



**INDEPENDENCE AND PERFORMANCE OF INTERNAL AUDIT FUNCTIONS
WITHIN ZIMBABWEAN STATE UNIVERSITIES**

by

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Signed

Date

ABSTRACT

The importance of an independent internal audit function (IAF) cannot be ignored as it adds value and improves the operations of an organisation. Particularly, there is a need for practical solutions to the corporate governance problems faced by higher education institutions (HEIs), yet research in this domain is still scarce. This study, therefore, assesses the performance of the internal audit functions in the Zimbabwe state universities (ZSUs) in terms of independence and its influence on the performance of ZSUs, which is understudied in current literature. The relationships between key factors, namely audit committee, top management, legal mandate, internal audit quality and the independence of the IAF, are empirically tested. The relationship between independence and performance of the ZSUs is also examined through the Indirect variables that affect the independence of the IAF through the audit committee, top management, legal mandate, and internal audit quality. This study established that the independence and performance of the IAF cannot be explained by one theory; rather, it requires a combination of economic, behavioural, and systemic theories to be integrated to robustly test the proposed conceptual model of the study. Therefore, the agency theory (economic) was used to explore the principal-agent relationship, while the stakeholder theory (behavioural) addressed the social relationships. The institutional theory (systemic) covered the rules and regulations and their enforcement, and the protection motivation theory was used to explain the incentive behind the behaviour of the internal auditors.

This research triangulated the aforementioned theories to address the internal audit phenomenon through a collective lens and gain understanding from different perspectives. Data was gathered using a mixed methodological approach consisting of in-depth interviews and an online self-administered questionnaire. A total of eleven (11) in-depth interviews were conducted with the chief internal auditors (CIA) of the ZSUs to gain in-depth knowledge about the status and independence of the internal audit functions. Further, two hundred and seventy-nine (279) responses were obtained from auditees within the state universities in Zimbabwe.

The qualitative empirical data was analysed through content analysis derived from the in-depth interviews. The findings showed that the internal audit functions in Zimbabwean state universities were not independent. The empirical results revealed that the departments lacked resource independence as they were under the Vice-Chancellor's programme for budgeting purposes. Chief among the factors that contributed to the lack of independence of the IAF was top management's substantial involvement in resource allocation, leading to paralysis of the IAF as a result of resources being deliberately withheld, putatively, because of a shortage of resources. The audit committee's lack of participation in IAF matters involving resource allocation and CIA hiring and firing decisions contributed to this issue's problematic nature.

The quantitative data results indicated that the auditees professed ignorance of issues concerning the IAF. Further, the results showed that from the perspective of the auditees, the IAF appears not to be independent. The Comptroller and Auditor General reports confirmed that the IAF has not significantly added value or improved the performance of ZSUs according to the Institute of Internal Auditors (IIA) definition of internal auditing.

The study's contributions are as follows: First, by linking internal audit independence to the performance of state universities, an area which has been under-explored yielded novel academic literature. Secondly, this study adds value to theory by examining the relationships between the indirect factors that influence internal audit independence in higher education institutions in the public sector, an area that also has not been extensively researched. This study assesses the independence of the IAFs in state universities in Zimbabwe, thus advancing the understanding of the current state of the IAF in ZSUs. The study highlighted that the IIA framework for independence and objectivity of the internal auditors is appropriate where the IAF is independent, or rather, IAF independence can be assumed. However, the IIA framework is inappropriate where independence is absent or questionable. This study closed various identified gaps by proposing a conceptual framework which can be used to create appropriate settings where IAF independence is lacking in a public sector context. This leads to the conclusion that independent IAF could significantly contribute towards the improved performance of state universities in Zimbabwe and hence contribute towards the attainment of the country's Vision 2030.

Several recommendations are also made, starting with the suggestion to minimise the agency problem; the Zimbabwean government should capitalise on an independent internal audit as a valuable resource to add value and improve the performance of ZSUs and public sector entities in general. To avoid IAF decoupling, in line with the institutional theory, IAF independence should be deliberately promoted through legislation and policy reforms. The CIA should be protected in support of the protection motivation theory through the active involvement of university councils in the IAF using their audit committees. As advocated for by the stakeholder theory, awareness of IAF should be raised amongst all the state-owned university stakeholders.

Keywords

Independence, performance, internal audit function, Zimbabwe state universities

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DEDICATION

For the glory of the living God!

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ACRONYMS AND INITIALISMS

Acronym/Initialism	Full term
AJU	Arrupe Jesuit University
AT	Agency Theory
AU	Africa University
BUSE	Bindura University of Science Education
CFA	Confirmatory factor analysis
CG	Corporate Governance
CIA	Chief Internal Auditor
CUT	Chinhoyi University of Technology
CUZ	Catholic University in Zimbabwe
ERM	Enterprise risk management
GSU	Gwanda State University
GZU	Great Zimbabwe University
HE	Higher education
HEI	Higher education institutions
HIT	Harare Institute of Technology
HTE	Higher and Tertiary Education
HTEI	Higher and Tertiary Education Institution
IA	Internal Audit
IAA	Internal Audit Activities
IAASB	International Auditing and Assurance Standards Board
IAC	Internal Audit Charter
IAF	Internal Audit Function
IAP	Internal Audit Plan
IAQ	Internal Audit Quality
IAU	Internal Audit Unit
IIA	Institute of Internal Auditors
INTOSAI	International Organisation of Supreme Audit Institutions
IPPF	International Professional Practices Framework
ISPIIA	International Standards for the Professional Practice of Internal Auditing
ISSAIs	International Standards of Supreme Audit Institutions
IT	Institutional Theory

LSU	Lupane State University
MHTEISTD	Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development
MSU	Midlands State University
MSUAS	Manicaland State University of Applied Sciences
MUAST	Marondera University of Agricultural Sciences and Technology
NUST	National University of Science and Technology
OAG	Zimbabwe Auditor and Comptroller Office of the Auditor General
PAMUST	Pan-African Minerals University of Science and Technology
PAYE	Pay As You Earn
PECGA	Public Entities Corporate Governance Act
PFMA	Public Finance Management Act
PMT	Protective Motivation Theory
PSE	Public Sector Entities
PSL-SEM	Partial least squares structural equation modelling
RCU	Reformed Church University
RM	Risk Management
SOE	State-owned Enterprise
ST	Stakeholder Theory
UZ	University of Zimbabwe
VC	Vice-Chancellor
WEI	World Education Indicators
WUA	Women's University in Africa
ZEGU	Zimbabwe Ezekiel Guti University
ZIMCHE	Zimbabwe Council for Higher Education
ZimCode	Zimbabwe Code of Corporate Governance
ZIMDEF	Zimbabwe Manpower Development Fund
ZNDU	Zimbabwe National Defence University
ZSU	Zimbabwe State University

CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Background to the study

Public higher education institutions have been subjected to immense pressure over the last decade to use resources more effectively and efficiently, leading to the adoption of accountability and control systems commonly found in private sector organisations. The evolution of the knowledge-based economy has magnified the importance of universities (Boulton & Lucas, 2011; Masunda, Hove, Marumbwa & Ndlovu, 2022). Research in South Africa showed that value added by the higher education sector ranks second after gold and is higher than the contribution of hotels and restaurants, textiles, clothing and leather products, forestry, and others (Pouri & Inglesi-Lotz, 2014). State universities have adopted internal auditing as a mechanism to improve the overall efficiency of the universities. Internal Auditing (IA) is defined as an 'independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (IIA, 2017a).

According to DeSimone and Rich (2020), state universities have many stakeholders who demand accountability through published annual Auditor General reports. Internal auditors in state universities have different responsibilities and may carry out assurance and/or consultancy work, financial management, risk management, compliance (academics, assets, procurement, and grants), advisory and information technology work (Chinyoka & Mutambara, 2020; DeSimone & Rich 2020; Mattei, Grossi & Guthrie, 2021). Universities can outsource the Internal Audit Function (IAF) activities or maintain an in-house IAF. State universities in Zimbabwe are required by law to establish in-house IAFs. The arrangement of having IAFs helps an organisation accomplish its objectives by "bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes" (IIA, 2017:2).

Mokono and Nasieku (2018) identified the factors that affect the IAF within state-owned universities as the internal audit environment, internal auditor independence, and the competence of the internal auditors. Several studies (Roselyne & Wamitu, 2019; Turetken, Jethefer & Ozkan, 2020; Abdelrahim & Al-Malkawi, 2022) have noted that an IAF's

effectiveness depends on the legal and regulatory framework, independence and existence of the audit function, placement of the IAF within the organisational structure, availability of resources for the IAF, and the professionalism of the internal audit staff. The effectiveness of the IAF can be measured by the production of the desired IAF objectives within an organisation (Samagaio & Felicio, 2023).

Internal audits are key to corporate governance processes, which are, in turn, key to the effectiveness of the organisation (Janse van Rensburg, 2014; Ackermann, Marx & Fourie, 2016). Traditionally, IA was primarily concerned with safeguarding assets, compliance assurance, and financial control (Dellai & Omri, 2020). Under the new IA definition, IA now includes assurance services being offered to management on the appropriateness of risk management, governance, and control procedures (IIA, 2017). This research adopted the new IA definition as it has highlighted the key concepts of IA (independence and objectivity), which were considered in designing the conceptual framework for this study.

According to Mutchler (2003), objectivity and independence drive IAF effectiveness. Stewart and Subramaniam (2010) emphasised that the integrity and value of IA assurance services are derived from the objectivity and independence of the internal auditor. Previous research shows the United States of America (U.S), the United Kingdom (UK), and Australia as some of the developed countries that have made the establishment of an internal audit unit (IAU) at public institutions of higher learning mandatory (Christopher, 2012a, Christopher, 2015; Arena, 2013; DeSimone & Rich, 2020). Research also shows that developing nations such as the Philippines, Malaysia, Kenya, and Nigeria have also introduced IAF in their state universities (SUs) (Ahmad & Kehinde, 2016; Musnida, 2017; Eke, 2018; Mokono & Nasieku, 2018). Research on internal auditing in Zimbabwean state universities (ZSUs) is scarce; hence, there is a need to understand the status of IA in Zimbabwean state universities.

Despite the Zimbabwean government's well-intended policy reforms and corporate governance initiatives, the annual reports produced by the Auditor General after auditing SUs are still littered with material irregularities (OAG, 2023). The Zimbabwe Auditor General (OAG) reports on parastatals and state enterprises that have found material irregularities in SUs over the past few years, which is not expected in organisations with effective internal audit units (IAUs). Irregularities range from financial, administrative, and risk management to policy issues (Jachi & Yona, 2019; Mukono, 2021). Higher education institutions in Zimbabwe face several risk implications: financial losses, misappropriation of funds, loss of assets, going concern uncertainties, and failure to fulfil the Ministry of Tertiary Education 5.0 agenda. The agenda was introduced as a strategy to achieve the Zimbabwean vision of becoming an upper-

middle-income status economy by 2030 (MHTESTD, 2019). Under the Education 5.0 agenda, universities must focus on teaching, research, community service, innovation, and industrialisation.

The 2017 OAG report showed that one of the state universities in the country had no key policies to regulate its operations. It was noted that the university had no loan, risk management, related party transactions, fraud response, disaster response, finance regulations, capitalisation, records management, network security and student accommodations policies (OAG, 2017). Similarly, another state university was reported as having twelve properties with no title deeds, leaving the university at risk of losing assets in the event of disputes over ownership (OAG, 2017). These reports demonstrate that the going concern status of some universities is uncertain as they have net current liabilities and are continuously reporting deficits (OAG, 2018). Another university is operating with an audit committee that does not hold meetings and has no audit committee chairperson (OAG, 2018). Failure to comply with national statutory regulations like remitting PAYE and Pension contributions is also a common event in the ZSUs. Poor debt, procurement and cash management issues litter the OAG reports for every university. All this is happening under the very noses of the IAUs.

The purpose of this study was to develop an Internal Auditing (IA) independence framework that enables the improvement of the overall performance of SUs in Zimbabwe. The factors that influence IA independence in ZSUs were examined for their relationship with independence and other indirect variables of IAF independence. In Zimbabwe and other countries, SUs are public sector entities (PSEs) solely responsible for providing higher education services to the public. In a bid to control the internal practices and effectiveness of PSEs, the Zimbabwean government has, over the past years, introduced numerous corporate governance regulations (Mukono, 2021). One initiative was to make the establishment of IAUs within PSEs mandatory. Value addition and the improvement of the performance of organisations are the ultimate goals of the IAF. Assurance, consultancy, internal control, and risk management are the roles played by IAF in the governance process (Dellai & Omri, 2020). Consequently, the purpose of this research was to design a working framework for IA independence for Sus, which aimed to improve the effectiveness of the IAF in ZSUs. The audit must be proactive rather than reactive if it is to address deficiencies in the universities owned by the state (Jaggi, 2023; Rupšys & Boguslauskas, 2007). The gap between the IIA international professional practice standards and the actual performance of the IAUs in Zimbabwe SUs is expected to be closed by implementing the framework developed from this study.

The Zimbabwean government has committed to sound corporate governance processes in PSEs by introducing the national code of corporate governance (ZimCode), the Public Finance Management Act (PFMA) of 2010, and the Public Entities Corporate Governance Act (PECGA) of 2018. It seems, however, that it is one thing to have regulations in place and another thing to implement them. SUs in Zimbabwe seem to have complied with the regulations and have established the IAF to improve and add value to the operations of the state institutions (Denhere, 2023; Wadesango & Ncube, 2020). Nonetheless, the reports produced each year by the Auditor General show material irregularities; some even contain adverse opinions or disclaimers of opinion. All SUs in Zimbabwe had a disclaimer opinion issued for the 2018 financial year. Issues that question IA independence have also been reported. For example, the OAG report (2015) showed that a certain university had no functional audit committee, leaving the Chief Internal Auditor (CIA) reporting functionally and administratively to the Vice-Chancellor. The same report (OAG, 2015) expressed concern over the going concern status of another university and issued a disclaimer of opinion. In another report, two principal officers continued to be signatories of the university bank accounts for nine (9) months after their resignations. Funds were then fraudulently siphoned out of the university. This occurrence is unexpected, as organisations with efficient Internal Audit Units (IAUs) are often not prone to such substantial errors. According to Ahmad (2018), the primary purpose of IA is to identify and address shortcomings that may have been overlooked by the initial line of defence, preventing these deficiencies from escalating into unmanageable issues or being shown through an external audit. In other words, the exposure of deficiencies by an external auditor's report shows that the IAF has not successfully instituted checks on the day-to-day transactions, which operate continuously as part of the routine system (Mukono, 2021). The work of one person is proved independently, the objective being the avoidance and early uncovering of errors and frauds. Previous research has shown that independence is the cornerstone of internal auditing (Christ, Eulerich, Krane & Wood, 2021; Jaggi, 2023; Nerantzidis, Pazarskis, Drogalas & Galanis, 2022). This means that internal auditing cannot be effective without independence (Christopher, Sarens & Leung, 2009). Hence, this research needs to develop a practical independent internal audit framework that will improve IA performance and the overall performance of ZSUs.

The public sector's ability to provide services is directly influenced by the effectiveness of the IAF, making it a key player in governance processes (Janse van Rensburg & Coetzee, 2015). Despite the presence of in-house IAF in nearly all PSEs, poor service delivery is the order of the day in Zimbabwe (Jachi & Yona, 2019). Various statutory pronouncements have been made to support good corporate governance practices and resident IAFs in PSEs (Jachi & Yona, 2019). Literature lacks framework for an independent IAF. Of interest, is the

research by Jachi and Yona (2019) that focused on the impact of internal audit independence on transparency and accountability in local authorities but did not investigate strategies for strengthening IA independence. Other research in the Zimbabwean context by Wadesango & Mhaka, (2017); Jachi & Yona,(2019; Denhere, (2023); Wadesango et al., (2023) have not provided a solution to the IA independence problem. This study sought to address the gap by analysing the impact of independence on the performance of SUs, the goal being to develop a framework for strengthening IA independence and hence improving the overall performance of state universities.

Each SU in Zimbabwe is established by an Act of parliament and is owned by the public through the government (Nkala & Ncube, 2020). For example, the University of Zimbabwe (UZ) was established and is guided by the UZ Act Chapter 25.16. The government has placed the ZSUs under the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development (MHTEISTD). Since the IAF influences the ability of the PSEs to deliver services to the public (Janse van Rensburg, 2014), one would expect the IAF to be fully provided for in the acts governing the universities. The IAF in ZSUs indirectly derives its authority from the Public Entities Corporate Governance Act (PECGA) of 2018. Before that, the IAF indirectly derived its authority from the Public Finance Management Act (PFMA). However, the PFMA is very scanty in its guidelines on IAUs in SOEs (Mukono, 2021).

The Zimbabwe MHTEISTD minister introduced the Education 5.0 agenda, which aims to contribute to Zimbabwe's Vision 2030 of converting the nation into a middle-income economy (MHTESTD, 2019). If the Education 5.0 agenda is to be achieved, the IAF must be taken seriously. Based on this background, this study revealed the degree of influence the IAF has on the performance of state-owned universities. Literature on challenges encountered by the IAF in PSEs is very scarce. Not much research has been carried out in the Zimbabwean setting (Jachi & Yona, 2019). Internal auditing in local authorities has been the focus of studies in Southern Africa (Dlamini, Mutambara & Assensoh-Kodua, 2017; Mbewu & Barac, 2017; Jachi & Yona, 2019; Nerantzidis *et al.*, 2022). The perceived obstacles encountered by IAF in the South African public sector were the focus of a study by Motubatse, Barac and Odendaal (2015). The biggest challenge faced by the IAF shown in this research is the perceived insignificance of the IAF, which has resulted in external auditors not relying on IA findings, inadequate support from management, and minimal knowledge of the business.

Jachi and Yona (2019) identified poor remuneration systems, lack of financial support for the CIAs, performance of incompatible duties and lack of coordinated IA activities, functions, and structures within the Zimbabwe local government sector. The study further concluded that lack of audit knowledge and illiterate audit committee members are some of the challenges the IAF encounters in local authorities. Other issues related to IAF are the appointment of local authority audit committee members based on political mileage and not academic and professional merit. Chinyoka and Mutambara (2020) highlighted the challenges of revenue generation in ZSU, which indirectly affect IAF in state universities. Challenges unearthed by Jachi and Yona (2019) are not generalisable to other public sector entities as they focused specifically on local government authorities in Zimbabwe, hence the need for this research to carry out a study that quantifies the relationships and explains the need for an IA independence framework for ZSUs (Nerantzidis, Pazarskis, Drogalas & Galanis, 2022). The study aimed to reveal the challenges faced by ZSUs as it considers the contextual factors that influence the independence of IA in SUs.

Auditor General reports over the past years on ZSUs have found various irregularities (OAG, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021). This is despite the presence of the IAF within the SUs in Zimbabwe. The absence of independence in the IAF of higher education institutions has led to financial losses, misappropriation of funds, liquidity crises, loss of assets, going concern problems, poor teaching and learning services as well as poor corporate governance structures, problems this study investigated (Chinyoka & Mutambara, 2020; Nkala & Ncube, 2020). Objectivity and independence are cornerstones of the efficient performance of the IAF (Mutchler & Chang, 2001; Mutchler, 2003; Stewart & Subramaniam, 2010; Pelsler, Mensah & Ngwenya, 2020; Bello, Ahmad and & Yusof, 2018; Singh *et al.*, 2021). The IAF in Zimbabwe SUs seem not to play their key institutional roles, as irregularities continue to occur under their noses. The situation allows many irregularities to go unreported because of its placeholder status. Internal auditing is expected to provide objective and independent consultancy and assurance services on the management of risk, internal control and other governance processes that are needed to add value and improve the operations of organisations. However, the IAF in Zimbabwe SUs fails to play its role effectively.

Although some research on IA in state-owned universities has been done, much of the research was done internationally (Gramling, 2004; Zakaria, Selvaraj & Zakaria, 2006; Christopher, 2015; Musnida, 2017; DeSimone & Rich, 2020). Regionally in Africa, research on internal auditing in public institutions of higher learning is scanty (Broad & Ntim, 2014; Ahmad & Kehinde, 2016; Eke, 2018; Mokono & Nasieku, 2018). None of the research carried out to date on IA in SUs has produced an IAF independence framework that can be

implemented in SUs, particularly in Zimbabwe. SUs have unique governance structures which require a unique IA model or framework. Mihret, James and Mula (2010) acknowledge that research has to be carried out in different contexts, as environments in which IAUs operate are heterogeneous. The absence of a universal framework for SUs consequently demands IA designs that will address the independence of the IA in the Zimbabwean context. This study, therefore, analysed contextual influences that impact the independence of the internal auditors as well as the IAF performance within the Zimbabwe SUs. The proposed internal audit independence framework incorporated the distinct factors influencing the IAF, as presented in this study. The purpose of the framework was to improve organisational independence and create an environment needed for the IAF to play its intended role as the catalyst of Zimbabwe's Vision 2030.

1.2 Structure of the Higher and Tertiary Education Sector of Zimbabwe

Zimbabwe faced an economic recession even before the COVID-19 pandemic, with its economy contracting by six per cent (6%) in 2019 (African Development Bank, 2019). The Zimbabwean government has been investing in its higher and tertiary education sector to fight the prevailing economic challenges. The performance of the higher and tertiary education institutions (HTEIs) is believed to be critical in facilitating the government's vision of transforming Zimbabwe into an upper-middle-income economy by 2030. The economic performance of a nation is largely a reflection of its higher and tertiary education (the) sector (MHTESTD, 2019). The Zimbabwe HTE sector is made up of fourteen state and seven non-state universities, ten state and three private teachers colleges, eight polytechnic colleges, three state industrial training colleges, and three private industrial training colleges (MHTESTD, 2019).

The HTE sector has several authorities, organisations, and statutory bodies with different mandates and legal frameworks. The MHTEISTD, ZIMDEF and ZIMCHE are the main actors within the HTEs.

1.2.1 The Ministry of Higher and Tertiary Education, Science and Technology Development

The Ministry of Higher and Tertiary Education, Science and Technology Development (MHTEISTD) is the parent ministry responsible for sixteen grant-aided institutions, which include fourteen state universities. The mandate of the MHTEISTD is to formulate and implement policies related to skills training and development and promoting science,

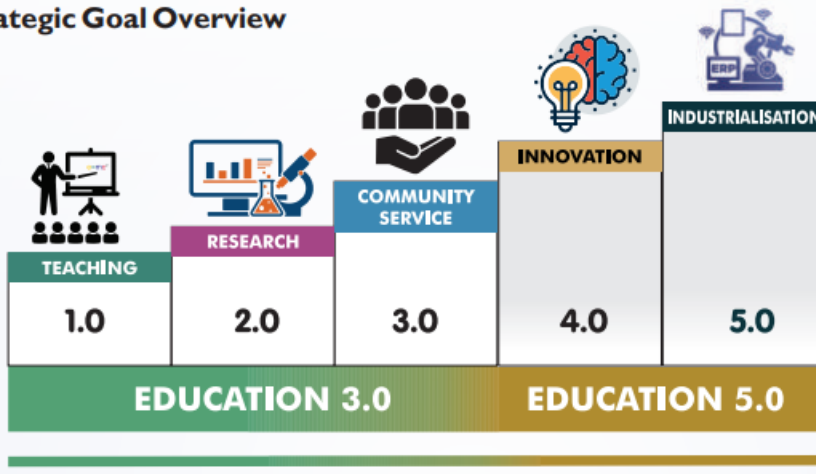
technology, and innovation (MHTEISTD, 2022). The Ministry comprises six technical departments, namely Tertiary Education Programmes; Higher Education Programmes; Quality Assurance and Standards; Research, Development, and Innovation; Projects and Technology Transfer; and the Zimbabwe National Commission for the United Nations Educational, Scientific and Cultural Organisation (UNESCO). To implement its responsibilities, the Ministry oversees the promotion of science and technology, research, development, and innovations; supervises and accredits teacher education, technical and vocational education, and training (TVET) and university education. It also facilitates cooperation in research and development and higher and tertiary education, as well as in science and technology at local, regional, and international levels. In addition, the MHTEISTD is also responsible for the National Biotechnology Authority and the Zimbabwe Council of Higher Education, as well as two specialised projects, namely Verify Engineering (Coal to Fuel) and the National Nanotechnology Programme. The ministry has strategic goals, which, when achieved, are expected to migrate Zimbabwe into a middle-income economy. The numbers in Figure 2.1 depict strategic goals one (1) to five (5). The first, second, third and fourth strategic goals of the five listed on the MHTEISTD (2019 – 2023) strategic plan are about implementing the Education 5.0 agenda for the innovative industrialisation of the economy through the HTE to produce quality goods and services.

The Zimbabwean tertiary education system was anchored on three pillars of teaching, research, and community service under the Education 3.0 agenda before two more pillars of innovation and industrialisation were added under the new Education 5.0 agenda, as shown in Figure 2.1 below.

Figure 2.1 Summary of an Education Revolution

6. STRATEGIC GOAL 1: A HIGHER AND TERTIARY EDUCATION SYSTEM THAT PRODUCES GOODS AND SERVICES

Strategic Goal Overview



Source: MHTEISTD (2022)

Figure 2.2 shows strategic goal number five of the ministry. This strategic goal indicates that the ministry recognises the importance of robust governance structures for the modernisation and industrialisation of Zimbabwe through higher tertiary education institutions.

Figure 2.2: MHTEISTD Strategic Goal 5

10. STRATEGIC GOAL 5: ROBUST GOVERNANCE STRUCTURES FOR THE MODERNISATION AND INDUSTRIALISATION OF ZIMBABWE THROUGH HTEIs

Strategic Goal Overview



Source: MHTEISTD (2022)

1.2.2 The Zimbabwe Council of Higher Education

The mandate of the Zimbabwe Council of Higher Education (ZIMCHE) is to promote and coordinate education provided by institutions of higher education and to act as a regulator in determining and maintaining standards of teaching, examinations, academic qualifications, and research in higher education institutions. The Zimbabwe Council for Higher Education was created through the ZIMCHE act of parliament, Chapter 25:27, promulgated in 2006. The act establishes ZIMCHE and the procedures for registering and accreditation of higher education institutions (ZIMCHE, 2022).

1.2.3 The Zimbabwe Manpower Development Fund

The Zimbabwe Manpower Development Fund (ZIMDEF) was established by Section 23 of the Manpower Planning and Development Act, 1984 (now revised Manpower Planning and Development Act Chapter 28:02 of 1996) with the broad objective of financing the development of a critical and highly skilled workforce in Zimbabwe. ZIMDEF, under the direction of the Trustee, undertakes infrastructure development projects at selected institutions of higher learning. This has seen ZIMDEF funding the construction of libraries, hotels, and workshops at the country's universities and polytechnics. ZIMDEF funds the procurement of training equipment such as computers, computer accessories, engineering materials, workshop machinery, laboratory equipment and training consumables for institutions of higher learning (ZIMDEF, 2023).

1.3 Composition of the higher and tertiary education sector of Zimbabwe

Before independence, the higher and tertiary education sector was state-supervised; after independence, it became state-controlled. Garwe and Tirivanhu-Gwatidzo (2016), as well as Garwe and Thondhlana (2020), distinguish between the two, arguing that in the latter, the government controls the policies, council and senior management appointments, remuneration, and other related issues, whereas, in the former, HEIs were relatively autonomous except for general government policy issues. The highest authority, the Government of Zimbabwe, supervises the HE sectors through the Higher Education Committee of the parliament, which, in turn, controls various authorities, organisations, and statutory bodies.

1.3.1 State and non-state HE in Zimbabwe

Zimbabwean HTE is made up of fourteen state and seven non-state universities, ten state and three private teacher colleges, eight polytechnic colleges, three state industrial training colleges and three private industrial training colleges. State universities in Zimbabwe are governed in terms of the provisions of a specific Act of parliament for a university (Masunda, Hove, Marumbwa & Ndlovu, 2022; Pawandiwa, Ndlovu, Shava, Charumbira, & Mathonsi, 2022). Private universities are governed by a charter. The Act and charter are different, but they serve the same purpose. The Act of a university and the charter establish and govern state and non-state universities, respectively. While private universities also contribute to the development and functioning of the HE in Zimbabwe, this study focused on the state universities. State universities have been chosen for distinct reasons, chief amongst them being that they are government-grant-aided (Chinyoka & Mutambara, 2020). The government of Zimbabwe is investing in state universities because they are considered the main Education 5.0 agenda vehicles. Moreover, state universities have also been chosen as they have in-house internal audit units, a subject which forms the scope of this study yet is scarcely explored (Moyo & Ngwenya, 2018). Table 1.1 shows the comparative details of state and non-state universities in Zimbabwe as a whole.

Table 1.1: List of state universities in Zimbabwe

	Name of University	Established	Website address
State universities in Zimbabwe			
1.	University of Zimbabwe (ZU)	1955	www.uz.ac.zw
2.	National University of Science and Technology (NUST)	1991	www.nust.ac.zw
3.	Bindura University of Science Education (BUSE)	1996	www.buse.ac.zw
4.	Zimbabwe Open University (ZOU)	1998	www.zou.ac.zw
5.	Midlands State University (MSU)	1999	www.msu.ac.zw
6.	Chinhoyi University of Technology (CUT)	2001	www.cut.ac.zw
7.	Great Zimbabwe University (GZU)	2002	www.gzu.ac.zw
8.	Lupane State University (LSU)	2004	www.lsu.ac.zw
9.	Harare Institute of Technology (HIT)	2005	www.hit.ac.zw

10.	Marondera University of Agricultural Sciences and Technology (MUASt)	2015	www.muast.ac.zw
11.	Gwanda State University (GSU)	2016	www.gsu.ac.zw
12.	Manicaland State University of Applied Sciences (MSUAS)	2016	www.msuas.ac.zw
13.	Zimbabwe National Defence University (ZNDU)	2016	www.defence.gov.zw
14.	Pan-African Minerals University of Science and Technology (PAMUST)	2016	www.veritaszim.net/node/1586

Source: Garwe, Thondhlana and McGrath (2020), MHTEISTD (2022), partially adopted

1.3.2 State-owned universities in Zimbabwe

State universities have been distributed in such a way that they cover every province in many countries (Sevinc, 2014). Universities in Zimbabwe have been recognised as important actors in local development, hence their establishment in every province (MHTEISTD, 2022). This is reinforced by Agasisti, Barra and Zotti (2019), who found that universities contribute to the economic development of the region in which they are located. Some of the contributions made by universities include the production of highly trained graduates and, as a result, a highly educated workforce, knowledge transfer, and product and service development (Chinyoka & Mutambara, 2020; Simbarashe, 2022). Zimbabwe has ten provinces, two of which are cities with provincial status. The provinces are Bulawayo Province, Harare Province, Manicaland Province, Mashonaland Central Province, Mashonaland East Province, Mashonaland West Province, Masvingo Province, Matabeleland Province and Matabeleland North Province. Table 1.2 summarises the provinces in Zimbabwe and their respective state universities.

Table 1.2: State universities and their provincial location

Province	State Universities	Mandate
Bulawayo Province	NUST	Science and technology
Harare Province	HIT	Science and technology
Harare Province	ZNDU	Security studies
Harare Province	UZ	Comprehensive

Manicaland Province	MSUAS	Science and technology
Mashonaland Central Province	BUSE	Science and technology
Mashonaland East Province	MUAST	Science and technology
Mashonaland West Province	CUT	Science and technology
Masvingo Province	GZU	Culture and heritage
Matabeleland North Province	LSU	Science and technology
Matabeleland South Province	GSU	Science and technology
Midlands Province	MSU	Comprehensive
Harare Province	ZOU	Open distance and electronic learning
Harare Province	PAMUST	Mineral beneficiation and value addition

Source: Author (2023)

1.3.2.1 The University of Zimbabwe

The University of Zimbabwe (UZ) is the oldest university in Zimbabwe, having been established in 1955 as the University College of Rhodesia and Nyasaland. It was an affiliate of the University of London and was constituted and incorporated by the Royal Charter dated 11 February 1955. It changed its name to the University of Zimbabwe in 1980 (University of Zimbabwe, 2022). The University of Zimbabwe is governed and administered in terms of the University of Zimbabwe Act, Chapter 25.16 of 1982. UZ has 11 faculties, namely Agriculture, Environment and Food Systems, Arts and Humanities, Business Management Sciences and Economics, Education, Engineering and the Built Environment, Law, Medicine and Health Sciences, Science, Social and Behavioural Sciences, and Veterinary Science (University of Zimbabwe, 2022).

1.3.2.2 Manicaland State University of Applied Sciences

Manicaland State University of Applied Sciences (MSUAS) is in the Manicaland province of Zimbabwe. The university was established and constituted in terms of the MSUAS Act, Chapter 25.31. MSUAS started as the College of Applied Sciences under Midlands State University in 2012 and became a stand-alone university in 2017 (MSUAS, 2022). The university mandate is applied sciences, mineral sciences, and hospitality. MSUAS also offers other supporting degree programmes outside its specialisation, such as Applied Social Sciences, Human Resource Management, Psychology, Business Management and Accounting (MSUAS, 2022).

1.3.2.3 Midlands State University

Midlands State University (MSU) was established in 2000 as a co-educational higher education institution. MSU is located in the Midlands province of Zimbabwe. The university is constituted and incorporated by the MSU Act, Chapter 25.21 of 1999 Amended Act No. 2, 2002 (MSU, 2022). MSU has a general mandate and runs ten faculties: Arts, Commerce, Education, Engineering and Geosciences, Business Leadership, Law, Medicine, Natural Resources Management, Agriculture, Science and Technology, and Social Sciences (MSU, 2022).

1.3.2.4 National University of Science and Technology

The National University of Science and Technology (NUST) is a non-profit co-educational higher education institution located in the city of Bulawayo within the Bulawayo Province. The university was established in 1991 under the NUST Act, Chapter 25 (NUST, 2022). The university specialises in offering science and technology programmes. It has seven faculties: Engineering, Commerce, Applied Science, Medicine, Built Environment, Communication and Information Science, and Science and Technology Education (NUST, 2022).

