ministries, government departments and/or parastatals. This demographic information helps reinforce the reliability of the findings, as the data was collected from interviewees with a high level of authority in their respective organizations (Etikan et al., 2016).

The study aimed to investigate the roles played by public sector accountants in the decision-making process for financing public economic infrastructure projects in Zimbabwe. These roles were examined across different stages of the project lifecycle, from the initial planning phase, through the implementation phase, and up to the completion of the public infrastructure assets (Saunders et al., 2015). The researchers assessed the role of public sector accountants in relation to public infrastructure financing from the perspective of the Ministry of Finance and Economic Development (MoFED), as it is the primary body overseeing public sector accounting and holds accounting responsibilities for the government, other ministries, and government departments. Stages of the public investment management cycle are shown in (Table 2), as defined in the public sector investment guidelines published by the Government of Zimbabwe in 2017:

Table 2. Public Investment Management Cycle in Zimbabwe

Stage	Responsibility for Contracting Authority	Treasury or Inter-ministerial Committee Responsibility
1	Project Concept Note: <ul style="list-style-type: none"> Conceptualisation of project ideas addressing specific needs aligned with developmental goals. Estimating Capital and Operating expenditure using inexpensive secondary sources. Quantify socio-economic benefits. 	<ul style="list-style-type: none"> Treasury assesses projects' alignment with strategic plans and financial and socio-economic feasibility. Only projects consistent with strategic plans, socio-economic feasibility and meets requirements are approved to go to the next stage. Otherwise, projects are postponed or returned for revision.
2	Pre-feasibility Study: <ul style="list-style-type: none"> Financial and socio-economic analysis. Preliminary environmental and social impact assessment. Additional studies if necessary, e.g., Gender Analysis. 	<ul style="list-style-type: none"> Treasury assesses financial and socio-economic feasibility and compliance with environmental and social impact regulations. Socio-economically feasible and projects compliant with environmental and social regulations are approved. Otherwise, projects are returned for revision or postponed.
3	Feasibility Study: <ul style="list-style-type: none"> Detailed engineering studies designs and cost estimates. Final Environmental and Social impact assessments. Project implementation plan preparation Project monitoring and evaluation plan preparation. Procurement plan preparation. 	<ul style="list-style-type: none"> Treasury assesses financial, socio-economic feasibility and past performance of the contractual authority. Financing modality is determined. Low financial returns projects queued into the PSIP whilst high financial returns considered for joint ventures (PPPs). Otherwise, projects can be postponed if not socio-economically feasible.
CABINET APPROVAL		
4	Implementation, Monitoring, Reporting and Accountability: <ul style="list-style-type: none"> Competitive tendering for project construction. Project execution according to detailed plan. Implementing agencies to submit quarterly reports to Treasury within 14 days of end of each quarter. If cost overruns exceed the contingency allowance, the implementing agency must seek treasury's approval to continue implementation. 	
5	Assets registry, Management, and Evaluation: <ul style="list-style-type: none"> Hand over project to client and close all project accounts. 	

Stage	Responsibility for Contracting Authority	Treasury or Inter-ministerial Committee Responsibility
	<ul style="list-style-type: none"> • Return unused funds to treasury. • Certify all deliverables. • Acceptance of project completion form by project committee. • Assess completed project and determine relevance and fulfilment of objectives. • Disseminate lessons learned. 	

Source: Extracted from MoFED, 2017:16)

At every stage of the public investment management cycle shown in (Table 2), there are roles that must be undertaken by public sector accountants. For example, at the first stage, estimation of capital and operating expenditure requires the involvement of accountants in line ministries. Whilst at stage 2, treasury's assessment of financial feasibility is a role that accountants are expected to undertake. At stage 3 treasury accountants are expected to evaluate financial feasibility studies outcomes of proposed projects. Accounting roles can be traced throughout the investment cycle stages until the conclusion of the infrastructure projects (MoFED, 2017). However, interviewees from the MoFED were not participating as some of these responsibilities are undertaken by departments where there are no accountants. Key informant F2 said, "... accountants are considered only when it comes to monitoring of funds and preparing financial statements." This shows accountants in the MoFED are performing custodial and financial reporting duties, which according to Ball (2011) are useful in eliminating information asymmetry between managers of reporting entities and their stakeholders who include providers of finance.

Duties expected of accountants in treasury were assessed against roles highlighted in job descriptions (MoFED, 2023). The duties are akin with minor differences for accountants in line ministries and government departments as their jobs are graded similarly and are employed by the Public Service Commission.

