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Utilizing performance audit reports to promote efficiency and value for money: A case study of SAI Uganda

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This thesis is presented in partial fulfilment for the degree of Master of Management in the field of Governance (Public and Development Sector Monitoring and Evaluation) to the Faculty of Commerce, Law, and Management, University of the Witwatersrand

Supervised by Dr Thelela Ngcetane-Vika

July 2024

DECLARATION

I hereby declare that this thesis/research - ‘Utilizing Performance Audit reports to promote efficiency and value for money in determining audit impact: A case study of SAI Uganda’ - is my own work, completed with the guidance and support of Dr. Thelela Ngcetane-Vika, the academic supervisor. All sources used and cited have been acknowledged and referenced. I am submitting it in partial fulfilment of the requirements for the Master of Management degree in Governance (Public and Development Sector Monitoring and Evaluation) at the University of the Witwatersrand, Johannesburg. Furthermore, I have never before submitted this write-up to another university for consideration for a different degree or exam.



_____

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Date: 26 July 2024

Abstract

Performance auditing, an evaluation of public entities' efficiency and effectiveness, is crucial for improving public sector accountability. Despite its importance, performance audits often lack the necessary attention in developing countries. This study investigates factors influencing the impact of performance audits on public sector accountability using the Ugandan Supreme Audit Institution as a case study. Data for this study was derived from both primary and secondary sources. Primary data was collected through interviews and questionnaires administered to SAI staff. Secondary data was compiled from a variety of published and unpublished materials, including INTOSAI records, the SAI library, SAI website, AFROSAI-E ICBF self-assessments, textbooks, academic journals, and online resources.

A conceptual framework was developed to examine the relationship between audit rate, audit outcomes, and follow-up efforts on audit impact. Quantitative data was collected from performance auditors and analyzed using descriptive statistics, correlation, and regression analysis. Findings indicate a positive correlation between audit rate, audit outcomes, and follow-up efforts with audit impact. The study recommends that Supreme Audit Institutions prioritize performance audits, enhance follow-up efforts, and promote the value of performance audit reports to improve public sector accountability. While the study provides valuable insights, its cross-sectional design limits its ability to establish causal relationships. Future research should employ longitudinal studies and explore the impact of emerging technologies like blockchain on performance auditing.

Key terms: Performance Audit, Audit Impact, Audit Efficiency, Supreme Audit Institutions (SAI) and Uganda

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The management of the African Organization of English-speaking Supreme Audit Institutions (AFROSAI-E) is also recognised for their understanding, academic sponsorship, and general support throughout the academic and research process. I am also appreciative of the management and staff of the Office of the Auditor General of Uganda for permitting me to conduct this research at the SAI and for providing detailed information during the data collection process.

Dedication

To my dear lovely wife Caroline, and our adorable boys Travis and Isaiah Asiimwe for their consistent support, which served and continues to serve as motivation and a source of strength throughout this journey.

Abbreviations

AFROSAI-E	The African Organisation of English-speaking Supreme Audit Institutions
AGSA	Auditor General of South Africa
CAQDAS	Computer-assisted Qualitative Data Analysis Software
COSASE	Committee on Commissions, Statutory Authorities and State Enterprises
ICBF	Institutional Capacity Building Framework
INTOSAI	International Organisation of Supreme Audit Institutions
ISSAIs	International Standards for Supreme Audit Institutions
LGPAC	Local Government Public Accounts Committee
NSSF	National Social Security Fund
OAG	Office of the Auditor General
PAC	Parliamentary Accounts Committees
SAI	Supreme Audit Institutions
SPSS	Statistical Package for the Social Sciences
UN	United Nations
VFM	Value for Money

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CHAPTER 1

1. INTRODUCTION TO THE RESEARCH

This study examines utilizing performance audit reports to promote efficiency and value for money in determining audit impact. Performance auditing is a process of conducting an unbiased appraisal of the measures taken by public entity management. The objective of this evaluation is to determine whether interventions, social programmes, and public institutions conform to the principles of economy, efficiency, and effectiveness. Additionally, performance auditing aims to identify any areas that require improvement. Audit impact also refers to the direct and indirect effect or influence that a supreme audit institution (SAI) might exert on the actions, performance, and values of the audited entity. The study aimed to determine the audit rate (frequency of audits) and its associated consequences, as well as the impact of these factors on the audit process. The researcher aimed to investigate the correlation between the implementation of performance audit recommendations and the impact of audits. Additionally, using the case study of SAI Uganda, the researcher planned to evaluate the relationship between the audit rate, the outcomes of audits, and the follow-up on performance audit recommendations in evaluating the overall impact (usefulness) of audits. A brief background is also provided below to highlight the purpose, value, and benefits of performance auditing in the public sector context, as well as how far the audit type has progressed in recent years. The chapter goes on to describe the problem statement, research purpose, research questions, and study scope as provided in the next sections.

1.1. Background

Empirical research demonstrates that performance auditing is crucial for providing lawmakers with information regarding governmental actions and the consequences of their own decisions (Lonsdale, Wilkins & Ling, 2011). They enhance governmental public transparency by furnishing valid and precise data regarding the performance of public services. Performance auditing, through the provision of novel insights and

identification of diverse obstacles, plays a crucial role in facilitating knowledge acquisition and driving transformation within the public sector. (Reichborn-Kjennerud, 2015). It strengthens governance by providing the government with recommendations derived from impartial analysis. Consequently, it enhances the fundamental operations of SAIs.

Over the past few years, researchers have noted advancements or achievements in African nations. For instance, performance audits have been mandated in Uganda by the National Audit Act (2008). In addition, according to the Constitution of Uganda, the Auditor General is mandated to scrutinise and issue a report on all public accounts in Uganda, as well as conduct financial and Value for Money audits (Constitution of the Republic of Uganda 1995; National Audit Act, 2008). Therefore, this study, focusing on a case study of SAI Uganda, aimed to investigate how performance audit reports might be used to enhance efficiency and cost-effectiveness in assessing the impact of audits.

According to the International Standards for Supreme Audit Institutions (ISSAIs), a performance audit is an examination that assesses if initiatives, social programmes, and public institutions adhere to the principles of economy, efficiency, and effectiveness, and if there is room for enhancement. The references are to ISSAI 3000/1.5 and ISSAI 300/8, i.e., performance audit standards, and fundamental principles of performance audit respectively. Performance is evaluated based on appropriate standards; the reasons for any deviations from those standards or other issues are investigated.

Section 1.1.1 provides the context for the study and reflects on the rationale of performance audit, with section 1.1.2 discussing the development of performance audit practices in English speaking African countries in the public sector, with Uganda's context as a research setting. Section 1.2. outlines the research problem, 1.3 the research objectives and 1.4 research hypothesis. This is followed by the subject scope under sections 1.5 and 1.6 provides a summary and preface to the research report. Section 2.1 provides more details of this research setting for the subsequent chapter.

1.1.1. The rationale of a performance audit in the public sector

The forces of supply and demand keep the private sector afloat and in business. From this perspective, companies can attest to their financial success if it is measured largely by their balance of payments and financial bottom line. Poor performers would not be able to survive and would eventually go out of business. Hepworth (1995 pg. 39-42) stated that;

> "…..The argument that the market provides the most appropriate test of accountability for the public services is one that has been disputed (Stewart, 1994). However, this does not necessarily detract from the argument that market forces in one form or another can have an important beneficial effect upon efficiency and effectiveness…."

In the public sector, there is often no clear way of gauging if the entities are operating efficiently. This is because their operations are funded through appropriations from the national budget. Hence, the forces of demand and supply have no natural way of determining the performance of such entities except through performance audits. According to the 2016 AFROSAI-E performance audit handbook, performance auditing was introduced to Africa in the late 1980s and early 1990s in countries such as Botswana, Lesotho, and Zimbabwe. The need to augment the conventional financial and compliance audits amidst accountability concerns in the public sector, drove the introduction of this type of audit (Nurul Athirah Abd Manaf 2010).

1.1.2. Development of a performance audit practice in English-speaking African countries

ISSAIs define a performance audit as an audit that examines whether interventions, social programmes, and public institutions are following the principles of economy, efficiency, and effectiveness and whether there is scope for improvement. (INTOSAI, 2019,ISSAI 3000/1.5; ISSAI 300/8). Performance is measured against suitable criteria, and the causes of deviations from those criteria or other concerns are explored. Performance auditing is critical in keeping lawmakers informed about government actions and the outcomes of their own decisions. It improves public transparency in government by providing valid and accurate data on how public services are faring. Performance auditing helps promote learning and change in the

public sector by providing new information and drawing attention to various challenges (Reichborn-Kjennerud, 2015). It helps to improve and reform governance by making recommendations to the government based on independent analysis. As a result, it strengthens SAIs' core activities.

SAIs are independent national audit offices tasked with the responsibility of auditing public institutions and guided by mandates enshrined in national constitutions. The SAIs conduct performance audits by following the ISSAIs (INTOSAI, 2019; ISSAI 3000 and 300). The standards are issued by the International Organisation of Supreme Audit Institutions (INTOSAI). These standards require that the auditor, based on the audit objectives, plans and performs the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for audit findings, conclusions, and recommendations. Some scholars such as Hussein, Hanefah & Endaya (2020) and Desmedt et al (2017), have attempted studies in Europe and on more advanced SAIs. (World Bank. 2021). The studies aimed at establishing the impact of audit recommendations largely through testing whether the impact was due to government, parliament, or audited entity action. The studies did not focus on audit rate, audit outcomes, or the follow up of performance audit recommendations in determining audit impact, or in other words, the value to citizenry.

For the purpose of this study, the audit rate is defined as the frequency with which SAIs conduct performance audits on the same entity. In previous studies, there is a notable absence of any relationship between performance audit rate and the audit impact or the value of performance audits to the citizenry. In fact, some scholars like Torres, Yetano & Pina (2019) argue that impact is determined from the audited entity's actions including their follow-up activities, and/or from parliamentary action. In general, performance audit outcomes were seen as beneficial because of the issued reports that contained useful analysis of performance challenges and subsequent recommendations. The alternative, in very unusual situations, produces an audit report that demonstrated high levels of institutional functioning in regard to improvements in the 3Es. i.e., economy, efficiency, and effectiveness, by which the audited entity utilises resources entrusted to it. This implies that the greatest importance of performance auditing appears on a system level – pushing public administration towards trying to perform well and solve their challenges.

In Africa, the African Organisation of English-speaking Supreme Audit Institutions (AFROSAI-E) sets the performance audit agenda. Performance audit reports are used by different actors, including individual parliamentarians and their committees; government and its ministries; professionals in audit entities; Non-govenrmental organisations (NGOs); professional bodies; media; clients; and citizens, among others. In principle, this creates an outcome which contributes to a better life for citizens (INTOSAI-P-12, 2019; Stapenhurst, et al 2005). Care is taken to end up in a very instrumental perspective – for example counting the number of recommendations that have been implemented A typical performance audit outcome and value to citizens can only be measured later (after a reasonable period since the audit) and not because of a just-concluded performance audit assignment. This can be realised if the auditor tracks previous findings and the implementation of recommendations issued from time to time Kwamena (2012).

In Uganda, according to the Institutional Capacity Building Framework (ICBF) self-assessment data (ICBF 2022), performance audit accounts for less than 1% of its total annual audit reports to parliament. AFROSAI-E advises that SAIs should focus more on performance auditing once accounting, internal control, financial reporting, and financial management have improved. One could argue that this almost 1% coverage makes sense given that the 2022 Transparency International's Corruption Perceptions Index ranks Uganda an unfavourable 142 out of 180 countries around the world. Most of this data is informed by how allocated funds have been prudently utilised. However, this begs the question as to whether the performance audits being conducted (also known as value for money audits at the SAI), reflect the desired outcomes of government policy from the current budgetary spending. This has prompted this present study to focus on the SAI of Uganda and establish the underlying factors impacting the achievement of the desired performance audit impact and value to citizens. The goal is to provide answers to key audit questions as well as make suggestions for improvement.

1.2. Problem Statement

The effectiveness of performance audits in driving public sector efficiency and value for money in Uganda is contingent upon several interrelated factors. While the Supreme Audit Institutions (SAI) of Uganda has increasingly recognized the importance of performance audits, the extent to which these audits contribute to tangible improvements in public service delivery remains unclear. This study seeks to understand the complex interplay between audit rate, audit outcomes, and the follow-up of audit recommendations in determining overall audit impact. By examining these factors, the research aims to identify opportunities to enhance the effectiveness of performance audits in promoting accountability, transparency, and improved public service delivery in Uganda.

The impact of performance audits extends beyond the mere production of reports. To maximize their value, it is essential to establish whether these reports have led to meaningful changes in public sector practices. This involves tracking the implementation of audit recommendations and assessing their contribution to improved performance. As Reichborn-Kjennerud & Johnsen (2015) emphasize, regular and rigorous auditing can drive public administration towards excellence. Effective utilization of performance audit reports by oversight bodies, such as Public Accounts Committees (PACs), is crucial for ensuring that audit findings translate into concrete actions. By focusing on the relationship between audit rate, outcomes, and follow-up, this study aims to contribute to the body of knowledge on enhancing the impact of performance audits in the Ugandan context.

1.3. Research Objective

This study aims to investigate the mechanisms through which governments can effectively leverage performance audit reports to enhance efficiency and value for money. Specifically,

1. To establish audit rate and related outcomes and their influence on audit impact
2. To explore the link between follow-up of performance audit recommendations and their influence on audit impact
3. To assess the relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact

1.4. Research Hypotheses

Null hypothesis for Question 1:

There is no relationship between the audit rate and related outcomes and audit impact

Research hypothesis for Question 1:

There is a relationship between the audit rate and related outcomes and audit impact

Null hypothesis for Question 2:

There is no link between the follow-up of performance audit recommendations and its influence on audit impact

Research hypothesis for Question 2:

There is a link between the follow-up of performance Audit recommendations and its influence on audit impact

Null hypothesis for Question 3:

There is no relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact

Research hypothesis for Question 3:

There is a relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact

1.5. Subject Scope

According to Stapenhurst (2006), parliaments around the world rely on SAI reports to enforce accountability of public resources. The concept of audit impact refers to the usefulness of the SAI's periodic reporting on the activities of the audited entity. It speaks to its influence on shaping policy directives that, when implemented by ministries, departments, and agencies, provide long term benefits to the general population. Audit impact is influenced by many factors; this study, however, focused on audit outcomes (from the audit process) and follow-up of audit recommendations. Whilst a lot of research has focused on other factors, it has not explained why many

audit reports are not generating the desired impact on the operations and activities of the audited entities.

The study's focus is on performance audit reports, which account for a large part of the SAIs reports that are seldom discussed by the relevant accounts committees of parliament in Uganda (OAG Uganda, 2019). However, the insights provided can be applied to other audit types of reports such as financial and compliance audit reports. The study ran from 2019 to 2023.

1.6. Summary and preface to the research report

This research comprises a total of six chapters: Chapter 1 introduces the study. Chapter 2 focuses on the literature review, which provides an examination of the research problem, previous and current studies, and the theoretical and conceptual framework that guides the study investigation. Chapter 3 outlines the research strategy, methodologies, and procedures employed in the study. It also discusses the measures of validity and reliability, as well as the methodological limitations encountered. Chapter 4 gives the results, and Chapter 5 concentrates on the explanations of the results in accordance with the chosen theoretical framework. Chapter 6 is dedicated to consolidating the findings and presenting conclusions, along with discussing the limitations of the research. Additionally, recommendations are provided for future investigations and steps are proposed to enhance follow-up research.

CHAPTER 2

2. LITERATURE REVIEW

2.1. Introduction

The goal of this chapter is to determine the work and contributions of various authors on the identified topics, identify gaps that need to be filled or questions that previous research did not answer convincingly, and provide the rationale for this study. This will not only provide a thorough understanding of the knowledge system's position in the chosen field but will also demonstrate that the research itself has the potential to fill gaps in the literature.