1.3.2.5 Bindura University of Science and Education

The Bindura State University of Science and Education (BUSE), established in 1996, is a coeducational, non-profit state higher education institution. The BUSE is located in Mashonaland Central province in Bindura. The university is constituted and incorporated by the BUSE Act, Chapter 25.22 of 1999. BUSE's mandate is arts, science education and learning. The university has five faculties: Science Education, Science and Engineering, Social Science and Humanities, Commerce, and Agriculture and Environmental Sciences (BUSE, 2022). The university was established as a measure to address the scarcity of science teachers in Zimbabwe. It started as a college in 1996 under UZ and was conferred university status in 2000 (BUSE, 2022).

1.3.2.6 Chinhoyi University of Technology

The Chinhoyi University of Technology (CUT) was established in 2001 as a coeducational non-profit higher education institution in Zimbabwe. The university is constituted in terms of the CUT Act, Chapter 25.23 (CUT, 2022). The special mandate of CUT is the development, teaching and application of sciences, art, design, and technology. The university is in Chinhoyi, Mashonaland West Province, in the north of Zimbabwe. The university has ten faculties: The Natural Sciences and Mathematics, Art and Design, Entrepreneurship and Business

Sciences, Engineering Science and Technology, Wildlife Ecology and Conservation, Hospitality and Tourism, Lifelong Learning and Development Studies, Materials Science, Processing and Engineering Technology, and Agricultural Sciences and Technology (CUT, 2022).

1.3.2.7 Great Zimbabwe University

Great Zimbabwe University (GZU) was established in 1999 as a coeducational non-profit higher education institution in Zimbabwe. The establishment came as a result of the Chetsanga Report of 1995, as cited in GZU (2022), which recommended the conversion of Teachers and Technical Colleges into degree-awarding HEIs that would eventually become universities in their own right. GZU is constituted in terms of the GZU Act, Chapter 25:24 (GZU, 2022). The university mandate is arts and culture. GZU has eight faculties: Agriculture, Arts, Culture and Heritage Studies, Commerce, Education, Law, Medicine and Health Sciences, Natural Sciences and Social Sciences (GZU, 2022).

1.3.2.8 Lupane State University

Lupane State University (LSU) was founded in 2005 and is a coeducational, non-profit higher education institution (LSU, 2022). It is situated in Lupane in the Matabeleland North Province of Zimbabwe. The university is constituted in terms of the Lupane State University Act, Chapter 25:25 (LSU, 2022). The university has a general mandate and runs three faculties: Agricultural Sciences, Commerce and Humanities, and Social Sciences (LSU, 2022).

1.3.2.9 Harare Institute of Technology

Harare Institute of Technology (HIT) was established in 2005 as a coeducational non-profit higher education institution. It is located in the Harare Metropolitan Province in Zimbabwe. The university is constituted and incorporated by the HIT Act, Chapter 25:26 (HIT, 2022). The special mandate of the university is the development, incubation, transfer, and commercialisation of technology, as well as to offer education programmes focusing on the design, production, and maintenance of technology with an entrepreneurial and innovative thrust. The university has five schools: the School of Industrial Sciences and Technology, the School of Engineering and Technology, the School of Business and Management Sciences, the School of Information Science and Technology, and the School of Allied Health Sciences (HIT, 2022).

1.3.2.10 National University of Science and Technology

NUST was established by an Act of the Zimbabwe Parliament in 1991. The university is constituted and incorporated in terms of the University of Science and Technology Act Chapter 25:13 (NUST,2022). The university's special mandate is in science and technology. NUST is located in the warm and friendly City of Bulawayo, Southwest of Zimbabwe. The university has seven faculties: Faculty of Applied Science, Built Environment, Commerce, Communication and Information Science, Engineering, Medicine and Science and Technology Education (NUST,2022).

1.3.2.11 Marondera University of Agricultural Sciences and Technology

Marondera University of Agricultural Sciences and Technology (MUASt) is an institution of higher learning established through the Act of Marondera University of Agricultural Sciences and Technology promulgated in 2015 (MUASt, 2022). The University was declared an independent institution in August 2017, following its incubation by the University of Zimbabwe in 2012 (MUASt, 2022). It started its academic activities at the Dozmery Campus in 2013. The university's special mandate is in the fields of Agricultural Sciences and Technology. The mission is to produce globally competent graduates, transforming agricultural communities and industries through teaching, research, university service and innovation. The university has three faculties: the Faculty of Agribusiness and Entrepreneurship, Earth and Environmental Sciences, and Agricultural Sciences and Technology (MUASt, 2022).

1.3.2.12 Zimbabwe Open University

The Zimbabwe Open University (ZOU) is a distance education university. Established in 1999, it is the sole distance education university in the country, constituted and incorporated in terms of the Zimbabwe Open University Act, Chapter 25.20 (ZOU, 2022). The university has six faculties: Science and Technology, Arts and Education, Commerce and Law, Applied Social Sciences, Agriculture, and Information Technology. A total of 24 programmes are offered under the aforementioned faculties (ZOU, 2022).

1.3.2.13 Gwanda State University

Gwanda State University (GSU) is the brainchild of the government of Zimbabwe, created to fulfil the government policy of having a state university in each province. It is constituted and incorporated in terms of the Gwanda State University Act, Chapter 25.30 and was established in 2016 (GSU,2022). The university currently focuses on mining and agriculture. In line with the natural endowments of its geographical location, the university's mandate is

“specialisation in animal and veterinary sciences, irrigation engineering and management, mining engineering, environmental engineering and ecosystems restoration,” given its location in Matabeleland South. The university has three faculties: Engineering and the Built Environment, Natural Resources Management and Agriculture, and Business Sciences And Management (GSU,2022).

1.4 Problem statement

Most of the research done on internal auditing so far has focused on parastatals and local governments other than state universities (Goodwin & Yeo, 2001; Alzeban & Gwilliam, 2014; Al-Matari *et al.*, 2014; Madawaki, Ahmami & Ahmad, 2017; Mihret, 2017; Jachi & Yona, 2019; Nerantzidis, Pazarskis & Drogalas, 2022). Little research has been conducted on internal auditing in SUs (Montondon, Fischer & States, 1999; Zakaria *et al.*, 2006; Soobaroyen, Broad & Ntim, 2014; Christopher, 2015; Eke, 2018; Mokono & Nasieku, 2018; Momanyi & Ngacho, 2018; DeSimone & Rich, 2020; Hazaea *et al.*, 2020; Siyaya *et al.*, 2021). The researcher maintains that findings from parastatal research cannot be replicated in research on IAFs within SUs since they both fall into different ministries in Zimbabwe and have differing functionalities within the state.

Most internal audit studies in the public sector have used the views of the internal auditors and the managers instead of those of other significant parties like employees and senior managers (Nerantzidis *et al.*, 2022). This research presented the views of the internal auditors and the auditees, closing the gap and providing a fuller perspective of the subject under study. The auditors gave the actual status of their independence, whilst the auditees gave a perception of the independence of the IAF in Zimbabwean state universities. This is because the appearance or perception of a lack of independence could be as damaging as the actual condition (ISSAI, 2010).

Previous research (Schmidt & Günther, 2016) has called for investigations on IA using agency theory concepts to gain insights from decision-making regarding the transparency of performance reporting within HE institutions. Schmidt and Günther (2016) carried out a systematic literature review of public sector accounting research in the higher education sector, covering 35 years up to 2014. The review showed that theory has scarcely been used in accounting research done on Higher Education Institutions (HEI). This study was therefore inspired by Schmidt and Günther (2016), Al Mamun, Yasser and Rahman (2013) as well as Nerantzidis *et al.* (2022), who concur that the performance of the IAF cannot be illustrated by

one theory; it needs a combination of economic, behavioural and systemic theories. This is evidence that a gap also exists in the literature in this regard. By basing the research on multiple theories, this study addresses the gap reflected in the scarcity of higher education management studies. The stakeholder, institutional, protection motivation, and agency theories have been used as a basis for this research.

Research done on internal auditing in institutions of higher learning mainly focuses on developed countries like the USA, UK, and Australia (Christopher, 2012; Purpera, 2017; DeSimone & Rich, 2020). In Africa, little research on internal auditing in public universities has been done: in Libya (Hazaea *et al.*, 2020), in South Africa (Siyaya *et al.*, 2021), in Kenya (Mokono & Nasieku, 2018) and in Nigeria (Popoola, Ahmad & Oyewumi, 2016). None of these studies assessed the independence and performance of the IAF in Sus, specifically in ZSUs. A paucity of studies have focused on developing countries in Southern Africa. This research, therefore, closed the gap by studying the internal audit function in Zimbabwean state universities.

Several studies (Montondon, Fischer & States, 1999; Zakaria *et al.*, 2006; Christopher, 2012; Mallari, 2013; Mokono & Nasieku, 2018) lament the ineffectiveness of the IAUs in SUs and colleges despite governments having made the creation of IAUs mandatory in SUs the world over. This research has identified the independence of IAF as the direct variable that influences the performance of SUs. None of the previous research studies highlighted above on internal auditing in ZSUs attempted to study the association that exists between the direct variables and the association between the indirect variables within the same research model. This research, therefore, seeks to close this gap by examining the association between the direct and indirect variables as identified in the conceptual model. The association between variables will be analysed using structural equation modelling (SEM).

Wolf and Rosenberg (2012) argue that most research in business management is too scientific, and the results and recommendations cannot be used to solve practical problems. This could be the reason universities in developed countries still lament the ineffectiveness of IAF despite research having been done in the area. This research intended to provide a relevant research output in the form of an independent internal audit framework for ZSUs. Although the IIA has developed a framework for the independence and objectivity of internal auditors, the IIA framework is only applicable where the scope of an engagement and the organisational status of the IAF are appropriate (Mutchler & Chang, 2001). The IIA framework provides ways to manage objectivity where IAF independence is present (Mutchler & Chang, 2001). This research argues that the starting point must be the creation of independence to

facilitate the objectivity of the internal auditors, as they cannot be objective without independence (Mutchler & Chang, 2001). To reduce the gap between rigorous scientific research and relevant research, post-positivist epistemology will be combined with the pragmatist research methodology. Triangulation of the qualitative and quantitative research methods was used to increase the practicality and relevance of this research. Instead of focusing only on knowledgeable persons as respondents to this study as has been done by prior research, this research collected data from both auditors and auditees within the ZSUs.

Most internal audit studies in the public sector used the views of internal auditors and managers instead of those of other significant parties like employees and senior managers (Mattei, Grossi & Guthrie AM, 2022; Nerantzidis *et al.*, 2022). This research presents the views of the internal auditors and the auditees, closing the gap and providing a fuller perspective of the subject under study. The auditors provided the actual status of their independence, while the auditees provided their perceptions of the independence of the IAF in Zimbabwean state universities. This is because the appearance or perception of a lack of independence could be as damaging as the actual condition (ISSAI, 2010).

In Fischer and Montondon (2005) as well as Schmidt and Günther (2016), the call has been made for investigations using agency theory concepts to gain insights from decision-making regarding the transparency of performance reporting within HE institutions. Schmidt and Günther (2016) carried out a systematic literature review of public sector accounting research in higher education, covering 35 years up to 2014. The review indicated that theory has scarcely been used in accounting research done on HEIs. This study was, therefore, inspired by Schmidt and Günther (2016), Al Mamun *et al.* (2013), as well as Nerantzidis *et al.* (2022), who confirm that the performance of the IAF cannot be illustrated by one theory and needs a combination of economic, behavioural and systemic theories. This is evidence that a gap also exists in the literature in this regard. By basing the research on the agency theory (AT), stakeholder theory (ST), institutional theory (IT), and protection motivation theory (PMT), this research addresses the gap reflected through the scarcity of higher education management studies using these theories.

Stemming from the above, the research problem can be summarised as follows:

Research on internal auditing has focused primarily on local governments and parastatals, ignoring state universities (SUs) in developing contexts like Zimbabwe, where specific operational dynamics require special frameworks. Previous studies have mostly focused on the perspectives of internal auditors and managers, leaving out important insights from the auditees and lacking comprehensive theoretical models that integrate multiple viewpoints.

This study aims to address these shortcomings by investigating the performance and independence of internal audit functions in Zimbabwean SUs using a multi-theoretical approach in order to create a framework that improves both internal audit independence and all around university performance.

1.5 Research questions

The study aimed to develop a practical independent internal audit framework to enable the IAFs to add value to state universities in Zimbabwe. Hence, the main research question that guides this study is:

What practical independent internal audit framework will enable the IAFs to add value to state universities in Zimbabwe?

Emanating from the primary research question, the following secondary research questions were proposed to improve the applicability of the expected findings:

1. What factors prevent or improve the independent functioning of IAFs in ZSUs?
2. What value is added by the IAFs in ZSUs in terms of:
 - Corporate governance practices,
 - University objectives,
 - Financial reporting,
 - Risk management, and
 - Internal control systems?
3. What relationship exists between the independence and performance of the IAF and the value they add to state universities in Zimbabwe?
4. What role can IA stakeholders play in improving the independence and performance of the IAFs in ZSUs?

1.6 Research objectives

The main research objective is:

To assess the performance of the Internal audit functions in Zimbabwean state universities in terms of independence.

The following secondary research objectives were derived from the main research objective:

1. To ascertain the factors that prevent or improve the independent functioning of IAFs in ZSUs.
2. To establish the value added by the IAFs in ZSUs in terms of:
 - Corporate governance practices,
 - University objectives,
 - Financial reporting,
 - Risk management, and
 - Internal control systems.
3. To examine the relationship between the independence and performance of the IAF and the value they add to state universities in Zimbabwe.
4. To determine the role that IA stakeholders can play in improving the independence and performance of the IAFs in ZSUs.

1.7 Research hypotheses

The proposed research hypotheses of this study are as follows:

H1: The audit committee has a positive influence on internal audit independence.

H2: The positive relationship between objectivity and performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced.

H3: Internal audit independence has a positive influence on the performance of internal audit functions.

H4: The top management has a positive influence on internal audit independence.

H5: Legal mandate has a positive influence on internal audit independence.

H6: The positive relationship between internal audit quality and the performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced.

1.8 Definition of key terms

Independence is defined as the freedom from material conflicts of interest that threaten objectivity, i.e., a state where threats to objectivity are managed to the extent that the risks of ineffective internal audit services are acceptably controlled (Mutchler & Chang, 2001).

Internal Audit (IA) refers to an “ independent, objective assurance and consulting activity that adds value and improves the operations of a university/organisation/company. It helps an

organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes” (IIA, 2017:2).

Internal Auditor (IAr) refers to any audit professional who works directly for management at some level and is mainly responsible for assisting management in fulfilling its stewardship and internal control responsibilities as effectively and efficiently as possible (Jachi & Yona, 2019).

Internal Audit Effectiveness (IAE) is defined as the capability to deliver performance consistent with targets. This is also defined as the extent to which an internal audit office achieves its stated goal or achieves the desired outcome (Jaggi, 2023; Mihret & Yismaw, 2007).

Internal Audit Function (IAF) is defined as a department of an institution that performs assurance and advisory activities designed to evaluate and enhance the efficiency of the institution's governance, risk management, and internal control processes, particularly in terms of operational effectiveness, financial management and reporting reliability, and compliance with applicable laws (Zain & Subramaniam, 2007; IIA, 1995).

Objectivity is a neutral mental attitude that enables internal auditors to carry out endeavours without quality compromises. Internal auditors must maintain objectivity by not deferring their audit judgment to others (IIA, 2017).

Internal Audit Performance (IAP) refers to the measurement of internal auditors' capabilities toward the goals of the company and the attainment of those goals (Chang, Chen & Chi, 2019).

1.9 Significance of the study

This study made valuable contributions to public policies considering the importance of internal audit functions in state-owned universities. The research recommended the inclusion of internal auditing best practices in the legislation that directly governs the running and establishment of state universities in Zimbabwe in line with the existing legislation. A contribution was also made to the existing body of knowledge since the literature on internal auditing for tertiary state-owned universities is still very scarce (Mukono, 2021; Moyo & Ngwenya, 2018). The research outcomes can be generalised to other state-owned universities in developing countries like Zimbabwe, particularly in emerging markets. A framework for an

independent internal audit was designed for this research to complete the requirements of the Doctor of Commerce in Internal Auditing Degree.

1.10 Demarcation/Delimitation of study

A number of the shortcomings of this study call for further discussion and present an opportunity for more investigation(s). This section covers the constraints from a theoretical, methodological, and empirical standpoint.

The internal audit of the state universities in Zimbabwe is the only focus of the study from a theoretical standpoint due to the intricacy of the theoretical model. The researcher was unable to recognise and consider all organisational aspects that might impact the two primary constructs of the study. Future studies can address the effects of external environmental factors on the relationships between internal audit performance and organisational independence by explicitly incorporating these factors as well as other organisational factors, such as competition and uncertainty (Denhere, 2019; Sebele-Mpofu, Mashiri & Korera, 2021).

Additionally, the theoretical framework is based on the agency theory as a primary theory widely used in internal audit studies (Mihret *et al.*, 2010; Sarens & Lenz, 2012). The theory has been criticised for ignoring social power and elements that may influence the decisions and practices of an organisation, even though the adoption of this theory has helped establish a comprehensive theoretical framework to address the aims of this study (Kivistö, 2007). As a result, basing investigations primarily on theoretical lenses that are socially oriented, like institutional theory, can help future studies acquire insights into the social elements that may have an impact on the study's major dimensions. Empirically, this study is restricted to a sample of Zimbabwean state universities, which may mean that the conclusions are only relevant to this setting. Comparative studies for various contexts, such as developed and developing contexts, might benefit future research. That would give further insight into how the constructs of the study relate to one another. This work should, therefore, be replicated in various country contexts in future research.

At the methodological level, although the study uses five dimensions to measure internal audit function effectiveness (independence, objectivity, added value, internal audit quality, and management, audit committee, and legal mandate), it does not use a measure that assesses the overall satisfaction of the system. Therefore, future studies could include a surrogate measure to reflect the overall success of the IAF and examine its effect.

1.11 Structure of the thesis

This thesis is divided into eight chapters.

1.11.1 Chapter One

This chapter begins by explaining the background and the identified problem. The importance of independence of internal audit functions in state universities has been established. The research aims and objectives are clarified in this chapter. The research question is developed based on the objectives of the study. In addition, the chapter defines the study's contribution to knowledge and the existing body of literature as well as the enhancement of the IAF. The chapter also identified the research methods used in the study and provided a preliminary review.

1.11.2 Chapter Two

The sequential chapter details the state of public universities in Zimbabwe in terms of their governance. The structure of the higher and tertiary education sector in Zimbabwe is outlined. An account is given of all state universities. Literature on the role played by universities and the importance of universities in economic development is also explored.

1.11.3 Chapter Three

To give the research a thorough basis, this chapter examined the pertinent professional and academic literature on internal audit independence. The importance of internal auditing in state universities was also discussed. Literature on the factors that influence, as well as the challenges faced by internal audit units in state universities, was explored. In addition to the Zimbabwean public sector, the chapter also looked at earlier research on internal auditing in developed and developing nations. Factors influencing the independence of internal audit functions are discussed. Legislative guidance for the IAF in Zimbabwe has also been reviewed.

1.11.4 Chapter Four

The fourth chapter builds on the triangulation of four theories and starts with the theoretical framework. The chapter explains how the institutional, stakeholder, and protection motivation theories complement the agency theory in this study. The conceptual framework is presented,

and variables that make up the conceptual framework are also discussed. The study hypothesis is established at this stage.

1.11.5 Chapter Five

The study's research methodology and design are the main topics of this chapter. Research design and methodology are presented. The methodology of the questionnaire and the interview are then discussed in detail. The pilot study is also discussed.

1.11.6 Chapter Six

The findings of the surveys are presented in this chapter. The questionnaire responses obtained from the 279 auditees in Zimbabwean state universities are summarised in the primary data that was gathered through the surveys.

1.11.7 Chapter Seven

This chapter presents the data gathered from the 11 study participants who participated in the in-depth interviews as well as the documentary evaluation. The in-depth interviews were conducted among the chief internal auditors of state universities. The annual audit reports of the Comptroller and Auditor General of Zimbabwe are reviewed, and data is also presented in this chapter.

1.11.8 Chapter Eight

The final chapter summarises the research findings concerning the research problem and its objectives based on the findings of the empirical results. Suggestions for IAF independence and a framework describing the shortcomings of the present practice in Zimbabwe's public universities are provided, and the ways in which such deficiencies can be addressed are also offered.

1.12 Summary

The study background was briefly explained in this opening chapter, which also included an explanation of internal audits. Furthermore, the research problem, research questions, and research objectives were covered. Additionally, it listed the research questions, the significance of this study, the contribution to knowledge, and the research methodology used.

A summary of the thesis structure was provided as the chapter ended. An overview of the state universities in Zimbabwe and the evolution of internal audits are provided in the next chapter.

CHAPTER TWO: THE STATE OF PUBLIC UNIVERSITIES IN ZIMBABWE AND DEVELOPMENT OF INTERNAL AUDIT

2.1 Introduction

The purpose of this chapter is to provide a background of state universities in Zimbabwe. State universities have been chosen for distinct reasons, chief amongst them being that they are government-grant-aided (Chinyoka & Mutambara, 2020). Substantial investments have so far been made in state universities as the main Education 5.0 agenda vehicles. The first, second, third and fourth strategic goals of the five goals listed on the MHTEISTD (2019 – 2023) strategic plan propose the implementation of the Education 5.0 agenda for the innovative industrialisation of the economy through the HTE to produce quality goods and services. The Education 5.0 agenda breaks down the mission of the MHTEISTD into five distinct missions: teaching, research, community service, innovation, and industrialisation (MHTEISTD, 2018). Operationalisation has begun with the government's heavy investment in building science parks/innovation hubs for state universities. Under phase one of this programme, six science parks/innovation hubs were established at selected state universities, including the University of Zimbabwe (UZ), Chinhoyi University of Technology (CUT), Harare Institute of Technology (HIT), Midlands State University (MSU), Zimbabwe National Defence University (ZNDU) and the National University of Science and Technology (NUST). All this is evidence of the level of importance and the grand expectations that the government has placed on the state universities in Zimbabwe (MHTEISTD, 2018). The government expects value to be created by the SUs. The fifth and last goal of the MHTEISTD strategic plan aims at creating robust governance structures for the modernisation and industrialisation of Zimbabwe through HTEIs. Robust governance structures go hand in hand with the effective performance of IAF within an organisation (Jaggi, 2023; DeSimone & Rich, 2020).

This chapter also highlights the role that internal audit plays an important role in ensuring sound corporate governance in the context of state universities in Zimbabwe (Gramling, 2004; Sarens & Lenz, 2012; Njeru, 2013; Mihret, 2017; Eke, 2018; Fitriyah & Padjadjaran, 2018; Zou, 2019). The internal audit adds value to an organisation when it functions effectively (Barac, Plant & Motubatse, 2009; Newman & Comfort, 2018). The internal audit can perform its functions effectively if independent or free from undue influence (Christopher *et al.*, 2009; Stewart & Subramaniam, 2010; Kimotho, 2014; Jachi & Yona, 2019). Literature on governance, funding, and the role of state universities in economic development is reviewed. Governance was included in the discussion because it forms part of the wider roles of internal

auditing and supports objectivity, accountability, independence and effectiveness of internal audit function (Drogalas, Arampatzis & Anagnostopoulou, 2016; Wadesango, Nyakumwa & Sitsha, 2023). This chapter also covers governance challenges related to internal audits. Topics like independence and objectivity are also closely reviewed.

2.2 Development of internal auditing in institutions of higher learning

Several researchers have linked internal auditing in institutions of higher learning to the performance of state universities (Momanyi & Ngacho, 2018).

2.2.1 Internal auditing in institutions of higher learning

The increase in financial irregularities and malpractices in SUs has recently been a cause of concern to researchers (Kehinde, Ahmad & Popoola, 2016; Eke, 2018; Mokona & Nasieko, 2018). The pressure to adopt internal auditing in the higher education system has emanated from the need to allocate resources efficiently and account for various stakeholders (Arena, 2013) as universities face increasing demands for accountability (Zakaria *et al.*, 2006). For example, students, politicians, and oversight agencies demand a commitment to quality learning and the assurance that the universities contribute to economic development (Leveille, 2006; Sandström *et al.*, 2018). The area of IA in state-owned universities has been scarcely researched, with much of the conducted research so far being focused on developed countries (Zakaria *et al.*, 2006; Mallari & Santiago, 2013; Arena, 2013; Christopher, 2015; Purpera, 2017; Mustapha & Abidin, 2017; DeSimone & Rich, 2019). Regionally in Africa, research on IA in state-owned universities seems to be scarce, as indicated in prior studies (Mihret *et al.*, 2010; Eulerich *et al.*, 2013; Christopher, 2015) is scanty (Kehinde *et al.*, 2016; Eke, 2018; Mokona & Nasieko, 2018; Mihret & Yismaw, 2007).

Previous research on IA in public tertiary learning institutions, in general, shows that the resident IAUs are not effectively performing their role (Christopher, 2015). Internal auditing is expected to provide objective and independent consultancy and assurance services on the management of risk, internal control, and other governance processes needed to add value and improve the operations of organisations (IIA, 2017). State universities in the USA, for example, are also facing challenges in the establishment and operationalisation of IAF, and the challenges include having no reporting structure and audit committees prescribed by local law, limited budget provisions and lack of quality assurance reviews, and non-compliance with IIA professional standards (Purpera, 2017).

2.2.2 Challenges faced by state universities in general

Globally, SUs are currently confronted with a significant challenge in the form of a rising incidence of malpractice (Christopher, 2012; Purpera, 2017; DeSimone & Rich, 2019; Mokono & Nasieku, 2018; Kehinde *et al.*, 2016). The presence of a concerning trend in SUs in various countries has been revealed through research. Specifically, this trend has been identified in Malaysia (Musnida, 2017), Nigeria (Ahmad & Kehinde, 2016; Bello *et al.*, 2018; Ogunwole & Oluwakemi, 2019), Australia (Christopher, 2015), the US (DeSimone & Rich, 2019), Kenya (Mokono & Nasieku, 2018; Njorogo, 2012), Italy (Arena, 2013; Arena & Azzone, 2007), the Philippines (Mallari & Santiago, 2013), Ethiopia (Mihret & Yismaw, 2007), and Indonesia (Sari, Ghazali, & Achmad, 2017). Some of the challenges faced by SUs globally include insufficient internal control systems, deficient corporate governance, inadequate risk management, below-average academic performance, errors in project and financial management, and misuse of funds (Zakaria *et al.*, 2006; Johnson *et al.*, 2017; Mokono & Nasieku, 2018b).

On the other hand, there is a dearth of studies on the independence and performance of IAF conducted in Zimbabwean SUs; nonetheless, the reports from the Auditor General provide substantiation for the presence of similar difficulties as those faced by global SUs inside ZSUs (OAG, 2023). Similar issues have a detrimental impact on the overall economic advancement of a nation as universities are considered to be key players in economic development (Boulton & Lucas, 2011; Pouri & Inglesi-Lotz, 2014; Valero & Reenen, 2019) as per the earlier discussion(s).

2.3 Governance of state universities in Zimbabwe

According to Vagliasindi (2008), governance refers to the organisational structure and processes through which power and policies are administered and regulated. The concept of governance, as discussed by Garwe and Tirivanhu-Gwatidzo (2016), Gerber (2015) as well as Abdeldayem and Aldulaimi (2018), pertains to the processes and mechanisms by which decisions are formulated and implemented within a multifaceted societal context. It encompasses the interactions and connections between government and various social entities, as well as their engagement with the general populace.

According to Maune (2015) as well as Mattei, Grossi and Guthrie (2021), corporate governance is particularly suitable for organisations seeking long-term investments through equity resources since it instils confidence and integrity across various entities. Corporate governance is a framework utilised to monitor the performance of entities (Wong, 2004).

According to Barac, Marx and Moloï (2011), implementing corporate governance can positively impact higher education institutions. This, in turn, can benefit not just the stakeholders of the institutions but also the entire nation.

One of the advantages of corporate governance is the increased availability of financial resources, as well as a reduction in conflicts of interest. According to Maune (2015), it is imperative for public sector entities and their officials to operate in a responsible, transparent, and accountable manner. The evolution of corporate governance in higher education institutions can be attributed to the challenges currently faced by HEIs. Higher education institutions face numerous challenges, including inadequate student preparation, capacity constraints, research and quality assurance expectations, globalisation, rapid technological advancements, market orientation, and complex legal environments (Barac *et al.*, 2011).

Higher education institutions, in particular state universities, can either be state-supervised or state-controlled. State supervision in Zimbabwe is where institutions are independent, with minimal government involvement mediated through general government policy (Garwe & Thondhlana, 2020; Mlambo, 2005). State control is where the government controls the institutions to a greater extent. The government controls policies, remuneration, senior management appointments and related issues through the HTE parliament portfolio committee (Maganga & Vutete, 2015). The orderly conduct of daily operations is guided by university statutes and ordinances established through an act or charter. The president of Zimbabwe is the chancellor of all state-owned universities (Maganga & Vutete, 2015). The founding acts provide for the state university councils and are the executive authorities that oversee policy matters. Specialist committees are appointed by the state university councils and act on behalf of the councils. The president of the country or the chancellor of the state universities appoints vice-chancellors for each state university upon recommendation of the university councils. The vice-chancellor (VC) is a state university's head or Chief Executive Officer (CEO). The academic, disciplinary, and administrative oversight of the university is the responsibility of the VC. Pro-VCs deputise for the VC and are appointed to assist the VC, who have diverse responsibilities. The implementation of academic policies is the responsibility of the Senate, which the VC chairs. The Senate comprises heads of departments and administrators. The deans and other academics assist the VC with the appointment of the heads of departments (Maganga & Vutete, 2015). Executive deans lead faculties, schools, and centres. The Zimbabwe Council of Higher Education (ZIMCHE) is responsible for the curricula and programmes offered by the state universities in Zimbabwe.

2.4 Development of internal auditing in Zimbabwe

The establishment of the IAF in the public sector in Zimbabwe started with the PFMA Act Chapter 22:19 of 2010 (Newman & Comfort, 2018). This Act requires all public entities to establish an IAF. This requirement for an IAF was made mandatory by the PECG Act Chapter 10:31 of 2018. In Zimbabwe, this legislation requires that all public entities create an IAF as a corporate governance mechanism. Before the PECG, public entities were guided by the PFMA Act Chapter 22:19 of 2010.

Public enterprises in Zimbabwe are subject to governance by individual Acts of Parliament that establish their existence. The applicability of the Public Finance Management Act (PFMA) (Chapter 22:19) and Treasury instructions also extends to all public enterprises. It is stipulated that these entities shall possess accounting authority as their governing powers. The legal and regulatory frameworks governing public entities encompass various statutes, including but not limited to the Public Finance Management Act (PFMA), the Constitution of Zimbabwe of 2013, Amendment Number 20, the Public Entities Corporate Governance Act, and the Companies Act. The Zimbabwe Public Companies Corporate Governance Act (PECGA) of 2018, specifically Chapter 10:31, provides comprehensive instructions for the formation and operations of the internal audit function within public companies. The PECGA, Chapter 10:31 of 2018, guides the establishment and functioning of the internal audit function in all public entities. Sections 23 to 33 of the PECGA focus on issues concerning the internal audit function. The PFMA, Chapter 22:19 of 2016, also gives guidance on issues related to the internal audit function in public entities. The PFMA prevails in the event of any inconsistency between it and any other enactment.

State universities in Zimbabwe are established and governed by the different acts of each university. The University Acts are silent on issues related to the IAF. Guidance is therefore obtained from the PFMA, the PECGA, and the National Code of Corporate Governance (ZimCode). Section 80(1) gives the Public Service Commission (PSC) an option to appoint an internal auditor to any ministry or any reporting unit. Section 226 of the PECGA recommends that a competent, continuous, and effective risk and results-based internal audit unit be put in place to assist audit committees in assuring internal controls, risk management, and governance processes. The IAF must comply with the standards of professional practice of internal auditing. Zimbabwe also has the ZimCode of 2022, which gives guidance on IAFs. The Role and Functions Principle 8 of Section 8.4 of the ZimCode states that the board (which equates to the council in state universities) should set up an effective IAF with qualified

personnel. The board is also required to define, approve, and put in place an internal audit charter.

2.4.1 Internal audit provisions of the Public Entities Corporate Governance Act (Chapter 10:31) and the Public Finance Management Act (Chapter 22:19)

As an internal assurance provider and part of the combined assurance model, the IAF should (PECGA S252):

- a. annually conduct a formal and documented review of the design, implementation, and effectiveness of internal financial controls;
- b. provide independent assurance on the integrity and robustness of the risk management processes and a written assessment of the effectiveness of the system of internal control and risk management to the Board;
- c. evaluate governance processes, including ethics and setting the tight "tone at the top";
- d. assure the Board that the combined assurance model is coordinated to best optimise costs, avoid duplication, and prevent an assurance overload.

The functions of an internal auditor appointed in terms of subsection (1) of the PFMA shall be:

- (a) to monitor the financial administration and procedures of the Ministry or reporting unit concerned to ensure that -
 - (i) Proper accounting and bookkeeping transactions and procedures are carried out; and
 - (ii) proper accounting records are maintained; and
 - (iii) adequate internal checks and controls are observed; and
 - (iv) assets under the control of the Ministry or reporting unit are properly accounted for; and
 - (v) instructions and directions issued in terms of section 6 are complied with; and
 - (vi) generally, that requirements of this Act are being observed; and
- (b) to assess the cost-effectiveness of any projects undertaken by the Ministry or reporting unit concerned; and
- (c) to perform any other function that may be assigned to him or her by the accounting officer of the Ministry or reporting unit concerned.