The duties of a treasury accountant extend beyond traditional financial reporting. They encompass a broader range of responsibilities, including budget preparation, monitoring and control, financial performance tracking, liquidity management, project implementation, and investment decision-making, including assessing the financial performance of public enterprises (MoFED, 2023). These responsibilities suggest that public sector accountants should be actively involved in evaluating public infrastructure investments and making financing decisions. However, this is not currently the case in practice.

The roles of public sector accountants were assessed against the duties outlined in Zimbabwe's Public Finance Management Act (Chapter 22:19). The Act primarily focuses on the qualifications and duties of the Accountant General (Section 9) and the duties of accounting officers (Section 10). It does not explicitly define the duties of accountants within the Ministry of Finance and Economic Development (MoFED), line ministries, or parastatal enterprises.

The documentary analysis revealed the theoretically expected duties of public sector accountants, as highlighted in the public investment management guidelines, job descriptions, and the Public Finance Management Act. The next step was to establish the actual roles played by public sector accountants through key informant interviews. The interview questions were guided by the above-mentioned documents to assess the status of public sector accounting in the financing of public infrastructure.

The study first sought to establish the roles played by accounting staff before the commencement of an infrastructure project, during the financing decision-making process. The interviews revealed that the emphasis during project preparation was on the technical evaluations of proposed projects, despite the public investment management guidelines clearly outlining the duties that accountants are expected to undertake at each stage of the public investment management cycle. This suggests that the guidelines have not yet been fully implemented across government ministries, departments, and parastatals, even though they were developed in 2017 (MoFED, 2017).

Interviewees from the MoFED revealed that the interactions between contracting authorities and line ministries in the development of infrastructure assets were with specific departments within

the ministry, where no accountants are employed. The MoFED is composed of four principal directorates: The Accountant General, the non-accounting Permanent Secretary, the Fiscal Policy and Advisory Services, and the Chief Director National Budgets (MoFED, 2023). The Accountant General's department is responsible for the government's financial reporting, and the accounting staff are largely concentrated in this department. Their contribution to budget formulations is limited, as it is beyond the scope of their duties, and there is a separate department dealing with national budgeting (MoFED, 2023). The financing of infrastructure projects is undertaken by the Public Sector Investment Programme (PSIP), which is housed in the Budgets, Revenue, and Tax Policy department, and most of the staff in this department are economists. As a result, accountants are not actively involved in the financing evaluations for infrastructure projects before the development of the assets.

The findings from the interviews showed that the public sector accountants in the MoFED and other line ministries are not actively involved in the evaluation of infrastructure financing during the project preparation stages. Accountants are only consulted on the financial aspects, while technical staff, such as engineers, take the lead roles. Within the MoFED, economists take the leading roles in evaluating the projects submitted by ministries, government departments, and parastatals. This has led to public sector accountants failing to provide technical advisory services during the evaluation of public infrastructure projects, especially within the MoFED. Accountants are also excluded from the evaluation of the financing decisions, where they are expected to contribute their technical skills in assessing the financial viability and financing methods that minimize costs and maximize value for public money.

In parastatal enterprises, accountants operate differently from other public sector accountants. They function like private sector accountants, playing leading roles in the financing decisions and providing strategic advice key for decision-making, including financing decisions for infrastructure assets (Pietrzaka & Wnuk-Pel, 2015; Pantea, et al., 2013). This is unlike the situation in the MoFED and other government ministries and departments where accountants play subsidiary roles in the financing of public infrastructure, which contradicts expectations highlighted in the public investment management guidelines and in job descriptions, as well as private sector expectations. This conjectures the existence of knowledge/skills as well as expectation gaps in public sector accountants, therefore, limiting their contributions to the infrastructure financing decision-making processes in Zimbabwe's public sector.

The Government of Zimbabwe has already adopted IPSAS to enhance the quality and standardisation of accountability and reporting to external stakeholders (Business Weekly, 2020). Efforts have been made to implement IPSAS to address inconsistencies in accounting and reporting practices by players in the public sector, which had been raised by the Auditor General (OAG Zimbabwe, 2019). The IPSAS implementation process is compulsory, and all public sector entities are expected to have fully complied with the IPSAS by 2025 (Business Times, 2019). The results presented and analysed are discussed in the following section.

6. DISCUSSION OF RESEARCH FINDINGS

From the study it is expected that implementation of IPSAS is going to improve quality of financial information reporting for planning and control purposes by stakeholders of public sector entities, especially providers of finance for public infrastructure development (Upping and Oliver, 2012). In addition, implementation of IPSAS is expected to enhance quality of accounting/reporting and transparency which is a fundamental for attracting private sector investors and public private partnerships into public infrastructure (Upping & Oliver, 2012 and UNDP, 2019).