The chapter commences with the establishment of fundamental principles. It subsequently delves into the conceptual and theoretical framework that examines the aspects and variables that influence the impact of performance audits on the environment of SAI, the process of holding the public sector accountable, and ongoing discussions and controversies. The text concludes with a concise overview of the main points.

2.2. Explanation of Fundamental Ideas and Concepts

2.2.1 What is performance auditing?

Performance auditing, according to the performance audit principles as stated in ISSAI 300 and as carried out by SAIs, is:

> "…..an independent, objective, and reliable examination of whether government undertakings, systems, operations, programmes, activities, or organisations are operating in accordance with the principles of economy, efficiency, and effectiveness and whether there is room for improvement"….. (ISSAIs 300:9 p. 8)

The notion of **economy** entails the reduction of resource expenses. The resources utilised must be promptly accessible, in an optimal amount and quality, and at the most favourable cost. The lowest cost option may not always be the most cost-effective, as

it is important to consider the quality of products or services, as well as timely delivery in the correct amount and to the correct location.

Efficiency pertains to the conversion of inputs (utilised resources) into outputs, specifically in the form of commodities or services, and ultimately results in an outcome. Efficiency can be defined as the ratio between the outputs produced and the resources utilised. The transition occurs within the internal operations of the company. An efficient organisation strives to optimise the ratio of outputs to inputs or to limit the amount of input required to achieve a certain level of output. In other words, doing things well.

Effectiveness can be applied at various levels. The success of an organisation is determined by its ability to achieve the objectives that are directly linked to the desired outcomes for which the organisation was established. Effectiveness can also be employed in a narrower sense, specifically to denote the efficacy of a particular programme or objective (AFROSAI-E, 2016).

Audit impact refers to the measurable changes or improvements in public sector performance, efficiency, or accountability resulting from the implementation of recommendations derived from performance audit reports. It is the extent to which audit findings and recommendations have influenced decision-making, resource allocation, and policy reforms, ultimately leading to enhanced public value (Alissa, Capkun, Jeanjean and Suca (2014)

Audit rate is the frequency or volume of performance audits conducted by a Supreme Audit Institution (SAI) within a specific timeframe, typically expressed as a ratio or percentage relative to the total number of entities or programs audited. It is considered a quantitative measure of the SAI's audit coverage and capacity (Asnawi, 2013)

Audit outcomes represent the direct results or consequences of performance audit activities. These include the findings, conclusions, and recommendations generated from audit work, as well as the subsequent actions taken by audited entities in response to these outputs (Guan, Su, Wu and Yang, 2016)

Performance Audit is defined as an evaluation of the measures taken by public entity management to determine whether public institutions conform to the principles of economy, efficiency, and effectiveness (Furubo, 2011; Ruta, 2020).

Supreme Audit Institutions (SAI) Uganda is the 'Office of the Auditor General of Uganda'. It is an independent government agency responsible for auditing public funds in Uganda. The SAI in Uganda is tasked with ensuring accountability and transparency in public financial management (Mulati, 2023)

Value for Money refers to the extent to which performance audit reports contribute to ensuring that public resources are used optimally to achieve desired outcomes (Elliott, 2002).

Utilizing performance audit reports refers to leveraging the information and recommendations contained within performance audit reports to influence positive changes in public sector practices.

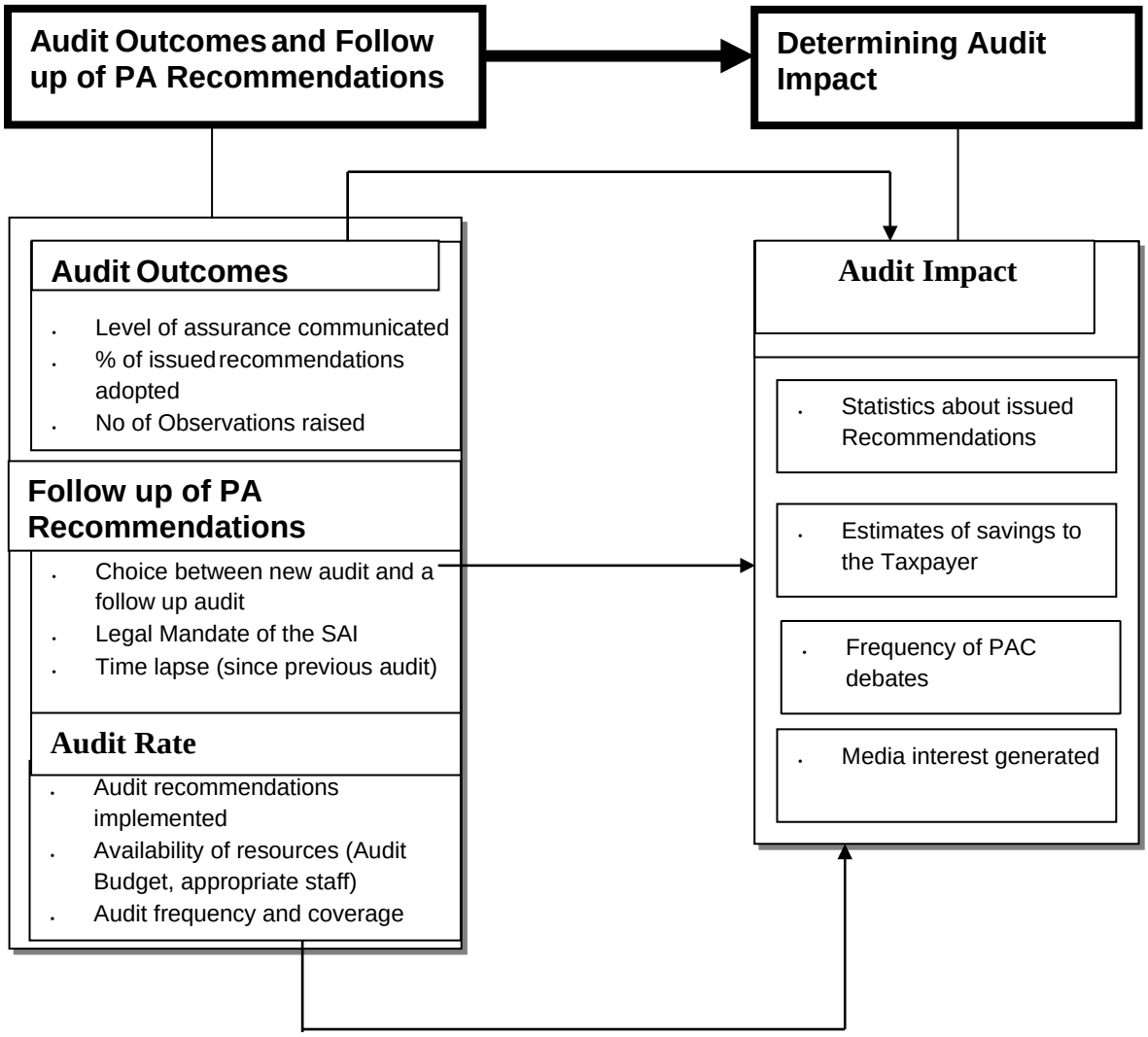
2.3. Conceptual and theoretical underpinnings of this study

The following section will discuss the theoretical framework and conceptual underpinning of this study. It examines the philosophical paradigm that forms the basis of the methodological approach and the theoretical framework employed.

2.3.1 Conceptual Framework

The conceptual framework draws upon the works of Daujotaitė & Adomavičiūtė (2017); Alwardat & Basheikh, (2017); Desmedt et al., (2017); Pollitt et al. (1999); Morin (2014); and Fréchette (2019). It also utilises the INTOSAI standards and principles with adjustments to meet the purely African SAI scenarios. The model depicts a relationship between audit rate and outcomes, follow-up of performance audits recommendations, and audit impact. While many factors reportedly influence audit impact from a SAI perspective, this study focuses on the factors mentioned.
See Figure 1.

Figure 1: Conceptual Framework model



Source: *Daujotaitė D., Adomavičiūtė D. (2017), Alwardat & Basheikh, (2017), Desmedt et al., (2017), Pollitt et al. (1999) and Morin (2014), Pierre Fréchette (2019), INTOSAI standards and principles*

2.3.2 A theoretical framework for interpreting performance audit value to SAIs

Performance audit is a widespread practice in numerous countries worldwide, serving as an integral component of contemporary government auditing. The purpose of a performance audit is to evaluate the effectiveness of an audited organisation and determine if there are opportunities for improvement. The origins of performance audit may be traced back to the 1960s when it was closely associated with concepts related to programme budgeting. It was introduced in Africa during the late 1980s and early 1990s. According to AFROSAI-E, the SAIs of Botswana, Lesotho, South Africa, and Zimbabwe were among the pioneering organisations in the region. Within English-

speaking African nations, approximately 25 SAIs that are affiliated with AFROSAI-E are actively endeavouring to implement performance auditing (AFROSAI-E, 2016)

Eisenhart (1991) established that a theoretical framework is a structure that guides research by using a formal theory to build a clear account of certain phenomena and relationships. By drawing on these theoretical frameworks, the study aimed to provide a comprehensive understanding of the factors influencing the utilization of performance audit reports in promoting efficiency and value for money in SAI Uganda. These frameworks analyse the interplay between organizational, managerial, and contextual factors to offer insights into how performance audits can drive positive change in public sector governance. There are several key theoretical frameworks underpinning the study on utilizing performance audit reports to promote efficiency and value for money. For this study and its focus on SAI Uganda, the researcher focused on Performance Management Theory, Public Administration Theory, and the Principal-Agent Theory.

The Performance Management Theory perspective is selected due to its capacity to elucidate the significance of management measures implemented by government institutions to ensure the cost-effective acquisition and efficient utilisation of resources. Furthermore, the application of the Public Administration Theory perspective is employed to formulate hypotheses that suggest the beneficial effects of external control, particularly when the public is engaged and adequately informed. Finally, the Principal-Agent Theory approach is selected due to its capacity to elucidate the effects of performance audits, resulting from the parliament's utilisation of performance audit reports from the SAI to enforce robust governance and accountability mechanisms.

By drawing on these theoretical frameworks, the study aimed to provide a comprehensive understanding of the factors influencing the utilization of performance audit reports in promoting efficiency and value for money in SAI Uganda. The researcher analysed the interplay between organizational, managerial, and contextual factors to offer insights into how performance audits can drive positive change in public sector governance.

The theory of Performance Management, as explained by Mabey, Salaman & Storey (1999), pertains to the perspective of a performance management system. The framework emphasises the importance of measuring and managing performance in order to achieve organisational goals. The focus lies on the significance of creating clear objectives, performance indicators, and monitoring systems to improve the efficiency and effectiveness of public sector organisations. For instance, the effectiveness of establishing clear objectives and targets, as well as the systematic tracking and assessment of outcomes (Roberts 2001). A significant benefit of performance auditing is its ability to assist audited entities in the development and enhancement of their performance management systems.

Performance management strategies have a direct impact on the performance and productivity of public sector organisations in Africa (Fatile 2014). This study examines the extent to which performance audit reports can be used to enhance efficiency and cost-effectiveness, considering that performance auditing heavily relies on the concepts of performance management methods. The main advantage of performance auditing in this context will be to enhance stakeholders' understanding of the existing challenges within the audited organisation. However, in the African context, performance audits have not received as much attention as other types of public sector audits, such as financial and compliance audits. It is important to note that performance management systems in the African region are still relatively basic and undeveloped (Wachira, 2013). Therefore, utilising performance management systems in the public sector can significantly contribute to audited entities' efforts to report on their performance targets and statistics.

Public Administration Theory is a framework that examines the principles and practices of public administration, including accountability, transparency, and the role of audit institutions. While this study focuses on the value of performance audits in determining audit impact regarding social service delivery, it is interesting to see how proper accountability reporting can make this possible (Itika 2011). The theory in this context can be used to explore how performance audits can contribute to improving governance and ensuring value for money in public sector operations. A fundamental comprehension of the principles of economy, efficiency, and effectiveness in public

administration serves as the basis for performance audits (ISSAI 300 & 3000, 2019). The concepts elucidate the issues or deficiencies that might be regarded as difficulties or weaknesses from a performance standpoint, and which can be tackled through performance audits.

The Principal-Agent Theory examines the dynamics between principals such as people or elected leaders, and agents such as public officials or auditors, and the difficulties in matching their interests. It highlights the role of audits in reducing information asymmetry and addressing agency problems, ultimately promoting efficiency and accountability in public administration (Kofman & Lawarrée 1996; Khalil & Lawarrée, 2003). This can be examined from the perspective of delegation. SAIs are legally required by legislation to conduct audits and provide reports to a certain committee of parliament, typically, the accounts committee. These audits assess how well public institutions have achieved their strategic objectives and implemented policy decisions made by the executive branch. Within the context of this theory, the executive is responsible to parliament, and the examination of the audited entity's activities is influenced by the work of the SAIs, who act as representatives of parliament. The primary goal of performance auditing is to actively encourage economic, effective, and efficient governance constructively. It fosters accountability and openness, serving as the foundation for learning and advancements in the public sector (AFROSAI-E, 2016).

2.4. Overview of Supreme Audit Institutions (SAIs)

SAIs the world over have the mandate to audit the use of government resources and provide an independent assessment of the implications of government decisions, policy directives, and objectives. The United Nations (UN) Resolution adopted by the General Assembly on 22 December 2011 [on the report of the Second Committee (A/66/442)] 66/209) recognizes that SAIs can only perform their duties objectively and effectively if they are independent of the audited entity and protected from outside influence. Countries in English-speaking African countries such as Uganda, have established the SAI in line with the UN recommendation that Member States, in accordance with its national institutional structures, apply the principles enshrined in ISSAI 1 (the Lima Declaration) and ISSAI 10 (the Mexico Declaration on

Independence). This typically means that, if the impartiality of the office is to be realised, the SAI must follow its national legislation and regulations in the execution of its mandate and must not be under the influence of an outside force. The SAI of Uganda, like any modern SAI in the INTOSAI community, is empowered by law to provide information to parliament on the use of public resources. The only credible source of such independent information to the general public often comes from SAIs (Alwardat & Basheikh, 2017).

2.5. INTOSAI P 12 – Value and benefits of SAIs

In a country where accountability, transparency, and integrity are fundamental elements of a stable democracy, an independent, effective and credible SAI is a crucial component. By effectively reacting to citizen problems, stakeholder expectations, growing risks, and shifting audit environments, SAIs may demonstrate their ongoing relevance in today's world. SAIs must be seen as reliable to carry out their responsibilities and guarantee their potential benefit to citizens. SAIs are only deserving of confidence if they can be held liable for their actions and are seen to be credible, competent, and independent in the eyes of others. To make this achievable, they must be role models, setting an example for those in the public sector and the auditing profession at large (AFROSAI-E 2016). The value and benefits of SAIs are outlined in ISSAI 12, which also lays out three objectives and twelve guiding principles for SAIs to work toward. This makes it possible for all SAIs to share and promote the value and advantages they can bring to democracy and accountability in their respective jurisdictions. Both SAI employees and those who work for the SAIs must abide by the same rules. See Figure 2 below.