The Audit Committee: The PECGA and the PFMA require the establishment of an audit committee for public entities. The responsibility of overseeing the IAF, evaluating its performance, and ensuring its independent quality assurance review lies with the audit committee. According to Section 219 (5C) of the Companies and Other Business Entities Act, one of the responsibilities assigned to the audit committee is to assess and deliberate upon the sufficiency of the company's internal auditing personnel and procedures, as well as its internal controls, compliance procedures, risk management systems, and any modifications made to these components.

Reporting: Section 225 of the PECGA requires that the Chief Audit Executive (CAE) reports functionally to the chairperson of the audit committee and administratively to the CEO.

Availability of resources and legal mandate: Section 229 requires that the IAF be sufficiently empowered to perform its mandate. The annual expenditure, capital budget, and audit committee should approve risk-based internal audit plans annually according to Section 241 of the PECGA. Review of the independence and objectivity of the auditors is also listed as one of the functions of the audit committee.

Organisational placement: Section 239 of the PECGA requires that the CAE be on the same level as other heads of departments within an entity.

The internal audit plan or activity: According to Section 232, an internal audit plan or activity should:

- (a) follow a risk-based approach;
- (b) be informed by the strategy and risks of the company;
- (c) be agreed to and approved by the audit committee;
- (d) be independent of management;
- (e) be an objective provider of assurance predicted on–
 - (i) the risks that may prevent or slow down the attainment of strategic goals;
 - (ii) whether controls are in place and functioning effectively to mitigate risks;
 - (iii) the opportunities that will promote the attainment of strategic goals as may be identified, assessed, and effectively managed by the company's management team;
- (f) submit to the Board at least once a year a written assessment of the effectiveness of the company's system of internal control and risk management;

- (g) form an integral part of the combined assurance model as an internal assurance provider;
- (h) submit to the audit committee a written assessment of internal financial controls.

Access to information: PFMA Section 80 outlines that in the performance of his or her functions in terms of subsection (2), an internal auditor:

- (a) shall have free access at all reasonable times to any records, books, vouchers, documents, and public resources under the control of the Ministry or reporting unit concerned;
- (b) shall have direct access to the accounting officer of the Ministry or reporting unit concerned;
- (c) may, without payment of any fee, cause a search to be made and extracts to be taken from any record, book, voucher, or document under the control of the Ministry or reporting unit concerned;
- (d) may call upon any officer in the Ministry or reporting unit concerned to give and shall be entitled to receive, without undue delay from that officer, any explanations and information he or she may require to enable him or her to perform his or her functions.

Placement of the IAF on the university organogram: As prescribed by the PECGA, the Chief Internal Auditor is on the same level as other department heads on the organogram.

2.4.2 The State University Internal Audit Charter

The existence of an internal audit charter (IIA Standard 1000) is essential for the success of every internal audit unit. The charter is a formal document approved by the governing body and/or audit committee through mutual agreement with management. It serves as a comprehensive plan for the internal audit department, allowing the governing body to effectively demonstrate its commitment to internal audit independence. The Institute of Internal Auditors (IIA) has identified seven essential domains that improve internal auditing's overall strength and effectiveness, which the internal audit charter should incorporate (IIA, 2017). Although many charters may not encompass all these aspects, exclusions can undermine the function's independence (IIA, 2017). As best practice, the internal audit charter must be displayed publicly on the university website or be readily available to ensure optimal transparency and accountability (Christopher, 2015). This will provide stakeholders with the

necessary information to evaluate the effectiveness of the internal audit function (Christopher, 2015). Only four internal audit charters from four ZSUs were examined for this study. The remaining internal audit charters were not accessible to the public or available upon request. One of the reviewed IACs had been in existence for over 15 years, yet it lacked a signature indicating approval. It is noteworthy that only one of the reviewed IACs was approved, raising concerns as the Vice Chancellor and the AC approved it, contrary to the IIA requirement that the AC must approve it.

The researcher's inability to access the IACs' information on the university websites or get access upon request suggests that the IAFs lack the necessary authority to function in a competent and independent manner. Prior studies have emphasised the importance of the internal audit charter in determining the internal audit function's efficiency. Research has demonstrated a direct relationship between a well-defined internal audit charter and the internal audit function's effectiveness (Shewamene, 2014; Christopher, 2015; Motubatse, 2019; Demeke *et al.*, 2021). However, none of these studies has investigated the extent to which the independence of the internal audit function influences the effect of the internal audit charter on performance (Shewamene, 2014; Christopher, 2015; Motubatse, 2019; Demeke *et al.*, 2021). This study aims to fill this gap. Table 2.3 below provides a comparative examination of internal audit charters, highlighting areas of compliance or non-compliance with the requirements of the international internal audit standards.

Table 2.1: Compliance of the ZSU internal audit charters with the requirements of the IIA

Vital components of an IAC (IIA, 2017)	U11	U8	U2	U9
Mission and purpose	✓	✓	✓	✓
Recognising Mandatory Guidance in the Internal Audit Charter	✓	✓	✓	✓
A statement that the GB will maintain and assure IAF authority by:				
Including a statement on the CAE's functional and administrative reporting relationship in the organisation	X	X	X	✓
Approving the internal audit charter	X	X	✓	X
Approving a timely, risk-based and agile internal audit plan	X	X	✓	X
Approving the IA budget and resource plan	X	X	✓	X
Receiving timely communications from the CAE on performance relative to its internal audit plan.	X	X	✓	X

Actively participating in discussions about and ultimately approving decisions regarding the appointment and removal of CAE.	X	X	X	X
Ultimately approving the remuneration of the CAE.	X	X	X	X
Making appropriate inquiries of management and the CAE to determine if there are any inappropriate scope or resource limitations.	X	X	X	X
Developing and approving a statement that the CAE will have unrestricted access to and communicate and interact directly with the governing body without management present.	X	X	X	X
Developing and approving an authorisation that the activity will have free and unrestricted access to all functions, records, property, and personnel pertinent to carrying out any engagement, subject to accountability for confidentiality and safeguarding of records and information.	X	X	X	X
Independence and Objectivity – The charter should include:				
A statement that the CAE will ensure that the internal audit activity remains free of conditions that threaten the ability of the activity to carry out its activities in an unbiased manner. If independence or objectivity is impaired in fact or appearance, the CAE will disclose the details of the impairment to the appropriate parties	X	X	X	X
A statement that the internal audit activity will have no direct operational responsibility or authority over any of the activities audited.	✓	✓	✓	X
A statement that if the CAE has or is expected to have roles and/or responsibilities that fall outside of internal auditing, safeguards will be established to limit impairments to independence and objectivity.	✓	✓	X	X
A requirement for the CAE to confirm at least annually the independence of the internal audit activity to the governing body.	X	X	✓	X
Scope of Internal Audit Activities – The charter should include:				
A statement that the scope of the internal audit activities encompasses, but is not limited to, objective examinations of evidence for the purpose of providing independent assessments on the adequacy and effectiveness of governance, risk management, and control processes.	X	X	✓	X

A statement that the CAE will report periodically to senior management and the governing body on the results of its department and the work the activity performs.	✓	✓	✓	✓
Responsibility –The charter should include statements as to the responsibility for:				
Submitting at least annually a risk-based internal audit plan.	✓	✓	✓	X
Communicating with senior management and the governing body about the impact of resource limitations on the plan.	X	X	X	X
Ensuring the internal audit activity has access to appropriate resources with regard to competency and skill.	✓	✓	X	X
Managing the activity appropriately for it to fulfil its mandate	✓	✓	✓	✓
Ensuring conformance with IIA Standards	✓	✓	✓	✓
Communicating the results of its work and following up on agreed-to corrective actions	✓	✓	✓	✓
Coordination with other assurance providers.	✓	✓	✓	✓
Approved of internal audit charter	X	X	X	✓

Key : X denotes that the domain is provided for in the IAC

✓ denotes that the domain is not provided for in the IAC

Source: Author (2023)

2.4.3 Loopholes in the internal audit charter of the state universities in Zimbabwe

The capability of the IAF hinges on the IAC. A well-written IAC links positively with the IA effectiveness (Asiedu & Deffor, 2017; Christopher, 2015). The IAC charters reviewed did not contain all the seven domains as recommended by IIA. Particularly, the reporting structure, independence and duties of the audit committee or governing board are not present. The lack of a well-defined charter has been found to be the cause of IA inefficiency in Australian public universities (Christopher, 2015). Seventy-five per cent (75%) of the IAC was not signed for approval by the audit committee. Furthermore, 25% of the IAC was approved by the Vice Chancellor and the audit committee, which violates the requirements of the IIA, which recommends that the AC should independently approve the IAC and only agreed to by the management. The IAC is also not readily available to the university stakeholders to facilitate scrutiny by the stakeholders (Christopher, 2015). Demeke and Kaur (2021) concluded that establishing a well-defined charter ensures the independence and objectivity of the IAF.

2.4.4 Internal audit provisions of the Public Entities Corporate Governance Act (Chapter 10:31)

Laws and regulations play a crucial role in establishing the authority and credibility of a department (Asiedu & Deffor, 2017). An official authorisation in the form of legislation grants a department the ability and authority to carry out its assigned responsibilities. All state university acts were evaluated to determine the internal audit provisions, and it was discovered that there are no provisions for IAFs in the university acts. However, the PECGA act includes provisions for the IAF in public sector entities. The PECGA 10:31 was therefore examined for its appropriateness in protecting IAF independence in public sector companies. The crucial safeguards to internal audit independence, as suggested by previous research (Liston-Heyes & Juillet, 2023; Christopher *et al.*, 2009; Macrae, 2010; Razali, Said & Johari, 2016) include statutory and legal provisions against interference in audit processes. Sections 223 to 254 of the PECGA 10:31 are the sections that provide for the internal audit operations, authority, and credibility in Zimbabwe public sector entities. Table 2.4 below shows whether the acts provided the safeguard to IA independence in public sector entities and, hence, the state universities.

Table 2.2: Provisions for the safeguards of internal audit independence in the laws and regulations of Zimbabwe

Safeguard of internal audit independence	PECGA	University Act
Statutory and legal provisions against interference in audit processes (interference of management in IA budget and plan approval process, management determining the contents of internal audit report, unrestricted access to information) (Liston-Heyes & Juillet, 2023)	Unavailable	Unavailable
Special reporting channels to allow independence: CAE to report only administratively to the CEO (IIA,2017)	Section 225	Unavailable
Special reporting channels to allow independence; CAE reporting functionally directly to the AC (Macrae & Van Gils, 2014)	Section 225	Unavailable
Security of tenure of the CAE (Liston-Heyes & Juillet, 2023; Christopher <i>et al.</i> , 2009)	Unavailable	Unavailable
The AC should approve a risk-based internal audit plan, as well as the annual expenditure and capital budget of the auditing government.	Section 241	Unavailable

The AC is designated as the sole authority for the selection, compensation, and termination of the Chief Audit Executive (Christopher <i>et al.</i> , 2009; Liston-Heyes & Juillet, 2023)	Unavailable	Unavailable
Organisational placement of the CAE to allow independence (Abbott <i>et al.</i> , 2006)	Unavailable	Unavailable
Centralised oversight and responsibility of all IAF in public sector entities (Liston-Heyes & Juillet, 2023)	Unavailable	Unavailable
Establishment of National Internal Audit Act to provide for the authority and credibility of IAFs in the public sector (Asiedu & Deffor, 2017)	Unavailable	Unavailable

Source: Author (2023)

Although the PECGA Act 10:31 has sections that provide for the IAF, methodology and mandate, safeguards for internal audit independence have not been provided for. The principles regarding internal audit independence, although not specifically stated as such, are addressed in sections 223, 224, 225, 239, 241 and 243. Section 223 of the PECGA 10:31 requires that the board, through the AC, provide assurance services in accordance with the Professional Practice of Internal Audit. Section 224 requires that the audit committee oversee the IAF, evaluate its performance, and ensure that the IAF is subjected to an independent quality assurance review. Section 225 requires that the CAE reports functionally to the chairperson of the audit committee and administratively to the chief executive officer. Section 241 requires that the AC approves the risk-based internal audit plan, the annual expenditure and capital budget of the auditing department, and evaluates the performance of the IAF functionally. Reviewing the independence and objectivity of the auditors, as well as providing an independent reporting channel for the internal auditors, has been stated as one of the duties of the AC in section 243, paragraphs (f) and (g). According to Section 239, the Chief Audit Executive (CAE) should have equal status with other department heads in the organisation. The provision lacks clarity as it places the CAE, who is expected to have an executive role based on best practice, on the same level as other department heads inside a firm. The ambiguity around the term "other heads of departments" has resulted in the chief internal auditors in ZSUs being categorised at the head of department level for salary grading purposes. Organisational placement of the CAE has been cited as a factor that influences the independence and objectivity of the IAF (Abbott *et al.*, 2006). These observations clearly demonstrate that the legal provisions for IAFs in ZSUs are insufficient. Furthermore, it is important to highlight that the IAF in ZSUs does not entirely comply with the PECGA 10:31,

as demonstrated by the table provided below. Table 2.5 below is a result of the comparative analysis of the ZSU internal audit charters with the provisions of the PECGA 10:31.

Table 2.3: Zimbabwe State University compliance with the PECGA Act 10:31

NB: U12 and U13 did not participate in the study.

PECGA Act 10:31 Section	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13
223. In-house IAF	√	√	√	√	√	√	√	√	√	√	√	-	-
224 & 240. Presence of AC	√	√	√	√	√	√	√	√	√	√	√	-	-
AC approves the IA budget.	X	X	X	X	X	X	X	X	X	X	X	-	-
AC reviews the independence of the IAF	X	X	X	X	X	X	X	X	X	X	X	-	-
AC responsible for hiring and firing the CAE and the remuneration.	X	√	X	X	X	X	X	X	X	X	X	-	-
224. Independent quality assurance review	X	X	X	X	X	X	X	X	X	X	X	-	-
225. CAE reports functionally to AC	√	√	√	√	√	√	√	√	√	√	√	-	-
225. CAE reports administratively to the CEO	√	√	√	√	√	√	√	√	√	√	√	-	-
229. Sufficient empowerment of IAF	X	√	X	X	X	X	X	X	X	X	X	-	-
231. Adhere to IIAs and Code of Ethics												-	-
230. Approved IAC	X	√	X	X	X	X	-	-	-	-	-	-	-

PECGA Act 10:31 Section	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13
232a. Risk-based internal audit plan	X	√	X	X	X	X	-	-	-	-	-	-	-
239. CAE should be on the same level as other heads of departments within the company	√	√	√	√	√	√	√	√	√	√	√	-	-

X – Noncompliance

√ - Compliance

Source: Author (2023)

2.5 Summary

The chapter began by elucidating the state of public universities in Zimbabwe. The structure of the higher and tertiary education sector in Zimbabwe was also given. The chapter discussed and enumerated all the state universities in Zimbabwe as of 31 December 2022. To provide a complete setting for the study, the governance, funding, and economic role of state universities were also discussed. The provisions of the various acts for the IAF are also presented. The chapter concludes by examining the adequacy of different acts in ensuring the independence of internal audit functions within ZSUs.

CHAPTER THREE: LITERATURE REVIEW THAT GUIDES THIS STUDY

3.1 Introduction

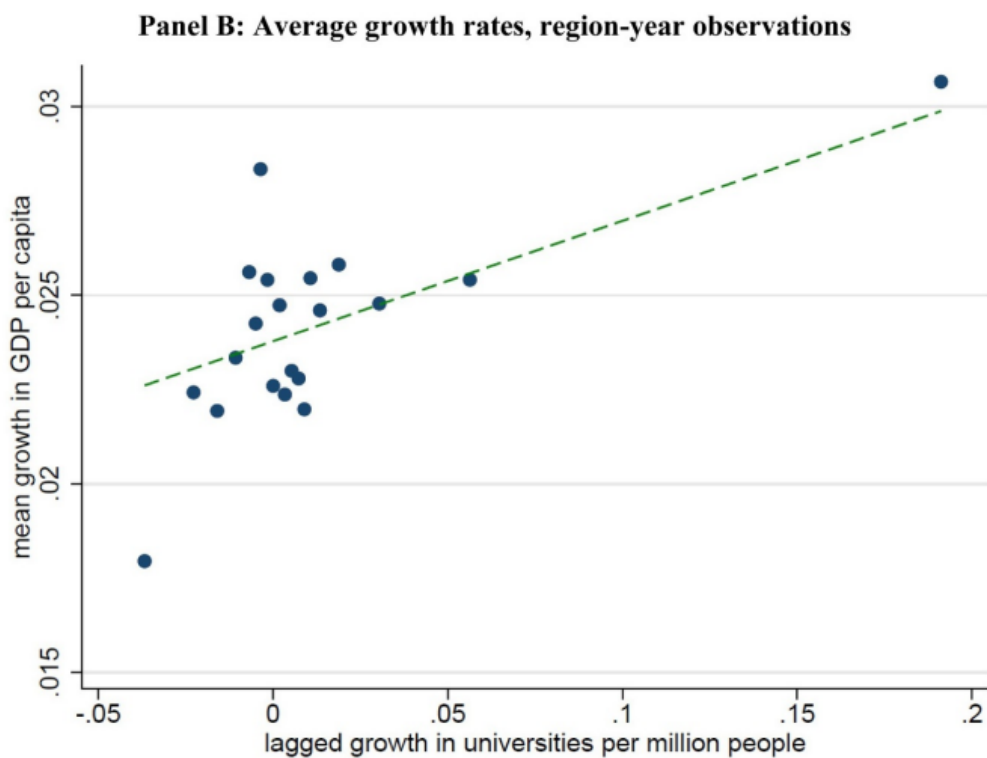
Having introduced state universities in Zimbabwe, this chapter will now review the literature to better understand the evolution of the thematic areas of the study and match them as a backdrop to the general course of the research (Amin, 2014; Rowland, 2017). The literature for this study is mainly drawn from academic books, journals, studies, and papers that are ten years old or less, except where authoritative as well as seminal literature is used. For instance, Adams (1994) wrote a key article on agency theory. The fundamental ideas that shape the basis of this study's entire approach are known as theories. The preceding discoveries can all be further processed to yield more imperative findings or the opposite but with relation to certain circumstances or variables. A factual review of the relevant literature has been conducted. By referencing the research from earlier and more contemporary studies, the information that is already available is given more in-depth examination. The purpose of the link to more recent research is to align or contrast the conclusions' inconsistencies. The variables that make up the study's background are all described in this chapter. The analysis of relevant material is arranged per the guiding ideas behind the title and how it came to be. The order of the evaluation is structured per the institution's norms for grouping items.

3.2 The role of universities in economic development

Historically, universities have been important in the domain of knowledge (Pouri & Inglesi-Lotz, 2014; Chinyoka & Mutambara, 2020). Pouri and Inglesi-Lotz (2014) conducted research to establish the direct and indirect contributions of universities in South Africa to employment and GDP. The results of their research showed that value added by the higher education sector ranks second after gold and is higher than the contribution of hotels and restaurants, textiles, clothing and leather products, forestry, and others (Pouri & Inglesi-Lotz, 2014). An area's revenue rises by 0.4% on average, with a 10% increase in universities (or around one more institution added to the average region in the data), with extra impacts extending to neighbouring regions (Valero & Reenen, 2019). The evolution of the knowledge-based economy has magnified the importance of universities (Boulton & Lucas, 2011). Universities are contributing to education, research, innovation, state engagement and international engagements (Garwe, Thindhlana & Saidi, 2021).

In the European context, state money is expected to be converted into tangible effects of economic prosperity by governments, which are the principal funders of universities (Boulton & Lucas, 2011). Universities serve as bases for technology-based industrialisation in the regions in which they are located. Techno parks are established to promote the cooperation of universities and industries (Sevinc, 2014). Universities create employment and income in the regions where they are located. They create positive environments for certain industries and companies by creating aggregation economies, hence increasing the competitiveness of their cities and regions (Sevinc, 2014). Several theoretical paradigms have been inspired by the positive role that HEIs can play in the interaction with key stakeholders, with the final aim of transferring knowledge, disseminating culture, and fostering economic competitiveness (Agasisti, Barra & Zotti, 2019). While countries like South Africa have recorded significant contributions from universities to economic development, Zimbabwe has not been able to cross over to middle-income status despite enormous investment in the education sector and vast natural resources (Satumba, 2019). Figure 3.1 shows the impact of universities globally on economic growth in terms of GDP per capita.

Figure 3.1: Universities and regional growth showing average growth rates, region-year observations



Source: World Higher Education Database (WHED) (Valero & Reenen, 2019)

The information presented in Figure 3.1 was sourced from the WHED annual report of 2019. There have been no new WHED publications since 2019. Hence, the information in Figure 3.1 is still less than five years old and is the most current. The case of South Africa was reviewed to better understand the contribution of universities in the context of Africa. Table 3.1 below presents the contribution of universities to economic development in South Africa.

Table 3.1: Contribution of universities to the economy in South Africa in 2009

Output	Universities (Rand Billions)
Direct output	R36 892
Secondary output	R50 910
Total output generated (direct + secondary)	R87 803
GDP	
Direct GDP	R23 350
Secondary GDP	R25 455
Total GDP generated (directed + secondary)	R50 805

Source: Pouri and Inglesi-Lotz (2014)

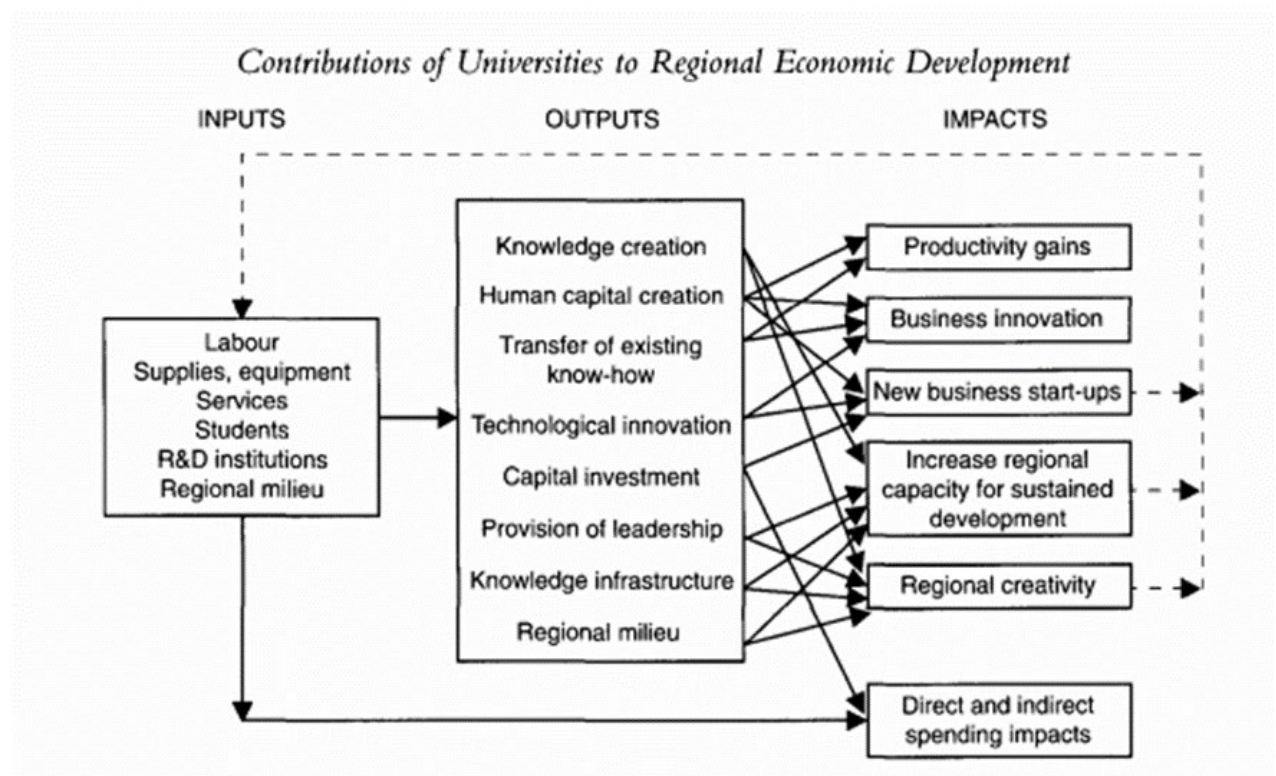
3.3 Direct and indirect contributions of universities towards economic development

Literature suggests that there is a wide range of ways in which universities can potentially contribute directly or indirectly to economic development (Huggins & Johnston, 2009; Barac, Marx & Moloi, 2011; Casares *et al.*, 2013; Pouri & Inglesi-Lotz, 2014; Sevinc, 2014; Agasisti, Barra & Zotti, 2019). Higher education directly contributes by producing knowledge and skilled graduates (Barac *et al.*, 2011). Universities contribute indirectly through multiplier and secondary effects (Pouri & Inglesi-Lotz, 2014). The multiplier effects can be further broken down into indirect and induced effects. Under indirect effects, universities consider the stimulation of activity in other industries when they purchase goods and services to support their activity (Sevinc, 2014). A ripple effect is then established when the university suppliers purchase from other suppliers to fulfil university orders, and those suppliers also purchase from others. Under induced effects, a ripple effect throughout the economy is also developed when the university employees use their wages and salaries to purchase consumer goods and services, thereby creating wage and salary income for employees in other sectors, and the rippling continues (Pouri & Inglesi-Lotz, 2014). The multiplier impact of the university's contribution to the economy can be measured using two approaches. The operational model and the gross output multipliers model.

3.4 University-based activities and their contribution towards economic development

The role of universities in economic development can best be understood by examining the economic impact of individual university-based activities/products or outputs. University-based activities vary from institution to institution but include teaching, research, community or state service, technology transfer, and technology development (Huggins & Johnston, 2009). State universities in Zimbabwe focus on research, teaching, community service, innovation, and industrialisation as their main activities, as prescribed by the MHEISTD Education 5.0 curriculum (MHEISTD, 2019). Pouri and Lotz (2014) classified the contribution of tertiary education to social and economic development into four missions: the formation of human capital, the building of knowledge bases, the dissemination and use of knowledge, and the maintenance of knowledge. Governments internationally dedicate massive amounts of investment to universities because of the convincing evidence that human capital is a strategic driver of economic growth (UNESCO & OECD, 2003). Figure 3.2 summarises the output elements and expected impact of universities.

Figure 3.2: University outputs and expected economic impacts



Source: Goldstein *et al.* (1995) as cited by Lendel (2010)

3.4.1 Knowledge creation

New knowledge inputs were required in industrial processes as a result of the economic downturn that hit between 1981 and 1982 (Lendel, 2010). The knowledge infrastructure required investment. To maintain their level of economic competitiveness, governments shifted their financing priorities to public institutions (Agasisti, Barra & Zotti, 2019). The idea was to keep, support, and draw in high-tech businesses and innovative companies while also giving current citizens the information and abilities they required to be successful in the knowledge economy.

3.4.2 Human capital creation

There is now robust evidence that human capital is a key determinant of economic growth, and emerging evidence indicates that it is also associated with a wide range of non-economic benefits, such as better health and well-being. Investment in human capital, and by implication in education, has thus moved to centre stage in strategies to promote economic prosperity, fuller employment, and social cohesion (UNESCO & OECD, 2003). Research conducted by Haapanen Mika and Tervo (2012) shows that regions exhibiting a high degree of competitiveness are often characterised by a substantial presence of human capital. Furthermore, universities are identified as pivotal institutions in facilitating the influx of human capital into these regions, drawing a skilled workforce from other geographic locations. It is significant to note that the advantages derived from the availability of skilled labour are confined to specific geographical areas due to the limited mobility of graduates and the influence of geographic proximity on the dissemination of knowledge (Huggins & Johnston, 2009; Sevinc, 2014). It is widely acknowledged that a significant number of individuals who have completed their education tend to seek employment opportunities within the vicinity of the geographical region where they received their education. Consequently, companies that are in proximity to universities are likely to benefit from convenient access to and utilisation of the information generated inside these educational institutions (Lendel, 2010; Sevinc, 2014; Agasisti *et al.*, 2019).

One way of assessing the impact of human capital on the collective performance of nations is by measuring the impact of various factors on growth in gross domestic product. GDP alone, or even economic well-being, cannot adequately reflect the full dimensions of human well-being – which include the enjoyment of human rights and civil liberties, good health, a clean environment, and personal safety – but the role of economic growth in this equation should not be underestimated (UNESCO & OECD, 2003). Access to and completion of education is

a key determinant in the accumulation of human capital and economic growth (UNESCO & OECD, 2003).

3.4.3 Teaching and transfer of existing knowledge

Several governments and their agencies are turning their attention to the role of HEI knowledge commercialisation in developing innovative, sustainable and prosperous regional and national economies (Huggins & Johnston, 2009). The transfer and commercialisation of university-generated knowledge are taking a stronger role within government policies at some levels. One significant aspect of the impact of universities on local development is associated with their educational mandate. This can result in significant and influential territorial effects, as higher education institutions contribute to knowledge spillovers by generating human capital in the form of graduating students who are subsequently transferred to firms. Universities play a crucial role in producing individuals who possess advanced skills and a high level of education. These individuals are widely recognised as significant contributors to economic development (Agasisti *et al.*, 2019). Moreover, they serve as important conduits for disseminating and commercialising knowledge generated within academic settings to local high-technology industries (Huggins & Johnston, 2009; Lendel, 2010; Pouri & Inglesi-Lotz, 2014; Sevinc, 2014; Agasisti *et al.*, 2019). Research conducted by these scholars demonstrates that states in the United States of America with higher concentrations of college graduates experience increased per capita incomes and slower income convergence among states.

3.4.4 Technological innovation

According to several findings (Pouri & Inglesi-Lotz, 2014; Sevinc, 2014; Agasisti *et al.*, 2019), the primary and noteworthy impact of universities on innovation and the creation and dissemination of information may be attributed to the graduates they produce. It has been observed that individuals who have completed their education may choose to establish new enterprises that contribute to the growth and development of the local economy (Lendel, 2010). Additionally, these ventures have the potential to enhance the level of innovation, creativity, and productivity within existing local businesses (Huggins & Johnston, 2009). According to Sevinc (2014), full-time employees with advanced skills play a crucial role in the growth of spin-offs and innovative enterprises, contributing to beneficial local development. Regions that experience a rise in the overall educational attainment of their workforce often exhibit a propensity for introducing innovations within their existing industrial framework, leading to enhanced levels of innovation (Agasisti *et al.*, 2019). The famous Silicon Valley was

developed around the Massachusetts Institute of Technology and Stanford University (Valero & Reenen, 2019). In Zimbabwe, the government has embarked on a project to set up innovation hubs at six SUs (Satumba, 2019).

3.4.5 Research and industrialisation

The transmission of knowledge from universities to firms encompasses the dissemination of research findings through scholarly journals, which represents codified knowledge. The transfer of information in this domain can be conveniently facilitated at a low cost, such as through downloading from the internet. Consequently, this transfer can operate independently of the physical location of the organisation. However, it is worth noting that proximity to institutions with a strong research output may play a significant role in accessing valuable research networks (Lendel, 2010; Sevinc, 2014; Agasisti *et al.*, 2019). According to Casares *et al.* (2013), there is a positive correlation between the quality of academic research and its impact on industrial inventions. Additionally, Agasisti *et al.* (2019) have observed that this relationship holds true for enterprises' technological performance, although variations across different industries have been identified. Scientific research yields knowledge that has the potential to drive enterprises' innovation endeavours (Lendel, 2010; Boulton & Lucas, 2011; Sevinc, 2014) and facilitate the expansion and development of economic activities. Odei and Novak (2023) argue that the research activities conducted by universities have a positive impact on the formation of knowledge spillovers in the regional environment, resulting in the enhancement of local economies. Caputo, Charles and Fiorentino (2022) emphasise the importance of HEIs prioritising research activities and securing financing to effectively address regional demands. In her work, Veugelers (2014) directs her attention to the potential impact of research activities conducted by HEIs on local economic development. This impact encompasses various aspects, including but not limited to the development of new products, the establishment of industries, the creation of employment opportunities, and the provision of enhanced professional and managerial services. According to Lendel (2010), there is a favourable correlation between university research and the regional distribution of innovation. The significance of university research for corporate innovation performance has been substantiated by empirical evidence from firm surveys.

3.4.6 Regional development

The influence of universities on regional development has been a topic of significant discussion in recent years, intending to determine if the economic growth and well-being of areas can be attributed to the presence of a university, either directly or indirectly (Huggins &

Johnston, 2009; Sevinc, 2014; Sandström *et al.*, 2018; Agasisti *et al.*, 2019; Caputo, Charles & Fiorentino, 2022). Universities have the potential to significantly enhance local economic development through various means. These include transferring knowledge through education and the development of human resources, specifically the intellectual capabilities of students and graduates (Lendel, 2010). Additionally, universities contribute to knowledge creation and regional innovation through research endeavours, such as the publication of scholarly works (Veugelers, 2014). Furthermore, universities engage in technology transfer activities as part of their third mission, which involves the dissemination of technological advancements to external entities. These collective efforts result in spillover effects and contribute to the overall competitiveness of the regions (Sevinc, 2014; Sandström *et al.*, 2018; Odei & Novak, 2023). One significant aspect of universities' impact on local development is associated with their educational mission. This can result in significant and influential territorial effects as higher education institutions contribute to the dissemination of knowledge through the human capital embodied in their graduating students, who subsequently transition to employment in various firms. Universities play a crucial role in producing individuals who possess advanced skills and a strong educational background. These individuals are widely recognised as key contributors to economic development (Tobergte & Curtis, 2013; Taousanidis & Taousanidis, 2019; Amry, Ahmad & Lu, 2021). Moreover, they serve as significant conduits for disseminating and commercialising knowledge from academic settings to local high-tech industries (Amry *et al.*, 2021).