The findings of the study provide strong support for the first hypothesis (H1) that public sector accountants in Zimbabwe play a significant role in the financing of public infrastructure projects. The in-depth interviews with senior-level participants revealed that public sector accountants are centrally involved in the financial management processes and decision-making related to public infrastructure projects across government ministries, departments, and parastatal

enterprises (Saidulu & Durgaiyah, 2020; Adhikari et al., 2019). Participants highlighted the critical role of accountants in areas such as budgeting, financial reporting, cash flow management, and procurement, which directly shape the financing and implementation of infrastructure initiatives (Salawu & Agbejule, 2017; Christiaens et al., 2015).

Regarding the second hypothesis (H2), the study findings indicate that the accountability expectation gap between private sector investors and the public sector does indeed affect the role played by public sector accountants in the financing of public infrastructure projects. Participants reported that private investors often have higher expectations for transparency, financial controls, and performance reporting compared to the established practices within the public sector (Heald & Hodges, 2015; Pina et al., 2009). This mismatch in accountability requirements creates challenges for public sector accountants in meeting the demands of private investors, ultimately influencing the financing outcomes and processes for infrastructure development (Grossi & Steccolini, 2014; Askim et al., 2016).

Enhancing transparency and accountability in the public sector is crucial (Jomo et al., 2016; IFAC, 2020). Transparency and accountability are key pillars identified by the UNDP (2019) as a challenge that restrains the public sector from attracting private sector capital. Public sector accountants are expected to fully disclose all fiscal implications of the financing arrangements for public infrastructure, including any underlying contingent liabilities (Jomo et al., 2016). However, this level of disclosure is not adequate in Zimbabwe. The consolidated financial reports published by the Ministry of Finance and Economic Development do not provide sufficient detail on the fiscal implications of the financing arrangements for public infrastructure investments. The financial reports should furnish information on the efficiency and effectiveness of service delivery, as well as the resources available to public sector entities for future expenditure (IFAC, 2020; Santis et al., 2018). The adoption of International Public Sector Accounting Standards (IPSAS) is fundamental for improving public sector accounting and accountability practices in Zimbabwe. The following section summarises the conclusions drawn from the study and presents recommendations by the authors.

7. CONCLUSIONS AND RECOMMENDATIONS

The study on the roles of public sector accounting in the financing for public infrastructure reveals that public sector accountants in the Ministry of Finance and Economic Development (MoFED), line ministries, and government departments are not actively involved in the decision-making processes related to financing (Nyamwanza et al., 2020). In contrast, accountants in parastatal enterprises are actively involved in both external reporting and internal advisory roles. The duties undertaken by public sector accountants are found to contradict the expectations highlighted in the public investment management guidelines and the job descriptions for the accountants (Nyamwanza et al., 2020).

To improve the quality of public sector accountability and reporting, the Government of Zimbabwe has commenced the mandatory adoption and implementation of the International Public Sector Accounting Standards (IPSAS) by public sector entities by 2025 (Government of Zimbabwe, 2022). This initiative is intended to eliminate the inconsistent accounting practices across public sector entities. The implementation of IPSAS is expected to improve the quality of financial reporting and transparency, which, in turn, is expected to inspire private sector confidence in Zimbabwe's public sector and attract private sector financing and investment into public infrastructure (Government of Zimbabwe, 2022).

Given these conclusions the authors recommend the following.

- a) Public sector accountants must be trained and be equipped with skills for undertaking the duties outlined in the public investment management guidelines. Moreover, as the Government of Zimbabwe pursues compulsory implementation of IPSAS, there is need for training current and future staff on using IPSAS. This is likely to lead to a smooth transition from cash accounting to accruals accounting.

- b) There is need for instituting and strengthening robust whistle blowing schemes as a means for improving public sector accountability especially in public infrastructure procurement (Kapesa, Mugano and Fourie 2021). Although, it is noted that whistleblowing may physically endanger the lives of whistle-blowers in developing countries (Okafor et al., 2020), support from national leadership in the whistleblowing can help in eliminating corruption which is a common threat to public sector accountability in developing countries.
- c) The MoFED should ensure staffing balance in departments that deal with public infrastructure financing. Thus, there is need for balancing finance-skilled staff with economics-skilled staff. This is expected to strengthen accountability in the financing of public infrastructure.

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