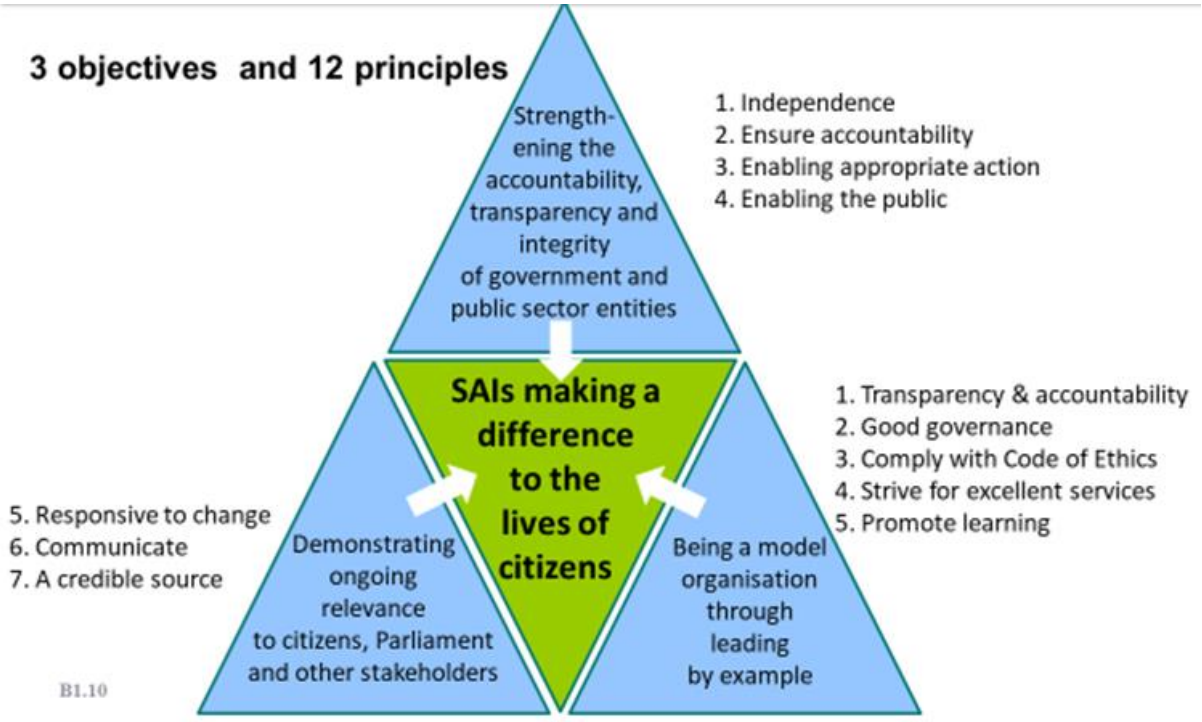


Figure 2: Values and Benefits of SAIs (ISSAI12)

Source: International standards of supreme audit institutions

2.6. Performance audit

The ISSAIs issued by the INTOSAI provide for performance audit as one of the three audit types that constitute the audit products of any SAI, the others being financial and compliance. According to ISSAI 3000:17, the primary goal of performance auditing is to promote economical, effective, and efficient governance. It also assists with accountability and transparency. The reality on the ground and people's lived experiences frequently shape the general public's expectations of government. Understanding deviations from such expectations and studying the negative consequences is a solid place to start when looking for an audit topic in a performance audit. This is accomplished by comparing performance to appropriate criteria and analysing the root causes of deviations from criteria or problems. By giving parliament, taxpayers, other financial sources, people affected by government policies, and the media access to information on the administration and results of various government activities, performance auditing fosters transparency. In this way, it forms a good basis for measuring SAI's relevance to the citizenry. Ideally, the goal is to provide new

information, analysis, or insights, answers to key audit questions, and recommendations for improvement where appropriate.

In Uganda, the need for audit services has expanded beyond the conventional financial statement assurances, particularly among stakeholders and the INTOSAI fraternity. The National Audit Act of 2008 created the Office of the Auditor General (OAG), a legal entity whose head, the Auditor General, is chosen in accordance with the Constitution of the Republic of Uganda, 1995, as amended under Article 163(1). Effectively, the mandate to conduct performance audits was obtained in 1995 (Wang and Rakner, 2005). According to Sections 13(1) and 18 of the National Audit Act 2008, which are detailed in Article 163(3) of the Constitution of the Republic of Uganda, the Auditor General's mandate is to audit and report to parliament. The office was delinked from the mainstream public service in 2008 and Value for Money Audit (VFM) was introduced, resulting in the office being restructured into two Divisions: Audit and Corporate Services. There are now assurances covering every aspect of service delivery in terms of effectiveness, economy, and efficiency that improves the lives of citizens. These performance audit reports are issued as part of the SAI's annual reporting to parliament. Due to the time element involved in their production and partly, the requirements within the enabling laws, reports are issued as and when completed.

2.7. Managing the performance audit process for greater impact

We have seen that performance audits promote accountability by assisting those charged with governance and oversight responsibilities to improve performance. This is done by examining the extent to which legislative and/or executive decisions are efficiently and effectively prepared and implemented in terms of value for money, without questioning the intentions and decisions (merit of policy objectives) of the legislature (INTOSAI GUID 3910:25). Performance audits promote transparency by providing the legislature, taxpayers and other sources of funding, those targeted by government policies and the media, with insight into the management and outcomes of various government activities. SAIs are free to decide what, when, and how to audit within the scope of their mandate, and should not be prevented from disclosing their findings. For example, Morin (2001) discusses the influence of value for money on

public sector administration, stating its contribution in providing useful information to citizens especially as it serves as a foundation for learning and improvement.

Problems with the performance of government undertakings can be traced back to the design of the undertaking as well as how the responsible entities implement it. Performance issues in the implementation of government initiatives are frequently linked (either directly or indirectly) to management systems design and implementation. All operational systems are also monitored and/or improved by management systems. This means that most audits addressing implementation issues cover at least some aspects of management systems. Most management systems share some fundamental concepts and principles, whether they are related to quality management, environmental management, information systems and IT management, safety management, or anything else. On the other hand, these principles must be applied in the context of each government initiative. While the principles are general, the causes of performance issues and the appropriate solutions for reducing or eliminating them must be examined in each individual case. This is supported by the works of Aikins (2012) and Morin (2001) who argue that auditees, if aware that recommendations will be tracked by the auditors at some point, will be eager to implement best practices. This is a compelling reason for implementing a robust performance audit management system.

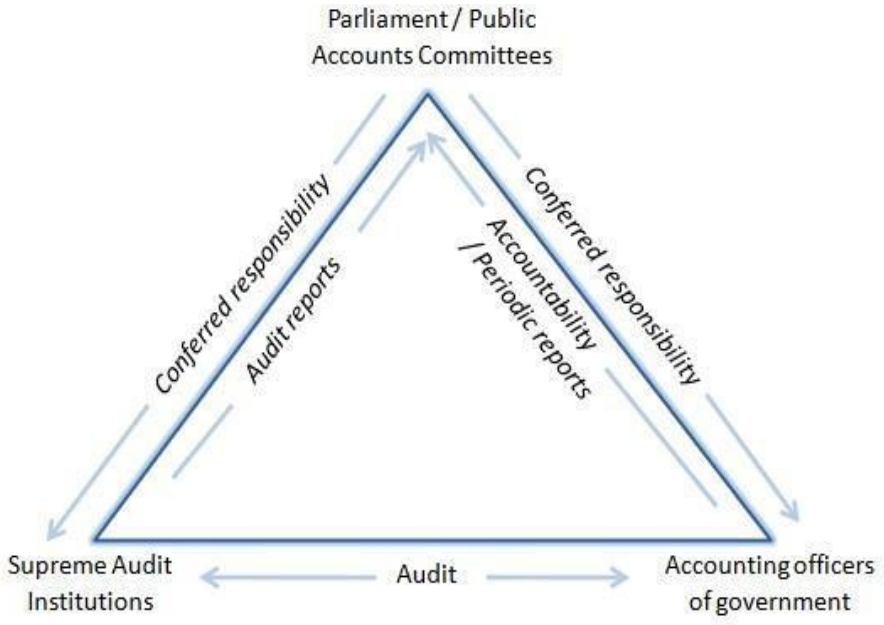
2.8. Accountability triangle

Accountability is a social relationship in which an actor (either an individual or an agency) feels obligated to explain and justify his or her actions to a significant other. Public sector auditing and accountability has four main objectives which include judicious and effective use of taxpayer's money; creating a sound public financial management system; the ensuring of efficient performance of administrative functions; and the objective communication of audit information to PACs and the general public (The Lima Declaration, 1977*).* Different SAIs submit reports for scrutiny by the public, using one of three important external auditing accountability models. These include Anglo-Saxon or the Parliamentary model (commonly known as the Westminster model), Napoleonic or judicial model and collegiate, or board model. (DFID 2004). Uganda adheres to the Westminster model, probably informed by its historical ties to

its colonial power, Great Britain. While variations might occur in its setup, typically, the process is set up as illustrated in Figure 3 below.

Parliament confers responsibility on accounting officers to efficiently and effectively manage funds and the delivery of services. The accountability mechanisms put in place include periodic reporting. The SAI's responsibility in this process is to provide a report on the financial information presented by government executives to parliament. The SAI can usually also report on the economy, efficiency, and effectiveness with which the allocated resources have been used. According to Bonollo (2019), the SAI's reports are the first step in oversight leading to public sector reform. Representing parliament, the Parliamentary Accounts Committee (PAC) is the main stakeholder of the SAI's reports. It is up to the PAC to ensure the issues raised in the audit reports are further investigated when necessary and that the actions taken by accounting officers are followed up. Effective oversight in a Westminster system relies heavily on a well-functioning relationship between the SAI and the PAC.

Figure 3: The Accountability Triangle



Source: AFROSAI-E Performance Audit Handbook(2016)

In Uganda, the parliament is given authority under Chapter 6 of the Constitution of the Republic of Uganda to appoint PACs to scrutinise the SAI's audit reports, which include performance audits. The PAC is appointed by Parliament to supervise the executive branch by scrutinising the accounts of various ministries, missions abroad, and other entities in the central and local government, as well as to demonstrate the appropriation of funds for public expenditure and how they were spent. Subsequently, Parliament of Uganda set up the PAC for the central government, the Local Government Parliamentary Accounts Committee (LGPAC) for local governments, and the Committee on Commissions, Statutory Authorities and State Enterprises for government parastatals and Commissions. These committees are responsible for oversight. As a result, the Department of Parliamentary Liaison in the Office of the Auditor General was created to improve coordination, provide technical assistance, and follow up on and document issues that arise during all Oversight Committee sessions (OAG Uganda Annual report 2015).

2.9. Audit rate

The audit rate is the proportion of the audit mandate covered by the SAIs, each audit year on auditable entities. It is widely predicted that the audited entity's perception of the probability of being audited, strongly determines the extent to which they are willing to implement audit recommendations. Thus, the importance that a SAI assigns to the frequency and coverage of its audit function greatly affects the ability of the organization to enforce good governance and accountability mechanisms for improved audit impact. While several studies have analysed the value of performance audit reports to the audited entity (Reichborn-Kjennerud, 2014, 2015; Morin, 2001, 2004; Torres, Yetano & Pina, 2019), there has been little research into the SAI's frequency of audit coverage on a given audit entity and the impact this is likely to have on that entity's short and long term performance. The available literature indicates that audited entities that perceive a higher probability of poor performance detection, result in increased efficiencies within the organization. However, from the viewpoint of SAIs, when performance audits are conducted professionally and with the appropriate frequency, this results in increased efficiencies within the organization.

Research by Pratama (2019) has proven that because performance auditors have to apply various tools for analysing possible audit problems in the implementation of

government policies, there arises a weakness of choice for what can be audited and when. This can assist the SAI to consider carefully what needs auditing and in obtaining a more general conclusion. The available resources (audit budget and appropriate staff) also have an impact. There are no predetermined procedures for which area to choose in the entire audit universe for a performance audit. It therefore becomes crucial to decide whichgovernment interventions are appropriate for an audit. The SAI's mandate; the materiality of the government intervention; the risk to performance issues; the potential for change when recommendations are made; and the auditability of the area are all taken into account and applied across the entire government when deciding the scope of an audit.

In Uganda, the OAG frequently makes use of performance audits to validate documentary evidence on the self-reporting made by the audited entity. The reporting is further corroborated through field inspections at implementation sites or through interviews with beneficiary communities for such interventions to capture lived experiences. Because performance audits are typically direct reporting engagements (ISSAI 100:30), assurance is typically communicated descriptively. While performance audits continue to be performed with relative frequency on selected government entities, the drive stems from what scholars like Wang & Rakner (2005) have called relational resources. This is, in part, attributed to the SAI's interactions with other political institutions and agencies as well as how it has been able to garner support from the environment.

2.10. Audit Impact

Strategic factors such as organisational culture, good management practices, a conducive work environment, good relations at work, change management, and management support can yield the desired impact at the entity level for the effective delivery of public service and goods. The usefulness of an audit and its subsequent effect on the audited entity is generally perceived as a measure of its impact. In this study, impact is understood as the value obtained from an audit exercise over time, when considering the general public sector and the audited services provided by the institutions under it. This value needs to be measured after a reasonable time has elapsed from the issuance of a performance audit report. A ‘reasonable time’ is a matter of definition by an assessor, but typically can be over a short-term and or long-

term depending on the change desired. This impact refers to how the audited entity has transformed its resources and processes for the effective delivery of goods and services. However, few studies have explored the correlation between implementing recommendations from a performance audit report and the change that is eventually witnessed (Desmedt et al., 2017). Others like Pollitt et al. (1999) and Morin (2014) present models for evaluating performance audits. However, these models have only been tested in Europe where the accountability chain is robust and with a readily available database of audit recommendations issued over time.

The National Audit Office of the United Kingdom has derived performance indicators to measure the impact of their performance audit reports using estimates of savings to the taxpayer for every one pound spent on a performance audit exercise. This tracking has also been used by the SAI of Ghana. Others like the Auditor General of South Africa kept statistics about issued recommendations, while Tanzania used as a tracking mechanism, specific examples of the changes in programme implementation gains obtained from auditing a given entity and or programme. Uganda, however, doesn't report on its impact but rather only on its outputs. Performance indicators, regardless of what is tracked by these SAIs, can be categorised under recommendation statistics, financial impact estimates, PAC debates, and media interest generated (measured in the form of hits to the websites where the report is published) (Fréchette 2019).

2.11. Audit outcomes and follow-up of performance audit findings and recommendations

In a financial audit, the four categories of audit outcomes are unqualified, qualified, adverse, and disclaimer opinions, whereas in a performance audit, the outcome is presented as a level of assurance. Assurance implies that users can have faith in the report's findings, conclusions, and recommendations. Simply put, in a performance audit, the auditor relies on a set of agreed-upon criteria to measure the performance of an entity and in turn provides information that is accurate, valid, and reliable to an intended user about the activities of the audited entity. The intention is to provide these intended users with the confidence that the audit conclusions accurately reflect the state of affairs of the audited entity. Since there are studies that have found that

auditors' recommendations might be theoretically possible but not easy to implement, it begs the question as to the extent audit outcomes can be measured by the number of quality recommendations issued and implemented (Desmedt et al., 2017).

Some studies (Bonollo, 2019; Gendron, Cooper, & Townley, 2001) focus on the implementation of recommendations by the SAI which, by default, are audit outcomes. This refers to the level of assurance communicated, percentage of recommendations accepted and implemented by the audited entities, quality of information produced by the audited entity, and number of observations raised, among others. However, the studies have not delved into how recommendations from such audits influence decisions of the audited entities. Other authors such as Mosimege & Masiya (2022), have noted that in accordance with the audit criteria, the audited entity must improve the validity, accuracy, and completeness of information it provides for audit. Decision making is a significant factor in this trajectory.

Conversely, audit results (findings and recommendations), are meaningless if the issued report is not followed up on. Follow-up activities are those in which the SAI investigates the extent to which the audited entities have taken actions in response to the findings and recommendations of a previous performance audit. Firstly, this is done to improve the effectiveness of the audit report as it increases the likelihood that recommendations will be implemented. Second, the output of such a follow-up activity assists the government and legislature by guiding their actions. Third, SAIs can use the exercise to assess their performance, and fourth, follow-ups can be useful for creating incentives for learning and development, resulting in better knowledge and practices for audited entities (Dwiputrianti, 2011). The ISSAIs establish standards for follow-up, with the report indicating the extent to which audited entities adequately addressed performance problems identified during previous audits. It covered PAC reports and parliamentary decisions, allowing sufficient time for audited entities to take appropriate initiatives, and possibly highlighting common trends and themes across several reporting areas (ISSAI 20:3, 300:42).