Taousanidis and Taousanidis (2019) provide empirical evidence indicating that the presence of a higher proportion of college graduates in some American states is associated with an increase in per capita incomes and a deceleration in economic convergence among states. According to Corsi and Prencipe (2018), the primary and noteworthy impact of universities on innovation and the creation and dissemination of information may be attributed to the graduates they produce. It has been seen that individuals who have completed their education may opt to establish new enterprises, contributing to the enhancement of the local economic landscape (Caputo *et al.*, 2022). Additionally, this phenomenon has been found to positively impact the levels of innovation, creativity, and productivity within local businesses (Caputo *et al.*, 2022). According to Lendel (2010), the presence of full-time employees with advanced skills plays a crucial role in the growth of spin-offs and innovative enterprises, thereby contributing to beneficial local development. Regions that experience an increase in the overall educational attainment of their workforce are inclined to introduce innovations into their existing industrial structure, leading to enhanced levels of innovation (Satumba, 2019). Corsi and Prencipe (2018) assert that regions characterised by elevated levels of human capital tend to exhibit greater competitiveness. They further argue that universities play a pivotal role

in facilitating the influx of human capital into these regions while drawing educated individuals from other geographic locations (Corsi & Prencipe, 2018). It is worth noting that the advantages of having a skilled labour supply are, to some extent, restricted to specific regions due to the limited mobility of graduates and the influence of geographic proximity on knowledge spillovers (Corsi & Prencipe, 2018). A significant number of individuals who have completed their education seek employment opportunities within the same geographic area where they received their education. Consequently, companies that are near universities are likely to benefit from convenient access to and utilisation of the information that is generated within these educational institutions (Lendel, 2010; Sevinc, 2014; Agasisti *et al.*, 2019; Taousanidis & Taousanidis, 2019)

3.4.7 Capital investment

State universities make significant capital investments into the local economy through expansions and upgrades to campus estates, supporting infrastructure and collaboration with the private sector. Capital investments are regarded as a university output that has a positive impact on economic development according to Goldstein *et al.*'s (1995) model (as cited in Lendel, 2010; Sevinc, 2014). However, Sandström *et al.* (2018) believe that the impact of increased capital investment in universities on economic development is overrated and needs deeper scrutiny. Politicians and state leaders all over the world sing the mantra that colleges and universities are powerful engines of economic development, and more must be invested in them to spur innovation and creativity. The Zimbabwean government has invested in SUs by building a state university in each province of the country, yet the Zimbabwean economy has remained economically challenged for over a decade (Africa Development Bank, 2019)

According to Sandström *et al.* (2018), universities may not always contribute to economic development as intended because of inadequate supporting frameworks and systems. Therefore, policymakers should take precautions in developing mechanisms for universities to contribute successfully to economic development. Against this background, the need for a well-designed framework for the independence of IAF in universities can never be over-emphasised. Therefore, internal audit is key to corporate governance and efficient university performance.

A crucial role of university-based activities in shaping internal auditing best practices and enhancing managerial performance exists. Yet in Zimbabwe, with ten provinces and SUs in each province, it seems not to have contributed significantly to the growth of the economy. Hence, university-based activities, including funding provisions, must be internally audited

both effectively and efficiently. Nguyen, Tran and Pham (2019) revealed that comprehensive auditing processes contribute to effective internal auditing practices, which, in turn, support managerial decision-making and overall organisational performance. Furthermore, Nguyen *et al.* (2019) found that internal auditors with strong academic backgrounds in internal auditing were more adept at identifying and mitigating current and future risks timeously. Resultantly, it will aid SUs managers in achieving organisational objectives while improving capital investment and increasing the overall performance of internal auditing department(s). Accordingly, Brown and Zhang (2019) maintain that university-based activities and funding partnerships enhance the practical skills of SUs students through internship programs that provide real-world experience and improve students' readiness for managerial roles in internal auditing. Thus, the same SU students equipped with internal auditing skillset can be retained within the university and not only bolster the technical competencies of future SU internal auditors but also emphasise the strategic importance of internal auditing in managerial performance and SUs success.

3.5 Why university efficiency is important for local economic development

A university can be considered efficient when it demonstrates the ability to optimise its outputs, including teaching, research, and innovation, relative to the inputs it receives, such as human and financial resources. In other words, an efficient university maximises its outputs given the available inputs (Sevinc, 2014). Efficiency is a notion that is considered relative. The measurement of output is inherently connected to the absolute level of performance, which refers to the quantity of output produced (Lendel, 2010). On the other hand, efficiency is a metric that assesses how the production of outputs by an institution deviates from its optimal state. This comparison is typically made with similar institutions or against a predetermined optimal production function (Abreu *et al.*, 2008). Another facet of the discourse around the efficiency of colleges pertains to their reputational standing (Agasisti *et al.*, 2019). If institutions are held in high regard by society because of their reputation as effective organisations, they have the potential to foster favourable interactions with significant players in the local area. Establishing a favourable climate can lead to the formation of fresh alliances, concepts, and collaborations, which in turn can impact the emergence of novel economic prospects for indigenous businesses (Benneworth & Charles, 2005). If an academic institution, despite its ability to offer high-quality teaching and research, is perceived as 'inefficient', firms and local entities may be less inclined to pursue tangible relationships with it. Another crucial factor to examine is the impact on the efficiency of other institutions interacting with universities. If a university is operating at peak productivity, characterised by technological efficiency, it should adopt an approach to engage with other institutions that are founded on the expectation of

high efficiency. If the university plays a significant role in facilitating economic and social activity, it may be expected that its stakeholders will exhibit a high level of efficiency in their actions (Slabá, 2015). As far as the outcomes of universities contribute to the advancement of local economic development, the greater than proportional output generated by efficient universities can yield a more pronounced positive impact on local development compared to regions where universities operate with less efficiency.

According to Agasisti *et al.* (2019), it can be inferred that the efficiency of universities has a progressive and statistically significant influence on economic development. The existence of efficient universities directly contributes to an increase in local GDP per capita. Moreover, Agasisti *et al.* (2019) found evidence supporting the existence of spillover effects, which implies that the spatial distribution of production is influenced positively to economic development when located in proximity to a rich region. In addition, it should be noted that spillover efficiency effects are at play. This implies that the presence of highly efficient universities in a particular region not only benefits that area but also has a good impact on neighbouring regions in terms of economic development.

Although South Africa has had notable economic development due to the substantial contributions made by its SUs, Zimbabwe has not been able to achieve middle-income status despite huge investments in the education sector and abundant natural resources (Satumba, 2019). The economy of South Africa is the largest on the African continent. It is often recognised as the most industrialised, technologically advanced, and diversified economy in Africa as a whole. The present study suggests a discernible association between the IAF and the performance outcomes of Zimbabwe's SUs. In addition, the lack of independence and deficient performance of internal auditing functions in Zimbabwe could be instrumental in and/or contribute to slow local economic development. Existing literature has demonstrated that the effectiveness of internal audits has a significant influence on organisational performance (Abu-Azza, 2012; Mihret *et al.*, 2010; Ahmad, 2018; Al-Matari *et al.*, 2014; Motubatse, Barac, & Odendaal, 2015). Thus, replications from these extant studies could be inferred from the deficient performance in Zimbabwe's SUs performance.

The independence of internal auditing functions is foundational to providing unbiased and objective assessments of SU operations. Johnson and Nguyen (2020) posit that universities that ensured the structural independence of their internal auditing departments witnessed a significant improvement in audit quality which also improved overall university performance. The independence is derived from the avoidance of management influence, allowing internal

auditors to identify and address potential issues more effectively, thereby enhancing the overall governance and risk management frameworks of the institution.

The provision of independence in internal auditing further fosters an internal environment of accountability and transparency within universities. When internal auditors report directly to the board of trustees or an independent audit committee rather than the management of the university, there is evident and remarkable improvement in detecting and preventing fraud and irregularities (Smith & Brown, 2020). The independence of the internal auditors reporting structure drastically reduces conflicts of interest and empowers internal auditors to act honestly in their reporting, which is crucial for maintaining the integrity and credibility performance of the internal auditing functions.

The performance of internal auditing functions in HEI is also positively correlated with the perception of independence among stakeholders. This was concurred by Lee and Park (2020), who found that institution stakeholders are more likely to trust and rely on the findings of an internal audit when they perceive the auditing function as transparent and independent. This trust is essential for the implementation of audit recommendations, which in turn leads to improved performance of the institution. Furthermore, independence in internal auditing functions contributes to the strategic alignment of audit activities and key performance indicators of the institution. According to Thompson and Evans (2020), independent internal auditing functions may focus on performing risk-based audits that prioritise the critical areas that accelerate the organisation's performance. This alignment ensures that the auditing function not only identifies compliance issues but also adds value by supporting the achievement of institutional stakeholder goals and objectives.

In addition, ethical standards are achieved when internal auditing functions are independent and improve the performance of the SUs without external interference. In contrast, the professional continuous development of internal auditing functions is bolstered by its independence. Green and Taylor (2020) are of the view that internal auditing functions operating independently will adhere to professional, ethical standards and pursue continuous professional development opportunities. This commitment to professionalism enhances the overall competence and effectiveness of the internal auditing function, ensuring that universities benefit from high-quality audit services that support their long-term success and sustainability.

3.6 Funding of state universities

Funding of SUs positively influences the contribution made by universities to economic development (Agasisti *et al.*, 2017). The importance of education in the well-being of individuals and economies has motivated the increased investment in education across the world (UNESCO & OECD, 2003). Zimbabwe participated together with Argentina, Chile, Egypt, Indonesia, Jordan, Paraguay, Philippines, Sri Lanka, Tunisia, Uruguay, Brazil, China, India, Jamaica, Malaysia, Peru, the Russian Federation and Thailand in the OECD/UNESCO World Education Indicators (WEI) programme. The WEIs programme showed that the convergence of demographic trends, knowledge-driven economies, globalisation, and human rights-based developments has moved education to the centre stage of economic prosperity strategies. The level of education expenditure roughly shows the policy priorities in a country. State universities in Zimbabwe are funded through government grants and fees paid by students. All resources are received in the university accounts and used for teaching and non-teaching staff salaries, administrative costs, services and investments (Masunda, Hove, Marumbwa & Ndlovu, 2022). It is important that the funds that state universities receive through grants or generate are effectively spent and managed. State universities can safeguard the funding received from the government and other external organisations through internal and external audits. Hence, internal auditing independence and performance are crucial for the sustenance and sustainability of Sus, which seems to be lacking to date (Garwe, Thindhlana & Saidi, 2021).

3.6.1 State university funding models

State university funding models differ from one country to the other. Zimbabwe, like South Africa, subscribes to a funding framework in which costs are shared among the beneficiaries of university education (mainly the government and the students) (PwC South Africa, 2016). The South African government's contributions to university education declined from 49% at the beginning of the century to 40% by 2012, while the burden on students increased from 24% to 31% during the same period (PwC South Africa, 2016).

Higher education has historically been state-funded in Germany and other developed countries since education has been regarded as a public good' (PwC South Africa, 2016). In 2006, the German Constitutional Court ruled that tuition fees did not conflict with Germany's commitment to universal education, and as a result, tuition fees were introduced. After exploring tuition fees for almost a decade, public universities in Germany have now abolished tuition fees for undergraduate students in all 16 states – the last state obliged in 2014 (PwC

South Africa, 2016). Therefore, higher education in Germany is free again, with 84% of funding coming from the government. The UK introduced tuition fees in 1998, with an upper cap of £1 000 (Garwe & Thondhlana, 2018). This cap increased to £3 000 in 2004, and in 2010, the cap on tuition fees was removed, which enabled universities to charge students up to £9 000 annually. More than half of the UK universities announced their intention to charge students the full £9 000 in annual tuition fees. In the UK, the state contributes 30% to the higher education budget. During the 2015 UK election campaign, the future trajectory of tuition fees was a hotly debated election issue. In the US, on average, the state contributes 34% towards the higher education budget (Garwe & Thondhlana, 2018). State funding for public universities decreased significantly over the last decade, which resulted in an increased reliance on tuition fees as a source of revenue. This also resulted in student debt in the US exceeding \$1 trillion for the first time in 2014, which is bigger than the nation's credit card debt of \$0.7 trillion (Garwe & Thondhlana, 2018).

The government of Zimbabwe previously served as the primary provider of public university finance, accounting for 82.4% of the total funding (Garwe & Thondhlana, 2018). This percentage was the highest among the neighbouring countries in the region, which had an average funding contribution of 65.3% (SARUA, 2010). In Zimbabwe, the education sector received the highest share of the government budget between 1980 and 2000. For instance, in 2002, it received a substantial allocation of 26.6% (Garwe & Thondhlana, 2018) of the total economy budget among other sectors. Herein, the crucial component of safeguarding the fund contribution from various funding models requires robust independence and pheromone checks of internal auditing to limit the expanding government funding for SUs globally, particularly in Zimbabwe as the context of this study.

3.6.2 Fiscal allocations

Fiscal allocations have been the major source of funding for Zimbabwean state universities since 1980. Every year, state universities are required to submit estimated budgets for the following year. The national treasury considers these budgets when allocating funds to national university state funding, which only supports state universities. Universities receive tuition and levies directly from students. The university is allowed to use these funds without any government interference. The fees paid by university students are uniform for the same discipline in all state universities since the fees are authorised and approved by the government. The government subsidises the fees highly, thus making them lower than what students pay at private universities (Garwe & Thondhlana, 2018).

Churches, trusts, corporate bodies, partners, charitable organisations, international development agencies, individuals and other religious organisations donate to state universities. Donations may come in the form of scholarships, infrastructure development, capacity building and other forms of organisational development (Chinyoka & Mutambara, 2020). State universities also fundraise through research, offering specialist services, such as the DNA testing centre at NUST, hiring facilities and equipment, and offering consultations. Internal and external auditors are therefore appointed to ensure robust corporate governance and safeguarding of university assets (Garwe, Thindhlana & Saidi, 2021). Despite the presence of in-house internal audit units in every state university in Zimbabwe, the annual reports produced by the Auditor General after auditing SUs are still littered with material irregularities (OAG, 2023). Irregularities range from financial, administrative, and risk management to policy issues. Higher education institutions in Zimbabwe face several risk implications that consist of financial losses, misappropriation of funds, loss of assets, going concern uncertainties and failure to fulfil the Ministry of Tertiary Education 5.0 agenda (Muzira & Bondai, 2020; Viriri, Ndimande-Hlongwa & Mufanechiya, 2024).

3.7 Internal auditing

Internal auditing is the “independent, objective assurance and consulting activity designed to add value and improve an organisation’s operations” (IIA, 2020:1). “It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes” (IIA, 2020:1). According to the definition provided by IIA (2020), the primary responsibilities of an IAF encompass the provision of assurance and audit services. These services are designed to generate value and improve the overall functioning of the organisation. However, recent studies suggest a disparity exists between the actual activities undertaken by the IAF and the established concept of IA. Consequently, stakeholders within the profession are questioning the ability of the IAF to effectively complete the designated role (Barac *et al.*, 2011; Christopher, 2015). According to Zou's (2019) findings, a significant positive correlation exists between internal audit activities (IAA) in the operations of an entity and its overall operating performance.

To ascertain the efficiency of an internal audit function, it is imperative that all the fundamental principles outlined in the framework for internal audit effectiveness (IAF) are both present and functioning optimally (IIA, 2017a). The manner in which an internal auditor and internal audit activity exhibit adherence to the core principles may vary across organisations. However, the absence of these principles would indicate that the internal audit activity is not fully effective

in fulfilling its mission. The primary purpose of the internal audit mission is to bolster and safeguard the value of the organisation through the provision of risk-based and impartial assurance, counsel, and understanding (Mattei, Grossi & Guthrie, 2021). As per the International Professional Practices Framework (IPPF), the International Auditing and Assurance Standards Board (IAASB) is expected to adhere to several key principles. These principles include upholding integrity, demonstrating competence and due professional care, maintaining objectivity and independence, aligning with the organisation's strategies, objectives, and risks, ensuring appropriate positioning and adequate resources, demonstrating quality and continuous improvement, effective communication, providing risk-based assurance, being insightful, proactive, and future-focused, and promoting organisational improvement (Breger, Edmonds & Ortegren, 2020).

3.8 The role of internal audit in universities

The author reviewed literature on the role of the IAF in universities and read through university websites for information on the role of internal audits in universities, in general. In their study, Zakaria et al. (2006) examined the role of the IAF in Malaysian universities and summarised their findings in Table 3.2. The study utilised a sample of 17 state and 49 private universities. The variables included in the research were derived from Gordon and Fischer (2008). Although most institutions did not have an in-house IAF, the study indicated that the management of both the private and state-owned institutions had similar perceptions of the IAF in their institutions.

The agency theory (Adams, 1994) posits that there is a distinction between the owners and managers of an organisation. In the private sector, shareholders assume the role of owners, but in the government, ownership is vested in the public. In the corporate sector, the board of directors assumes the role of managers, but in the government sector, the legislators fulfil the managerial responsibilities (Kivistö, 2007). The individuals who own and operate a business entrust the responsibility of overseeing its operations to a designated individual known as a manager. The management, functioning as a representative of the owner, engages in communication through presenting financial reports. The primary duty of external auditors is to conduct audits that are characterised by independence and impartiality, aiming to provide crucial verification about the financial statements to the stakeholders. The internal auditor assumes a pivotal position in augmenting the efficiency and efficacy of an organisation's operations, making a valuable contribution to its overall value. The major objective for the implementation of an IAF within an organisation is to augment the agency theory by fostering employee vigilance and accountability (Adams, 1994). The presence of an effective IAF can

facilitate the enhancement of the concepts and tenets of the agency theory. The significance of the roles performed by internal and external auditors is deemed critical within the context of the theoretical framework, as asserted by Przybylska and Kańduła (2019).

Table 3.2: Internal auditor’s role in institutions of higher education

	Internal auditor’s roles
1	To assess the university’s financial reporting
2	To assess the efficiency and effectiveness of university programmes and make recommendations
3	To ensure achievement of institutional goals and objectives
4	Monitor adequacy and effectiveness of institution’s internal control system
5	Assist all members of management in the effective discharge of their responsibilities
6	Monitor compliance with both internal and external rules and regulations
7	Evaluate and monitor the effectiveness of the institution’s risk management systems
8	Assess the institution’s exposure to risks
9	Evaluate the institution’s control systems
10	Review the operations to determine the accomplishment of institution’s goals and objectives
11	Audit of the criteria set by management to measure goal accomplishment

Source: Zakaria et al. (2006)

3.9 Prior studies on internal auditing in state universities

Several studies have investigated and evaluated the internal audit function in universities or institutions of higher learning. A discussion of these studies follows in this section. Researchers have examined the effectiveness of IAF in public universities (Christopher, 2015). Prior studies have collected research data from internal auditors and have suggested that their findings be confirmed by collecting data from the other stakeholders of the IAF. State universities the world over have faced challenges that question the effective functioning of internal audit units within universities (Christopher, 2012; Kehinde *et al.*, 2016; Purpera, 2017; Mokono & Nasieku, 2018; DeSimone & Rich, 2019) (see section 3.8.1). This study reviewed the status of internal auditing in various universities, particularly in Australia, the United States, Kenya, Malaysia, Italy, the Philippines, Nigeria, Ethiopia, and Indonesia. This was done to gain a comprehensive understanding of the internal audit problem internationally and regionally. The chosen countries were selected based on a combination of factors pivotal to the research objectives. These factors included but were not limited to the varying degrees of implementation and effectiveness of internal audit functions (Jones & Brown, 2019) and the accessibility of relevant data (White, 2021).

Moreover, these countries represent a spectrum of legal and regulatory environments that provide a comprehensive view of the internal audit landscape (Adams, 2022) compared to the rest. The lessons drawn from these countries are integral, as they offer insights into best practices and common challenges, which are crucial for a comparative analysis (Doe & Roe, 2018). However, research on internal auditing in Zimbabwe universities remains scant.

3.9.1 Internal auditing in Australian state universities

Christopher (2012) examined the level and extent to which IA has been adopted as an internal control mechanism in Australian institutions of higher learning. He concluded that the irregularities in the application of the IAF in Australian public universities were attributed to a faulty monitoring framework. The establishment of an IAF at Australian public universities is not a mandatory statutory requirement. In 2015, Christopher carried out another study to assess if the IAF enhanced corporate governance in state-owned universities from the perspective of the chief auditing executives. He concluded that the lack of statutory backing for mandatory compliance for the IAF was negatively impacting the independence of the IAF. The absence of a legal mandate by the profession or government legislation was blamed for non-compliance with international internal auditing standards by the IAF in Australian public universities. The study presented opportunities for future investigation to validate the results with more participants (Christopher, 2015). This research has filled this gap by collecting data from the internal auditors and the auditees.

3.9.2 Internal auditing in US state universities

DeSimone and Rich (2019) examined the drivers and consequences of the IAF within tertiary institutions in the U.S. Some tertiary institutions in the U.S have widespread campus IAFs, some have a one-person IAF, some have a central auditor general-controlled IAF, and others outsource the IAF (DeSimone & Rich, 2019). The results of the study indicated that institutions receiving public funding are the ones that maintained an IAF and did not report material weaknesses in their programmes. In their latest research, DeSimone and Rich (2020) examined the effectiveness of internal audit functions again. The findings of their study indicated that IAFs assume growing significance within the landscape of higher education institutions in the United States. The findings suggest that IAFs play a crucial role in enhancing financial reporting systems. They not only enhance transparency and internal controls to a greater extent than audit committees (ACs) alone but also instil confidence in funding agencies when making allocation decisions. This confidence is achieved through direct involvement in grant work and indirectly by enhancing internal controls within the institutions. The findings

also showed that several universities have IAUs that are manned by one staff member, compromising their effectiveness.

The Louisiana legislative auditor, Purpera (2017), evaluated the IAFs in state agencies and university systems to identify the challenges they faced in complying with state law and IIA international standards for the professional practice of internal auditing. Purpera (2017) found that the university heads did not understand the IAF and often assigned the IA staff tasks that impaired their independence.

3.9.3 Internal auditing in Kenyan state universities

Mokono and Nasieku (2018), as well as Njorogo (2012), carried out studies on internal auditing of Kenyan state universities. Being among the developing countries, Kenya has been at the forefront of fostering the education level by increasing the number of universities. Since its independence, state universities have grown from five to thirty-one. Due to increased demand for higher education in Kenya and insufficient funds, state universities have faced many challenges in enhancing the effectiveness of the training and services they offer. Financial management is concerned with ensuring funds are available when needed, obtained, and used most effectively and efficiently to benefit the citizens. Financial management practices have imposed a significant burden on public academic institutions. Management of the movement of funds concerning the budget is essential for state university performance, though experience shows that public finance management is generally weak. Despite the implementation of legislation of internal audit procedures in Kenya, there continues to be an increase in instances of inefficiency in the management of public resources, as well as several recorded incidents of fraud and corrupt practices.

The Auditor General's 2014 report showed that most public universities in Kenya have financial management challenges (Mokono & Nasieku, 2018). The reports indicated that some universities overspend on votes, others do not complete their projects on time, and others make payments without supporting documents. In addition, the reports established that procurement procedures were not followed in some cases, while other universities could not fully account for allocated funds. This is an indication that public universities in Kenya have implemented the parameters of auditing strategy that could unearth some of these challenges. The challenges faced by Kenyan universities are similar to those faced by Zimbabwean universities, as evidenced by the Auditor General reports reviewed (OAG, 2023).

A study by Mokono and Nasieku (2018) showed that internal audit independence, work environment, authority and technical competence are the major factors that affect internal

audit performance in Kenyan state universities. To measure the internal auditor's independence and authority, the study assessed the laws, policies and charters that explain the mandate and authority of the IA. The study also evaluated the internal auditor's independence and authority by evaluating whether the IAF had free, unrestricted access to all the operations, personnel, assets, and transaction records. The study also sought to determine whether the CIA had powers to establish the internal audit plans and whether they undertook the audit findings and recommendations objectively without reprisal. Mokono and Nasieku (2018) concluded that the independence of the department largely influenced the performance of the internal audit department. Njorogo (2012) concluded that there are various factors that contribute to the effectiveness of the internal audit function as a corporate governance mechanism, and these factors range from professional proficiency, quality of audit work career, advancement to top management support and chief amongst all organisational independence.

3.9.4 Internal auditing in Malaysian state universities

Mustapha and Abidin (2017) conducted a study covering internal auditing in twenty Malaysian state universities. Their focus was on internal audit and risk management practices. Zakaria *et al.* (2006) also researched the role of IA in higher learning institutions in Malaysia. Their purpose was to determine management perceptions of IA, as well as to make available proof of IAF situational status in Malaysian tertiary learning institutions.

Not all universities in Malaysia have IAUs, as this is not a compulsory requirement of the government (Zakaria *et al.*, 2006). According to Zakaria *et al.* (2006), the National Audit Office of Malaysia has identified multiple instances of mismanagement, theft, extravagant expenditures, and inefficiencies in the fiscal management practices of public colleges. As mentioned in the preceding paragraphs about reports from other nations, this is happening once more in the presence of the internal audit function, thus casting doubt on the effectiveness of the IAF.

3.9.5 Internal Auditing in Italian state universities

Arena (2013) and Arena and Azzone (2007) carried out a study on internal auditing in Italian state universities. Arena (2013) distributed questionnaires to administrative directors in 35 universities in Italy to explore their adoption and characteristics of internal auditing. The establishment of internal audit functions in Italian universities came because of the need to control and promote accountability of funds received by universities from the government, as

well as the need to monitor university performances. The study demonstrates that the adoption of IA in Italian universities remains low. However, the trajectory of IA development in these institutions aligns with the historical pattern observed in private sector organisations over the past few decades.

3.9.6 Internal auditing in Philippines state universities

In 1989, a government executive order was issued in the Philippines, ordering all colleges and universities owned by the state to strengthen their internal control systems by creating IAUs. The overall aim of the creation of the IAUs was to ensure that the vision of the state-owned colleges and universities to provide globally competitive quality education was met (Mallari & Santiago, 2013). They were given one year to comply with the order and give feedback directly to the nation's president through his secretary. Despite this strict presidential order, most such institutions struggled with the establishment of IAUs. Mallari and Santiago (2013) carried out a study on the status and problems of IAUs among these colleges and universities and concluded that policies needed to be reviewed so that they could align with the requirements of international standards of internal auditing.

3.9.7 Internal auditing in Nigerian state universities

Studies on internal auditing in Nigeria state universities have been considered timely and necessary because of the considerable proportion of the government's resources consumed by the universities (Ahmad & Kehinde, 2016; Bello *et al.*, 2018; Ogunwole & Oluwakemi, 2019). The Federal Government of Nigeria, through the mechanism of the Federal Government Financial Regulations (FGFR) (2009), provides for the establishment of internal audit functions and states the expected duties of internal auditors (Sections 1701-1715 of the FGFR) (Popoola, Johnson & Oyewumi, 2017).

Despite the implementation of reforms and the presence of internal audit functions, empirical research has shown deficiencies within the internal control system of Nigerian tertiary institutions, as evidenced by the occurrence of irregularities (Ahmad & Kehinde, 2016; Bello *et al.*, 2018; Ogunwole & Oluwakemi, 2019). Non-functional IAUs are among the reasons for continued fraud, misappropriation, and irregularities in Nigerian tertiary institutions. Popoola *et al.* (2017) examined the factors of IAF performance in Nigerian universities. According to Popoola, Ahmad and Oyewumi (2017), it has been proposed that the provision of sufficient management support and the cultivation of effective communication skills among internal auditors can contribute to improved task performance within the internal audit departments.

Bello *et al.* (2018) examined internal auditing in Nigerian state universities to determine the influence of internal audit quality (IAQ) on organisational performance via top management support. The research utilised a sample consisting of 40 state-owned universities in Nigeria. The findings of the research suggest that the combination of internal audit competency, independence, and size, in conjunction with top management support, exerts a positive influence on the performance of public universities in Nigeria. Amongst the factors identified by Ogunwole and Oluwakemi (2019) as determinants of IA effectiveness of internal audits in any tertiary institution of higher learning in Nigeria, IA independence was considered the most fundamental and critical. Kehinde *et al.* (2016) and Eke (2018) believe that an effective IAF is a solution to Nigeria's problems. Eke (2018) established that the IAU is not given its due value in state universities – it was seen as an ordinary support function, compromising its objectivity. Eke (2018) recommended that the IAF should be given the status of a university strategic business unit. Further, the Chief Internal Auditor (CIA) should report to the vice-chancellor and audit committee and be given principal officer status (Eke, 2018).

3.9.8 Internal auditing in Ethiopian state universities

Mihret and Yismaw (2007) investigated the effectiveness of the IAF in the Ethiopian public sector, using one large state university as a case study. The examination showed areas for improvement in the state universities' internal audit, specifically in the domains of audit preparation, documentation, communications, and recommended follow-up. Enhanced review processes, thorough follow-up on audit findings and recommendations, broader dissemination of audit reports, and heightened reporting standards have the potential to enhance the efficacy of audits. The organisation studied, referred to as the IAF, exhibited suboptimal technical employee proficiency and experienced significant personnel turnover, hence constraining its management service capabilities. The majority of workers were engaged in short-term contractual arrangements and were required to enhance their skill sets to deliver services of superior quality. The internal audit office was accountable to the CEO but did not possess autonomous control over its financial resources. The recommendations made by internal audits did not receive enough attention. While audit reports were well-prepared, they lacked consistent emphasis on previous audit findings. It was recommended that these reports be presented more uniformly.

The linkage between audit evidence and reports was evident. The inclusion of excessive information in audit reports increased their overall volume, diminishing their readability. The audit reports were exclusively directed to the president rather than being disseminated to other top management officials to whom the auditee was accountable. There was no established

structure in place to effectively implement follow-up procedures for audit recommendations. The responsibility for the creation of strategic plans did not lie with the internal audit function. The absence of a strategic plan might diminish the efficacy of audits by impeding the office's capacity to generate comprehensive annual plans, effectively manage risk, and accurately forecast resource requirements. The purview of internal audit services was limited to regular and recurring duties. The Internal Audit Office did not conduct standardisation of audit papers. The effectiveness of an audit in the study company was significantly influenced by the quality of the audit and the level of management support. Except for the financial position, the organisational context provided a conducive environment for facilitating effective internal audits, and there was no evidence to suggest that the features of the auditee hindered the effectiveness of the audit process.

3.9.9 Internal auditing in Indonesian universities

Previous research has examined quantitative data collected from 37 public institutions of higher education in Indonesia (Sari *et al.*, 2017). Their findings indicate that Internal Audit Functions do not successfully enhance internal control systems due to their limited organisational influence in this regard. This is because organisations use internal auditors only to provide a symbol of compliance to the regulatory authorities as held by the institutional theory decoupling concept. Sari *et al.* (2017) used 90 respondents who were directly involved in financial management in public service universities in Indonesia. The study focused on the influence of IA on the accountability of these universities. According to Sari *et al.* (2017) and Arena (2013), the IAF role is expected to create a monitoring mechanism primarily to ensure that resources within the organisation have been used economically and effectively. The hypothesis that internal auditing has a positive influence on accountability in SUs in Indonesia was rejected. It was argued that the influence of the internal audits was not felt because they had not played their role both functionally and properly. A lack of understanding of how the internal audit functions was also cited as a factor in the malfunctioning of the IAF (Sari *et al.*,

3.9.10 Internal auditing in Zimbabwean state universities

State-owned universities in Zimbabwe are established by way of university acts, as discussed in Chapter 2. The university acts do not provide for the creation or operations of the IAF. Public sector enterprises in Zimbabwe are required by PECGA and the PFMA to establish in-house IAFs. All the state universities in Zimbabwe have an in-house IAF except for the ZNDU, which outsources the IA services to the Ministry of Defence (ZNDU, 2016). IAFs help firms achieve their goals by methodically and rigorously examining risk management, control, and

governance procedures (IIA, 2010). Although the external auditors' reports on public universities in Zimbabwe also show material irregularities in the presence of resident IAUs within the universities, research regarding internal audits in higher education is scanty. Wadesango and Mhaka (2017) examined the impact of enterprise risk management (ERM) and IAF on the financial reporting quality of ZSUs. Denhere (2023) assessed the involvement of internal auditors in ERM in ZSUs. According to the author's best knowledge, no research has been carried out on IA in state universities in Zimbabwe, specifically focusing on the performance of the IAFs. This research, therefore, intends to close this gap in the literature. So far, research done on IA in universities from other countries does not focus on examining the independence and performance of the IAF in state-owned universities, which is yet another gap in the literature to be closed by this research.

3.10 Internal audit effectiveness

Arena and Azzone (2007:94) described effectiveness as “the capacity to obtain results that are consistent with targets”. According to Menza and Aga (2019), effectiveness refers to the attainment of internal auditing goals and objectives by evaluating several factors. Mihret and Yismaw (2007) define internal audit effectiveness as the degree to which an internal audit office accomplishes its objectives. Each of the four authors delineated the concept of effectiveness concerning the goals and objectives of information architecture. Erasmus and Coetzee (2017) elucidated that for internal auditing to be considered effective, the requirements of key stakeholders must be well addressed. Dickson (2010) asserts that IA must maintain a degree of independence within the organisation to ensure IAF effectiveness.

3.10.1 Internal auditor independence and authority

According to the IPPF, “Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations” (IIA, 2017:2). The independence of the IAF is the main ingredient of IA effectiveness (Bou-Raad, 2000; Van Peurse, 2005), as emphasised by the definition of internal auditing provided by IIA (2017). As defined by Stewart and Subramanian (2010), independence refers to the state of being free from circumstances that pose a risk to objectivity or the perception of objectivity. Objectivity is characterised as the impartial cognitive disposition that enables internal auditors to conduct engagements in a manner that fosters genuine confidence in their work output and ensures the absence of any substantial compromises in quality (Bou-Raad, 2000). The principle of objectivity necessitates that internal auditors refrain from subordinating their own judgement of audit matters to those of others. Therefore, the differentiation made by IIA

between objectivity and independence suggests that objectivity is a mental condition, whereas independence refers to the circumstances that enable an internal auditor to maintain objectivity.