2.12. The relationship between audit outcomes, follow-up of performance audit recommendations, and audit impact

The effect of audit rate on audited entities should ideally improve entity operations and subsequently, goods and services. This is possible if audit recommendations are accepted and implemented by the audited entity for the desired impact. However, for audit recommendations to be accepted and adopted, the auditor will need to adduce stubborn and sticky evidence about the conditions prevailing at the audited entity that could and or might be hindering the entity from achieving its full potential. According to ISSAI 3000:126, if recommendations are to significantly contribute to addressing the audit's identified weaknesses or problems, they must avoid truisms, address the root causes of problems, and not infringe on management's responsibilities. There is little evidence from available studies of a relationship between (high and low) audit outcome, (high and low) audit frequency, and the follow up of performance audit recommendation on the impact of an audit (Morin, 2014; Marijani, & Hussein 2022).

A survey conducted by Daujotaitė & Adomavičiūtė (2017) using data from performance audit from the National Audit Office of Lithuania, revealed a high degree of improved performance (impact) among audited entities that implemented all accepted recommendations. By correlation, this was likely to enable funds to be saved, expenses to be reduced, and performance quality to be improved. Other benefits like management, administration and organizational processes were more likely to be strengthened, legislation to be improved, and financial discipline to be implemented. These, though, have not been tested.

2.13. Using performance audits to promote value for money and efficiency

Performance auditing is based on the international standards developed by INTOSAI. According to ISSAI 300:12 and 3000:18, the objectives of performance auditing are to promote good governance, accountability, and transparency. Put differently, it directly contributes to giving the citizens of any democratic society important information and provides a foundation for the growth and development of any country in contemporary society. This is because performance audits typically seek to determine if government projects, programmes, policies, or organizations uphold the value for money premise Marijani, & Hussein (2022). The SAIs work stops when they present the audit

outcomes (financial, compliance, and performance reports) to parliament. How, and if, when and how parliament engages with those reports, is outside the control of the SAIs. For this matter, PACs and the Auditor Generals need to collaborate closely.

Studying areas with a focus on performance audits and specifically engaging with other academia has the potential to advance civil society interests and put active pressure on the organizations that are charged with public sector accountability. The study findings, for example, could advance actual evidence demonstrating that the Auditor General has produced numerous parliamentary audit reports for many years and that none of them have been examined by the appropriate parliamentary committees. In fact, according to Stapenhurst, et al. (2005), one way to instil unity of purpose among various parties, is to have a clear focus on accountability. This would arouse the interest of various stakeholders and shed light on the importance of these reports, raising public awareness of the wide range of SAI products. It could also, as argued by Hoque & Pearson (2018), improve assurances on the efficient use of taxpayer's money, and illuminate the benefits that the general public derives from the services that the government offers its citizens over time.

2.14. Summary

The conceptual framework posits that the generation of impact through performance audits relies on the interplay of three key elements: (1) the rate at which audits are conducted, (2) the outcomes of the audits, and (3) the subsequent implementation of recommendations made in performance audits. This framework expects significant influence from these factors on the effectiveness of the SAIs' work, provided that the SAIs' reports are appropriately utilised by all relevant parties.

The study was based on various fundamental theoretical frameworks and focused on the interplay of organisational, managerial, and contextual factors to provide light on how performance audits can promote positive changes in public sector governance. Initially, performance management ideas were employed to highlight the significance of assessing and overseeing performance in order to accomplish organisational objectives. Furthermore, the Public Administration Theory was utilised to scrutinise the fundamental principles and operational methods of public administration,

encompassing notions such as accountability, transparency, and the function of audit institutions. Finally, the Principal-Agent Theory was utilised to analyse the interactions between principals (individuals or elected leaders) and agents (public officials or auditors), as well as the difficulties in aligning their interests.

The major goal of this study was to find out how performance audits can increase government efficiency and achieve value for money through the promotion of audit outcomes and follow-up of performance audit recommendations by the SAI of Uganda. Studies in the recent past have investigated the impact of performance audits on the audited entities in relation to follow-up of performance audit recommendations. However, many have, to some extent, ignored the aspect of audit rate and resulting audit outcomes in determining the impact of performance audit by SAIs. While studies have found a positive relationship to audit impact by following up on previous audit recommendations as well as the influence of audit outcomes on the work of PACs, these studies are a reflection of results from developed countries.

In contrast, studies in developing countries have attributed the low impact of performance audit to a number of factors. These include reporting to weak and often inactive PACs; the complexity of performance audit reports; the length of time it takes to produce these performance audits reports (typically 12 months); weak legal mandates to conduct performance audits; high staff turnover, and the inability to recruit and retain a workforce with a multidisciplinary background, among others. The results of performance audits and the implementation of previous audit recommendations have been found to have a significant impact on the impact of SAIs.

CHAPTER 3

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

The purpose of this section is to identify and describe procedures and methods that the researcher employed during the research. Here, the researcher presents how the gathering, processing, and analysis of collected information was handled. The chapter discusses the research approach, research tools and their application, sampling, and the data analysis process followed. The chapter also discusses the researcher's limitations, feasibility, and positionality, before concluding with the study's adherence to research ethics principles.

3.2. Research strategy

A research strategy is a type of research orientation typical research adopts. According to Leavy (2017), a research strategy is a plan for conducting a research study and that directs a researcher's planning, execution, and monitoring of the study. Generally speaking, the research plan can be thought of as a methodical approach to managing how the entire study will be carried out. Bryman (2017) defines a research strategy as a general approach to conducting social research. Depending on the study, a researcher might select from a variety of research techniques or methodologies, including mixed, qualitative, and quantitative methods. A quantitative technique was used in this study to help answer the research question. Deductive methods of analysis are frequently used in quantitative research to support, contradict, or confirm pre-existing beliefs.

A research strategy, according to Bryman (2017), involves a logical approach to the relationship between theory and research throughout the testing of ideas, and emphasizes quantification in the data gathering and analysis. The tactic involves positivism in particular, which holds a view of social reality as an external, objective reality, as well as the natural scientific paradigm. In order to understand and have an impact on phenomena, the quantitative research approach is used to address concerns about correlations between measurable variables. Literature evaluations have shown that prior research on public sector auditing has focused largely on

accountability, PACs, and financial audits, with little attention paid to performance auditing and its value in promoting good governance and holding public officials to account. This study used a quantitative approach to determine how often performance audits are conducted, what they reveal, and whether or not the recommendations they make are implemented. Collectively, this affects the audit impact of a SAI and the benefits it provides to citizens through regular reporting on government programmes, projects, and interventions.

In quantitative research, a logical method is preferred over the more subjective qualitative technique. In the latter, one's worldview and reality are not merely constructed, but rather formed through personal experiences, themselves informed by culture and beliefs (Denzin and Lincoln, 2000). A quantitative study is one in which procedures are followed to obtain the desired results; in other words, there is a predetermined method that can be followed (Sheppard, 2021). Edmonds and Kennedy's (2017 pg. 26) definition of quantitative research as a "systematic process of control" is consistent with this view (e.g., group assignment, selection, and data collection techniques). Depending on the design, research can be either experimental, quasi-experimental, or nonexperimental.

3.3. Research Design

Simply put, a research design is a framework for answering research questions and implementing strategies to do so (Cohen, Manion & Morrison 2018). Several authors, Bryman (2017) and Leavy (2017), have discussed the concept of research design. Almost all of them are of the view that research design is a framework used to produce the data needed to address the research questions. For example, Cohen, Manion & Morrison (2018), argue that a research design is a plan or strategy for organizing research and making it feasible so that research questions can be answered using evidence. Similarly, Edmonds, W. A., & Kennedy, T. D. (2016). had earlier stated that the research design is a research structure designed to find answers to research questions or hypotheses. Leavy (2017) expands on this, arguing that a research design is an overall strategy used to carry out research, a concise and logical plan to tackle established research questions through data collection, interpretation, analysis, and discussion. However, there are slightly divergent views as well. In discussing

research design, Sheppard (2021) includes “what” the researcher must do when conducting their research and linking the exploring of "how" to do it. This differs significantly from the others in that it describes the study design as a framework for responding to research questions.

As a researcher, it is critical to commit to the type of strategy and design that will be used as this will help with the direction the study needs to take. The phenomenon under study, or the question and purpose of the study, influences the research strategy and design. A researcher can choose from a variety of designs, including cross-sectional, longitudinal, case study, comparative, and experimental designs. This study used a quantitative research strategy known as cross-sectional. Because of time and financial constraints, a longitudinal design could not be used, as this design requires collecting data over time. The pinnacle of a cross-sectional study is a national survey. This is where a representative sample of the large population, including people of various ages, occupations, educational backgrounds, and socioeconomic levels, and living in various regions of the nation, is questioned on the same day (Thomas 2020). While using a cross-sectional design for a study, variables must be identified and chosen. Researchers have the chance to collect a variety of data from sizable samples utilizing a cross-sectional design and extrapolating to the larger population from which the sample was taken.

Since little is known about the problem under investigation, and to provide a clear picture of the impact of performance audits produced by the SAI of Uganda, a cross-sectional research design was used, as well as a combination of exploratory studies. As Bryman (2016 pg. 53) stated.

“… A cross-sectional design entails the collection of data on a sample of cases and at a single point in time to collect a body of quantitative or qualitative data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association.”.

Furthermore, Cohen, Manion, and Morrison (2018 pg. 348) expound that "a cross-sectional study is one that produces a 'snapshot' of a population at one particular point in time".

In this study, a cross-sectional design was used to provide a snapshot of the relationship between the identified variables: audit outcomes, performance audit recommendation follow-up, and audit rate in determining the audit impact of a SAI. The survey was carried out in the SAI of Uganda, one of the AFROSAI-E member countries. When compared to other SAIs in English-speaking African countries, the SAI in Uganda was chosen for its consistent ratio of annual production of performance audits. Furthermore, having a good working relationship with the SAI's management and the SAI's open data policy that promotes transparency through its own inward management reporting practices, the researcher had a better chance of obtaining approval to conduct the research. Admittedly, the survey site was chosen based on non-scientific factors such as financial constraints and convenience, among others. However, the researcher believes that the findings are indicative of the audit outcomes, rate, and follow-up of performance audit recommendations, as well as their influence on audit Impact.

3.4. Target population

This section moves to discuss the study's population of interest and the procedures for selecting a representative sample of participants for the study. The group of people that the intervention wants to do research on and draw conclusions from is called the target population. To this end, a population is a group of people or units that a researcher wants to learn more about to add to the body of academic knowledge about the subject (Leavy, 2017).

3.4.1. Sampling technique and sample size

The survey population consisted of performance auditors at the SAI of Uganda because the organisation actively conducts performance audits and, in compliance with its duty, submits annual performance audit reports to its parliament. Both secondary and primary data was obtained from the performance audit directorate and trained performance auditors at the SAI. The target research for the study was derived from a combination of sources that supported the cross-sectional design determined for the study. The researcher also utilized the self-assessment reporting data generated annually by the SAI using the AFROSAI-E ICBF tool to corroborate information obtained from the SAI staff. This included distributing a questionnaire to

active performance auditors at the SAI. Based on this data, the staff was reported to be 36 individuals as shown in Tables 1 and 2 below.

Table 1: Sources of data, respondents, sampling methods and sample size

Sources of data	respondents of the study	Sampling methods	Sample size
Active performance auditors	36	Purposive (Total population sampling)	36

Source: extract from the ICBF self-assessment data (2021)

From Table 1, 36 active performance auditors, all deployed to the performance audit directorate in the last 10 years to deliver performance audit reports at the SAI, were selected purposively.

The researcher used the total population sampling technique, a type of purposive sampling method that involves exploring the entire population with a specific set of characteristics such as size (small) of study population. This was determined after applying the following criteria. All:

- research respondents have all been formally trained in the performance auditing 3 module course issued to AFROSAI-E member SAIs
- have between two and 10 years of experience practicing performance auditing
- have been deployed in the Directorate of Value for Money and specialized audits at one point within the SAI or are currently deployed in that Directorate
- are active performance auditors that have produced at least one performance audit report during this period

See Table 2.

Table 2: Population of active performance auditors at SAI Uganda

SAI	Number of Active performance auditors	Number of performance audit reports produced annually
Uganda	36	8
Total	36	8

Source: Annual AFROSAI-E ICBF self-assessment figures (2021)

Bearing in mind that the study needed access to both the performance auditors and the actual audit reports conducted and published, purposive sampling was used to obtain information about actual production time frames, the percentage of discussed reports, and audit recommendations adopted by parliament. Through the use of the ICBF self-assessment data for 2021, the researcher also obtained information about the status of follow-up of the recommendations issued by PACs and implemented by the audited entity. Judgment sampling, in this case, was used in particular. This is because most SAIs believe it is in their best interest to stay invisible due to the political implications of their work; they may not cooperate naturally.

3.5. Data collection techniques

This section discusses the methods and processes used to gather, organize, and analyse the study's empirical data. It starts with a description of the tools used to gather information

3.5.1. Data collection Instruments

Data-gathering instruments, also known as data collection tools or gadgets, are physical implements used to collect information from research participants (Leavy 2017)"There are different techniques for gathering the relevant data, which differ greatly in terms of cost, time, and other resources." Preliminary information might be gathered through either experimental or survey methods. According to Leavy (2017: 12), "the devices/instruments used to gather data, such as a paper questionnaire or computer-assisted interviewing system" allude to the previously stated methodologies. On the same point, although data-collecting methods and instruments are often

grouped and approved under one category, it is crucial to remember that data collection tools include surveys, case studies, checklists, questionnaires, observation plans, and, most importantly for this study, interview schedules. A questionnaire was the main tool for gathering information for the research project. It is also important to note that a questionnaire can be considered a fully structured interview schedule.

There are three main types of interview schedules: (i) structured or fully-structured (preferred in studies where a lot is known about the research topic), (ii) semi-structured (preferred in studies where a lot is known about the research topic but modern data and aspects are included), and (iii) unstructured (preferred in studies where not much is known about the research topic) Wotela, (2016). This study used a structured interview schedule based on what was found in the aforementioned literature review. Bryman (2016) argues that such an approach to interviews is used in a qualitative research study, and while this study uses a quantitative methodology, unstructured interviews are directed by themes rather than questions and the directional flow of the conversation.

As previously discussed, planned interview schedules (also known as questionnaires) are often used when a great deal has been written about a topic. A variety of closed and open-ended questions are prepared in advance to lead the researcher throughout an interview session (Leavy 2017). Interviews may be conducted face-to-face, over the phone or via virtual video platforms such as Microsoft Teams or Zoom. Research is conducted systematically, with the researcher asking questions in a set order and using a voice recorder and notes to ensure accuracy. One of the main benefits of using a structured interview schedule is that it makes it easier to collect consistent and detailed information on the variables of interest, which can then be compared and quantified. This is in addition to the fact that such an approach is typically more efficient and cost-effective (Bryman 2016).

For this study, the SAI of Uganda was the focus of the investigation and the study's data collection tools adopted was a structured questionnaire. Data was gathered using an online survey platform. A cross-sectional survey was conducted on active performance auditors using simple closed-ended questionnaires. The respondents were required to tick the appropriate option on a 5-point Likert scale, while the other section of the questionnaire required a selection of the correct answer. The

questionnaire was circulated amongst selected staff at the SAI (active performance audit professionals) via email, in accordance with the sample selection. In order to validate the information obtained from the self-administered questionnaire and the ICBF self-assessment data, interviews were carried out using an interview guide.

The researcher obtained permission to conduct research at the SAI on request. Once this was obtained, and prior to the commencement of the data collection, a participant information sheet was then dispatched to the SAI and provided more information on how the research would progress. To ensure the quality of the data collected, the researcher ensured that the instrument was easy for respondents to understand and complete. The researcher also assured the respondents of the confidentiality of the information provided. A content validity test was performed to test the validity of the instrument while a reliability test - to test the internal consistency of the scales used in the instrument - was performed using the Cronbach alpha coefficient. By doing this, the researcher was able to identify potential problems such as which questions needed to be rewritten or clarified, and the length of time required to complete the questionnaire.