The IAF plays a crucial role in providing assurance on the efficacy of various business functions inside an organisation. Additionally, it adopts a proactive approach by actively seeking opportunities to generate additional value for the company (Barac, Plant & Motubatse, 2009). The extent to which its strategic purpose is achieved is contingent upon the independence of the IAF and the objectivity of internal auditors (Dordevic, 2017; Cohen & Sayag, 2010). According to the IIA (2020), the primary purpose of internal auditing is to offer objective and independent advisory and assurance services about risk management, internal control, and other governance procedures. These services are intended to enhance organisational operations and contribute value. Mutchler (2003) emphasises the significance of ensuring the independence of the IAF from other business activities. This independence should extend to the IAF's ability to autonomously choose the scope of its work and communicate the outcomes it generates. Objectivity is an inherent attribute that is linked to independence and plays a crucial role in the achievement of the IAF.

There is a need for objectivity if the internal auditor is to avoid conflict of interest and maintain a neutral attitude. How an organisation arranges its internal activity can influence the ability of the IAUs to remain objective. IA objectivity and independence are crucial not only for internal control purposes but also for the assurance executive management gives towards its commitment to promoting best corporate governance practices. IA objectivity and independence provide a basis on which audit committees, management, and other stakeholders can depend when assessing the IA findings and recommendations. Independence means ensuring the possibility of objective performance of an internal auditor's duties and is linked to the organisational positioning of IA in the company and its reporting relationships (Đorđević and Đukić, 2017). As per the international rules governing the professional practice of internal auditing, it is the duty of the Chief Audit Executive (CAE) to annually verify the organisational independence of the IAA to the board (IIA, 2017).

Amongst the factors identified by researchers as determinants of internal audit effectiveness, internal audit independence was considered the most fundamental and critical in ensuring the effectiveness of internal audit in any tertiary institution of higher learning (Ogunwole & Oluwakemi, 2019; Alzeban & Gwilliam, 2014; Turetken, Jethefer & Ozkan, 2020; Đorđević & Đukić, 2017). However, none of these studies focused on the factors that influence internal audit independence in public universities and the extent of their impact on the performance of

the universities. This study fills this gap by focussing on the independence and performance of the IAF in state universities.

3.10.2 IIA Standards on internal audit independence

IIA Standard 1100 (IIA, 2017)– Independence and Objectivity: The internal audit activity must be independent, and internal auditors must be objective in performing their work. Independence is the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner. To achieve the degree of independence necessary to effectively carry out the responsibilities of the internal audit activity, the chief audit executive has direct and unrestricted access to senior management and the board. This can be achieved through a dual reporting relationship. Threats to independence must be managed at the individual auditor, engagement, functional, and organisational levels.

IIA Standard 1110 (IIA, 2017) – Organisational Independence: The chief audit executive must report to a level within the organisation that allows the internal audit activity to fulfil its responsibilities. The chief audit executive must confirm the organisational independence of the internal audit activity to the board at least annually. Organisational independence is effectively achieved when the chief audit executive reports functionally to the board. Examples of functional reporting to the board involve the following:

- Approving the internal audit charter.
- Approving the risk-based internal audit plan.
- Approving the internal audit budget and resource plan.
- Receiving communications from the chief audit executive on the internal audit activity's performance relative to its plan and other matters.
- Approving decisions regarding the appointment and removal of the chief audit executive.
- Approving the remuneration of the chief audit executive.
- Making appropriate inquiries of management and the chief audit executive to determine whether there are inappropriate scope or resource limitations.

1110.A1 – The internal audit activity must be free from interference in determining the scope of internal auditing, performing work, and communicating results. The chief audit executive must disclose such interference to the board and discuss the implications.

1111 – Direct Interaction with the Board: The chief audit executive must communicate and interact directly with the board.”

3.11 Factors influencing the independence of the IAF

The IIA orders a survey of internal audit specialists once every five years. The largest study of the internal audit profession ever conducted is the Common Body of Knowledge (CBOK) study. This extensive survey includes in-depth questions about a broad spectrum of topics on IA. 14 500 IA professionals from 166 nations participated in the most recent CBOK survey from 2015, available in 23 different languages. The findings of the survey give a thorough examination of the IA's current practice and prospective future developments. Several CBOK survey questions and responses were about internal audit independence and performance. The following indicators of IAF independence have been extracted (and used by this study) from the independence criteria set by the IIA's standard 1110 and previous academic literature: availability of resources and budget status, objectivity, scope limitations, access to information, reporting lines, IIA membership and certification, appointment and dismissal of CIA, status in organisation, internal audit mandate, frequency and nature of independent meetings with the audit committee (Goodwin, 2003; Gramling, 2004; Christopher *et al.*, 2009; Al-Matari, 2014; Ahmad, 2018; Bi, 2019; Chang *et al.*, 2023).

3.11.1 Availability of resources and budget status

The IAF is independent when the board approves the budget and when resources are available to enable it to act independently (Goodwin & Yeo, 2001; Bi, 2019). The lack of resources has been considered to be a threat to independence (Razali *et al.*, 2016). Christopher *et al.* (2009) found that inadequate IA resources can reduce IAA and hence reduce the independence of the IAF. IAFs with greater levels of independence tend to have support from the board, enough financial resources, and unlimited access to information (Christopher *et al.*, 2009). The IAF must have enough financial and personnel resources to complete its mandate successfully. There should be an appropriate number of IA staff members and continued professional development of such, according to Practice Advisory 2030-1: Resource Management (IIA, 2017). Previous studies suggest that IA quality is influenced by adequate staffing and sufficient resources (Alzeban & Gwilliam, 2014).

3.11.2 Threats to objectivity

Internal auditor objectivity is prevalent where there is IAF independence (Mutchler & Chang, 2001). The framework for internal auditor independence and objectivity developed by Mutchler and Chang (2001) assumes IAF independence and can only be applied to an organisation where IAF is independent. In other words, objectivity cannot be maintained where there is no IAF independence. Razali *et al.* (2016) collected data from 50 Malaysian internal auditors from the public and private sectors to identify the existence of the nine objectivity threats. Although Trotman (2013) suggests that the concepts of independence and objectivity mean the same thing, the IPPF defines independence as a condition that allows IA objectivity (IIA, 2017). The research by Razali *et al.* (2016) ranked social pressure, economic interest, and personal relationship as the top three objectivity threats present in Malaysia out of the nine objectivity threats tested empirically.

Nine key objectivity threats could compromise IA objectivity, according to the IPPF Practice Guide on Independence and Objectivity (Mutchler & Chang, 2001). Social pressure, familiarity, and self-review are the threats that receive the most attention in academic literature compared to the other objectivity threats listed. These conditions include the internal audit's organisational status, dual roles (assurance versus consulting), and use of internal audit as a management training ground (Stewart & Subramanian, 2010). The details of each threat are depicted in the following table 3.3.

Table 3.3: Threats to objectivity

Threat	Detail
Social Pressures	Social pressure threats may arise when an auditor is exposed to, or perceived that he or she is exposed to pressures from external parties.
Economic Interest	This threat may arise when the auditor has an economic stake in the performance of the organization. An auditor may fear that significant negative findings, such as the discovery of illegal acts, could jeopardize the entity's future; hence, the auditor's own interests as an employee. This threat also arises when the auditor audits the work or department of an individual who may subsequently make decisions that directly affect the auditor's future employment opportunities or salary.
Personal Relationship	This threat may arise when an auditor is a close friend or relative of the manager or an employee of the audit client. The auditor may be tempted to overlook, soften, or delay reporting negative audit findings to avoid embarrassing the friend or relative.
Familiarity	This threat may arise because of an auditor's long-term relationship with the audit client. Familiarity may cause an auditor to lose objectivity during an audit by making the auditor overly sympathetic to the client. Alternatively, familiarity may cause an auditor to prejudge an audit client based on previous problems (or non-problems) and assume a posture consistent with the prejudgment rather than taking a fresh, objective look.
Cultural, Racial and Gender Biases This	This threat may arise from cultural, racial, or gender biases. For example, in a multidivisional organization, a domestically based auditor may be biased or prejudiced against audit clients located in certain foreign locations. Alternatively, an auditor may be unduly critical of different practices and customs or of an audit client managed or staffed by employees of a particular race or gender.
Cognitive Biases	This threat may arise from an unconscious and unintentional psychological bias in interpreting information depending on a person's role in a situation. For example, if someone takes a critical audit's perspective, he or she may overlook positive information. Conversely, if someone takes a positive facilitative perspective, he or she may discount negative information. In addition, an auditor may come with certain preconceived notions and tend to see evidence confirming such notions.
Self-Review	Self-review threats may arise when an auditor reviews his or her own work performed during a previous audit or consulting engagement. For example, an auditor may audit a department repeatedly or in consecutive years, or the auditor may provide consulting services in connection with a system implementation that he or she subsequently must audit. Furthermore, the auditor may provide recommendations for operational improvements and subsequently review processes that were changed in accordance with those recommendations. All of these examples represent situations in which the auditor could conceivably become less critical or observant of the errors or deficiencies due to the difficulty of maintaining objectivity when reviewing his or her own work.
Intimidation	Intimidation threats arise when an auditor is deterred from acting objectively by threats — actual or perceived — or being overtly or covertly coerced by audit clients or other interested parties.
Advocacy	Advocacy threats arise from auditors acting biased in promoting or advocating for or against the audit client to the point that subsequent objectivity may be compromised.

Source: Mutchler and Chang (2001:29-30)

3.11.3 Scope limitations and access to information

According to the IIA (2017), the internal audit scope covers consulting and assurance services on risk management, corporate governance, financial reporting, and internal control systems of organisations. Mutchler and Chang (2001) state that to ensure sufficient independence and enhanced effectiveness of the audit function, it should be accorded the right of access to books of account, financial statements, information, and explanations at all times. The IPPF standard

1111 (2017) requires that to promote independence for internal audit effectiveness, there must be direct interaction or access between the internal auditor and the organisational board. The chief audit executive must enjoy free and direct communication and relations with the board. The standard identifies the independence and effectiveness of the IAF if there is a restriction on access to auditing resources and information (Nyaga & Kamau, 2018). Delai and Omri (2016) observe that the internal audit function needs unlimited rights to organisational personnel, records, departments, and senior management to be effective. Internal auditors should operate free from obstruction and interference. A study by Kimotho (2014) confirmed that the restriction of scope has an impact on the independence of internal auditors.

3.11.4 Organisational status

Internal audit independence requires that the IAF be given a higher status in the organisation so that it can function independently (Razali *et al.*, 2016). The ability to achieve internal audit unit independence depends critically on the appropriate placement or organisational status of the unit within the organisation (Razali *et al.*, 2016). Evidence from five countries across the world has established that internal audit independence is significantly influenced by how the IAF is positioned in the organisation (Bi, 2019). The IAF organisational status needs to be adequate to satisfactorily perform its activities as defined by the IIA definition of IA. IA independence and organisational status must be frequently reviewed for adequacy. If the IAF lacks adequate organisational status and independence, the objectivity of the internal auditors becomes questionable. When evaluating the independence of the internal audit department, the governing body should consider many factors, including the reporting structure, the level of engagement of the Audit Committee (AC), the extent to which the CAE has unfettered access to the governing board, the IAC, and the degree of involvement of senior management. According to the IIA *Factsheet – Internal Audit Independence and Objectivity (2022)*, an internal audit should be independent and be separated from the line management structure. The CAE should be a senior management appointment (IIA *Factsheet – Internal Audit Independence and Objectivity, 2022*).

3.11.5 Reporting structure

To institutionalise the internal auditor's independence, the IPPF Standard 1110 requires the chief audit executive to functionally report to the highest level of the hierarchy in his organisation, which permits the internal audit function to impartially execute its obligations (IIA, 2017). In addition, in writing, he should assure the board, preferably annually, of the organisational independence of the internal audit unit. This facilitates internal auditors'

achievement of functional independence in terms of approval of the audit charter, risk-based internal audit plans, internal audit budget and resources, receiving instructions and communication, and making inquiries of management and composition of human capital (IIA, 2017). Mutchler and Chang (2001) argue that for a minimum, internal auditors' functional reporting should be to a level possessive of adequate authority to promote their independence, to ensure wide functional scope, sufficient thought on engagement communications, and sufficient action on audit recommendations. The IIA stresses the need to give internal audits the status they deserve. This is essential for the function's organisational independence and internal auditors' objectivity. This is necessary because internal auditors have a unique role. As employees, they must review and oversee management actions and advise management on internal controls (Sarens & De Beelde, 2006; DeSimone & Rich, 2020).

Internal auditors may have a conflict of interest when examining governance procedures and reporting to the audit committee on organisational culture and leadership (Kimotho, 2014; Motunrayo, Osaloni Bankole, Matthew & Victor, 2023). The internal audit function has evolved in many organisations to the point that it often leads to risk management and control implementation, evaluation, and conceptualisation. The internal audit function has aggressively implemented strong governance and control mechanisms while evaluating management's control practices.

Kimotho (2014) also reported a few cases where internal audits perform management functions that could impair the independence and objectivity of the internal audit department. There were also three cases where internal audit departments' independence was compromised as internal audit leaders either did not report directly to audit committees or did not meet regularly with their audit committees. Internal audit departments should be organisationally independent of management and report directly to audit committees.

3.11.6 IIA membership and certification

IIA membership and certification make a difference in the way internal auditors perform (Emnert *et al.*, 2010). Certified internal auditors use the profession's standards, IPPF, to a greater extent than those without certification (Emnert *et al.*, 2010). Since the IIA certifies internal auditors, publishes the IPPF, and works to enhance internal auditing as a profession, the capacity of internal audit practitioners is determined by their professional qualifications (Sarens, 2009). Moreover, the IPPF, through the proficiency standard 1210, stipulates that "Internal auditors demonstrate their proficiency by obtaining appropriate professional

certifications and qualifications, such as the Certified Internal Auditor designation and other designations offered by the IIA”.

3.11.7 Appointment, dismissal, and remuneration of the CIA

According to IIA standard 1110, the board should approve decisions regarding the appointment, removal, and remuneration of the CAE to ensure the organisational independence of the IAF (IIA, 2017). Previous research maintains that the hiring, firing and remuneration of the CAE compromise IAF independence when done by management instead of the board or audit committee (Scarborough, Rama & Raghunandan, 1998; Goodwin & Yeo, 2001; Alzeban, 2018; Alzeban, 2022). According to the IIA (2017), the audit committee is responsible for selection, performance assessment and termination of the CAE with input from the CEO.

3.11.8 Internal Audit Charter

The Internal Audit Charter is an officially recognised document that outlines the objectives, scope, and duties of the internal audit function, as defined by the Institute of Internal Auditors (IIA, 2017). The mission of the internal audit is established by the formal approval of an internal audit charter by the audit committee. The charter is designed to achieve three primary objectives, as outlined by the Institute of Internal Auditors (IIA, 2017). The primary objective of this study is to ascertain the organisational standing of the internal audit function. Ultimately, it establishes the boundaries within which internal audit endeavours are conducted. A typical IAC will also contain the broad duties of the IAF, the established standards the internal audit team must follow, and the relationship between the IAF and the AC.

Additionally, the charter functions as a mechanism to guarantee the absence of unwarranted limitations on the extent of the auditor’s duties (Demeke, Tadesse & Kaur, 2021). According to O’Regan (2002), it is imperative for the charter to explicitly state and record any restrictions and modifications relating to recent or anticipated internal or external changes that affect the IAF’s capacity to offer independent and objective assurance services.

Numerous experts have contributed vital insights regarding the imperative to incorporate a clearly defined audit charter into firms since it greatly enhances the efficacy of auditors (Van Peursem, 2005; Shewamene, 2014; Mokono & Nasieku, 2018; Demele et al., 2021). According to Shewamene (2014), the effectiveness of an internal audit (IA) is greatly influenced by the existence of a carefully designed charter. The implementation of specific regulations facilitates the efficient direction of audit personnel's actions and defines the board's

desired level of assurance in the internal audit function's evaluation of internal control. Shewamene (2014) argues that incorporating a comprehensive charter bestows a formal and prestigious level of authority upon the internal auditor's position inside an organisation. The establishment of autonomous status as an IA is equally significant in ensuring success. Moreover, the integration of an audit charter within an organisation has a substantial influence on the degree to which senior management adheres to the recommendations made by internal auditors (Van Peurseem, 2005). Therefore, this specific element has a direct influence on the overall effectiveness of the internal audit process.

3.11.9 Frequency and nature of independent meetings with the audit committee

The IPPF Standard 1111 requires that to promote independence for internal audit effectiveness, there must be direct interaction or access between the internal auditor and the organisation's board (IIA, 2017). The chief audit executive must possess a disposition that facilitates unrestricted and unmediated dialogue and engagement with the board. The CAE should have quarterly private meetings with AC. The AC and the CAE should hold a meeting at the beginning of every year to review the organisational independence of the IAF as recommended by the Treadway Commission in 1987. Scarbrough *et al.* (1998) also examined the frequency and nature of meetings between the AC and the CIA (Ismail, Mohd-sale & Yaakob, 2022). The findings showed that audit committees that frequently met privately with the CIA were more likely to be involved in decisions to dismiss the CIA and in the review of the IAF results.

3.11.10 Legislation

Research has shown that an effective internal audit mandate has a significant effect on IAF independence (Bi, 2019). A study that utilised data from Austria, China, Germany, Japan, and the US established that IAF independence was higher where the internal audit was mandated by law than when there was no legal mandate (Bi, 2019). The lack of a statutory requirement for the independence of internal audits contributes to the diverse placement of internal audit functions inside organisations. Christopher *et al.* (2009) assert that the independence of an internal audit is compromised when the audit clients have authority over the nomination or removal of CAE. The study conducted by Christopher *et al.* (2009) demonstrates that granting the audit committee the authority to select the CAE has been found to enhance the degree of independence within internal auditing. Christopher (2009) claims that the presence of an audit committee within businesses leads to enhanced internal audit functions (IAF) in most cases.

3.11.11 Internal audit quality

Internal audit quality (IAQ) has been used as a measure of internal audit effectiveness by previous studies (Alzeban & Gwilliam, 2014; Sihombing, 2023). This study employs IAQ as a measure of IAF independence as perceived by auditees and Auditor General reports. Sihombing (2023) found that most internal audit quality is only output-oriented, primarily influenced by compliance driver variables. The most researched variables are independence and competence. Internal audit quality can be achieved by prioritising process and outcome aspects and being long-term oriented to provide added value to organisational governance. Research that utilised a theoretical approach to auditor independence and audit quality showed that auditor independence increases audit quality. David and Festus (2023) carried out a study titled 'Audit quality and financial reporting quality in selected public universities in southwest Nigeria'. The study shows that many universities have not integrated audit quality into their operations to enhance financial reporting quality. The study adopted a survey research design. The population was 19 public universities in southwest Nigeria, and a purposive sampling technique was used to select 12 universities. The study found that audit quality had a significant effect on relevant financial reporting of public universities in southwest Nigeria. The terms audit quality and auditor independence were used interchangeably in the study. Internal audit quality has been defined by research as compliance with professional standards and audit engagement contracts (Sihombing, 2023).

The IIA (2017) asserts that internal auditors must comply with the standards and professional code of ethics that are specifically tailored to their profession to guarantee the delivery of audits of exceptional quality. The aforementioned criteria establish the essential attributes that an internal auditor must possess, specifically independence, objectivity, and appropriate professional diligence, to guarantee the generation of audits of superior quality. In their study, Abbott *et al.* (2016) argue that independence is a crucial and distinct aspect of internal audit quality. In a recent study conducted by Demeke and Kaur (2021), an investigation was undertaken to explore the correlation between organisational independence and the quality of audits. The results of their study did not demonstrate a statistically significant correlation. It is important to acknowledge that the study primarily concentrated on a distinct demographic group originating from Ethiopia; hence the results cannot be generalised to a larger population in a different setting.

3.11.12 Ownership structure

Ownership structure exerts an influence on the internal audit function. A study undertaken by Rönkkö, Paananen, and Vakkuri (2018) has found that foreign ownership, dispersed ownership, and state ownership are significant factors associated with an increased likelihood of corporations employing internal audit practices. This is in line with the findings by Talab, Manaf and Malak (2018), whose research showed that listed companies that established internal audit departments and whose shares are substantially held by the government perform very well due to strong monitoring mechanisms. Hence, an internal audit is a monitoring mechanism that reduces agency costs and improves firm performance.

The focus of this research is on state universities in Zimbabwe. Hence, the study examines ownership structure as a factor or determinant of internal audit independence (Mukono, 2021). There is a paucity of literature in this area. Ownership structure has been studied as a determinant of the decision to use internal audit or not but has not been examined as a determinant of internal audit independence (Pawandiwa, Ndlovu, Shava, Charumbira & Mathonsi, 2022). The Organisation for Economic Co-operation and Development's Principles of Corporate Governance (OECD, 2004) introduces internal audit as an important part of good corporate governance. These principles aim to develop professional and ethical behaviour to stabilise financial markets and economic growth. Several member countries have introduced their own policies for steering the activities of state-owned companies. Among other countries, the Zimbabwean government has enacted the PFMA, the PECGA and the ZimCode, which make it clear that all public entities are expected to comply with the best practices of corporate governance as presented by the acts and the codes (Chimbari, 2017; Maiwasha, 2023). It follows that the state universities in Zimbabwe have established in-house IAF in compliance with these statutory regulations. The state has control over the IAF through the audit committees, which are appointed by the university councils, which are the equivalent of a board of directors in the private sector (Simbarashe, 2022).

3.12 Impact of internal audit stakeholders on IA independence

The chief executive officers, chief internal auditors, administrative managers, financial managers, external auditors, and audit committee members have been identified by previous research as internal audit stakeholders (Abuazza *et al.*, 2015; Erasmus & Coetzee, 2018; Mashayekhi, Jalali & Rezaee, 2022). The IA stakeholders can either prevent or improve the independent functioning of the IAUs (Scarborough *et al.*, 1998; Goodwin & Yeo, 2001; Goodwin, 2003; Gramling, 2004; Christopher *et al.*, 2009; Al-Matari, 2014; Bi, 2019; Chang *et al.*, 2023).

IA stakeholders can be broadly classified into two groups: the auditees and the internal auditors. In the study conducted by Mashayekhi *et al.* (2022), it was found that internal audit (IA) stakeholders significantly influence the status of IA through their perceptions and actions. Internal audit independence and objectivity are not only important to an internal organisation's credibility; they are hallmarks of executive management's commitment to promoting a strong, introspective approach to corporate governance. Audit committee and top management involvement in IA affairs have been identified as some of the factors that influence IAF independence, according to previous academic literature (Scarborough *et al.*, 1998; Goodwin & Yeo, 2001; Goodwin, 2003; Gramling, 2004; Christopher *et al.*, 2009; Al-Matari *et al.*, 2014; Bi, 2019; Chang *et al.*, 2023). In addition to the fact that stakeholders are crucial in determining the IA status, internal auditors who consider the demands and expectations of stakeholders are more successful in enhancing their organisations' value (Grzesiak, 2021).

3.12.1 Audit committee involvement

Previous research has shown that the audit committee has a responsibility to safeguard and ensure the independence of the IAF (Goodwin & Yeo, 2001; Goodwin, 2003; Gramling *et al.*, 2004; Christopher *et al.*, 2009). In a study undertaken by Gramling *et al.* (2004), a series of comprehensive interviews were conducted with internal auditors and audit committee (AC) members. The study found that ACs possess the capacity to positively influence IAF independence. According to the authors, a robust and successful audit committee-IAF connection improves the IAF's support system. Turley and Zaman (2007) used a similar strategy to interview a major UK financial services company. Their findings indicate that an AC plays a crucial role in establishing a leadership tone that gives the internal audit function the necessary authority and influence within the organisational context. This was also confirmed by Goodwin and Yeo (2001), who established that the audit committee's relationship with the CIA had a significant impact on IAF independence.

Christopher *et al.* (2009) sampled 34 Australian organisations to investigate the concept of internal audit independence. The researchers identified various risks to audit independence with respect to the connections between IAFs, AC, and management. These concerns included situations where Chief Audit Executives (CAEs) do not report functionally to the AC and where the AC is not accountable for the appointment and evaluation of the CAE. As part of its oversight responsibilities, the AC should review and ensure IAF independence and objectivity, review and concur with the CAE's appointment, replacement, reassignment, and dismissal, review/approve the IAC, and ensure its compatibility with the AC. The AC oversight responsibilities also include a review of the IAF's financial and human resources. Christopher

et al. (2009) found that the independence of the IAF can be threatened if an unhealthy relationship exists between the AC and the IA. An unhealthy relationship implies non-compliance with IAF structural and functional best practices. Goodwin (2003) also examined the relationship between audit committees and internal audits in New Zealand and Australia. Goodwin (2003) argued that the involvement of the AC in the decision to dismiss the CIA enhances IAF independence by protecting the CIA from unfair dismissal by management following unfavourable reports. This argument supported the findings by Scarbrough *et al.* (1998).

3.12.2 Top management involvement

Independence of the IAF is achieved where top management displays an active interest in the objectivity of the internal auditors (Chang, Mutchler & Prawitt, 2023). An active interest involves recognising the IAF as an important unit within the organisation by prioritising it in the budget, rewarding the CAE appropriately as an executive, putting in place human resource policies that guarantee the job security of the internal auditor even after reporting on the misdeeds of top management. This, however, was contrary to findings by Goodwin and Yeo (2001) that the use by management of the IAF as a training ground for future managers did not influence the independence and objectivity of the internal auditor. Nevertheless, the respondents in the Goodwin and Yeo (2001) study were all members of the IIA. Hence, their responses were mostly likely biased towards the requirements of IIA for independence.

Saputra, Winarningsih and Puspitasari (2020) highlight the effect of top management support on the effectiveness of internal audits in the Indonesian public sector. The study showed that top management support indirectly had a significant effect on the effectiveness of IAF through competence and independence. Alzeban and Gwilliam (2014) in their research also concluded that management support affects the effectiveness of the IA. According to Alzeban and Gwilliam (2014), the presence of management support is associated with various factors, including the recruitment of competent and knowledgeable personnel, allocation of sufficient resources, cultivation of a strong rapport with external auditors, and establishment of an independent internal audit department. The findings of Alzeban and Gwilliam (2014) further corroborate the findings of Al-Twaijry *et al.* (2003), which emphasise the significance of the interaction between internal audit personnel and top-level management in influencing the independence and objectivity of internal auditors.

Christopher *et al.* (2009) investigated the level of independence of the IAF in Australian corporations. Specifically, the researchers studied the potential risks to independence that

may arise from the interactions between the IAF and management, as well as the audit committee. The results of the study showed that the association between the IAF and management posed risks to the independence of the IAF, as the CEO held the authority to approve the IAF budget. Top management posed a significant risk to the IAF's independence in approving the IAF budget since it allowed management to potentially limit the scope and effectiveness of the IAF through the imposition of budgetary restrictions. Moreover, top management was heavily involved in developing the internal audit plan, where their requests were considered unconditional priorities and threatened IAF independence (Christopher *et al.*, 2009).

3.12.3 Auditees involvement

The ongoing discourse over the appropriate terminology to refer to individuals or entities subject to auditing by auditors, specifically whether to use the terms "auditees" or "clients," has persisted for an extended time (Glascock, 2002). The use of the term "auditees" to refer to those undergoing an audit is thought to have implications for the independence and objectivity of internal auditors (Glascock, 2002). Previous research has shown a gap between what the auditees expect from the internal auditors and what the internal auditors provide to the auditees (Grzesiak, 2020). Auditee expectations have a considerable impact on the success of internal audit activities (Grzesiak, 2020). They may boost it by identifying areas that require intervention and improvement, or they may decrease it if they are unrealistic or unethical and opposed to the International Standards for the Professional Practice of Internal Auditing (IIA, 2017). The efficacy of the IA has been assessed based on its capacity to fulfil the expectations of its primary stakeholders, namely the auditees (Grzesiak, 2021). Grzesiak (2021) revealed that the auditees had a limited comprehension of the roles and responsibilities of internal auditors. In addition, many of the auditees found the IAFs to be of no value to their organisations.

3.13 Safeguards for the independence of the IAF

The following safeguards for the independence of the IAF within an organisation were proposed after Perez-Lopez (2013) had consulted the IIA Independence and Objectivity: A Framework for Internal Auditors as well as after reviewing the literature.

3.13.1 Organisational independence

It can be deduced that ensuring the independence of the IAF would be guaranteed by its establishment in a prominent role within the organisational structures. As per the International Institute of Auditors (IIA, 2017), an ideal configuration involves the chief executive assuming administrative oversight responsibilities, while functional oversight is delegated to the auditing committee, the board of directors, or another appropriate governance authority (KPMG, 2004; De Andrés, 2001 as cited in Perez-Lopez, 2013). Therefore, this system is dependent on non-executive entities.

3.13.1 Independence from auditing activities and internal control systems

The IAF is not permitted to meddle with company activities or internal control measures, as this would imply that the IAF would have to assume responsibility for these actions, thereby jeopardising its neutrality (Church & Schneider, 1992). Internal auditors' independence may be maintained even if they perform intermittent non-auditing jobs as long as they disclose such activities in their reports. According to the Institute of Internal Auditors (IIA), both management and internal auditors must exercise prudence and maintain the internal auditor's objectivity.

3.13.2 Internal audit statute

A lack of legal mandate that provides the IAF with sufficient authority to perform its duties independently has been blamed for causing the IAF to fail to perform its theoretical role of adding value to the universities (Christopher, 2015). Compulsory internal audit legislation is considered an IA independence safeguard (Perez-Lopez, 2013). The statute for IAA is an official written document outlining the purpose, scope, and duties of internal auditing.

3.13.3 Hiring and firing the internal auditor by the audit committee

According to the IIA, it is recommended that the audit committee should have a role in the decision-making process for the appointment and termination of internal auditors. This recommendation aims to mitigate the risk of these choices being entirely influenced by individuals subject to audit.

3.13.4 Reviewing the quality of internal audit work

Independent reviews of the quality of the IAA should be done frequently to safeguard IA independence.

3.13.5 Meetings of audit committees, boards of directors or other appropriate governance authorities

Confidential conversations between the CAE and the AC should be formally facilitated with a frequency of four times each year.

3.13.6 Specifying conflicts of interest

Internal auditors must refrain from engaging in any circumstances that may give rise to a conflict of interest during the execution of their IA responsibilities. If this scenario arises or is anticipated, it is imperative for the internal auditor to duly notify senior management of any conflicts of interest by the submission of a formal statement outlining their duties.

3.13.7 Rotating internal auditors in their duties

The potential for conflicts of interest may arise when a single auditor is responsible for reviewing the same work over an extended duration. According to IIA (2011), the feasibility of rotation is contingent upon the significant time and financial resources required for its implementation in most instances, as per the guidelines outlined in the Institute of Internal Auditors' Standard 1130.A1 (2011).

3.13.8 Strong organisational governance

An internal audit environment and organisational culture that fosters support and encourages enterprise and ongoing development efforts might mitigate the perception of failure that often accompanies recommendations, system implementation processes, and other advisory actions. The existence of a functional AC is crucial inside a conducive setting. According to Tušek (2015), the presence of a robust audit committee serves to safeguard the IA independence and professionalism of auditors.

3.13.9 Incentives

Al-Shbiel and Al-Zeaud (2015) have suggested that the introduction of a rewards system and a corrective mechanism within both the IA department and the organisation can be a successful strategy for addressing potential obstacles to objectivity.

3.13.10 Use of teams

An essential aspect of objectivity is the procedure of corroborating and substantiating the assessments, appraisals, and decisions conducted by others outside the self. The incorporation of both team-based and individual approaches can be a viable strategy for effectively addressing and managing conflicts of interest.

3.13.11 Elapsed of time/change of circumstances

When auditors evaluate the efficacy of their own recommendations presented in a prior audit, the passage of time can lead them to interpret hazards as having reduced significance. Moreover, it is crucial to bear in mind that the completion of an audit may result in alterations to the environment and personnel in the area under investigation, consequently diminishing or eradicating any potential risks. In this scenario, auditors will strive to proactively mitigate risks to their objectivity by taking independent action when they anticipate being approached by a colleague or superior for inquiries. In this given context, auditors will make conscious efforts to actively minimise threats to their objectivity by autonomously implementing procedures, expecting to be approached by a peer or superior with inquiries.

3.13.12 Hiring practices

The initial step in establishing an objective IAF is making a prudent decision to ensure that potential workers do not have any conflicts of interest that could compromise their neutrality.

3.13.13 Training the internal auditor

Training offers a means of attaining objectivity. Additionally, auditors can enhance their ability to identify potential risks to objectivity, enabling them to proactively mitigate or manage these risks promptly.

3.13.14 Reviewing audit work before reporting the results (supervisions)

Standard 1120-1 emphasises the importance of individual objectivity in the internal audit function. It suggests that the outcomes of the internal audit activity should be thoroughly evaluated before any reports are produced to provide a fair level of assurance that the work has been conducted objectively. Babatope and Adewunmi (2019) claim that the implementation of stringent oversight measures and thorough evaluations of auditors' work, surpassing routine reviewing practices, can foster the cultivation of impartial audits. This approach holds auditors accountable for the judgments they render, hence promoting objectivity in their assessments.

3.13.15 Outsourcing the IAF

In situations where internal resources prove insufficient for mitigating dangers, the utilisation of external services can offer a means to attain an impartial assessment within a particular context. Outsourcing necessitates additional financial resources and has the potential to create a sense of uneasiness within the internal audit department, given the profession's reluctance towards such practices.