3.5.1.1 Sources of data

The main sources of data were:

Primary Data: This data was obtained from personal interviews and responses from questionnaires administered to members of staff at the SAI.

Secondary Data: This was collected from journals and documents obtained from the INTOSAI records, SAI Library, SAI Website, AFROSAI-E Institutional Capacity Building Framework (ICBF) self-assessments from the SAI, relevant textbooks, professional journals, and the internet.

3.5.1.2 Measurement of Research Variables

Dependent Variable: Audit Impact

Independent Variables: Audit Rate, Audit Outcomes and Follow up of performance Audit recommendations

Justification for the Chosen Model: The study chose a multiple linear regression model because of the nature of the variables. The dependent variable (Audit Impact) is a continuous variable, and the independent variables (Audit Rate, Audit Outcomes and Follow up of performance Audit Recommendations) are also continuous. In addition, as presented in the conceptual framework, a linear relationship exists between the dependent and independent variables.

The **independent variables** of the study were audit outcomes, follow-up of performance audit recommendations and audit rate. Audit outcomes were measured by the level of assurance communicated by the audit report, the percentage of issued recommendations adopted by the audited entity, and the number of audit observations raised in measuring the audit impact.

Follow-up of performance audit recommendations was measured based on the choice the SAI makes between conducting a new audit and a follow-up audit; the SAI legal mandate; and the time lapse since the previous audit. Equally important was the audit rate which has a contributing factor to audit outcomes. The researcher measured audit recommendations implemented by the audited entity, the availability of resources such as a sufficient audit budget and appropriate staff in establishing the SAIs audit frequency and coverage. These variables were measured based on a 5-point Likert scale i.e. (5= strongly agree, 1= strongly disagree).

The **dependent variable** of performance audit impact was measured considering the statistics of issued recommendations by the SAI, estimates of savings to the taxpayer, frequency of PAC debates, and media interest generated in published reports. These variables were also measured based on a 5-point Likert scale i.e. (5= strongly agree, 1= strongly disagree). These measurements are drawn from previous works of Daujotaitė & Adomavičiūtė (2017), Alwardat & Basheikh, (2017), Desmedt et al., (2017), Pollitt et al. (1999), Morin (2014). and INTOSAI standards and principles (2019).

3.5.2. Designing of the data collection instrument and storage

Data collection is the process of acquiring information on a research topic using appropriate instruments to allow the researcher to assess the information and test the hypothesis or research question (Kabir, 2016). Bryman (2016) describes it as acquiring data to answer research questions, whereas Cohen et al. (2018) define it as the activity that allows researchers to choose the best equipment for data collection. In defining data gathering, Lincoln & Guba (2013) focus on cost, time, and other resources, as well as the rigour and quality of the data collection techniques. The four most common methods of gathering research data are participant observation or ethnography; interviews (group, face-to-face, telephone, or internet-based); focus group discussion; and documentation.

Interviews are commonly associated with traditional survey research which is designed to generate quantitative data. Interviews include questions that are closed, closed-ended, pre-coded, or fixed choice (Bryman 2016), meaning the phrasing and order of the questions are the same for every respondent. Variations in this regard can thus be attributed to respondents rather than to interviewing process variability. The phrase 'qualitative interview' is sometimes used by researchers to describe these variations (Bryman, 2016). Data gathering instruments are classified into three types or strategies: unstructured, semi-structured, and fully structured. Unstructured strategies are commonly utilised in qualitative strategies, semi-structured strategies in mixed strategies, and completely structured strategies in quantitative structures. According to Leavy (2017), data gathering methods should be organised, semi-structured, and unstructured; examples include interview schedules, face-to-face, and self-completion questionnaires.

For this research, a structured interview was used. It is a popular quantitative research approach in survey research, also known as a standardised interview or a researcher-administered survey. The goal of this method was to ensure each participant was administered the same questions in the same order. As a result, the data collected was quantitatively examined. In their study, Afayo et al (2019) sought to assess the performance of the Epidemic Preparedness and Response Committee members in preparedness and response to disease outbreaks in the Arua district of Uganda, as

well as identify factors that may affect their performance. They employed standard questions in measuring the level of preparedness and response to disease outbreaks. The main mode of data collection they used were structured and semi-structured interviews. This allowed them to validate their study assumptions by diving into the perspectives provided by participants on the research topic.

This is supported by Bryman (2016) who contends that data collection follows interviews and observations relating to considering primary and secondary data, which is what this research aimed to collect in answering the research questions. For this research and considering that data collection was administered through emails, it made sense to put together the data from an organised questionnaire for a quick statistical analysis. Second, interviewer bias was eliminated; carefully planned, structured questionnaires were used, containing standard questions. This made it less likely that the data would be affected. The questionnaire was sent and returned by email. This significantly reduced the time it took the researcher to gather information from all targeted, and also avoided long and frequent travel to collect data. This mode was also able to provide for fewer interviewer effects. i.e., personal characteristics of the researcher were less obvious than in face-to face situations and therefore, less intrusive. Additionally, this approach secured the safety of the interviewer (Seale 2012).

To avoid inadvertent loss of acquired data, the researcher kept multiple up-to-date copies of critical data sets. These copies were saved on various media for various purposes. While transporting data to different places, the researcher also employed external hard drives, which were maintained in locked cabinets for long-term preservation. In addition, the study used one drive web space (cloud) to store data for simple retrieval and security.

In summary, the study's data collection tools adopted a structured questionnaire approach. The SAI of Uganda was the focus of the investigation. Data was gathered using an online survey platform. A cross-sectional survey was conducted on active performance auditors using simple closed-ended questionnaires with a few structured questions. The respondents were required to tick the appropriate option on a 5-point

Likert scale, while the other section of the questionnaire required a selection of the correct answer. The questionnaire was circulated amongst selected staff at the SAI (active performance audit professionals) via email, in accordance with the sample selection. In order to validate the information obtained from the self-administered questionnaire and the ICBF self-assessment data, interviews were carried out using an interview guide.

The researcher obtained permission to conduct research at the SAI on request. Once this was obtained, a participant information sheet was then dispatched to the SAI and provided more context to how the research would progress before commencement of the data collection. To ensure the quality of the data collected, the researcher ensured the instrument was easy for respondents to understand and fill out. The researcher also assured the respondents of the confidentiality of the information they provided. A content validity test was performed to test the validity of the instrument, while a reliability test - to test the internal consistency of the scales used in the instrument - was performed using the Cronbach alpha coefficient.

3.6. Data processing and analysis

In this section, data processing and analysis procedures utilised for this study are described including the demographics of the study participants.

3.6.1. Data processing

Data processing, a series of actions or steps performed on data to verify, organize, transform, integrate, and extract data in an appropriate output form for subsequent use, best describes the activities under the theme being discussed. Leavy (2017); Bhushan & Alok (2017); and Cohen, Manion & Morrison (2018) discuss this theme in their texts. They all assert that data processing involves cleaning data by way of processing (editing tabulation, coding, etc.) to enable analysis. Others like Bryman (2016), Sheppard (2021), Edmonds & Kennedy (2017) have not explicitly defined this activity, even though they infer meaning to it when discussing data processing and analysis. Cohen, Manion & Marrison (2018) have provided a unique addition to this definition of data processing and submitted that with the help of computer-assisted

qualitative data analysis software (CAQDAS), more powerful, flexible tools help the researcher analyse different types of data.

Data processing involves cleaning data by way of data coding, entry into the computer, and data cleaning to enable analysis. The data is broken down into their component parts, and then given labels during the coding procedure. Automated data input eliminates the need for the researcher to manually enter data into a spreadsheet, thereby minimising data entry errors (Bryman 2016). The process of coding data begins once units of analysis have been determined. The act of allocating a specific word or phrase to distinct portions of data is referred to as the process of assignment, while data cleaning is the process of identifying and resolving mistakes and inconsistencies within a dataset (Leavy 2017).

For this study, to ensure data accuracy and reliability, the data collected from respondents underwent a rigorous cleaning process. After the data was coded it was entered into a computer using the Statistical Package for the Social Sciences (SPSS) software. After which the data was explored to identify inconsistencies and address missing values within the dataset.
Information collected was stored in a computer which also enabled data cleaning, sorting, and coding. This was done to avoid information loss during collection. The data processing was checked regularly throughout the process for consistency and coding applicability. Because many errors can occur, checking in at the end of each data collection process was critical in ensuring data storage, consistency with values, and completeness. The researcher also utilized simple everyday tools like phones and emails during this field process. The data collected from the respondents was coded, edited for errors, and summarised.

3.6.2. Data analysis

Data analysis extracts useful information from data to make useful conclusions and decisions (Bryman, 2016). Different authors contend that data analysis involves the organization of data into categories and the subsequent identification of patterns and relationships among these categories. Cohen, Manion & Morrison (2018) adds to the scholarship around data analysis by arguing that the use of software should not be

equated to data being analysed. The authors posit that while software organises and structures data for subsequent analysis, it simply processes materials while researchers conduct the actual analysis of the data. For quantitative analysis, there are several methods one can employ to analyse data such as regressions analysis, factor analysis, descriptive analysis, inferential analysis, correlation analysis, cluster analysis, and content analysis, among others.

The researcher utilised factor analysis to determine simple partners of relationships among the variables. i.e. to determine which component measured the study variable. Descriptive analysis was also used to describe the basic features of the data in the study, while inferential analysis employed Spearman's and regression analysis to determine the influence of the independent variable on the dependent variable. The reliability of the questionnaire was tested using the Cronbach's alpha coefficient. The reliability of the questions used in the study ranged from 0.6025 to 0.9281, above the acceptable minimum of 0.50 which indicates that the instruments used to collect data from the respondents were dependable and could yield similar results at all times. The results and conclusions of this study can be safely used to make decisions. Other researchers in the future can use the questionnaire to carry out further research in the same field.

To ensure the integrity of the data collected, summaries were obtained through data analysis. The analysis was used to assist the researcher in making sense of the statistics to determine the amount to which results could be attributed to the variables being researched. Since the researcher was measuring audit rate, audit outcomes, and follow-up of audit recommendations, technical tools such as descriptive, inferential, and regression analysis were used. During this phase, similar trends for validity were examined. Throughout the data analysis, summarises were obtained to ensure the integrity of the data collected. The analysis was used to help the researcher make sense of the figures in trying to understand the extent to which audit rate, outcomes, and recommendations can be attributable to the SAI's impact through its audit products.

In their research article, Durizzo et al., (2020) used these analysis tools to compute correlations and determine the impact of the lockdown between Ghana and South Africa. The analysis looked at the similarity of the mitigation measures taken by the populations of both countries and their compliance to them, to ascertain which attributes were correlated with a higher number of reported preventative actions. This would eventually assist their study in analysing correlates of behavioural change during the lockdowns. They argue that "these correlations could indicate possible ways to foster compliance with social distancing and preventive hygiene guidelines to minimize the spread of COVID-19 and to avoid another lockdown of public life, which has immediate severe negative consequences on the lives of the urban poor". Using a similar tool assisted this research in establishing whether there are associations with the research variables i.e., the relationship between audit outcomes, follow-up of performance audit recommendations, and audit impact. Correlations were used to illustrate the relationship between the variables, namely the dependent variable: Audit Impact, and the independent variables: Audit Rate, Audit Outcomes, and Follow up of performance audits. This helped the researcher to understand why those tasked with accountability responded in the manner they did, and how such responses impacted the lives of those who live with such decisions.

The analysis was used to help the researcher make sense of the figures in trying to understand the extent to which observed relationships can be attributed to influencing variables. The data was also subjected to descriptive, exploratory, and inferential analysis to answer the research questions and test the hypotheses (Kumar, 2019). To investigate relationships between study variables, statistical tests such as Chi-square tests of the association were used. Regression analysis was also used to investigate relationships between variables of interest and to form conclusion.

3.6.3. Description of the respondents

In this section, the researcher describes anticipated products of research data and information analysis that are not directly meant to answer the research questions, test the research hypotheses, or prove the research proposition (Wotela 2016). Demographic variables can be associated with age, ethnicity, and gender. They are largely applied in statistics and research to produce an understanding of the particular sample that is being tested or studied for a particular phenomenon. Different authors

have different views on how to apply the demographic variables, e.g. Brywan (2016) states that the demographic variables can be applied statistically whereas Sheppard (2021) states that there is some disagreement among other authors on where to apply the demographic variables on a survey. However, both authors agree about the demographic variables such as age, gender, ethnicity, and socioeconomic status. Socioeconomic variables can be referred to as those variables in a research study that unveil the status of a particular household or individual such as income, class, and education. Both Leavy (2017) and Cohen, Manion & Marrison (2018) have referred to these aforementioned socioeconomic variables as those that determine the status of the individual or household.

For this research, the study targeted the entire performance audit department of the SAI of Uganda. This comprised a complement of 36 staff members, both male and female, aged 18 to 50. The researcher also utilized the self-assessment reporting data produced annually by the SAI to corroborate on prior information obtained from the SAI. The researcher administered a questionnaire to the performance auditors purposively selected for the study. This was possible considering that, while many staff at the SAI are trained performance auditors and have worked in the Directorate of Value for Money and specialized audits, most are also not currently deployed in this directorate. However, this staff still annually conducts performance audits within their deployment space, hence the need to bring them into the target population as shown in Table 3 below.

Table 3: Population of performance auditors selected for study

SAI	Number of Performance Auditors	Number of Performance Audit produced annually
Uganda	35	8
Total	**35**	**8**

Source: Annual AFROSAI-E ICBF self-assessment figures(2021)

While the researcher acknowledges that the number of persons trained to conduct performance audits at the SAI level is greater than 35, the target group was restricted to those who have conducted performance audits for at least five years. These are employees who were either still employed in the Directorate of Value for Money or

other SAI directorates but were still assigned performance audit assignments throughout the last three fiscal years.

3.7. Research strengths—reliability and validity measures applied

The common consensus in theory concerning reliability in research is that for research to be reliable, it must be repeatable. According to Leavy (2017), reliability and validity are ideas used to assess the quality of research. Bryman (2017) describes the concept of internal validity as the inquiry into whether a conclusion that encompasses a causal association between two or more variables is substantiated.

To ensure the reliability of this research, consistent testing of the results produced was conducted regularly to check the extent to which the results can be reproduced when the research is repeated under the same conditions. The researcher was mindful that the reliable measurement is not always valid because while reproducing the same results might be possible, this might not necessarily mean they are correct. This is why, to ensure that the hypothesis of the research is valid, the researcher first applied ecological validity as described by Leavy (2017) in examining whether the findings of a study can be generalized to naturalistic situations. The second validity test that the researcher ran was internal validity as described by Bryman (2016) to check whether a conclusion that incorporates a causal relationship between two or more variables is sound. Thus, by applying internal validity, the research was able to test if there is a relationship between the variables under study.

3.8. Ethical considerations when collecting data

This section discusses the ethical considerations made throughout the study procedure. Ethical considerations are the most important aspects of research. Researchers have a moral duty to safeguard those who assist them with the research project as well as a scientific duty to discover new information that helps society. In the end, researchers are asked to do no harm while protecting the people and animals involved in their studies. Research ethics take into account four factors: informed permission, voluntary participation, confidentiality, and guaranteeing that there is no harm. According to Sheppard (2021), all researchers in all professions are expected and compelled to observe specific ethical standards when conducting their study. This is the case regardless of the field in which the research is being conducted. In certain

circumstances, the decisions that need to be made to design research have a significant bearing on the ethics of such decisions. Researchers must have a thorough understanding of the context in which the decisions about their research are being made, as well as how those decisions affect not only the research itself but also the mental and physical health of the participants in the study.

Some scholars, such as Edmonds & Kennedy (2017), have not precisely specified the ethical factors to keep in mind when collecting data. Throughout their work, they focus on applied procedures with cases. Whereas Cohen, Manion & Marrison (2018) argue for ethical consent when collecting data via the internet, delving into other ethical considerations such as how to give information and gain consent, what constitutes public and private information, and the expectations associated with it. Although it is no longer possible to guarantee perfect secrecy, anonymity, and traceability, it is nevertheless critical to ensure that all necessary rights have been obtained for data use. Bhushan & Alok (2017) examine the different and complex ethical, legal, social, and political issues that surround research ethics.

Self-declaration confirms that the researcher has complied with all forms of ethical considerations as far as possible. For this study, the key ethical considerations included voluntary participation, where individuals willingly chose to take part; informed consent, where participants were fully told about the study and gave their permission to participate; anonymity, where the identities of participants were not disclosed; confidentiality, where the data collected was kept private and only accessible to authorised individuals; potential for harm, where the study took precautions to minimise any potential negative effects on participants; and results communication, where the findings of the study were to be shared with participants and other relevant parties.

As Bryman (2016) suggests, deception occurs when researchers represent their work as something other than what it is. This is consistent with Cohen, Marion & Keith Morrison (2018) who contend that a researcher has an ethical duty to ensure the results of the research are reported fairly, credibly, accurately, and without misrepresentation. The researcher Informed prospective research participants about the essential components of a research study and the nature of their involvement. The researcher received informed consent from all participants in the study.

Through email communication and the online link to the questionnaire provided, the study participants were assured that they would remain anonymous and that their information would stay private. The researcher maintained the anonymity of responders by unchecking the "Collect email addresses" option in the online form settings and only shared the initial link to the questionnaire. Assurances were also provided that they could withdraw their permission at any time during this project without any penalty. They were also informed that their participation would not put them at risk or cause hurt on physical, professional or emotional grounds. All participants who took part in the study did so willingly, with promises to destroy all their data after the approval of the dissertation. The data collection was conducted remotely and did not necessarily take place on the premises and/or during work hours. This was in an effort to avoid interruption of participants' workday.

Participants were also given the contact information of the researcher's supervisor as well as the authorising academic institution in the event they needed to authenticate the study. They were also given a copy of the consent from the school's ethics committee, as well as permission to proceed with the research at the OAG Uganda, granted by the Auditor General of Uganda. The Auditor General was informed and made aware that the research participants would not be paid for this study. This reduces the risk of potential volunteers agreeing to participate in the study despite having doubts or misgivings, actions that pertain to research discipline governance and code of conduct (Knight, 2019). The researcher further assured the participants that no personal information would be collected or used in this study. All these guarantees helped to build trust between the participants and the researcher, allowing for the collection of accurate data for this study.

3.9. Summary

This chapter detailed the measures implemented during data collection and offered information on the sample. Quantitative research is used for this study to determine how often performance audits are conducted, what they reveal, and whether or not the recommendations they make are implemented. A cross-sectional design was used to provide a snapshot of the relationship between the identified variables: audit outcomes, performance audit recommendation, follow-up, and audit rate in

determining the audit impact of a SAI. The SAI of Uganda was the focus of the investigation and the study's data collection tools adopted was a structured questionnaire. Data was gathered using an online survey platform. The study targeted the entire performance audit department of the SAI of Uganda. For this study, the key ethical considerations included voluntary participation; informed consent; anonymity, confidentiality, potential for harm.

CHAPTER 4

4 PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the analysis and interpretation of the findings of the study. Data was organised and analysed in accordance with the specific objectives of the study and presented in tabular format. The presented data was used to draw inference and conclusion about the study. To restate, the following main research questions guided the study to achieve its objectives.

a) To what extent does the audit rate and related outcomes influence audit impact?
b) What is the link between the follow-up of performance audit recommendations and its influence on audit impact?
c) What is the relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact?

4.2 Response Rate

The sample was 33 respondents taken from a population of 36 SAI staff and thus a response rate of 93.9%.

Table 4: Demographic characteristics of the respondents

	Variable	Frequency	Percentage
1. Gender	Male	21	63.6%
	Female	12	36.4%
2. Age of the respondents	18-28	1	3.0 %

	29-39	16	48.5%
	40-50	10	30.3%
	51+	6	18.2%
4. Education level	Postgraduate	27	81.8%
	Undergraduate	4	12.1%
	Enrolled for a postgraduate programme	2	6.1%
5. Are you a performance Auditor?	Yes	31	93.9%
	No	2	6.1%

Source: Primary Data

The results in Table 4 above reveals that the majority of the respondents were male (63.6%), were between the ages of 29-39 years (48.5%), had attained a postgraduate qualification (81.8%) and were performance auditors (93.9%).

Table 5: Occupation, experience at SAI & current position of respondents

	Variable	Frequency	Percentage
Occupation	Accountant	7	21%
	Auditor	21	64%
	Economist	3	9%
	Social Scientist	1	3%
	Statistician	1	3%
	3 to 5 years	6	18%

How long have you worked at the SAI? (Years)	6-10 years	9	27%
	11-15 years	6	18%
	16-20 years	3	9%
	21-25 years	3	9%
	26-30 years	6	18%
Current position/ designation	Auditor	10	30%
	Principal Auditor	8	24%
	Senior Auditor	5	15%
	Senior Principal Auditor	3	9%
	Assistant Director of Auditor	2	6%
	Audit manager	2	6%
	Compliance Officer	1	3%
	Director	1	3%
	Senior Economist	1	3%

Source: Primary Data

The results in Table 5 above show that most of the respondents were auditors by profession (64%), followed by accountants (21%). Most of the respondents had 6-10 years' experience working at the SAI (27%), while 18% had more than 26 years' experience of working at the SAI. The results also revealed that most of the respondents are currently employed as auditors (30%), with 24% working as Principal Auditors.

The results in Table 6 below reveal that most respondents had less than 5 years' experience of conducting performance audits and completed their most recent audit in between 2021 and 2023 (72%). The findings also reveal that most of the audits were not scrutinized by PAC (69.7%).

Table 6: Respondents' experience conducting audits

	Variable	Frequency	Percentage
Experience conducting performance audits	1 to 5 Years	16	48%
	6 to 10 Years	12	36%
	11 to 15 Years	5	15%
When did you complete your most recent audit?	2011 to 2015	3	9%
	2016 to 2020	6	18%
	2021 to 2023	24	73%
Has your audit been scrutinized by the relevant PAC?	No	23	69.7%
	Yes	10	30.3%

Source: Primary Data

Table 7: Descriptive: Audit Traits

	Variable	Frequency	Percentage
1. Do your performance audits highlight performance gaps in government programs	Yes	33	100%
	No	-	-
	I don't Know	-	-
2. Have you ever been involved in any follow up audits?	Yes	33	100%
	No	-	-

	I don't Know	-	-
3. Do you supervise performance audit activities?	Yes	21	63.6%
	No	12	36.4%
	I don't Know	-	-
4. Do you have a say on what areas the SAI prioritize for performance audits?	Yes	19	57.6%
	No	13	39.4%
	I don't Know	1	3.0%
5. Do you promptly conclude on your performance audit assignments?	Yes	26	78.8%
	No	6	18.2%
	I don't Know	1	3.0%
6. Have you ever failed to complete any performance audit	Yes	8	24.2%
	No	25	75.8%
	I don't Know	-	-
7. Do your performance audits highlight performance gaps in government programs?	Yes	33	100%
	No	-	-
	I don't Know	-	-
8. Are you conducting performance audits because have been	Yes	16	48.5%
	No	17	51.5%

asked to?	I don't Know	-	-
9. Do you know if your audit recommendations have been implemented by the audited entity?	Yes	22	66.7%
	No	8	24.2%
	I don't Know	3	9.1%
10. Have you ever heard of performance audits creating impact in the public sector?	Yes	32	97%
	No	1	3%
	I don't Know	-	-
11. Have you been involved in the promoting of performance a audit reports to the Public and the PAC by your SAI?	Yes	16	48.5%
	No	17	51.5%
	I don't Know	-	-

Source: Primary Data

The results in Table 7 above reveal that performance audits of all the respondents (100%) highlight performance gaps in government programs. Similarly, the data reports that all the respondents (100%) had ever been involved in any follow up audits. Most of the respondents supervise performance audits activities (63.6%), with only 36.4% not involved in the supervision of performance audits. Similarly, most of the respondents (57.6%) reported to have a say on what areas the SAI prioritize for performance audits, while 39.4% had reported non influence at all, while only 3% were not aware whether they had influence or not.

With regard to promptness in concluding performance audit assignments, the majority of the respondents responded in the affirmative (78.8%), 18.2% were not prompt, and 3% were not cognizant of the extent of their promptness.

4.3 Correlation Matrix

Table 8: Correlation between variables

	Mean	SD	1	2	3	4
Audit Rate-1	1.833	.725	1.000			
Audit Outcomes-2	1.818	.882	.635**	1.000		
Audit Follow-up-3	3.424	.751	.392*	.403*	1.000	
Audit Impact-4	1.455	.794	.624**	.478**	.348*	1.000
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						
Source: Primary Data						

Table 8 above shows the results of the correlation between each of the variables. It reveals a moderate correlation between the audit rate and the audit outcomes, with a correlation coefficient of .635. This suggests that the higher the audit rate, the better the audit outcomes. Similarly, there is a moderate correlation between the audit follow-up and the audit impact, with a correlation coefficient of .392. This indicates the higher the follow-up efforts, the better the audit impact. Lastly, the results reveal there is a high correlation between the audit outcomes and the audit impact, with a correlation coefficient of .624. This suggests the better the audit outcomes, the higher the audit impact.

4.4 Regression Analysis

4.4.1 Null hypothesis for Question 1: There is no relationship between the audit rate and related outcomes and audit impact

Research hypothesis for Question 1: There is a relationship between the audit rate and related outcomes and audit impact

Table 9: Research hypothesis for question 1

	Unstandardized Coefficients		*Standardized Coefficients*	T	Sig.	*Collinearity Statistics*	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.152	.312		.488	.629		
Audit Rate	.587	.200	.536	2.932	.006	.597	1.675
Audit Outcomes	.124	.165	.138	.754	.457	.597	1.675
a. Dependent Variable: Audit Impact							
R	.633						
R Square	.401						
Adjusted R Square	.361						
Std. Error	.635						
F Statistic	1.027						
Sig.	.000						

Source: Primary Data

The results in Table 9 above reveals the model has an R-squared value of 0.401, meaning 40.1% of the variance in audit impact is explained by audit rate and audit outcomes. The collinearity statistics indicate that the independent variables have a tolerance of 0.597 and a variance inflation factor (VIF) of 1.675, suggesting they are not highly correlated with each other.

4.4.2 Null hypothesis for Question 2: There is no link between the follow-up of performance audit recommendations and its influence on audit impact?

Research hypothesis for Question 2: There is a link between the follow-up of performance Audit recommendations and its influence on audit impact?

The results of the correlation revealed that there is a moderate correlation between the audit follow-up of performance audit recommendations and the audit impact, with a correlation coefficient of .392. This indicates that the higher the follow-up efforts, the better the audit impact.

4.4.3 Null hypothesis for Question 3: There is no relationship between audit rate, audit outcomes, and follow-up of Performance audit recommendations in determining audit impact.

Research hypothesis for Question 3: There is a relationship between audit rate, audit outcomes, and follow-up of Performance audit recommendations in determining audit impact.

Table 10: Regressions Model

	Unstandardized Coefficients		*Standardized Coefficients*	T	Sig.	*Collinearity Statistics*	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.126	.537		.234	.817		

Audit Rate	.562	.206	.513	2.726	.011	.575	1.740
Audit Outcomes	.101	.170	.112	.590	.560	.569	1.758
Audit Follow-up	.107	.168	.101	.638	.528	.807	1.240
Dependent Variable: Audit Impact							
R	.639						
R Square	.409						
Adjusted R Square	.348						
Std. Error	.641						
F Statistics	6.688						
Sig.	.001						

Source: Primary Data

The model in Table 10 above has an R-squared value of 0.409, meaning that 40.9% of the variance in the dependent variable is explained by the three independent variables. The adjusted R-squared value is 0.348, which adjusts for the number of independent variables in the model and provides a better estimate of the goodness of fit when comparing models with different numbers of predictors. The collinearity statistics indicate that the independent variables have a tolerance of 0.569-0.807 and a VIF of 1.240-1.758, suggesting they are not highly correlated with each other. The F-statistic and its corresponding p-value of 6.688 and 0.001 respectively, suggest the overall model is statistically significant.

4.5 Summary

This chapter discussed the study's findings, which were organised and examined based on the study's unique objectives to address the research questions. The survey questionnaire yielded a response rate of 93.9%.

A results correlation matrix was produced to display the correlation between each variable, indicating a moderate correlation of 0.635 between the audit rate and the outcomes. This suggests as the audit rate increases, the audit outcomes improve. The relationship between follow-up and audit impact was somewhat correlated, with a correlation coefficient of .393. Additionally, there was a stronger association between audit outcomes and audit impact, with a correlation coefficient of .624. This suggests as audit outcomes improve, the impact of the audit also increases.

A regression analysis was conducted to determine the impact of an explanatory variable on the dependent variable. The analysis revealed that the model had an R-square value of 0.401, indicating 40.1% of the variation in audit impact can be explained by audit rate and audit outcomes. The collinearity statistics showed that the independent variables have a tolerance of 0.597 and a VIF of 1.675, suggesting they are not strongly correlated with each other. These models facilitated the comprehension of the study's hypotheses.

CHAPTER 5

5 DISCUSSION OF RESULTS

In this chapter, the research findings are interpreted in line with the research questions that sought to examine, using a case study of SAI in Uganda, how governments may utilize performance audit reports to promote efficiency and value for money in determining audit impact. Section 5.1 presents the interpretation of the findings related to the association between audit rate, and their influence on audit impact. Section 5.2 presents the interpretation of the findings related to the link between follow-up of performance audit recommendations and their influence on audit impact, while 5.3 discusses the findings on the relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact.

5.1 The association between audit rate, audit outcomes, and audit impact

In this section, we interpret the research findings relating to the association between audit rate, audit outcomes, and their influence on audit impact. The results reveal audit rate and related audit outcomes have a positive relationship with audit impact, thus suggesting that higher audit rates and subsequent audit outcomes are associated with higher audit impacts. The findings are in tandem with those of Cordery & Hay (2019) who sought to study the public value of SAIs and revealed that audit outcomes, rather than audit processes, ought to be the focus of audits.

Concerning audit rate, a study by Blume & Voigt (2007) revealed that SAI's "activities tend to have more effective fiscal policies and better accountability systems". Their findings further showed that "audit outcomes provide evidence of the importance of Supreme Audit Institutions in promoting government accountability and effectiveness." Similarly, in his study of performance measurement of SAIs in four Anglo-Saxon countries, Azuma (2004) revealed that audit outcomes are an effective tool in assessing the performance of SAIs and pointed out areas that require improvement. This in agreement with the findings of this study.

Most respondents concurred that the audit rate, which refers to the frequency at which an SAI audits its stakeholders, is the most suitable method for enhancing the performance of the audited entity. This is because a higher audit rate increases the likelihood of detecting and addressing recurring audit issues, which could otherwise negatively impact the reputation of the audited entity. The results of the self-assessment conducted by the SAI using AFROSAI-E's ICBF indicate that the SAI lacks the necessary capacity to effectively carry out performance audits across a broader range of its responsibilities. Consequently, the likelihood of the SAI conducting performance audits on the same institution remains low due to various factors. These factors include the high costs associated with performance audits; limited financial resources allocated to the SAI by the central government (resulting in only ten performance audit reports being feasible in a given audit year); a shortage of staff in the Directorate of Performance Audit; and a lack of genuine interest in performance audits from the legislature. On this last point, despite their requests, only a few reports have been thoroughly examined by the PAC of parliament. (ICBF) Self-assessment data and report 2022

Moreover, research conducted by Karlina, Lindrianasari, & Gamayuni (2018) in Indonesia corroborates the results of this study. The researchers recognise that the timeliness of audit findings is important, and their study found that the size of the audit committee has a substantial impact on the timeliness of audit reports. They propose having a larger audit committee to minimise delays in audit reporting.