Table 3.4: Summary of significant literature on the independence of the IA function

Authors	Method	Sample	Research focus
Goodwin and Yeo (2001)	Survey	80 organisations	This study investigated two variables that could impact the independence of internal audits. The relationship of the audit committee with the internal auditor was found to have a strong influence on the independence of the internal audit function. The research also found that the use of the IAF as a management training ground is widely practised in Singapore. More than half of the respondents believed that this had no effect on IA objectivity. This was attributed to the fact that all the CIAs who were respondent members of the IIA were, therefore, career internal auditors and well-grounded in terms of maintaining objectivity.
Ahmad and Kehinde (2016)	Literature Review		The study conceptually examined the regulatory role of professional accounting and auditing bodies in Nigeria, comprising the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of

			<p>National Accountants of Nigeria (ANAN), and the statutory/regulatory role of government on the independence and objectivity of Internal Auditors in Nigeria. The study showed that the professional accounting bodies in Nigeria, comprising ICAN and ANAN, pay less attention to the coordination of the internal auditing aspect of the profession and invariably give no protection against the oppression of IAs. The study indicates that IAs in Nigeria, especially in the public sector, face challenges of victimisation and ridicule from the management and the auditees in the course of discharging their responsibility independently and objectively. Arising from these professional and governmental lapses and based on protective motivation theory, the study proposed a framework showing the influence of professional regulation and government enactment on the independence and objectivity of IAs and makes propositions for the variables.</p>
Njeru (2013)	Survey	43 organisations	<p>The primary objective of this research was to examine the independence of the internal audit function and its correlation with corporate governance in the context of commercial banks operating in Kenya. The study showed that internal audit independence was compromised due to the significant authority held by CEOs in the majority of banks. This authority encompassed the approval of the internal audit budget, determination of the Chief Audit Executive's remuneration, and the ability to employ and terminate the CAE.</p>
Stewart and Subramaniam (2010); Nyaga and Kamau (2018)	Survey	1 organisation	<p>This study aimed to investigate the correlation between internal audit independence and internal audit effectiveness within the context of the Kirinyaga County Government. The results of the analysis suggest that the audit function exhibited a lack of independence. The study's findings indicate the potential limitations on the ability of internal audits to access audit material. The findings suggest a scenario in which internal auditors were allocated responsibilities unrelated to auditing, potentially</p>

			compromising the extent of their work and compromising their independence.
Djordjevic and Dukic (2017)	Literature review		The study aimed to highlight the issue of independence and objectivity of internal auditors, which, given the place and role of internal audit in the system of corporate governance, is increasingly gaining in importance. The study concluded that full utilisation of the internal audit's potential to improve corporate governance systems is largely conditioned by the independent and objective approach of internal auditors in defining the scope of their work (having full control over the nature of their work), implementing activities (freedom to collect and evaluate evidence) and communicating results (freedom in reporting the results of their work without any pressure).
Mutchler (2003)	Literature review		The primary objective of this specific chapter is to examine independence and objectivity in relation to internal auditing while also proposing potential areas for further research. The publication delineated various categories of risks, encompassing self-review, social pressure, economic interest, personal relationship, familiarity, cultural, racial, and gender bias, as well as cognitive bias.
Stewart (2008)	Literature review		The research conducted a comprehensive analysis of the most recent scholarly works pertaining to the concepts of objectivity and independence within the realm of internal auditing, specifically within the context of the contemporary professional landscape. The review primarily concentrated on the various issues related to the dual role of the internal auditor, encompassing both assurance services and consulting activities. Additionally, it examined the organisational status of internal audit, its participation in risk management, the outsourcing of internal audit activities, and the utilisation of internal audit as a platform for managerial training.

Bi (2019)		5 countries	<p>The objective of the study was to examine the correlation between three governance models and the level of internal audit independence. Additionally, it aims to identify the elements that influence internal audit independence and explore how this independence is manifested in the actual practices of internal auditing. The findings of this study indicate that internal audit functions are not in compliance with the independence requirements set out by the Institute of Internal Auditors (IIA). The findings of the research suggest that governance concerns, namely the composition of the board, have a significant impact on both the independence of the Chief Audit Executive (CAE) and the associated audit practices. This study presents a unique and original contribution to the current body of knowledge by enhancing our understanding of the impact that corporate governance has on the implementation of internal auditing.</p>
Christopher <i>et al.</i> (2009)	Survey	34 countries	<p>The research sampled 34 Australian organisations to investigate the concept of internal audit independence. The researchers identified various risks to audit independence with respect to the connections between Internal Audit Functions (IAFs), Audit Committees (AC), and management. These concerns include situations where Chief Audit Executives (CAEs) do not report functionally to the AC, and where the AC is not accountable for the appointment and evaluation of the CAE. The objective of this study is to examine the correlation between three governance models and the level of internal audit independence. Additionally, this research aims to identify the elements that influence internal audit independence and explore how internal audit independence is manifested in the practical implementation of internal auditing. The findings of this study indicate that internal audit functions are not in compliance with the independence requirements set out by the Institute of Internal Auditors (IIA).</p>

Perez-Lopez (2013)	Delphi method		This empirical study utilises the Delphi technique to examine the independence of the internal audit function and potential safeguards.
Kimotho (2014)	Survey	1 organisation	The primary aim of this study was to ascertain the factors that influence the level of internal audit independence at the Technical University of Mombasa. The independent variables investigated were limitation of scope, reporting structure and traditional role. The study established that all the factors under investigation were critical for internal audit independence to be achieved at the university.

Source: Author (2023)

3.14 Frameworks for the objectivity of internal auditors from previous research

Table 3.4 above shows the significant literature on internal audit independence. None of the authors in Table 3.4 developed a framework for the independence of IAFs in state universities. According to Perez-Lopez (2013), ensuring the independence of the IAF necessitates the establishment of a framework that provides internal auditors, internal audit departments, and organisations with a reference point. This framework is essential for achieving and safeguarding an independent function. Mutchler and Chang (2001) introduced a framework for managing threats to objectivity within the context of the Institute of Internal Auditors Research Foundation. This framework, known as the framework for controlled objectivity, provides a structured approach to effectively address and mitigate potential biases that may compromise the impartiality of internal auditors. Despite being published under the title "Independence and Objectivity: A Framework for Internal Auditors," the framework lacks guidance on the IAF's independence because it presumes that independence already exists. This leaves a gap in the literature.

Figure 3.3 below presents the managed objectivity framework.

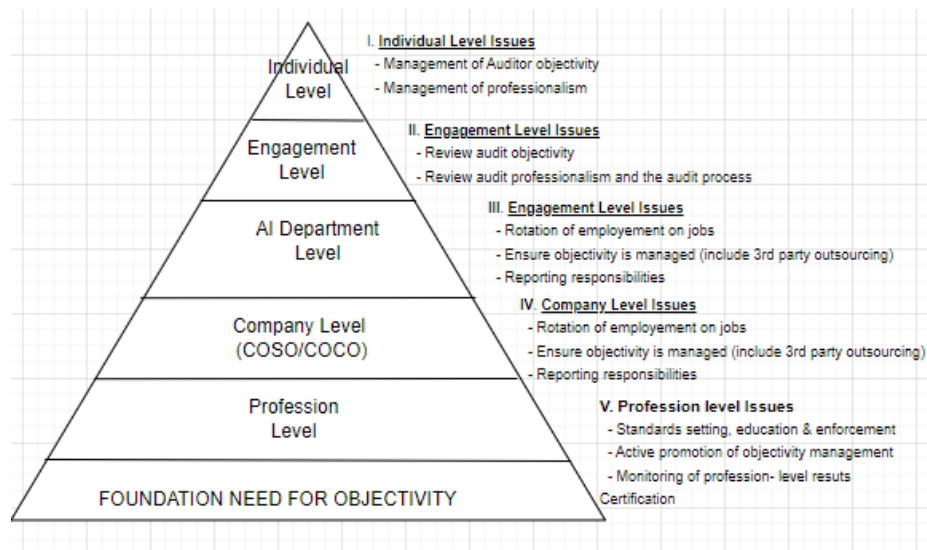
Figure 3.3: Managed objectivity framework



Source: Mutchler and Chang (2001)

The managed objectivity framework has eight parts. Auditors are responsible for identifying and managing threats to objectivity (Mutchler & Chang, 2001). After identifying and assessing threats to objectivity, internal auditors should identify environmental mitigating factors that could mitigate these risks (Mutchler & Chang, 2001). The figure below shows a Framework for Managing Threats to Objectivity for multiple auditor participation levels.

Figure 3.4: Framework for managing threats to objectivity at all levels of auditor involvement



Source: Mutchler and Chang (2001)

According to Mutchler and Chang (2001), the management of IA objectivity can be classified into five levels. As shown in Figure 3.4 above, the framework directly emphasises objectivity at both the engagement and personal levels, necessitating internal auditors to identify potential factors that may compromise their objectivity. Moreover, internal auditors must evaluate and

mitigate such threats while also evaluating their ability to maintain objectivity by considering the measures they have implemented to address the identified concerns.

The framework relies heavily on the professionalism of individual auditors and their supervisors (Mutchler & Chang, 2001). The goal of the framework is to articulate a more rigorous process for self-regulation in the internal audit environment. However, the framework assumes an appropriate audit scope based on the organisational status of the internal audit. Therefore, the framework is useless when the internal audit unit has insufficient organisational status and independence. The absence of sufficient organisational status and independence implies a lack of internal audit independence (Mattei, Grossi & Guthrie, 2021). To the best of my knowledge, no framework for internal audit independence in state universities for the context of developing countries, especially in Africa and in the public sector, exists; hence, this research seeks to close the gap by developing a framework for internal audit independence. The need for a framework for internal audit independence can never be over-emphasised, as the internal auditor cannot be objective in the absence of internal audit independence, according to Mutchler and Chang (2001).

3.15 Summary

The clear inference drawn from this discourse is that internal auditing assumes a pivotal role in the achievement of organisational goals and that internal audit independence is a key determinant of the effectiveness of the IAF. This chapter reviewed different themes on the IAF in state universities. This study aimed to investigate the influence of IA independence on the performance of the IAF in ZSUs, drawing upon existing literature. Chapter three successfully unpacked the gap that exists in the literature and emphasised the need for an independent internal audit function framework within public universities in emerging economies with a specific focus on Zimbabwe. The following chapter focuses on the theories that underpin this study. The study is based on the agency, stakeholder, institutional, and protection motivation theories.

CHAPTER FOUR: THEORETICAL AND CONCEPTUAL FRAMEWORK

4.1 Introduction

Concepts and theories play a crucial role in any academic research as they serve as analytical frameworks that enable a critical examination of the subject matter (Grant & Osanloo, 2014). The theoretical framework provides a solid justification for doing a study and aids the reader in understanding the perspective (Grant & Osanloo, 2014). This observation suggests that conducting any substantial research necessitates the incorporation of a theoretical framework. Theoretical frameworks are often regarded as essential components of research, serving as foundational structures that provide valuable insights into the core theories that serve as the foundation upon which each study is built.

This chapter presents a theoretical perspective to the study, viewed through the theoretical lenses of agency, institutional, stakeholder and protection motivation theories. Schmidt and Günther (2016) and Gordon and Fischer (2008) call for investigations using agency theory concepts to gain insights from decision-making regarding the transparency of performance reporting within HE institutions. Schmidt and Günther (2016) carried out a systematic literature review of public sector accounting research in the higher education sector, which covered 35 years up to 2014. The review indicated that agency theory has scarcely been used in accounting research done on HEI. The following discussion provides details on the different theories upon which IA studies are based and the motivation provided for the theories chosen for the current study.

4.2 Theories used in internal auditing research

Current internal auditing theories focus more on internal controls. This may limit understanding of internal auditing in the context of state universities (Przybylska & Kańduła, 2019). Previous researchers have attempted to locate internal auditing in selected economic and behavioural theories (Agasisti *et al.*, 2019; Kivistö, 2007; Arena & Azzone, 2007). The selected theories include the agency theory (AT), institutional theory (IT), stakeholder theory (ST), protection motivation theory (PMT), communication theory (CT) and the transaction cost economics theory (TCE), among others (Adams, 1994; Freeman, 2004; Lammers & Garcia, 2017; Josh & Karyawati, 2022; Eklund & Tenenbaum, 2014; Endaya & Hanefah, 2013).

Communication theory has been adopted to elucidate the imperative nature of proficient communication among internal auditors themselves, as well as between internal auditors and auditees, and internal auditors and members of the organisation, to fortify the Internal Audit Function (IAF). Agency theory has been used to explain the principal-agent relationship between the top management and the owners of the organisations (Adams, 1994). The agency theory suggests that internal auditors are appointed to monitor top management and ensure that the management carries out its procedures in the best interest of the owners (Adams, 1994; Jachi & Yona, 2019). To the board, the contractual costs are monitoring costs incurred by the need to ensure that management follows the procedures in the best interest of the owners (Colbert & Jahera, 2005). To the management or the agent, the contractual costs are the bonding costs that must demonstrate to the principal that they are carrying out their orders in a manner consistent with the specified objectives.

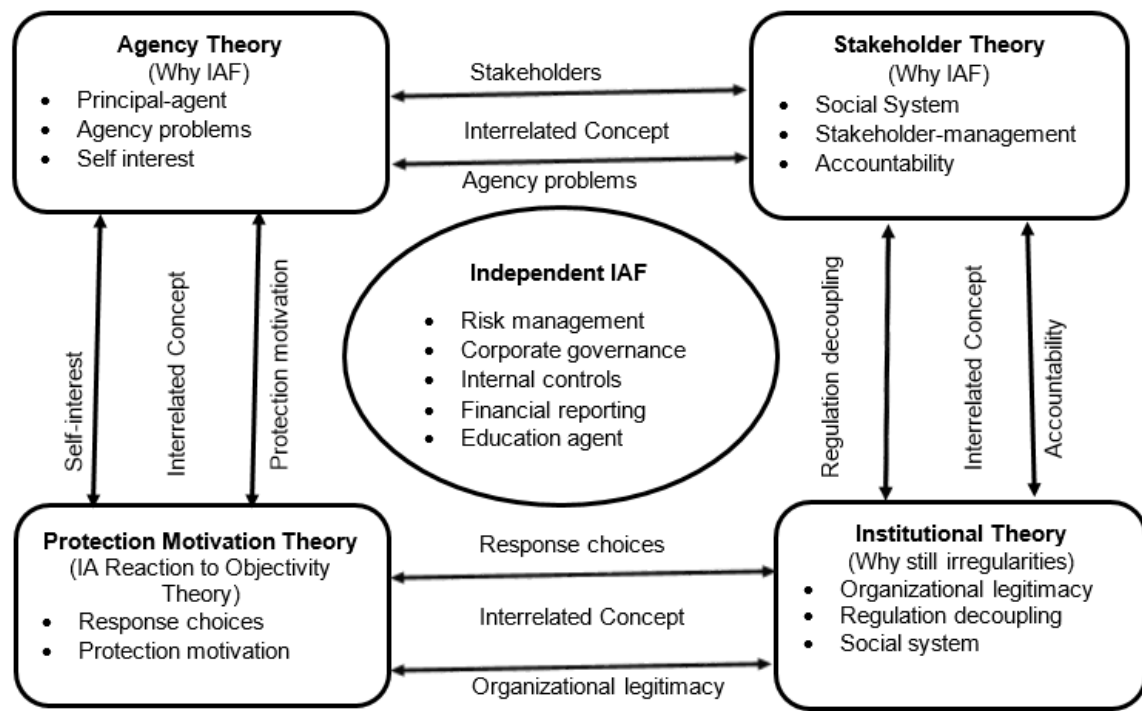
Additionally, to maintain their agency status, management is tempted to practice what is termed decoupling by IT (Colbert & Jahera, 2005). Decoupling is when management strives to display organisational legitimacy whilst their actions on the ground tell a different story (Truong, Jabbouri, Schneckenberg & Palmer, 2019). The institutional theory discusses how changes brought about by normative forces, including sources within the organisation as well as outside it, like laws and regulations or by the professions, influence organisational structures and practices (Lammers & Garcia, 2017; Josh & Karyawati, 2022). The public entities in Zimbabwe are required by law to establish an IAF as a corporate governance mechanism. IAFs are expected to comply with laws and regulations that govern the profession and the institutions so that they can add value to organisations. IIA standards require that IAFs be independent and objective as they play their consulting and assurance role in organisations (IIA, 2017a).

The protection motivation theory advocates for the protection of IA as they execute their duties (Eklund & Tenenbaum, 2014). The PMT established that employees are motivated by protection against loss of jobs and other forms of harassment that are established if they are independent and objective (Kehinde, Ahmad & Popoola, 2017). The stakeholder theory manages the relationships of the organisation (in this case, the state university) with its stakeholders. The IAF's role in the management of stakeholders is to independently and objectively ensure that top management or those representing the owners act in good faith as they interact with the stakeholders. Finally, the TCE is considered to be a variation of the agency theory and more appropriate for internal audit research (Spraaakman, 1997).

Though IA has been studied at all government levels, most research has been carried out at the local government level without reference to any theory (Nerantzidis *et al.*, 2022). A literature review by Nerantzidis *et al.* (2022) provided evidence that studies on impact evaluation in the public sector emphasise surveys/questionnaires and other empirical methods. However, most IA practices avoid employing theoretical frameworks as tools, references, or knowledge sources, which leaves room for future studies to tap into this area and address various IA issues in organisations (Nerantzidis, Pazarskis, Drogalas & Galanis, 2022).

This study was inspired by Schmidt and Günther (2016), as well as Al Mamun *et al.* (2013), who revealed that the performance of the IAF cannot be illustrated by one theory; it needs a combination of economic, behavioural, and systemic theories. Therefore, the agency theory (economic) can cover the management and principals. In contrast, stakeholder theory (behavioural) can address social relationships, and institutional theory (systemic) can cover the rules and regulations and enforcement of those. This study aims to fill the existing gap of independence and performance of IAF in SUs by utilising the AT, ST, IT, and PMT theories collectively as the foundation for conducting research because of the scarcity of higher education management studies informed by theory. Figure 4.1 presents how the theories overlap and the areas in which they are consistent.

Figure 4.1: Summary of overlap of theories



Source: Partially adapted from Menicucci and Paolucci (2018)

4.2.1 The Agency Theory

The AT provides valuable insights into the concept of accountability, specifically in the field of audit, elucidating its growth and significance. An organisation can be conceptualised as a complex network of interpersonal connections which are structured through contractual agreements. These contracts serve as a mechanism to harmonise the diverse individual interests of the involved parties, with the ultimate objective of optimising the organisation's value (Adams, 1994; Ekanayake, 2004). The agency theory highlights the distinctive connection between the principals, the owners of resources inside the organisation, and the agents who manage these resources in exchange for a return (Hina *et al.*, 2019). The agency theory highlights a fundamental conflict arising from a deficiency in trust between the principal and the agent. This conflict stems from a combination of knowledge asymmetry and divergent motives of both sides. The nature of this interaction has shaped the progress and rationalised the utility and objective of the audit.

Prior research has endeavoured to examine the association between the government and universities via the lens of agency theory, as demonstrated by previous works (Kivistö, 2007; Ahmad, Farley & Naidoo, 2012; Kivisto, 2007). The aforementioned previous works recognised various forms of the agency relationship, including the single-principal-single agent, multiple-principal-single agent, and single-principal-multiple agent partnerships. The multiple-principal-single agent framework has historically been employed in the context of state-run institutions, which often operate under the direction of numerous principals. SUs are under the shared governance of the Ministry of Higher and Tertiary Education, the Ministry of Finance, and the Zimbabwe Council for Higher Education (ZIMCHE). The government mandates that colleges prioritise efficiency and actively contribute to the nation's strategic aim of attaining a middle-income economy status by the year 2030.

The application of the agency theory to internal audit research has been limited, as noted by Nerantzidis *et al.* (2022) as well as Grossi and Guthrie (2021). Nonetheless, it serves as a valuable framework for comprehending the necessity and diverse characteristics of internal audit functions, as highlighted by Adams (1994). The purpose of the IAF within an organisation is to mitigate agency costs (Endaya & Hanefah, 2013), which enhances the performance of the organisation. Consequently, the AT serves as the conceptual framework for understanding the rationale and extent of IAFs (Goodwin-Stewart & Kent, 2006). Contrary to the findings of Carey, Simnett and Tanewski (2000), whose research demonstrated that the presence of an IAF does not exhibit any association with agency factors. However, the perception among individuals was that the internal audit's monitoring function was seen as a replacement for,

rather than a supplement to, the external audit. It is worth noting that the research conducted by Carey *et al.* (2000) focused only on a small business, which may pose limitations in terms of generalisability to larger public sector organisations due to the differing research scope and context. The AT has been employed in several studies to elucidate the reasons behind the outsourcing of internal audit services by organisations (Caplan & Kirschenheiter, 2000), which contributes to the independence of the IAF and provide enhanced efficiency in the performance of the auditing functions of the organisation. It has also been utilised to shed light on the moral hazards that management faces within organisations (Evans & Tourish, 2017; Ekanayake, 2004). Thereby, moral and ethical standards are positive pillars for improved performance in audit reporting. Furthermore, the theory has been applied to the diverse nature of IAFs and their stakeholders (Van Peurse, 2005).

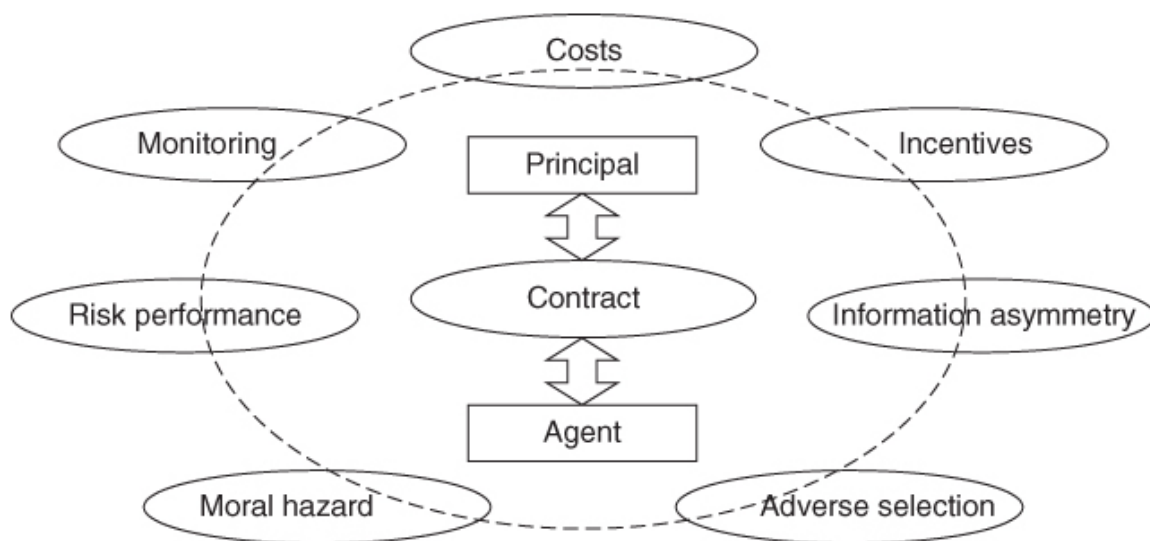
Al-Shabail and Turki (2017) expressed reservations regarding the utilisation of the agency theory within the internal audit literature, asserting its inadequacy within the framework of emerging economies and further questioning its applicability within the context of public sector organisations, highlighting the challenge of defining the principal due to the absence of a unified interest among the public (Reed, 2002; Mihret *et al.*, 2010; Al-Shabail & Turki, 2017). In the context of SUs, the IA's role is to monitor the university's top management on behalf of the owners and, in this case, on behalf of the government. This study examines the independence of the IAF in ZSUs to unearth the reasons why ZSUs continue to have material irregularities reported by the Auditor General when a monitoring agent (IAF) has been put in place by the government, thereby establishing the gap identified by the researcher of lack of independence and preferred performance indicators in the IAF within the ZSUs. An independent IAF is expected to reveal and recommend corrective action before any external audit is carried out in SUs (Mattei, Grossi & Guthrie, 2021; Nerantzidis *et al.*, 2022).

4.2.1.1 The agency problem

Eisenhardt (1989) posits that instances of agency problems could happen in several scenarios: when the intentions of the principal and the agent are not consistent or when the principal encounters difficulties or incurs significant expenses in providing evidence or proof of the agent's actions. The AT arises from the principal's decision to place trust in the agent and delegate activities that are intended to generate benefits for the principal (Nerantzidis *et al.*, 2022). In the context of state universities in Zimbabwe, the government, acting as the principal and shareholder, exercises its authority to guide the directors/managers in carrying out the responsibilities of the institution. Therefore, in such a scenario, the directors/managers assume the role of the state's agents. The exercise of governmental authority in the

appointment of university councils is facilitated by the designated minister, who acts as a representative of the shareholders. The council will assume the responsibility of overseeing the operations of the state universities, with vice-chancellors serving as the leaders in charge of managing the daily activities of the state universities. The agency problem in ZSUs is manifested through the constant irregularities reported by the Auditor General on ZSUs, which reflects evidence of some form of independence lacking and unfavourable performance in IAFs. The diagram presented in Figure 4.2 illustrates the concept of an agency connection.

Figure 4.2: A diagram showing the agent relationship



Source: Kurvinen et al. (2016)

The interaction between principals and the agents, who are entrusted with the obligation to utilise and manage the principal's resources, gives rise to a nexus of contracts (Jensen & Meckling, 1976). The central principle of agency theory posits that in situations where owners' objectives diverge from those of senior management (referred to as agents), agents tend to prioritise their own financial gain at the expense of the principals, resulting in a lack of independence in IAF procedures. According to Eisenhardt (1989:59), this phenomenon leads to the "separation of ownership and control". Another risk arises when individuals think that both principals and agents would behave sensibly and strive to maximise profits within the contractual arrangement, which can result in various unfavourable performance outcomes, such as risk, costs, and moral hazard, among others.

According to Adams (1994), it may be inferred that a human inclination towards greed manifests in a manner where an individual seeks personal gain in all situations. Consequently, this leads to a self-fulfilling prophecy, wherein the individual fails to behave in the best interests

of those they represent, and consequently, the independence of IAF is negatively affected. The moral hazard dilemma, as described by Capens (1985) and quoted in Adams (1994), is the subject of discussion. The aforementioned idea exerts an influence on the overall performance of state colleges. According to Dawson *et al.* (2016), multiple stakeholders possess diverse and conflicting interests, resulting in the allocation of limited resources to numerous competing goals deemed imprudent. If the interests of the different stakeholders are not aligned with those of the principals, there may be a misallocation of limited resources (Dawson *et al.*, 2016). Kivistö (2007) and Urbanek (2020) suggested the creation of efficient monitoring systems for measuring and evaluating the agent's performance, skills, and environmental conditions to reduce the agency problem. State universities have created IAF to monitor agents on behalf of the government.

It is important to determine the effectiveness of an independent internal audit function in mitigating the agency problem and the risk-sharing problem at ZSU. Gathogo (2018) demonstrated that the agency problem was reduced because of the efficient execution of independent internal audits. Furthermore, information asymmetry may arise because agents, who are responsible for the day-to-day operations of the organisation, possess more knowledge about the entity than the principals. Whilst the government of Zimbabwe has placed the state universities at the centre of Vision 2030 as key economic development drivers, the government may find it exceedingly difficult to monitor the universities to ensure that they are indeed driving the economic development of the country (Chinyoka & Mutambara, 2020).

Adams (1994) posits that the presence of information asymmetry has a detrimental impact on the principals' capacity to adequately oversee the agents and ensure their alignment with the principal's objectives. This phenomenon gives rise to an additional principal-agent issue, sometimes referred to as adverse selection. Adverse selection refers to a scenario in which principals face difficulties in determining if the activities undertaken by managers (agents) align with the organisation's best interests, further estranges the independence of IAFs. This challenge arises from the limited availability of information to principals/owners at the time decisions are made. According to Urbanek (2020) and Ahmad, Farley and Naidoo (2012), the management of conflicting interests and information asymmetry can be effectively addressed using monitoring mechanisms to further enhance the independence procedures in IAFs. According to Eisenhardt (1989), there are two potential strategies that organisations can employ to address agency concerns. Firstly, it is advisable to consider the agent's conduct as a determining factor. To effectively oversee the agent's behaviour, the principal should possess the capacity to invest in acquiring relevant information. Secondly, the monitoring approach is significant in mitigating agency difficulties within a business establishment, thus

being recognised as an agent cost (Eisenhardt, 1989). The principal is responsible for bearing the agency charges. According to Christopher (2010), "agency costs" refers to monitoring and supervising management activities. Information asymmetries can lead to the degradation of the quality of teaching and research in universities and eventually to market failure (Kivisto, 2007; Ahmad *et al.*, 2012), thus obtaining unfavourable performance in the midst of IAFs.

4.2.1.2 The agency costs

The agency costs can be categorised into four distinct areas: (a) the monitoring costs, (b) the bonding expenditure, (c) the residual loss and (d) the initial costs (Jensen & Meckling, 1976). Monitoring costs are a prevalent concern in principal-agent relationships when the principal establishes specific objectives for the agent to accomplish. To address these monitoring costs, the principal devises several solutions (Kivisto, 2007). Expenditures related to activities such as observation, measurement, and management of the agent's behaviour are incurred in the pursuit of addressing agency difficulties and conflicts of interest. The principal incurs expenses related to monitoring activities, including those associated with external audits and internal audit functions (IAFs). According to Cadbury (1992), monitoring mechanisms are implemented by the principal to ensure that management remains aligned with the interests of stakeholders, and the IAF is one such monitoring mechanism in ZSUs.

4.2.1.3 The bonding expenditures by the agent

Safeguards like IAFs are established in organisations to prevent agents from carrying out tasks that the principal has not authorised, which leads to bonding costs (Ahmad *et al.*, 2012). Adams (1994) hypothesised that since monitoring costs have a significant impact on an agent's salary, it is critical to cut monitoring expenditures and the associated negative impact on an agent's compensation or salary by implementing an IAF in an entity.

4.2.1.4 The residual costs

The principal could potentially experience a decline in overall well-being due to the disconnect between the judgements made by the agent and the interests of the principal (Adams, 1994). In this scenario, the board, or top executives, assuming the role of principals, can oversee and regulate the behaviour and actions of the workers, referred to as agents, by implementing IAFs with the aim of achieving corporate goals.

4.2.1.5 The initial costs of negotiating the terms of contracts

Expenses arise as a result of opportunistic behaviour exhibited by management, wherein an individual utilises their competitive advantage in information (Topfer, 2007; Kieser & Ebers,

2006). The existence of four conditions can lead to the revelation of certain factors, including hidden attributes, hidden information or knowledge, hidden actions, and hidden intentions. The following section provides a more detailed explanation of these circumstances.

(i) Hidden attributes

This typically occurs when the principal and agent formalise the contract. In this situation, the principal can overlook the risks involved in choosing the agent. Adverse selection is the outcome of this.

(ii) Hidden information or knowledge

Moral hazard develops as a result of the agent making use of the information or knowledge they possess hidden from the principal.

(iii) Hidden action

This scenario arises when the principal is limited to observing the final outcome of the agent's actions without being able to discern the agent's specific contribution to the said outcome. Thus, evidence of a lack of independence in IAF exists. Consequently, the agent exploits their independence to deceive the principal. Analogous to concealed knowledge, this situation has the potential to give rise to moral hazard, which further affects the performance of an entity.

(iv) Hidden intentions

The AT assumes that the agent has hidden intentions. According to Jensen and Meckling (1976), this leads to agency costs, which creates a position where the agents possess self-centred motivations and take advantage of the knowledge asymmetry between the principals and owners to increase their private wealth at the disadvantage of the principals. The emphasis of the AT is to reduce agency expenses while also balancing the interests of the principals and the agents. The agent problem, according to Kivisto (2007), is manifested by the management's inefficiency in state universities. As a result, the principal's tasks and organisational objectives are not completed (Barac, Plant & Motubatse, 2009; Jachi & Yona, 2019). The use of ineffective resource management by employees will prevent them from achieving the planned goals of universities (Kivistö, 2007; Ahmad *et al.*, 2012). When resources are misappropriated, an agent unfairly benefits at the expense of the principal, who should be enjoying the returns on his or her investments (Kivistö, 2007; Ahmad *et al.*, 2012).

4.2.1.6 Applicability of agency theory to this study

The management control structures within SUs of Zimbabwe are different from those in other global universities and companies. The Chancellor governs state universities through the university council. The President of the country or the Chancellor of the SUs appoints vice-chancellors for each state university upon recommendation of the university council. The vice-chancellor (VC), who is also the head or chief executive officer (CEO), works with specialised committees to manage the university's overall performance (Garwe & Tirivanhu-Gwatidzo, 2016). The fundamental issue in corporate governance stems from the divergence between ownership and control inside contemporary publicly traded firms. The phenomenon described is well known as the agency problem, as elucidated by renowned researchers such as Berle and Means (1932) as well as Jensen and Meckling (1976). In accordance with this notion, the authority for governance of the state university is entrusted to the university council by the government. The university council convenes on a limited basis throughout the year and delegates the responsibility of university management to a team led by the vice-chancellor, acting as their representatives. The provision of assurance on the quality of financial statements to owners, in this instance, the public, is carried out by independent external auditors. However, the independent internal audit function offers assurance to the council through the audit committee, which does not explicitly and implicitly exist in most of the ZSUs.