5.2 Exploring the link between follow-up of performance audit recommendations and their influence on audit impact.

The study found a positive and significant correlation between the follow-up of performance audit recommendations and their influence on audit impact. Specifically, the results showed that increased follow-up efforts were associated with better audit impact. The findings align with those of Umor, Zakaria, & Sulaiman (2016), whose study explored follow-up audits and their role in performance auditing in the public sector environment in Malaysia. They concluded that the absence of audit follow-up can hinder the accurate assessment of the value of performance audits and the expected outcomes of audit recommendations. Umor, Zakaria, Sulaiman, & Kutty

(2018) emphasise that conducting follow-up on performance auditing is crucial for reassessing the degree of response to audit recommendations, which ultimately influences the impact of audits.

In their examination of performance auditing from a governance perspective, Umor, Zakaria, & Sulaiman (2020) confirmed the correlation between the implementation of audit recommendations and the effectiveness of audits. They demonstrated the influence of follow-up practices, which include methods before, during, and after the presentation of audit findings. The findings align with those of Stefanescu and Trincu-Drăguşin (2020), who conducted a study on performance audit in the public sector in Romania. Their research demonstrated that the follow-ups effectively motivated the audited entities to fulfil the recommendations.

From the responses received, the results indicate that SAI Uganda was not actively prioritising the follow-up of earlier performance audit recommendations to determine the extent to which the audited organisations had implemented the suggestions. This is evident from the self-assessment results in the ICBF report 2022. The effectiveness of the Auditor General's recommendations is contingent upon their adoption by the PAC of parliament. Due to the delayed examination of the Auditor General's performance audit reports by the Committee, the implementation of the recommendations may not have occurred. This is because the audited entities were unlikely to implement the suggestions unless parliament had explicitly addressed them. The lack of follow up by the SAI is understandable since there are no formal directives to the audited entities by parliament, particularly given their resource constraints. The majority of respondents believe that by enhancing the implementation of performance audit recommendations, the SAI could have achieved greater value for their audit products and significantly increased their impact. In fact, the aforementioned study by Umor, Zakaria, & Sulaiman (2020) confirmed the correlation between the implementation of audit recommendations and the effectiveness of audits. The authors demonstrated the influence of follow-up practices, which include methods before, during, and after the presentation of audit findings.

In light of the above, it might be contended that the audited entities will not face any serious consequences for ignoring the recommendations, thus leading to a delay in the implementation of the recommendations until the audited entities are compelled to comply. This is especially true if later investigations uncover noncompliance; organisations would readily undertake changes to avoid potential repercussions from the PAC during future audit reporting conducted by the Auditor General. There are two main reasons for not implementing this. Firstly, there is no official requirement from parliament to do so. Secondly, there is very little chance of getting detected if they choose not to apply it. In contrast, audited organisations that demonstrated proactive thinking were more inclined to willingly adopt the recommendations to improve their operations, without necessitating guidance from the government. For a performance audit to be successful, it depends on the audited entities' proactive attempts to improve their performance before being obligated to do so by the parliament.

5.3 Assessing the relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations

This section focuses on analysing the research findings regarding the predictive capacity of audit rate, audit outcomes, and follow-up of performance audit recommendations in explaining the variation in audit impact. The results indicate that these factors collectively account for 40.9% of the observed variance. Additionally, it is evident that the audit rate has the most significant influence on the audit impact. The results of this investigation align with several prior empirical studies. Van & Put (2011) conducted a study on the effect of performance audits by examining existing literature. Their research demonstrated the crucial role that follow-ups have in determining the impact of audits. They argue that a single audit is less effective than a series of audits, and that follow-up audits are necessary to see if the issues revealed in previous audits have been resolved.

Similarly, Reichborn-Kjennerud & Johnsen (2018) found that performance audits in Norway have a beneficial effect on public administration by improving operational efficiency and effectiveness. Additionally, they emphasise that performance audits enhance public trust in government institutions, resulting in a favourable outcome.

The findings are also in tandem with those of Weets (2008), who studied the success of performance audits in Rotterdam and revealed a positive impact of performance audits in terms of effectiveness and efficiency of government services and particularly, in improvement in public service delivery. Similarly, the findings are in agreement with those of Marijani & Jarbandhan (2022) whose study on the impact of performance audit in the public sector in Tanzania revealed that performance audits hold the potential to increase accountability of government resources.

The timing of this study coincides with matters that have attracted significant public and press interest in Uganda and where the SAI has played a role. The current legislative inspection of the National Social Security Fund (NSSF) is noteworthy. According to Ssebuggwawo (2020), a performance audit conducted by the OAG in Uganda, discovered inconsistencies in the operations of the fund. The investigation highlighted that the fund irregularly maintained billions of Ugandan shillings in a suspense account. Furthermore, the report revealed unnecessary expenses in several projects funded by the organisation. Based on the performance audit report, a parliamentary investigation was established to examine the fund. This inquiry serves as a clear demonstration of the effectiveness of performance audits in ensuring value for money. In a similar vein, Oluka (2023) indicated that, based on the Auditor General's report, the Speaker of Parliament initiated an investigation into claims of office misconduct and mismanagement at the NSSF.

In a nation where the populace eagerly seeks information regarding the allocation of their tax funds towards social goods and services, the SAI serves as the primary autonomous provider of such information. Based on the AFROSAI-E ICBF, which all member SAIs have agreed to be assessed on, SAI Uganda is one of the few member countries that has achieved a high level of performance (level 3 and above) across the five domains: Independence & Legal Framework, Organisation & Management, Human Resources, Audit Methodology & Standards, and Communication & Stakeholder Management.

When evaluating the essential factors for a successful, meaningful and relevant SAI, we should take into account leadership, stakeholder engagement, and planning. The SAI of Uganda has incorporated the public financial management reporting framework or a comparable tool in their self-assessment findings from the ICBF report of 2021 and 2022, specifically under the "Comprehensive Reporting Framework" criteria. This adoption guarantees thorough coverage of their responsibilities and enables the timely generation of reports. Similarly, the SAI observed significant improvements in the effectiveness of its engagement with stakeholders, particularly in its organisational structure and the user-friendliness of its report structure. These improvements were reported to be at a satisfactory stage of development (level 3) and showed satisfactory performance in the development and implementation of strategic plans. These actions enhanced their rapport with lawmakers. Uganda's adherence to the SAI mandate helps maintain its favourable position compared to other government ministries, departments, and agencies. This, in turn, enhances the confidence and trust of the public in the policy decisions made by their elected leaders.

5.4 Summary

This chapter provided an analysis and examination of the results. The analysis reveals a strong association between the audit rate and audit outcome, as well as between audit outcomes and the follow-up of audit recommendations. Follow-up is therefore key, if a SAI is to register a higher audit impact from its audit work. Nevertheless, the achievement of a significant impact in the SAI remains uncertain, as evidenced by the substantial backlog of the SAI's performance audit reports that the PAC is currently facing in unscrutinised performance audit reports. Additionally, the resources available are insufficient to conduct a comprehensive performance audit within a single audit year, especially considering the SAI's extensive audit responsibilities and the relatively small workforce available.

This hindrance is preventing the SAI from accomplishing its goal of conducting follow-up audits, which the researcher and prior studies have identified as crucial for obtaining desired audit outcomes when recommendations are implemented. In contrast to Europe, where studies demonstrate a high level of successful performance audits in public administration, Africa is still struggling to achieve this impact due to its

weak accountability structures. This is seen in the large number of unexamined performance audit reports that have been released and presented to parliament by the SAI that have not been acted upon by those charged with governance systems.

CHAPTER 6

6 SUMMARY, LIMITATIONS RECOMMENDATIONS AND CONCLUSION

In this chapter, a summary of the findings is presented as a synthesis of the study in general. Section 6.1 presents a summary of the findings and conclusions, 6.2 the limitations of the study, 6.3 the recommendations derived from this research, and 6.4 the conclusion.

6.1 Summary of findings

With reference to Uganda's SAI, this study sought to examine how governments may use performance audits to encourage efficiency and value for money by investigating the relationship between the audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact (value to citizenry). The research was then guided by three questions:

(a) To what extent does the audit rate and related outcomes influence audit impact?

b) What is the link between follow-up of performance audit recommendations and their influence on audit impact?

c) What is the relationship between audit rate, audit outcomes, and follow-up of performance audit recommendations in determining audit impact?

The results revealed moderate correlations between the study variables, and further established a substantial predictive power of the independent variables in explaining the dependent variable.

The findings reveal that audit rate, audit impact and follow-ups of audit recommendations hold substantial explanatory power in explaining the variance in the audit impact of SAIs. Therefore, the study's results in alignment with its objectives, conclude that audit rate and audit outcomes influence audit impact. Thus, value for money from SAIs is significantly tied to the accuracy, relevance and timeliness of audit reports generated during the performance audits.

Secondly, the results also revealed that the higher the follow-up efforts of audit recommendations, the better the audit impact of the audit performance. Therefore, SAIs ought to schedule frequent follow-ups once performance audit reports are presented to the respective audited entities.

Additionally, audited entities should prioritise the prompt implementation of performance audit recommendations to enhance audit outcomes. This would enhance the efficacy and cost-effectiveness of government services, thereby benefiting the populace and realising audit impact for all.

6.2 Limitations of the study

The study is not without limitations, which consequently impact the ability to draw generalisations from its findings. The study was cross-sectional, which means it did not take advantage of the benefits that a longitudinal study provides, such as accounting for structural changes over time. Furthermore, the study primarily examined quantitative data, which frequently restricts the range of responses.

Regarding methodological constraints, the study employed a self-administered questionnaire that consisted of closed-ended questions. Consequently, it did not allow for the inclusion of supplementary material in cases of misinterpretation or the need for more clarification. The researcher, however, ensured that this information was corroborated against the SAI's assessment ICBF report administered annually by the AFROSAI-E across its members.

Furthermore, the study's scope was limited to examining only one SAI from a single nation (Uganda), hence restricting the opportunity to obtain more comprehensive insights by comparing SAIs from a minimum of four other nations. Furthermore, the study was hindered by limitations in both time and financial resources, as it was undertaken solely to meet the requirements of a Master's Degree. Nevertheless, the researcher successfully addressed all the research questions within the specified limitations.

6.3 Recommendations

This section provides suggestions that can be implemented to enhance the influence or significance of performance audits for the general public. According to the findings of this study, the following suggestions are put forward.

It is recommended that SAIs should raise the frequency of their audits to enhance their audit rates and prioritise the improvement of audit outcomes. This will lead to more efficiency and better value for money. Furthermore, SAIs must improve their follow-up endeavours to guarantee that issues highlighted in previous audits are adequately resolved, hence ensuring value for money and satisfaction for the general public, in this particular instance.

To further advance research on the subject of performance audits, it is necessary to conduct additional studies that investigate the potential of blockchain technology in improving the impact and practicality of audits. Empirical evidence suggests that blockchain technology can significantly disrupt the process of conducting audits. Elommal & Manita (2021) demonstrated that blockchain technology enables auditors to streamline their workflow by automating routine operations such as confirming and verifying sums and balances. This allows auditors to dedicate their time and expertise to more advanced duties, such as designing preventive tests and conducting intelligent data analysis.

Finally, **on policy recommendation** and in order to optimise the effectiveness of performance audits, governments should;

- Allocate resources to conduct regular performance audits. This includes providing comprehensive support to SAIs who can then ensure that audit recommendations are properly followed up.
- There is a need to strengthen the existing follow-up frameworks by the relevant parliamentary oversight committees, by developing a system for tracking the implementation of audit recommendations. This should include clear timelines, responsibilities, and performance indicators.

- There is also a need to develop policy frameworks that mandate response and action plans. i.e., require that audited entities submit to the relevant parliamentary oversight committees detailed action plans within a specified timeframe, outlining steps to address audit findings and recommendations.

6.4 Conclusions

This research has six chapters. After laying the groundwork in Chapter 1, Chapter 2 reviews the research problem, prior and current studies, and the theoretical and conceptual framework that leads the study. Chapter 3 describes the study's approach, methods, and processes. Validity, reliability, and methodological constraints are also covered. Chapter 4 presents the results, while Chapter 5 explains them using the chosen theoretical framework. Chapter 6 presents conclusions, consolidates data, and discusses research limitations. Also included in the last chapter are suggestions for further research and improvements.

Chapter 1 provides an overview of the study, explaining the reasons for conducting a performance audit in the public sector. It also discusses how governments in English-speaking African countries have structured themselves to make use of performance auditing, along with other types of audits. Additionally, it highlights the advantages of this approach for the SAI of Uganda. The chapter also includes the problem statement, study purpose, hypothesis, and research scope.

The conceptual framework discussed in Chapter 2, combines three factors: the rate at which performance audits are conducted, the results of the audits, and the implementation of their recommendations. This approach expects these elements to significantly impact the SAIs' work if all relevant parties properly utilise their reports. Several theoretical frameworks underpinned the investigation. Initially, performance management principles stressed the importance of assessing and managing performance to achieve organisational goals. Public administration concepts and practices, including accountability, openness, and audit institutions, were examined using the Public Administration Theory. Lastly, the Principal-Agent Theory was used

to examine the relationships between principals (like elected leaders) and agents (like public officials or auditors) and their difficulty aligning interests.

In Chapter 3, data gathering methods and sample information were covered. This research uses quantitative methods to establish how often performance audits are undertaken, what they disclose, and if their suggestions are followed. The audit impact of a SAI was assessed using a cross-sectional approach to examine the link between audit outcomes, performance audit suggestion, follow-up, and audit rate. The research examined Uganda's SAI using a structured questionnaire. Data was collected via online survey. The research addressed the whole SAI Uganda performance audit department. Voluntary participation, informed consent, anonymity, secrecy, and harm were ethical issues for this study.

In Chapter 4, findings are presented. The key findings of the study reveal that audit rate and related audit outcomes have a positive relationship with audit impact. In addition, the findings indicate that the higher the follow-up efforts, the better the audit impact, with a moderate, positive and significant correlation between follow-up of performance audits and audit impact. Lastly, the results revealed that 40.9% of the variance in audit impact of SAIs can be explained by audit rate, audit outcomes and follow-up of performance audit recommendations. The collinearity statistics indicate that the independent variables exhibit a tolerance of 0.597 and a variance inflation factor (VIF) of 1.675, implying a weak correlation among them. These models enhanced the understanding of the hypotheses in the study.

In Chapter 6, the study recommends that SAIs should encourage higher audit rates and focus on audit outcomes in determining their overall SAI efficiency and value for money in demonstrating their own relevance to the citizenry. In addition, SAIs ought to enhance follow-up efforts to ensure that concerns identified in prior audits are sufficiently addressed, ensuring value for money to the citizenry in this particular instance. However, in terms of limitation, this being a cross-sectional study, a longitudinal study may be required in the future to investigate the associations over a stretch of time to account for structural changes such as legislation. Similarly, further studies ought to examine the impact of blockchain technology on performance audits.

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APPENDICES

Appendix 1: Declaration by the researcher

Research Title: Utilizing Performance Audit reports to promote efficiency and value for money in determining audit impact. A case study of SAI Uganda

Dear Sir/Madam

My name is Joshua Asiimwe, and I am a Master of Management in the field of Governance (Public and Development Sector Monitoring and Evaluation) student at Wits University in Johannesburg. As part of my studies, I must undertake a research project, and I am investigating the use of performance audit reports to promote efficiency and value for money in determining audit impact: A case study of SAI Uganda**.** The aim of this research project is to find out how governments can use performance audits to ensure efficiency and value for money in government programs.

As part of this research project, I would like to invite you to take part in answering a once off questionnaire. The questionnaire involves response options on a five Likert scale. The options range from Strongly Agree to Strongly Disagree so that I can get a comprehensive picture of your views and level of agreement. This will take approximately 20 minutes answering.

You will not receive any direct benefits from participating in this study, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The questionnaire will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely in a cloud storage to safely back up updated copies of the data and will not be disclosed to anyone else. For any references (should the need arise) that need to be made to the data you provide in my final research report, I will be using a pseudonym (false name) to represent your participation. If you experience any distress or discomfort, I suggest you stop answering the questionnaire or resume another time.