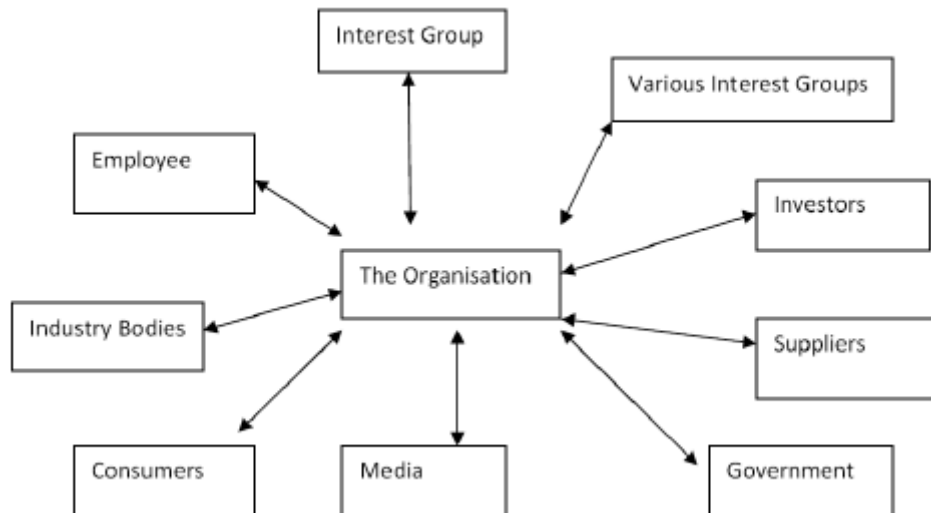
Hence, the identified problem driving this thesis stems from the existence of the agency problem, which in this case exists as a result of the government delegating the responsibility to run the state universities to the university councils (Garwe & Tirivanhu-Gwatidzo, 2016). Therefore, the concept of agency theory is utilised in this context to elucidate the rationale behind the internal audit function's independent monitoring role to reduce the agency problem within state universities in Zimbabwe (Adams, 1994). The auditing origin can be traced back to the 18th century. Auditing came to address the need by individuals or groups for independent reassurance about the conduct or performance of others in whom they have a legitimate interest (Teck-Heang & Ali, 2008). The effectiveness of the auditor's monitoring role depends on the auditor's independence (Stewart & Subramaniam, 2010), which is not prevalent in ZSUs. In contrast, the ownership structure of an organisation has an influence on the independence of the internal audit function (Rönkkö *et al.*, 2018). With the support of the previously discussed literature, the researcher established that state universities are state-owned, under government control, and subject to intense public scrutiny in relation to the idea of legitimacy. Consequently, the attainment of legitimacy is seen as crucial for their establishment and continued operation (Dowling & Pfeffer, 1975).

Meanwhile, the agency theory faces criticism due to its underlying behavioural assumptions and limited scope, which primarily centres on the principal-agent relationship, disregarding the interests and perspectives of other stakeholders within the university context (Kivistö, 2007). Consequently, the study employed triangulation of theories to attain a thorough comprehension of the research issue (that is, the independence and performance of the IAF). The subsequent discussion provides methodical details of the research problem through the lens of stakeholder theory.

4.2.2 Stakeholder theory

The concept of stakeholder theory (ST) gained significant recognition within the field of management during the 1970s. Prior to its formal introduction by Freeman in 1984 (Freeman, 1994), ST places much emphasis on the duties of stakeholders and the accountability of organisations. Internal auditing research has been underpinned by the agency theory (Adams, 1994; Carey, Simnett & Tanewski, 2000; Endaya & Hanefah, 2013; Christopher, 2015; Groff, Pietra & Sitar, 2016; Gathogo, 2018; Kabuye *et al.*, 2019; Kingdom, Abdullahi & Muturi, 2021), few studies seem to have considered the integration of agency theory with that of ST. The objective of this study is to better understand internal audit independence by considering the experiences and transparency of other university stakeholders. ST affirms that organisations should prioritise the concerns and interests of all relevant stakeholders rather than solely focusing on the owners' interests. According to the scholarly works of Freeman (1984), Donaldson and Preston (1995), Freeman (2010), and Miles (2012), individuals and entities other than shareholders are typically referred to as stakeholders. Furthermore, Flammer *et al.* (2019) argued that in the context of ST, it is posited that the primary responsibility of a corporate company is to prioritise the interests of non-investing stakeholders. According to Freeman (1999), stakeholder refers to any category that is directly associated with the achievement of an entity's aims. According to the scholarly work of Clarkson (1995), the theoretical framework posits that key stakeholders encompass employees, suppliers, shareholders, and customers, while secondary stakeholders encompass the government, trade associations, political groups, and communities. Stakeholder theorists claim that managers inside corporate organisations possess a network of relationships that they must establish, cater to, and satisfy. The network of interconnected individuals comprises personnel, corporate collaborators, and suppliers. Consequently, the attainment of legitimacy is seen as crucial for their establishment and continued operation (Dowling & Pfeffer, 1975). The information depicted in Figure 4.3 provides a visual illustration of the ST.

Figure 4.3: Stakeholder Theory



Source: Al Mamun et al. (2013)

According to Porter (2009), the conventional perspective that managers are solely answerable to shareholders is no longer paramount. This is because managers are now obligated to consider the needs of all stakeholders to increase transparency in their day-to-day operations. The need for a strong sense of responsibility and a comprehensive range of accountability tools from management arises from the significant impact that any misconduct may have on corporate organisations and the overall economies of nations and societies (Christopher, 2010). ST encompasses the various stakeholders beyond shareholders, considering the interests of all stakeholders, in contrast to the conventional shareholder-oriented perspective. This transition occurred as a result of the worldwide crisis and the financial business scandals, prompting a shift in focus to not just the long-term but also the short-term (Brennan & Solomon, 2008; Collier, 2008). The primary focus of numerous organisations has shifted away from solely prioritising accountability to shareholders. The enhancement of business performance is currently observed through entities' implementation of stakeholder accountability and societal liability. The allocation of social and economic resources is a societal obligation entrusted to management, with the expectation that management will exercise responsible stewardship and provide outcomes that yield benefits not only for the owners but also for the broader society. The growth and sustainability of companies can be attributed to the collective efforts of all stakeholders rather than solely relying on the financial resources provided by shareholders.

4.2.2.1 Who or what are stakeholders?

The ST encompasses the active participation of all groups' endeavours (Freeman et al., 2010), and, as a result, Christopher (2010) regards it as a more comprehensive theory

compared to the AT. The ST has, however, been criticised for being vague in defining the term 'stakeholder'. Mitchell, Agle and Wood (1997) argued the need for clarity as to what Freeman (1994) calls "The Principle of Who or What Really Counts". That is, who (or what) are the stakeholders of the firm? What is a stake? And to whom (or what) do managers pay attention? This called for a normative theory of stakeholder identification and a descriptive theory of stakeholder salience. Understanding who the stakeholders are and what type of influence they exert is important for public organisations to minimise conflict in their projects (Savga, Krykliy & Kyrychenko, 2018).

State universities have a wide range of stakeholders. The groups and individuals who affect and are affected by a business are its stakeholders (Freeman *et al.*, 2010). Businesses must be precisely responsible or accountable to their stakeholders for value creation and trade to occur. For the organisation to improve its performance, all stakeholders must work together collectively and transparently. For SUs, the stakeholders can be categorised into internal and external stakeholders, as supported by Slabá (2015), Balbachevsky (2015), and Falqueto *et al.* (2020). In this case, IAFs must ensure that management is accountable to all stakeholders, not only the principals, by carrying out its detection and oversight roles independently and free from external influence. Figure 4.4 presents the various definitions of stakeholders as derived from prior research (Mitchell, Agle & Wood, 1997).

Figure 4.4: Chronology of Stakeholder Definitions

Who Is a Stakeholder? A Chronology

Source	Stake
Stanford memo, 1963	"those groups without whose support the organization would cease to exist" (cited in Freeman & Reed, 1983, and Freeman, 1984)
Rhenman, 1964	"are depending on the firm in order to achieve their personal goals and on whom the firm is depending for its existence" (cited in Näsi, 1995)
Ahlstedt & Jahnukainen, 1971	"driven by their own interests and goals are participants in a firm, and thus depending on it and whom for its sake the firm is depending" (cited in Näsi, 1995)
Freeman & Reed, 1983: 91	Wide: "can affect the achievement of an organization's objectives or who is affected by the achievement of an organization's objectives" Narrow: "on which the organization is dependent for its continued survival"
Freeman, 1984: 46	"can affect or is affected by the achievement of the organization's objectives"
Freeman & Gilbert, 1987: 397	"can affect or is affected by a business"
Cornell & Shapiro, 1987: 5	"claimants" who have "contracts"
Evan & Freeman, 1988: 75-76	"have a stake in or claim on the firm"
Evan & Freeman, 1988: 79	"benefit from or are harmed by, and whose rights are violated or respected by, corporate actions"
Bowie, 1988: 112, n. 2	"without whose support the organization would cease to exist"
Alkhafaji, 1989: 36	"groups to whom the corporation is responsible"
Carroll, 1989: 57	"asserts to have one or more of these kinds of stakes"—"ranging from an interest to a right (legal or moral) to ownership or legal title to the company's assets or property"
Freeman & Evan, 1990	contract holders
Thompson et al., 1991: 209	in "relationship with an organization"
Savage et al., 1991: 61	"have an interest in the actions of an organization and . . . the ability to influence it"
Hill & Jones, 1992: 133	"constituents who have a legitimate claim on the firm . . . established through the existence of an exchange relationship" who supply "the firm with critical resources (contributions) and in exchange each expects its interests to be satisfied (by inducements)"
Brenner, 1993: 205	"having some legitimate, non-trivial relationship with an organization [such as] exchange transactions, action impacts, and moral responsibilities"
Carroll, 1993: 60	"asserts to have one or more of the kinds of stakes in business"—may be affected or affect . . .
Freeman, 1994: 415	participants in "the human process of joint value creation"
Wicks et al., 1994: 483	"interact with and give meaning and definition to the corporation"
Langtry, 1994: 433	the firm is significantly responsible for their well-being, or they hold a moral or legal claim on the firm
Starik, 1994: 90	"can and are making their actual stakes known"—"are or might be influenced by, or are or potentially are influencers of, some organization"

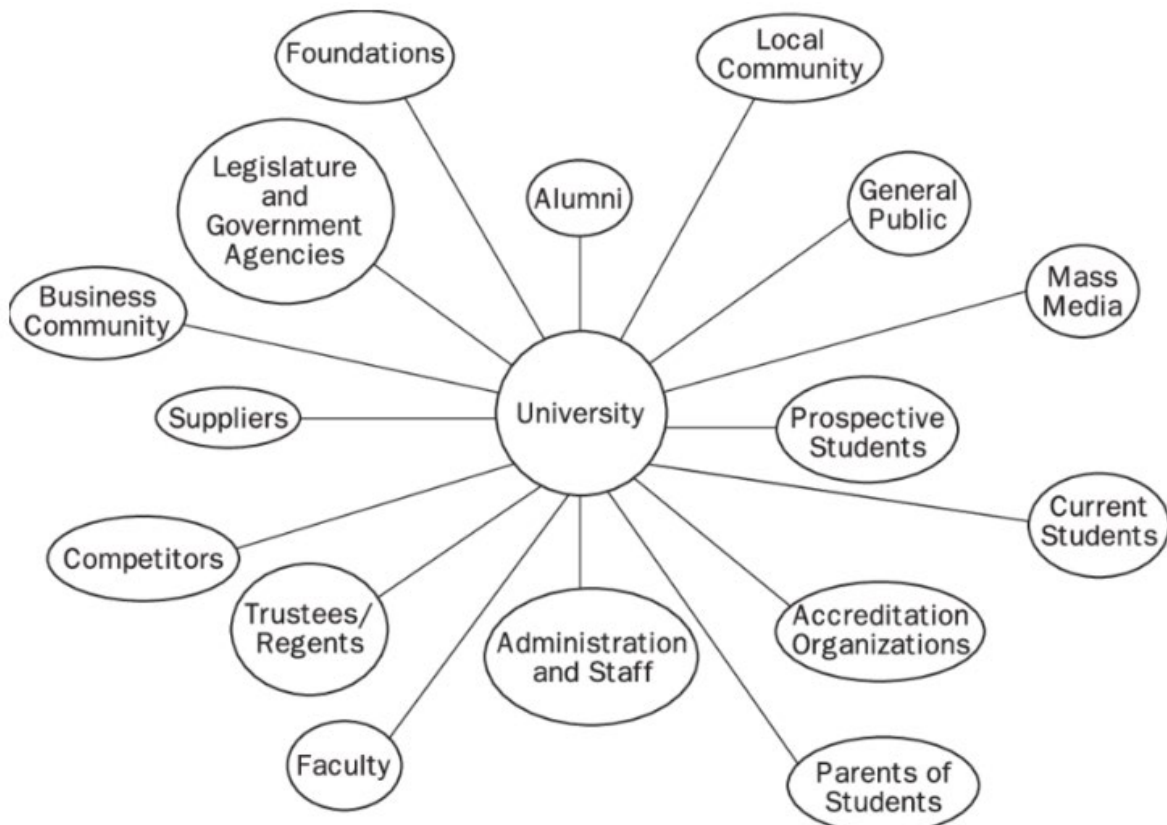
Clarkson, 1994: 5	"bear some form of risk as a result of having invested some form of capital, human or financial, something of value, in a firm" or "are placed at risk as a result of a firm's activities"
Clarkson, 1995: 106	"have, or claim, ownership, rights, or interests in a corporation and its activities"
Näsi, 1995: 19	"interact with the firm and thus make its operation possible"
Brenner, 1995: 76, n. 1	"are or which could impact or be impacted by the firm/organization"
Donaldson & Preston, 1995: 85	"persons or groups with legitimate interests in procedural and/or substantive aspects of corporate activity"

Source: Mitchell, Agle and Wood (1997)

4.2.2.2 Stakeholders of state universities

A diagrammatic depiction of stakeholders of state universities has been adopted from Naudé and Ivy (1999), Slabá (2015), Balbachevsky (2015) and Falqueto *et al.* (2020) is presented in Figure 4.5.

Figure 4.5: Stakeholders of HEIs



Source: Naudé and Ivy (1999)

4.2.2.3 The role of the IAF and the stakeholder theory

The ST also explains the impact of IAFs on the performance of state universities in Zimbabwe. According to Messier *et al.* (2010), it has been argued that in the absence of an audit, managers may be prone to deceiving both owners and stakeholders (Clarkson, 1995). Chow (1982) asserts that the audit function plays a crucial role in addressing the conflicts of interest that may arise between management, shareholders, and other stakeholders. In addition, Molzer (2005) claimed that auditing gives assurance that management reports are a true depiction of what is taking place during the period and functions as an incentive for executives to improve the quality of their work. To establish a robust sense of responsibility, it is imperative to recognise that auditing extends beyond the mere generation of reports. To ensure a comprehensive and meaningful level of accountability from management, the presence of an independent and efficient monitoring system or audit is crucial (Mihret, 2017). According to Ferry *et al.* (2022), accountability is a concept that can only be actualised through the implementation of audits and not by any other means transparently and independently. The assurance provided by IAFs is contingent on their independence as maintained by IIA-Australia2023). The significance of auditor independence is underscored by its incorporation into the International Standards for the Professional Practice of Internal Auditing (IIA Standard 1100) (IIA, 2017a).

The ST provides the audit committee with information regarding the role of internal audit functions (IAFs) in risk management, internal control, and governance procedures. The audit committee is responsible for overseeing internal auditing activities. According to Flammer *et al.* (2019), the concept of stakeholders in the context of strategic management extends beyond the conventional shareholders of an organisation. It encompasses several groups, including primary, secondary, and additional stakeholders. According to Erasmus and Coetzee (2018), the key internal stakeholders in internal auditing in state institutions are management and the audit committee. These stakeholders are of utmost importance and fulfil crucial responsibilities in the internal auditing process. The ST addresses the needs of all stakeholders within an organisation and maintains that achieving a harmonious balance among the many stakeholders of a business leads to improved growth and sustainability for the institution.

Following the research conducted by Flammer *et al.* (2019), it is posited that ST suggests that organisations should consider the interests of all stakeholders based on ethical considerations. Consequently, no particular stakeholder's interests should be given preferential treatment over others. The contractual promise to the principals is only confirmed by ST when the agents exclusively prioritise the interests of stakeholders. To mitigate

inaccuracies, distortions, and bias, the university council must gather information from both internal and external stakeholders (Savga, Krykliy & Kyrychenko, 2018). Distortions, biases, and inaccuracies exert a substantial influence on the effectiveness of businesses and their corresponding integrity. For example, the OAG's reports on ZSUs indicate the presence of significant deficiencies in the internal control, risk management, and corporate governance systems (OAG, 2023). According to Harrison, Freeman, and de Abreu (2015), the concept of the ST involves the active involvement of all groups' efforts. Christopher (2010) has considered the ST to be an additional, comprehensive theory in relation to the agency theory in addressing the research problem under study.

4.2.2.4 Application of the ST to this study

Since the stakeholders indirectly own state colleges, the ST is more pertinent in this situation. They own more than a portion of the company; they have a stake in it. Literature has made a distinction between internal and external stakeholders in higher education institutions (Savga *et al.*, 2018). Internal audit stakeholders can play a role in shaping the status of the internal audit via perceptions and actions (Mashayekhi *et al.*, 2022). Internal audit stakeholders have been identified as the executive management, heads of departments and audit committee members (Erasmus & Coetzee, 2018; Mashayekhi *et al.*, 2022).

The entity and its stakeholders communicate in both directions. This study asserts that internal auditors bear the responsibility of mitigating the agency problem within an organisation, acting on behalf of shareholders under the agency theory, as well as other stakeholders as prescribed by the stakeholder theory. However, it is also important to acknowledge that stakeholders have a role to fulfil in ensuring the independent operation of internal audit functions in SU to achieve better performance. Examining the research problem from the perspective of stakeholder theory facilitates the identification of the factors that influence the independent functioning of the internal audit in state universities. This study thus gathers data from both internal auditors and auditees, as recommended by (Abuazza, James & Best, 2015; Mihret, 2017) as key stakeholders in IAFs. The expectation for internal auditors is to possess independence in both actuality and perception, underscoring the significance of how both auditees and internal auditors perceive IA independence (Cohen & Sayag, 2010). Internal audit stakeholders can either improve or prevent the independent functioning of the IA in ZSUs as has been established in the case of the IA in Iran (Mashayekhi *et al.*, 2022).

4.2.3 Institutional theory

There is more pressure on the government to ensure that state-owned institutions, including SUs, are run effectively, economically, and efficiently for the good of the entire country. In large part, this pressure has been brought on by social expectations in response to the unfavourable annual reports that the Auditor General publishes on state-owned businesses, including ZSUs. The institutional theory, which is integrated into other theories in this study (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1987), essentially maintains that organisational leadership and oversight structures tend to conform to social expectations.

The fundamental tenet of institutional theory is that social construction shapes institutional environments, which, in turn, shapes how people behave. It has a variety of techniques and is viewed as a complex of interconnected ideas. Internal auditing is an institutional practice that can be fully understood within IT. Additional rules, attitudes, values, and conventions that are derived from contact with the outside world are encapsulated and explained by IT. Fogarty (1996) points out that IT helps to further explain how culture, politics, and other external social variables influence organisational structures and behaviour. Because institutional isomorphism can help an entity establish legitimacy, Scott (2004) said that organisations, particularly state universities in emerging countries, should adhere to the laws and values that are commonplace there (Meyer & Rowan, 1977).

According to DiMaggio and Powell (1983), the organisation field includes essential suppliers, competitors, resource and product consumers, and regulatory bodies. Businesses have adopted structures, processes, and business procedures to achieve homogeneity and compatibility so that decision-makers get the correct answers and avoid backlash. Isomorphism is the name given to this homogenisation (DiMaggio & Powell, 1983). Covaleski and Dirsmith (1988) hypothesised that institutional isomorphism has the right to observe that it must adhere to social norms of appropriate conduct for the entity to survive. Corporate reporting or voluntary disclosure is one example of an institutional mechanism.

According to Deegan (2009), decoupling is another part of institutional theory. Decoupling occurs when managers know they must adhere to specific institutional practices that are publicly endorsed and execute the necessary formal processes, but the actual entity's practices may differ. Due to the legitimisation of business tactics, this distinction leads to managers seeking profitability and increasing shareholder value rather than the obvious image generated by corporate disclosure on social and environmental reporting (Scott, 1987). Decoupling occurs whenever internal audits are outsourced or performed internally as long as they meet the needs of the corporate enterprise. The inclusion of audit committees and internal

auditors responds to social and institutional expectations of effective corporate governance. It complements other theories in motivating the management of state universities. The university council (via the audit committee) and management are expected to use the management control system, which includes the internal audit function, to accomplish their obligations in line with society's expectations.

This study adopts the position that management control structures (IAF) are put in place to address a variety of control and compliance needs of the government and professional bodies based on this justification. The Zimbabwean government has put in place several acts to guide the corporate governance of state-owned enterprises, thereby confirming the isomorphic behaviour of organisations as explained by the institutional theory. The homogeneous presence of the in-house IAF in ZSUs displays the isomorphic behaviour of state universities.

Normative isomorphism is based on the idea that professionalism facilitates organisational transformation, according to DiMaggio and Powell (1983). This is made possible by formal education, goods based on credible experts' research, and interconnected professional structures that share science, technology, and professional norms. The community holds the opinion that internal auditors need to have the necessary professional expertise obtained from academic institutions and/or professional organisations (Mashayekhi *et al.*, 2022; Chen, 2023). This idea might put pressure on state universities' hiring practices for internal auditors. This system could be viewed as normative isomorphism's current outward manifestation.

In the case of SUs, the pressure to adhere to governmental laws and regulations to gain legitimacy may demonstrate the existence of coercive isomorphism. This is because state universities are subsidised by the government (Garwe & Tirivanhu-Gwatidzo, 2016). These regulations may indicate the amount of forced isomorphism in the use of IAFs by state universities. State universities operate per the legislation that established them. Each state university must create an IAU according to the law. The legislation requires all auditors to carry out their responsibilities impartially and independently. This study was anchored in institutional theory because institutional theorists hold the view that institutional contexts, such as governments, can ensure that formal structures, such as IAFs, are developed in all state universities.

4.2.3.1 Application of institutional theory to this study

Regarding legitimacy, the researcher makes the claim that, as SUs are government-controlled, state-owned organisations that receive significant public attention, legitimacy is

crucial to their continued survival (Dowling & Pfeffer, 1975). According to Christopher *et al.* (2009), modern corporate misconduct places social pressure on organisations to manage their risks and uphold the three pillars of organisational performance. IAF's responsibility for the performance of SUs is to ensure that they gain legitimacy to demonstrate their social acceptability for resource mobilisation (Oliver, 1991) and to ensure that the entity units function per socially accepted values, beliefs, rules, and norms. The necessity for stakeholders to possess access to an Internal Audit Charter (IAC) acts as evidence that the IAFs are obligated to operate in a reliable and compliant manner. Shewamene (2014) agreed that the IAC serves as the IAFs' legal foundation for performing their tasks.

In the context of decoupling, as posited by institutional theory, the researcher claims that decoupling is occurring in ZSUs. According to Meyer and Rowan (1977), decoupling can happen when companies pretend to the business community that they are functioning as expected on the inside, even while externally, they are not meeting expectations (low-performance standards). When researchers Al-Twajjry, Brierley, and Gwilliam (2003) conducted a study on the growth of IAFs in Saudi Arabia, they accepted the isomorphic viewpoint. They stated in their research that they believe the International Standards for the Professional Practice Framework (ISPPFA) demonstrates how the precise operations of IAFs are disconnected from expectations of how they operate. The report concluded that Saudi Arabia's IAFs lacked proper development, which could be due to a lack of independence. The study conducted by Mashayekhi *et al.* (2022) also yielded a similar finding that the internal audit functions (IAFs) in Iran lack effectiveness primarily due to their establishment to meet regulatory obligations rather than being regarded as significant by the stakeholders involved in internal auditing. The importance of IT in influencing firms' behaviours concerning internal auditing is supported by Arena and Azzone's (2007) study of 364 Italian organisations. Because it explains how institutional patterns, structures, and practices are established through coercive, copied, and normative isomorphism, IT is suited for internal audit-related research. This is consistent with the study's goal, which is to examine the independence of the IAF within ZSUs. According to Kalbers and Fogarty (1996), the value of IT is based on what an organisation accomplishes and what its organisational structures suggest it should accomplish.

In particular, SUs in both emerging (Al-Twajjry, Brierley & Gwilliam, 2003; Mihret, Mula & James, 2012) and developed economies (Arena, Arnaboldi & Azzone, 2006) are well-suited to conduct internal research using institutional theory since it is applicable, well-considered, and well-supported. In ZSUs, it includes a domain made up of internal auditing procedures as

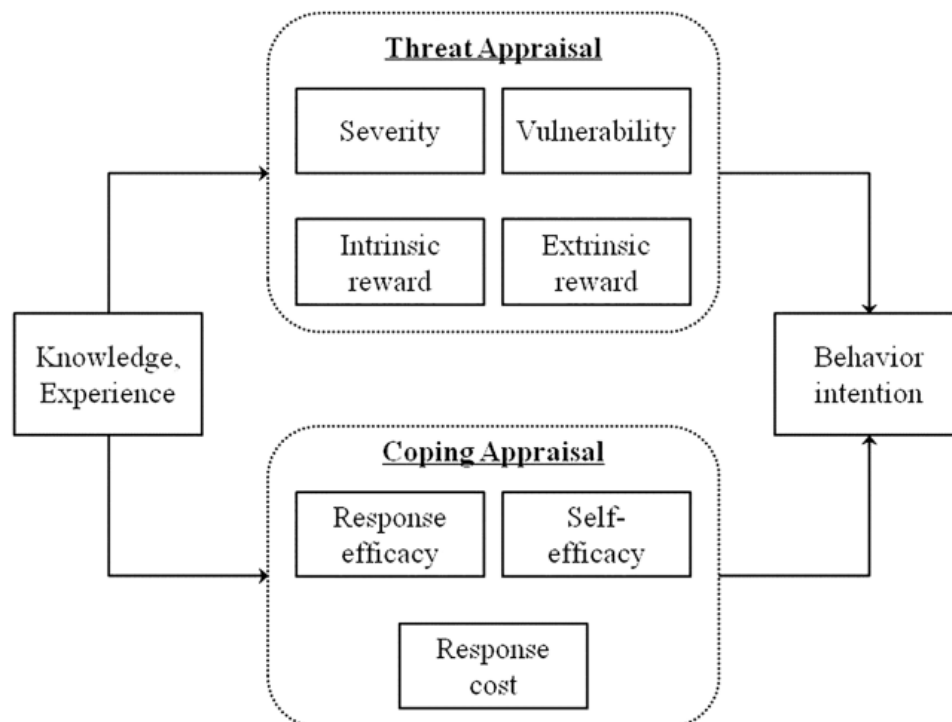
part of the phenomenon of the entity. The IT theory might contribute theoretically to auditing studies (Mihret *et al.*, 2012) in a developing nation like Zimbabwe.

4.2.4 Protection motivation theory

Protection motivation theory (PMT) was initially tailored towards health and safety-related intentions and behaviours, and several researchers (Plotnikoff, Rhodes & Trinh, 2009; Solansky, 2014; Sharma & Aparicio, 2022) have used it in different fields. Scholars have used it in business (Bolkan, 2018), governance (Solansky, 2014), and information technology (Sharma & Aparicio, 2022). Figure 4.6 shows the schematic presentation of the PMT and its various constructs.

The PMT comprises several components that are structured into two paths, namely the threat appraisal path and the coping appraisal path (Xiao *et al.*, 2014). These pathways serve as the link between individuals' perceptions and their subsequent behavioural responses. The threat evaluation pathway has four components that may be categorised into two groups: severity and vulnerability, as well as intrinsic and extrinsic rewards. The coping appraisal route consists of three sub-constructs, which may be categorised into two groups: response efficacy and self-efficacy and response costs.

Figure 4.6: Protection motivation theory diagram



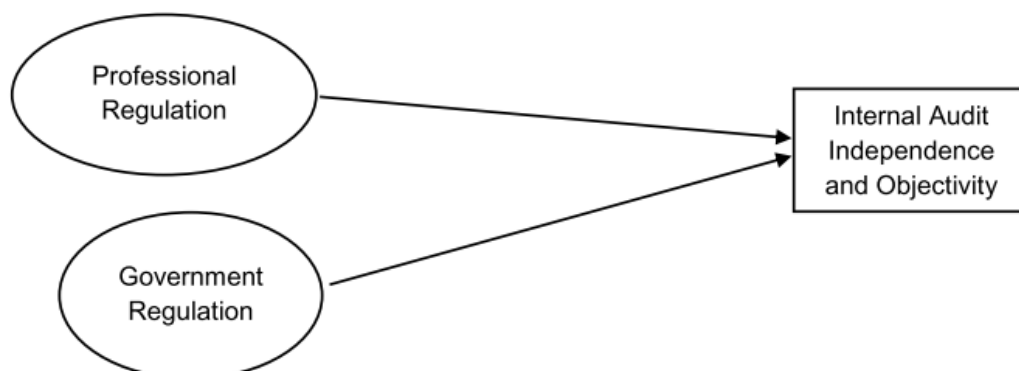
Source: Xiao *et al.* (2014)

PMT emphasises that fear is a catalyst for behavioural change and outlines the protective mechanism against the threat emanating from fear (Solansky, 2014). In other words, the theory postulates that an individual confronted with a threat will be motivated to protect oneself through the cognitive process of threat appraisal and coping appraisal (Sharma & Aparicio, 2022). According to the theory, the motivation to protect is based on three fundamental factors: the perceived severity of the threat, the assumed probability of the event's occurrence, and the efficacy of the perceived preventive measure (Rogers, 1975).

This study, therefore, applies PMT to develop a theoretical basis for the protection of IAs by professional bodies and government through supervision and laws. Applying the principles in PMT, the major threat to the objectivity and independence of IAs in the Zimbabwean context is the fear of job loss and operational and professional hazards. Consequent to this fear, IAs usually result in inappropriate decisions compromising their objectivity and independence, notwithstanding the consequential litigation that may arise. The efficacy of the protective mechanism of IAs is weak and cannot override the strong influence of the management and the auditees. PMT also complements the institutional theory that claims that coercive forces that influence the independence and objectivity of the IAF exist in Zimbabwean state universities, as explained in previous sections.

Arising from the study by Kehinde *et al.* (2017), who proposed a link between professional regulation, statutory regulation, and internal audit independence and objectivity, this study aims to empirically test the relationship between the legal mandate of the IAF and internal audit independence. The figure 4.7 below shows a proposed research framework by Kehinde *et al.* (2017).

Figure 4.7: Proposed framework of previous study

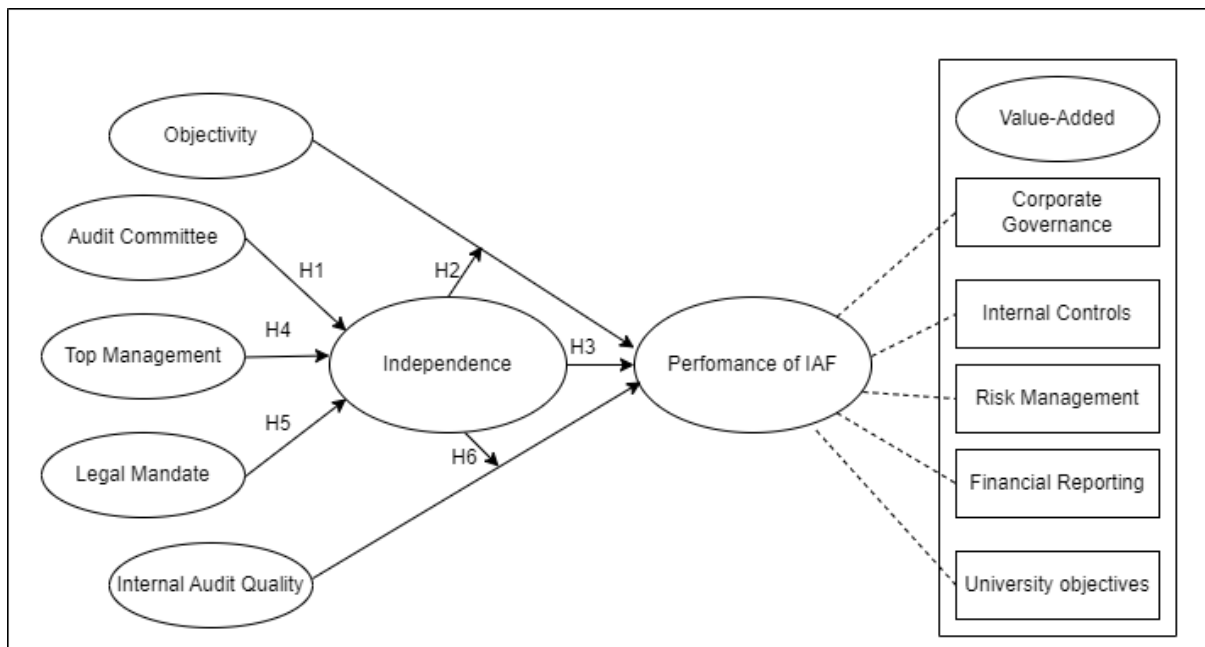


Source: Kehinde *et al.* (2017)

4.3 The conceptual framework

This section presents an integrated conceptual framework that addresses the key factors related to the independence and performance of IAF, as discussed in the previous sections. The conceptual framework for the present study is presented in Figure 4.8. The relevant independent variables in the framework are independence, objectivity, internal audit quality, audit committee, top management, and legal mandate (derived from the earlier theoretical framework discussion(s)). The dependent variables are the performance of the IAF and the value added to the SUs. As the conceptual framework specifies, some of these variables have interrelations as well as direct and indirect relations in the path model.

Figure 4.8: Independence and performance of IAF



Source: Author (2023)

The hypotheses for the relationships in the proposed conceptual model are proposed in the sub-sections that follow.

4.3.1 The audit committee and the independence of the IAF

An audit committee is a subset of a firm's board of directors responsible for the oversight of the internal and external auditors, amongst many other responsibilities (Tušeka, 2015). It is a crucial element of the governance structure and operates under the delegated authority of the board. In Zimbabwe, the Companies and Other Business Entities Act, the PECCA and the

PFMA require that an audit committee be established for public entities. According to the IIA standards, one of the responsibilities of the audit committee is to ensure the independence of the IAF (IIA, 2011). Clear standards have been put in place by the IIA as guidelines for maintaining the independence of the IAF. Standard 1100 – Independence and Objectivity states that organisational independence is effectively achieved when the chief audit executive reports functionally to the board through the audit committee and administratively to an individual in the organisation with sufficient authority to promote the independence of the IAF. Practice Advisory 1110-1 stipulates that support from the board assists the internal audit function in gaining the cooperation of engagement clients and performing their work free from interference. The CAE must communicate and interact directly with the board according to standard 1111 – Direct interaction with the board. Examples of functional reporting as listed by Standard 1110 include:

- Approving the internal audit charter.
- Approving the risk-based internal audit plan.
- Approving the internal audit budget and resource plan.
- Receiving communication from the CAE on the IAA's performance relative to its plan and other matters.
- Approving decisions regarding the appointment and removal of the CAE.
- Approving the remuneration of the CAE; and
- Making appropriate inquiries of management and the CAE to determine whether there are inappropriate scope or limitations.