If you have any questions afterwards about this research, feel free to contact me at 2515461@students.wits.ac.za. This study will be written up as a research report which will be available online through the university library website. If you wish to receive a summary of this report, I will be happy to send it to you upon request (optional).

If you have any queries, concerns, or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (non-medical), at telephone + 27(0)11 717 1408, and You may also contact the Supervisor via email at John.Khumalo@wits.ac.za or by phone at +27 11 717 3493 in case of any worries or inquiries about the research.

Appendix 2: Ethics Approval



UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

WITS SCHOOL OF GOVERNANCE

Research Office:
Lehlohonolo Mmolotsane
Tel: 011 717 3968
Email: Lehlohonolo.mmolotsane@wits.ac.za

Research Ethics Chair:
Rekgotsofetse Chikane
Tel: 0117173869
Email: rekgotsofetse.chikane@wits.ac.za

25 November 2022

Dear Joshua Asiimwe

Title: Utilizing Performance Audit reports to promote efficiency and value for money in determining audit impact. A case study of SAI Uganda.
Student Number: 2515461
Degree: Masters in Management
Ethics Clearance Number: WSG-2022-86

All candidates must satisfy the University's ethical standards for research. Your ethics application has been received and reviewed by the Wits School of Governance Human Research Ethics Committee.

Your ethical clearance has been approved subject to you getting permission to conduct research from all sites where research is conducted. The letter(s) of permission to undertake research must be submitted to the WSG Research Office and kept on file with your final proposal and other ethics documents.

You may commence your data collection under the guidance of your supervisor. In the event that the scope, methodology or nature of the research changes, you are required to submit another ethics application reflecting the changes.

The onus is on you as the candidate, with support from your supervisor, to ensure your research complies with university human research ethics policies and protocols at all stages of the research process.

It is recommended that you keep this letter in a safe place as you are responsible for ensuring you have proof of ethics clearance and have lodged the ethics clearance / protocol number with Faculty before final submission of your research report. If you do not have an ethics clearance number, you are not permitted to graduate.

Please do not hesitate to contact me if you have any queries.

Yours sincerely,

Rekgotsofetse Chikane

Rekgotsofetse Chikane
Research Ethics Chair

Appendix 3: Consent Form

Title of project: Using performance audit reports to promote efficiency and value for money in determining audit impact: A case study of SAI Uganda.

Name of researcher: Joshua Asiimwe

I, ……., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.

YES NO

I understand that I can volunteer to take part in the study

YES NO

I agree that the interview may be audio recorded

YES NO

I agree that direct quotations from my interview may be used by the researcher in their research report

YES NO

I agree that my participation will remain anonymous (my name will not be used by the researcher in their research report

YES NO

I agree that other researchers may use the information I provide in my interview (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on

YES NO

…… (signature)

…… (name of participant)

…… (date)

…… (signature)

…… (name of researcher)

…… (date)

Appendix 4: Questionnaire

Utilizing Performance Audit reports to promote efficiency and value for money in determining audit impact. A case study of SAI Uganda

Questionnaire

(To Be Filled by Staff in the VFMSA Directorate of SAI Uganda)

Dear respondent,

A study on using performance audit reports to promote efficiency and value for money in assessing audit impact: A case study of SAI Uganda is being carried out. This study will help policy makers and the Ugandan public to understand the relationship between the Audit rate, Audit Outcomes, and Follow up of Performance Audit recommendations in determining audit impact (value to citizenry).

In order to accomplish this study, the researcher is requesting you to complete this questionnaire. The information provided will be treated with utmost confidentiality. In case you are interested in receiving a copy of the outcome of the study, please indicate your contact address.

Thank you for participating and making this study a success.

BACKGROUND INFORMATION

This information will help the researcher in understanding the background and experience of the informed respondents. Please answer the following questions.

1 Gender (tick one): Male _____ Female _____

2 How old are you? (18-28) (29-39) (40-50) Above50

3 What is your level of education? _____

4 Are you a performance Auditor? Yes _____ **no** _____

5 What is your occupation? _____

6 How long (years) have you worked at the SAI? (Year) _____

7 Current position/ designation: _____

8 What is your experience (in years) conducting performance audits? _____

9 When did you complete your most recent audit? (Year) _____

10 Has your audit been scrutinized by the relevant PAC? _____

SECTION I

The following statements assess individuals' perceptions and views about the impact of performance audit reports issued by SAI Uganda. Please circle the most appropriate option.

Not Applicable (NA)

Do Not Know (DK)

Strongly Disagree (5)

Somewhat Disagree (4)

Neither agree nor Disagree (3)

Somewhat Agree (2)

Strongly Agree (1)

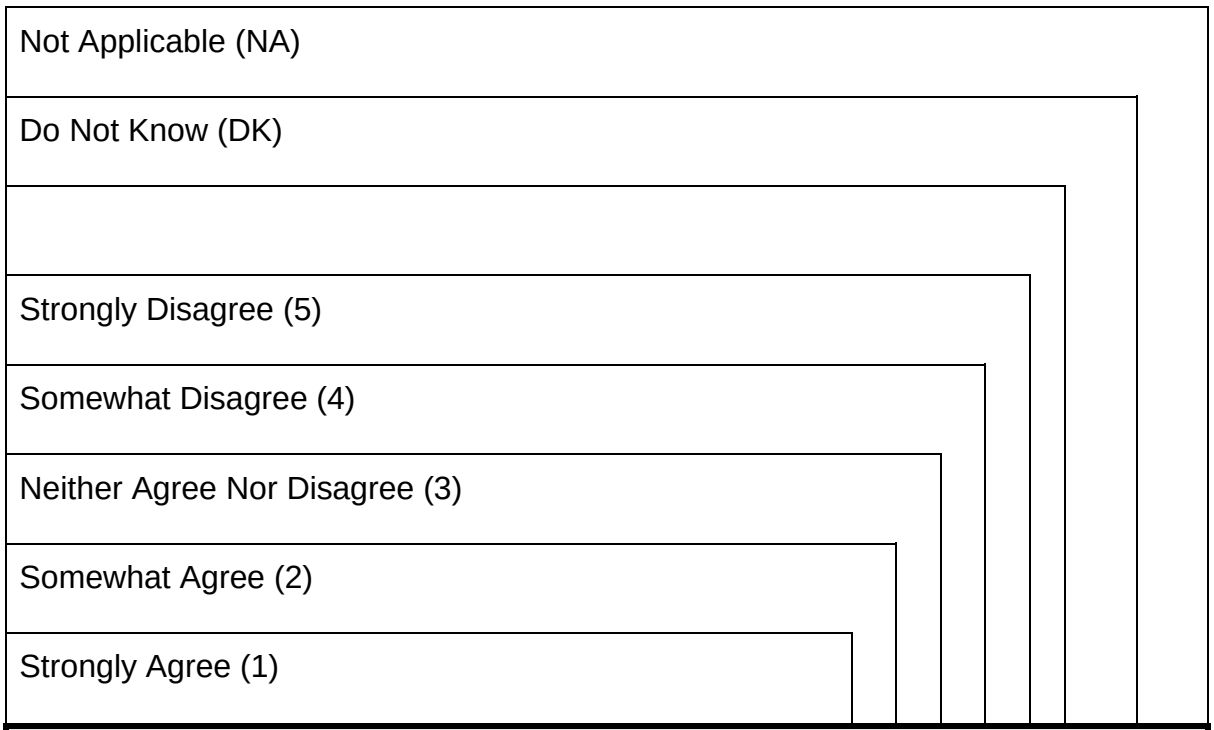
Topic A	GENERAL INFORMATION	F				T			
A01	Audits are necessary to evaluate the performance of government programmes, operations and policies.	1	2	3	4	5		DK	NA
A02	Performance audit's overall objective is to strengthen the accountability, integrity, and	1	2	3	4	5		DK	NA

	the transparency of government and all public sector institutions.								
A03	The ultimate destination of performance audit reports in Uganda is the predetermined one.	1	2	3	4	5		DK	NA
A04	If I were responsible for making the decision, on using performance audit reports to promote efficiency and value for money in assessing audit impact, I would	1	2	3	4	5		DK	NA
A05	As a performance auditor, I fundamentally believe that performance audits contribute to making a difference in the lives of all Ugandan citizens.	1	2	3	4	5		DK	NA
A06	Conducting performance audits (procedures) and the audit outcomes (recommendations in the reports) are very complex	1	2	3	4	5		DK	NA
Topic B	IMPACT OF PERFORMANCE AUDITS								
B01	Performance audits are not a useful measure in determining audit impact	1	2	3	4	5		DK	NA
B02	I think and believe that my SAI doesn't appreciate the value of performance audit reports	1	2	3	4	5		DK	NA
B03	There is more value in assessing the SAI overall impact through Financial and Compliance audit reports than from performance audit reports.	1	2	3	4	5		DK	NA

B04	I find performance auditing more expensive and time consuming	1	2	3	4	5		DK	NA
B05	If it were up to me, I would forego the chance to conduct performance audits in favor of the chance to take part in compliance and financial auditing.	1	2	3	4	5		DK	NA
B06	The impact of our SAI would be more appreciated if performance auditing was prioritized through increased audits.	1	2	3	4	5		DK	NA
B07	My SAI would have a greater impact if it tracked the implementation of performance audit recommendations.	1	2	3	4	5		DK	NA
B08	Tracking the financial impact of previous performance audit recommendations on the audited entity would strengthen our audit reputation as a SAI.	1	2	3	4	5		DK	NA
B09	If PAC regularly scrutinized performance audit reports, the audited entity's efficiency is likely to improve.	1	2	3	4	5		DK	NA
B10	The media interest generated by the published performance audit reports is likely to strengthen government and all public sector institutions' accountability, integrity, and transparency.	1	2	3	4	5		DK	NA
B11	Do you believe that your SAI treats performance audits less favorably than it does the other types of audits?	1	2	3	4	5		DK	NA

B12	Performance Audit has the same impact as the other audit types (i.e., CAM & FAM)	1	2	3	4	5		DK	NA
B13	The overall audit impact of the SAI to the audited entities in Uganda is influenced by how frequently performance audits are conducted.	1	2	3	4	5		DK	NA
B14	The above leads to the promotion of Value for Money in terms of government programs in order to ensure government efficiency?	1	2	3	4	5		DK	NA
Topic C	AUDIT OUTCOMES								
C01	My SAI tracks audit recommendations issued to the audited entity	1	2	3	4	5		DK	NA
C02	The SAI is aware of the percentage of issued audit recommendations that are implemented by audit entities.	1	2	3	4	5		DK	NA
C03	The audit findings, conclusions, and recommendations are trusted by users of our performance audit reports.	1	2	3	4	5		DK	NA
C04	During the audit, the SAI frequently relies on a set of audit criteria agreed upon with the audited entity to measure their performance.	1	2	3	4	5		DK	NA
C05	The SAI PA reports provide accurate, valid, and reliable information about the audited entity's activities to the intended user.	1	2	3	4	5		DK	NA

C06	The audited entity distrusts our intentions due to a lack of balance and fairness in the SAIs reporting.	1	2	3	4	5		DK	NA
C07	The audit reports issued by the SAI instills confidence that the audit conclusions accurately reflect the situation of the audited entity.	1	2	3	4	5		DK	NA
C08	The relevant accountability committees of parliament are constantly debating our PA Reports.	1	2	3	4	5		DK	NA
C09	A good audit outcome is informed by the number of observations raised in an audit report	1	2	3	4	5		DK	NA



Topic E	FOLLOW-UP OF PA RECOMMENDATIONS

E01	The SAI follows up on previous audits on a regular basis.	1	2	3	4	5		DK	NA
E02	Parliament usually accepts most of all our recommendations to the audited entity.	1	2	3	4	5		DK	NA
E03	In a given audit year, our Annual Audit Plans offer the option of both new and follow-up audits.	1	2	3	4	5		DK	NA
E04	The office mandate allows for the sanctioning of audited entities.	1	2	3	4	5		DK	NA
E05	Our National Audit Act outlines the penalties in detail.	1	2	3	4	5		DK	NA
E06	Follow-ups, in my opinion, force the audited organization to carry through PA recommendations.	1	2	3	4	5		DK	NA
E07	Sanctions are the most effective tool for increasing government efficiency.	1	2	3	4	5		DK	NA
E08	In Uganda, sanctions for noncompliance with audit recommendations are strictly enforced.	1	2	3	4	5		DK	NA
E09	I perceive it that in Uganda, treasury memorandums[1] are highly politicized and often inaccurate	1	2	3	4	5		DK	NA
Topic F AUDIT RATE									
F10	Not all entities have been audited by my SAI using the PA technique.	1	2	3	4	5		DK	NA

F02	The PA approach is frequently used by my SAI to audit all governmental bodies.	1	2	3	4	5		DK	NA
F03	During PA audits, there is collusion between performance auditors and audited entities.	1	2	3	4	5		DK	NA
F04	There are funds set aside for PA in each audit calendar.	1	2	3	4	5		DK	NA
F05	PA Audits are carried out correctly and result in quality outcomes for the entity.	1	2	3	4	5		DK	NA
F06	Performance audits are conducted professionally and result in increased efficiencies within the organization.	1	2	3	4	5		DK	NA
F07	Frequent performance audits raise public awareness of how their taxes have benefited them.	1	2	3	4	5		DK	NA
F08	Performance audits are the best tool for improving the VFM of government programs.	1	2	3	4	5		DK	NA
F09	Performance audits are likely to advance civil society interests in order to maximize societal benefit.	1	2	3	4	5		DK	NA

SECTION II

Which of the following would apply to you? CIRCLE ONE PER ROW

1	Have you ever been involved in any follow up audits?	Yes	No	Do Not Know
2	Have you ever been involved in any performance audit?	Yes	No	Do Not Know
3	Do you supervise performance audit activities?	Yes	No	Do Not Know
4	Do you have a say on what areas the SAI prioritize for performance audits?	Yes	No	Do Not Know
5	Do you promptly conclude on your performance audit assignments?	Yes	No	Do Not Know
6	Have you ever failed to complete any performance audit assignment?	Yes	No	Do Not Know
7	Do your performance audits highlight performance gaps in government programs?	Yes	No	Do Not Know
8	Are you conducting performance audits because you have been asked to?	Yes	No	Do Not Know
9	Do you know if your audit recommendations have been implemented by the audited entity?	Yes	No	Do Not Know
10	Have you ever heard of performance audits creating impact in the public sector?	Yes	No	Do Not Know
11	Have you been involved in the promoting of performance audit reports to the Public and the PAC by your SAI?	Yes	No	Do Not Know

[1] Means a report by the Minister outlining the actions taken in response to the Auditor-report.

Appendix 5: Factor Analysis

Exploratory Factor analysis for Audit Outcomes and Follow-up of PA Recommendations

	Audit Rate	*Audit Follow-up*	*Audit Outcomes*
AUDR4	.681		
AUDR5	.593		
AUDR6	.840		
AUDR7	.698		
AUDR8	.829		
FLLW3		.836	
FLLW4		.535	
FLLW5		.871	
FLLW6		.657	
FLLW8		.686	
AUDT1			.792
AUDT2			.786
AUDT5			.877
AUDT7			.841
Eigen Values	**4.430**	**1.660**	**1.173**
Variance%	**49.222**	**18.445**	**13.032**
Cumulative	**49.222**	**67.667**	**80.699**

Exploratory Factor analysis for Audit Impact

	Issued Recommendations	*Media Generated*	*PAC Frequency*	*Saving Estimates*
IMPA6	0.559			
IMPA7	0.857			
IMPA8	0.880			
IMPA4		0.784		
IMPA10		0.577		
IMPA12		0.704		
IMPA9			0.820	
IMPA11			0.754	
IMPA13			0.507	
IMPA3				0.813
IMPA5				0.715
Eigen Values	**2.553**	**1.780**	**1.533**	**1.235**
Variance%	**36.476**	**12.715**	**10.951**	**8.823**
Cumulative	**36.476**	**49.191**	**60.142**	**68.965**