Goodwin and Yeo (2001) carried out a study in Singapore as an extension of a study that was done by Scarbrough *et al.* (1998) in Canada. Goodwin and Yeo (2001) examined the relationship between internal audit and the audit committee as one of the factors that impacted the independence and objectivity of the IAF. The study concluded that the internal auditors had a particularly good working relationship with the audit committee. Almost all audit committees reviewed the plans and results of the internal audit function and were more involved in the hiring and firing of the CIA, thus offsetting any problems with objectivity and further ensuring the independence of the IAF. Audit committees consisting of only independent directors often confidentially met with the chief internal auditor. All responders were Institute of Internal Auditors members, suggesting a bias towards career auditing professionals. Threats to independence arise when the CEO approves the IA budget, which can impose budget constraints that reduce scope and effectiveness, or when the AC fails to source enough resources for the IAF to carry out its internal audit plan (Abdelrahim & Al-Malkawi, 2022). Several studies have been carried out to investigate the impact of the audit committee on the

IAF operations in general but none have focused on the impact of the audit committee on the independence of the IAF specifically (Scarborough *et al.*, 1998 (Canada); Goodwin & Yeo, 2001 (Singapore); Raghunandan *et al.*, 2001 (United States of America); Goodwin, 2003 (New Zealand). With the intention of addressing the identified gap in this study, it is therefore hypothesised that.

H1: The audit committee has a positive influence on internal audit independence.

4.3.2 Independence moderation on Objectivity and Performance of the IAF

The concept of the objectivity of the internal auditors has been scarcely studied (Mutchler, 2003; Stewart & Subramaniam, 2010; Santonastaso, Macchioni & Zagaria, 2023). Previous studies have primarily examined the effects of providing non-audit services on internal audit independence, the influence of internal audit independence on the utilisation of internal audit reports by external auditors, and the impact of CEO involvement in appointing the Chief Internal Auditor (CIA) on internal audit independence (Santonastaso, Machioni & Zagaria, 2023). The IIA acknowledges that the terms 'independence' and 'objectivity' have been used interchangeably although they have different meanings. Although the literature is not necessarily consistent in its precise definitions of independence and objectivity, it is generally agreed that objectivity relates to the quality of the assessments, judgments, and decisions that are activities of any assurance or consulting service (Mutchler, 2003; Singh & Singh, 2021), and independence relates to the state of the environment in which the assurance or consulting service takes place (Mutchler, 2003; Singh & Singh, 2021). To fulfil its function effectively, auditors must be sufficiently independent (Soobaroyen, Broad & Ntim, 2014; Demeke & Kaur, 2021; Singh & Singh, 2021; Yoewono, 2024). The IIA Glossary (IIA, 2017a) provides the following definitions for independence and objectivity:

- Independence – The freedom from conditions that threaten objectivity or the appearance of objectivity. Such threats to objectivity must be managed at the individual auditor, engagement, functional and organisational levels.
- Objectivity – An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to that of others.

As a result, the IIA distinction between the two concepts seems to be that independence is an environment that allows an internal auditor to act objectively, whereas objectivity is a state of mind. In other words, the independence of the IAF is reflected in the internal auditors'

objectivity. Without independence, they cannot be considered objective (Mutchler & Chang, 2001). The Institute of Internal Auditors has released several professional standards and guidelines about independence and objectivity in awareness of the possibility of conflict (IIA, 2017b). Self-review, societal pressure, economic interest, personal relationships, familiarity, cultural prejudices, and cognitive biases are the seven main objectivity threats identified by research (Razali *et al.*, 2016).

IAF independence is attained in accordance with IIA criteria (IIA, 2011) through the organisational status and the impartiality of the internal auditor. A study by Pelsler *et al.* (2016) indicated that the effect of the level of independence of the internal auditors had the highest strength of impact on the overall effectiveness of the internal audit function at a university. To fulfil its function effectively, auditors must be sufficiently independent (Liston-Heyes & Juillet, 2023). However, while the norm of factual independence is accepted, the challenge lies in creating conditions to ensure it in practice. Research has shown that there is a positive relationship between independence and internal audit effectiveness, but there is a dearth of research on how independence moderates the objectivity and performance of the IAF relationship. Therefore, based on the arguments supporting objectivity as a situation that promotes the performance of IAF, it is hypothesised that:

H2: The positive relationship between objectivity and performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced

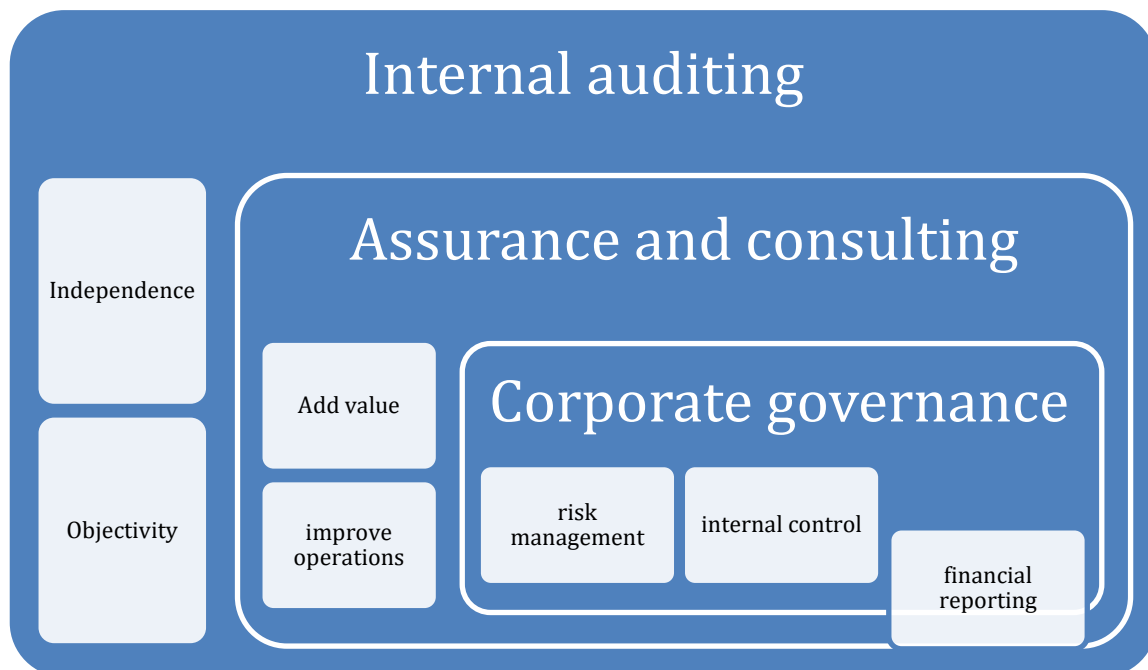
4.3.3 Independence and Performance of IAF

As per the International Professional Practices Framework (IPPF), internal auditing is defined as an autonomous and impartial endeavour that offers assurance and consulting services to improve an organisation's operations and contribute value (IIA, 2017). The use of a structured and rigorous approach to evaluate and improve the effectiveness of risk management controls and the governance process supports an organisation in attaining its goals. The definition presented provides a heightened focus on the primary purpose of internal auditing, which is to enhance the value of companies. Furthermore, the term elucidates how efficacy might be enhanced. The definition also puts emphasis on the need for assurance and consulting activity to be independent and objective in order to add value and improve an organisation's operations. According to the IIA (1999), the internal auditing activity should evaluate and contribute to the improvement of risk management, control, and governance, hence the use by this study of the parameters of "risk management", "internal control" and "corporate

governance” to measure the impact of internal auditing on the performance of state universities in Zimbabwe. The study also uses educational objectives and financial reporting to assess the impact of internal auditing independence on the performance of ZSUs.

The IIA's definition of added value is "...providing significant opportunities to achieve organisational objectives, identify operational movement, and reduce risk exposure through both assurance and consulting services" (IIA, 2009:4). Because internal audit efficacy acts as a gauge for the former, the idea of value-added internal audit that IAFs hold is directly relevant to the latter (Barac, Plant & Motubatse, 2009). Internal auditing plays a crucial role in ensuring an organisation's compliance with laws, rules, regulations, policies, and procedures, as well as the efficacy and efficiency of its operations (Al-Matari *et al.*, 2014). The following figure 4.9 is a representation of the impact of IAF on the performance of ZSUs, as inferred from the IIA (2016) definition of internal auditing. This study posits that there is a relationship between the performance of the IAF and the performance of the ZSUs.

Figure 4.9: Definition of internal auditing



Source: Author (2023)

Although the concept of value added by the IAF has been widely researched, research on the subject is scarce in Zimbabwe, particularly in its SUs. It is not known whether or not the IAF in Zimbabwean state universities are adding value. This research has, therefore, hypothesised that:

H3: Internal audit independence has a positive influence on the performance of the internal audit function.

4.3.4 The top management support and the independence of the IAF

Top management support is important for the independence of the IAF (Alzeban & Gwilliam, 2014). The IIA's IPPF emphasises the need for the Chief Internal Auditor to report to the AC functionally and to the CEO administratively as a way of ensuring the independence of the IAF. Appropriate administrative reporting to the CEO allows executives to support the IAF with adequate authority and money, allowing it to carry out its obligations without hurdles and to resolve challenging issues with other senior leaders (IIA, 2019). Internal auditing standard number 1100 emphasises the importance of this relationship for IAF independence and IA objectivity (IIA, 2017). Previous research shows that top management support facilitates the independent functioning of the IAF by providing IA with sufficient budget and resources to fulfil its responsibilities independently, providing IA with the right number of staff and attracting appropriately skilled and experienced staff, ensuring up-to-date training and development programmes; and providing resources and commitment to implement IA recommendations (Alzeban & Gwilliam, 2014; Mihret & Yismaw, 2007; Cohen & Sayag, 2010; Ahmad *et al.*, 2019; Alqudah *et al.*, 2019; Ta & Doan, 2022; Husam, 2022). Evidence from the past shows that top management support is a factor that influences IA effectiveness, but none has investigated top management support as a factor that influences the independent functioning of the IAF; hence, this research fills the gap by testing empirically the following hypothesis:

H4: The top management has a positive influence on internal audit independence.

4.3.5 The legal mandate and the independence of the IAF

The IAF's legislative and regulatory framework is the legal mandate. Institutional theory suggests that macro and micro factors affect internal auditor independence. This study examined IA efficiency factors using institutional theory. Institutional theory helps explain IA independence and its determinants (Lenz & Hahn, 2015). Many studies have used institutional theory to explain how institutional pressures affect different factors. The institutional theory also states that coercive, moral, and mimetic pressures drive institutional changes. Coercive forces include legal and regulatory compliance, while normative forces include internal auditing standards. Mimetic forces consist of organisations mimicking and emulating successful similar groups. Al-Twajry *et al.* (2003), Christopher *et al.* (2009), Lenz and Hahn (2015), as well as Lenz (2018) have examined and tested these concepts.

All Zimbabwean state universities must follow the constitution, ISPPIA, university acts, PFMA, ZimCode, and PECGA. The International Standards for the Professional Practice of Internal Auditing (ISPPIA), or Standards, are mandatory for professional internal auditing and efficacy evaluation. The 1978 criteria have been revised several times and are generally accepted as key criteria for IAF operations. Internal auditing is an independent, objective activity that provides assurance and advisory services to improve an organisation's operations and add value, according to the ISPPIA. An organisation can achieve its goals by systematically assessing and improving risk management, control, and governance systems.

Thus, the ISPPIA emphasises independence as the foundation for the International Auditing and Assurance Standards Board (IAASB), requiring consistent application across all organisations. The IIA Attribute Standard 1000 requires organisations to outline the governing principles of the IAF through the IAC. The formation of the IAC is now a legal prerequisite for the IAF. Thus, the prevailing legal mandates, as well as those that are emerging, are crucial for IA independence, and for these reasons, the following hypothesis is proposed in this study:

H5: Legal mandate has a positive influence on internal audit independence.

4.3.6 Independence moderates the IAQ and performance relationship

DeAngelo (1981) offered one of the first definitions of audit quality, proposing that audit quality is the probability, as determined by the market, that a certain auditor will find and disclose a breach in the client's accounting system. The Auditor General of Zimbabwe has reported breaches in the accounting systems of state universities (OAG, 2023). This situation could have been prevented if the internal auditors had been providing universities with high-quality services. Internal audit quality has been linked to the independence of the IAF in research that was carried out by (Roussy & Brivot, 2016; Hurriyaturohman, Indupurnahayu & Ramadhan, 2024; Kaawaase *et al.*, 2021; Zakwan, Muda & Sadalia, 2024). Recent research by (Abbott *et al.*, 2016; Kaawaase *et al.*, 2021) used internal audit independence as a measure or proxy of internal audit quality. Internal audit independence is a condition that guarantees quality outputs from the IAF (Roussy & Brivot, 2016). According to Endaya and Hanefah (2013) and Mihret and Yismaw (2007), the concept of internal audit quality also refers to the calibre of internal audit activities. The assessment of the quality of internal auditing (IA) is contingent upon its ability to generate valuable and practical insights and recommendations (Calvin, Eulerich & Fligge, 2023).

The quality of IA serves as an indicator of the proficiency of the staff, the breadth of the services rendered, and the effectiveness of the audit's planning, execution, and

communication (Mihret & Yismaw, 2007; Roussy & Brivot, 2016). The concept of IA quality encompasses a range of activities, such as planning, supervision, fieldwork, reporting of findings, and the formulation of recommendations. Additionally, it involves the development of follow-up action plans based on the suggestions provided (Endaya & Hanefah, 2013). Moreover, compliance with internal auditing standards affects the quality of IA work (Arena & Azzone, 2009; Cohen & Sayag, 2010; Roussy & Brivot, 2016). It should, however, be noted that IAQ is viewed differently by external auditors, internal auditors, the audit committee members, and the Institute of Internal Auditors (IIA) (Roussy & Brivot, 2016; Singh *et al.*, 2021). According to Roussy and Brivot (2016), external auditors equate IAQ with the competence and independence of the IAF. This research, therefore, seeks to quantify the relationship between IAQ and the performance of the IAF with independence as the moderating variable as a novel contribution to this study. Therefore, this study proposes the following hypotheses:

H6: The positive relationship between internal audit quality and the performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced.

The proposed conceptual framework (recall Figure 4.8) is empirically tested, and the results are presented in Chapter 7 using empirical information gathered for this study.

4.3.7 Performance of the IAF

Performance indicates organisational health (Bello *et al.*, 2018). Academics utilise performance in assorted studies, although it is challenging to define as it may differ from one study to another study. Early research described performance as a tangible outcome of an organisational process, evaluated in comparison to the intended outcome (Kaplan *et al.*, 1993). It is associated with the quality of services, efficiency, and effectiveness in the utilisation of resources (Kaplan *et al.*, 1993). While private company performance is usually measured in terms of financial results and position, public organisations like university performance can be measured in terms of academic output (Bello *et al.*, 2018). Previous research shows a need to measure the performance of IAFs (Rupšys & Boguslauskas, 2007; Kaplan *et al.*, 1993). “Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of action”, as defined by Neely *et al.* (2005), cited in Rupšys and Boguslauskas (2007,10). The assessment of the performance of the IAFs within the context of ZSUs is crucial for determining the extent to which the IAFs have adhered to international standards of internal auditing. Since internal auditing adds value to the organisation through improved risk

management, internal controls, and governance processes, measuring the performance of the IAFs using the value approach helps indicate its effectiveness and efficiency (Bou-Raad, 2000; Samagaio & Felício, 2023). However, Rupšys and Boguslauskas (2007) assert that the assessment of internal audit functions (IAFs) using the value approach is a complex task due to the inherent variability in internal auditing practises across various organisations. A combination of the input-process-output approach and value-added approach has been adopted for use in measuring IAF performance as suggested by (Bou-Raad, 2000; Rupšys & Boguslauskas, 2007). The input is “independence,” the process is “internal audit quality”, and the output is “value added” and indicated through improved risk management, internal control and governance processes, hence H2 and H6. H2: Independence moderates the effect of IAF performance on value added by objectivity, while H6 moderates the effect of IAQ on performance. Table 4.1 below shows the internal audit dimensions and performance measures adapted from previous research and used in this study.

Table 4-1: Internal audit dimensions

Dimension	Performance Measure
Input (independence)	CIA reporting lines; hiring, firing and remuneration of CIA; availability of human and financial resources; budget autonomy; legal mandate.
Process (upholding internal audit quality)	Upholds IAQ by considering university objectives and goals, providing timely and accurate reports, generating clear reports, providing accurate findings, and using qualified, experienced and professional staff.
Output (value added)	University goals and objectives, risk management, internal control system, corporate governance, and financial reporting.

Source: Partially Adapted from Rupšys and Boguslauskas (2007)

According to IIA (2017), the objective of internal auditing, as extracted from its definition, is to add value to and improve the organisation’s operations. Internal auditing is not considered to be effective if it does not add value to the processes of an institution (Siyaya *et al.*, 2021). Dellai and Omri (2016) argue that internal auditing creates value by identifying the weaknesses in institutional processes and providing the necessary recommendations for management to improve the audited processes and enhance the performance of the organisation. Performance indicators for higher education institutions are finance, customer, learning, risk management, internal control, and governance (Siyaya *et al.*, 2021). In the

context of this research, the indicators of IA performance are derived from the definition of internal auditing provided by the Institute of Internal Auditors (IIA, 2017). These indicators encompass financial reporting, risk management, internal control, corporate governance, and educational services.

4.3.7.1 Internal audit and internal controls

Internal control deficiencies detected by audit reports have been used as a measure of internal audit effectiveness (Nyaga & Kamau, 2018). IAFs work to improve oversight of university programmes in a way that lessens the possibility of problems with internal controls (DeSimone & Rich, 2020). As per the findings by DeSimone and Rich (2020), educational institutions with IAFs have a lower probability of disclosing material deficiencies in internal controls. The comprehensive preview of the internal audit includes the scrutiny and assessment of the sufficiency and efficacy of internal control systems. Corruption cases and weaknesses in internal control systems are a signal of the IAF's ineffectiveness (Saputra, Winarningsih & Puspitasari, 2020).

4.3.7.2 Internal audit and corporate governance

According to Demeke and Kaur (2021:52), "Internal auditing and corporate governance are two sides of the same coin". Internal auditing and corporate governance have been studied by different authors (Christopher, 2015; Groff & Pietra, 2016; Lantsoght, 2018; Dzomira, 2020). The need for sound corporate governance has directed attention to internal auditing as a corporate governance tool and mechanism in both public and private sector organisations. Corporate governance is strongly correlated with IA. Internal audit assists boards of directors of institutions in discharging their governance responsibilities, leading to improved performance and the achievement of competition. A good governance structure is intricately linked to improving corporate performance (Bhagat & Bolton, 2008). Following the exposure of fraud cases of companies from all over the world, traditional auditing and boards of directors have been judged as having failed to play their supervisory roles (Zou, 2019). As a result, the focus has shifted to internal governance, and hence, increased attention has been drawn to internal auditing.

Most internal auditing literature identifies and discusses the boards of directors, management, internal auditing, and external auditing as the four main corporate governance processes (Gramling *et al.*, 2004). Of these four mechanisms, internal auditing is the cornerstone. Gramling *et al.* (2004) argue that internal auditing serves as a resource for the other parties to corporate governance. In 2009, the IIA redefined internal auditing, specifically indicating

internal auditing as an enabler of corporate governance. The main governance roles are strategic planning and control, thus encompassing decisions on strategies and management control to protect the owners' interests. These roles further include decisions about nomination, compensation, control, strategic decisions, and management in crises.

Internal auditing is gaining an important role in corporate governance due to providing quality information on the execution of strategic plans for the purpose of better supervision of managerial decisions by governance bodies. In recent times, the numerous cases of corporate fraud, often related to accounting malpractice, have triggered a debate on inefficient corporate control mechanisms and called for strict changes in legislation related to corporate governance. Different authors have linked Poor corporate governance to a lack of independence in the internal audit function (Groff, Pietra & Sitar, 2016). Following the inclusion of improved effective corporate governance as one of the expected outcomes of internal auditing by the IIA (2016) definition of internal auditing and other previous literature, this study seeks to assess the impact of the ZSUs' internal audit functions on corporate governance.

Internal auditing helps firms achieve their goals by analysing and improving corporate governance practices (IIA, 2017). Cadbury (1992) defines corporate governance as the management and supervision of enterprises. Internal audit is the initial layer of defence used to counter poor organisational management and financial reporting, according to Njeru (2013). risk management, control governance, and compliance are key elements of internal audits that fit with corporate governance (Demeke & Kaur, 2021a). The internal audit process is incomplete until an organisation addresses and fixes its issues.

4.3.7.3 Internal audit and risk management

The impact of internal audit on risk management (RM) has been attracting increased attention in research (Mashal, 2014; Ackermann & Marx, 2016; Wadesango & Mhaka, 2017; Zainal *et al.*, 2017; Kabuye *et al.*, 2019; ElHaddad *et al.*, 2020; Čular, Slapničar & Vukor, 2020; Ninson & Tetteh, 2022; Tetteh, 2022). According to Erasmus and Coetzee (2017), internal audits are key drivers of internal audit effectiveness. The IIA (2017) has defined risk management as: "A process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of organisation objectives." Internal audits do not manage risk, but they provide information in the form of assurances and advice to the management of an organisation (IIA, 2022). One of the primary responsibilities of the Internal Audit Function (IAF) is to offer assurance to the board of directors regarding the effectiveness of risk management processes in effectively mitigating risks in alignment with the

organisation's risk appetite (Wan Mustapha & Zainal Abidin. Risk management is a crucial necessity for universities (Sityata, Botha & Dubihlela, 2021). Sityata *et al.* (2021) argue that the risk profile of universities is complex and could result in disruptions from both internal and external environments if not professionally managed. Research has shown that the occurrence of fraud, poor governance, weak internal controls, high litigation costs, loss of public funds and bad reputation has resulted in calls for the development of risk management frameworks (Ackermann & Marx, 2016). ElHaddad *et al.* (2020) stated that risks in the public sector vary in severity and importance from one period to another but are often risks arising from the regulatory environment, risks related to non-compliance with accounting or financial rules, risks related to management delegation, risks related to public control and internal fraud, and risks related to lack of services in asset management.

On the one hand, RM is expected to be able to improve organisational performance and public service delivery, while on the other, poor RM may have damaging effects on the efficiency or survival of an organisation (Wan Mustapha & Zainal Abidin, 2017). A study conducted by ElHaddad *et al.* (2020) explored the significance of IA in the context of risk management among Libyan universities. The study aimed to identify the contribution of internal audit to the reduction of risk. The study concluded that the internal audit offices and departments of the Libyan universities carry out their activities related to risk management evaluation and add value to the work of the departments. These results are in line with the findings of Ackermann and Marx (2016), who concluded that internal audits provide a broad scope of risk management work that assists senior management in the discharge of their responsibilities. Research by Ninson and Tetteh (2022) differed from earlier research (ElHaddad *et al.*, 2020; Ackermann & Marx, 2016) in that it concluded that weak implementation of internal audit recommendations and lack of internal audit resources resulted in ineffective risk management practices and, hence, a lack of contribution to driving organisational growth and sustainability.

4.3.7.4 Internal audit and financial reporting

Considerable research has been carried out to examine the relationship between internal auditing and financial reporting quality. In this study, financial reporting is used as a measure of university performance. Wadesango and Mhaka (2017) examined the impact of the IAF on the financial reporting quality of universities. Wadesango and Mhaka (2017) found that there was a significant positive relationship between the IAF and financial reporting quality.

The IAF acts as an independent party to guarantee that internal control over financial reporting and corporate governance is effective (process objective) and produces accurate financial

outcomes. Wadesango and Mhaka's (2017) research findings were in line with those of David and Festus (2023), who also found that audit quality had a significant effect on the financial reporting quality of public universities in southwest Nigeria. IAQ had a significant effect on faithful representation, understanding ability and comparability of financial reporting quality. An earlier study by Abbot *et al.* (2016) examined the impact of internal audit quality on financial reporting quality. The study used internal audit independence and competence as proxies for internal audit quality. The findings of the research conducted by Abbot *et al.* (2016) indicate that the impact of the IAF on the quality of financial reporting is contingent upon the independence and competency of the IAF. The findings of the study indicate that the simultaneous existence of competence and independence is crucial for the successful monitoring of financial reporting by the IAF.

4.4 Summary

The theories integrated in this study complement each other in the study of the independence and performance of IAF within state universities in Zimbabwe. State universities are institutions whose actions are determined by their internal and external environment. The institutional theory describes the processes through which institutional isomorphic change occurs, such as coercive, mimetic, and normative isomorphism. The presence of the IAF within state universities stems from coercive and normative isomorphism. Chapter 4 clearly shows that it is possible to view IAF in public entities through the lens of AT. The agency theory is, however, not sufficient for the purposes of this study because of the unique ownership and governance structures of state universities in Zimbabwe because, as has been alluded to by previous research, of the absence of a clear principle (Abu-Azza, 2012). While the agency theory analyses the relationship between two specific parties, investors and managers, stakeholder theory identifies the same parties as being part of university stakeholders. The groups and individuals who affect and are affected by a business are its stakeholders (Freeman *et al.*, 2010).

Internal auditors are also university stakeholders who play a crucial role through their independent, objective assurance and consulting activity that is designed to add value and improve an organisation's operations. On the one hand, stakeholder theory emphasises that businesses have to be precisely responsible or accountable to their stakeholders for value creation and trade. On the other hand, agency theory states that the agent has to perform certain duties for the principal. The agency problem arises when a conflict of interest exists between the principal and the agent. Whilst the presence of the IAF within state universities stems from coercive and normative isomorphism, the independent and objective functioning

of the internal auditors in state universities can be better explained through the lens of protection motivation theory. Thus, the integration of various theories to formulate the conceptual model that guides this study was deemed essential. The next chapter provides the research method and design adopted by this study.

CHAPTER FIVE: RESEARCH DESIGN AND METHODOLOGY

5.1 Introduction

This chapter describes and defends the rationale behind the methodology, approaches, and techniques adopted in this research to attain the main research objectives and answer the research questions. The rigour and quality, as well as the ethical considerations of the research, are discussed in this chapter. It outlines the research philosophy, research design and research strategy.

Research can be defined as the scientific and systematic search for pertinent information on a specific topic (Kothari, 2004). The theory of how inquiry should proceed, the assumptions, the principles and the procedures involved in a specific approach of inquiry are what is referred to as research methodology (Bryman, 2006). According to Kivunja and Kuyini (2017), the term 'research methodology' refers to how research is conducted and is based on assumptions, interests and purposes. Creswell and Creswell (2013) also describe research methodology as the philosophies, theories and values that support a certain approach to research; the collection of methods or rules by which a particular piece of research is undertaken; and the principles, theories and values that underpin a particular approach to research. Neuman (2014) explains that the questions presented in research can be both exploratory and descriptive, meaning that a research study can have several purposes. This study describes a phenomenon as it exists (descriptive) and analyses why or how something is happening regarding internal auditing in state universities.

This research employed both qualitative and quantitative research methods to understand and validate the conceptual framework developed for this study (see Figure 4.8). A combination of in-depth interviews and the use of self-administered online questionnaires based on pragmatism was employed to guide the research. An online self-administered questionnaire was used as a data collection technique. Table 5.1 below shows a summary of the research objectives and how they were answered. Additionally, structural equation modelling (SEM), using AMOS version 18.0, was used as a quantitative data analysis technique, and Atlas.ti version 9 was used to analyse the qualitative data.

Table 5.1: Summary of the research objectives and how they were answered

Research objectives	Operationalisation and Interpretation
1. To ascertain the factors that prevent or improve the independent functioning of IAFs in ZSUs.	In-depth interviews with the chief internal auditors IAFs stakeholders' responses to structured questions Descriptive statistics
2. To establish the value added by the IAFs in ZSUs in terms of: <ul style="list-style-type: none"> • Corporate governance practices, • University objectives, • Financial reporting, • Risk management, and • Internal control systems. 	Content analysis from participants in Zimbabwe state enterprises Analysis of Auditor General Reports
3. To examine the relationship between the independence and performance of the IAF and the value they add to state universities in Zimbabwe.	Specification of the basic structural equation model Evaluation and discussion of the conceptual model Regression analysis of the direct relationships and SEM for the moderating hypothesis
4. To determine the role that IA stakeholders can play in improving the independence and performance of the IAFs in ZSUs.	Based on the preceding collective qualitative and quantitative research results. Framework for independent Internal audit functions in ZSUs

Source: Author (2023)

This chapter is structured as follows: Sections 5.2 and 5.3 examine philosophical assumptions with a justification for and focus on the reasons behind choosing the pragmatist epistemology and ontology, which form the basis of this research. Section 5.4 discusses two main research strategies – qualitative and quantitative – with a discussion focus on the justification for the selection of the mixed method research strategy. Section 5.5 discusses the different research approaches available in the internal auditing field and justifies the use of the survey research approach for this study. Section 5.6 describes the research design and the research framework. Section 5.7 explains and justifies the use of a convenience sampling technique in

this research. Sections 5.8 and 5.9 describe the different stages in developing the questionnaire and measurement scales. Section 5.10 provides an overview of the pilot study. Section 5.11 outlines the issues related to data analysis and techniques using SEM. Before concluding this chapter in section 5.13, the ethical considerations of this research are reported in section 5.12.

5.2 Research philosophy and underpinning assumptions

The choice of the research method used to investigate a problem is influenced by the researcher's assumptions regarding the nature of the social world (Cameron, 2011). The assumptions are based on epistemological beliefs and the methodological approach to investigating knowledge (Rehman & Alharthi, 2016). Paradigms are a wide framework of perceptions, beliefs, and feelings within which theories and practices operate. The terms 'paradigm' and 'worldview' mean the same thing, according to Creswell and Creswell (2013). The research can follow four philosophical worldviews: post-positivist, constructivist, transformative, and pragmatic.

A paradigm or worldview can be described as how a researcher perceives the world, acts within it, and interprets it (Kivunja & Kuyini, 2017). In this regard, a research paradigm can be said to be those beliefs and philosophies that outline how a researcher perceives the methodological phases of their research project and works as a basis for selecting research approaches, data collection and analysis methods. Axiology, epistemology, ontology and methodology are the four components of a research paradigm (Kivunja & Kuyini, 2017). Epistemology is used to define how researchers obtain their knowledge and know its truth or reality (Kivunja & Kuyini, 2017). Since epistemology is about knowledge, the knowledge sources can be empirical or intuitive (Kivunja & Kuyini, 2017). Research is said to be informed by authoritative knowledge if the epistemological basis of the research depends on data collected from books, organisational leaders or people who possess knowledge of the topic being researched (Creswell, 2016). This research will, therefore, be informed by the authoritative knowledge of the internal auditors and various stakeholders of the IAUs in SUs.

While epistemology and methodology are treated as synonymous by Howe and Eisenhart (1990), this research supports Johnson and Onwuegbuzie (2004), who maintain that data collection and analytical methods are not dictated by the logic of justification, which is an important aspect of epistemology. According to Johnson and Onwuegbuzie (2004), the link between research procedures or methods and certain paradigms is neither holy nor compulsory. The strict reliance on quantitative methodology that post-positivists advocate

conflicts with the methodological perspective of pragmatism. Pragmatism is a philosophical approach that focuses on the identification of practical methodologies for addressing real-world inquiries. It emphasises a problem-centred and pluralistic methodology, granting researchers the independence to choose from a range of tools, instruments, and procedures (Creswell, 2009).

The choice of research philosophy to be applied depends on the knowledge being investigated (Saunders, Lewis & Thornhill, 2019). Several philosophical standpoints are available to researchers, such as positivism, constructivism, interpretivism, critical realism, and post-positivism. Positivism asserts that knowledge derives from observable and measurable phenomena, ensuring objectivity and reliability in the findings (Du Plooy-Cillers, Davis & Bezuidenhout, 2021). Positivism allows for verifiable and replicable numeric results (Du Plooy-Cillers *et al.*, 2021), aligning with quantitative research techniques. Interpretivism contrasts significantly with positivism since it emphasises understanding social phenomena through the subjective interpretation of participants' experiences (Saunders *et al.*, 2019), thus aligning with qualitative research techniques. Similarly, constructivism posits that reality is socially constructed and subjective, emphasising the importance of understanding the contextual and individual experiences of participants (Piaget, 1971; Vygotsky, 1978). Creswell (2013) is of the opinion that constructivism influences the choice of methodologies and methods, leading researchers to favour qualitative approaches such as case studies and interviews to facilitate deep, contextual insights into participants' perspectives. Considering that this study adopted a mixed methodology, the researcher could not select the use of positivism or interpretivism in isolation.

According to Dewey (1931), the process of developing options for action and organising future observations and experiences is well-suited for achieving desired outcomes. While adherents of post-positivism who prioritise purity tend to solely embrace quantitative research approaches, pragmatism allows researchers to flexibly combine and utilise several methodologies that are most suitable for addressing their research inquiries. Mixed-methods research is a methodology that aligns with the pragmatist perspective, as discussed by Kaya (2013) as well as Johnson and Onwuegbuzie (2004). Aligned with the tenets of pragmatism, this approach incorporates a multitude of concepts and employs several methodologies, placing equal importance on both objective and subjective forms of knowledge (Creswell, 2009). Pragmatic mixed-methods research involves the integration of qualitative and quantitative methodologies, enabling researchers to utilise the most appropriate tools for a given study environment.

5.3 Mixed methods research design

There are several research designs that researchers can adopt, including causal, exploratory, and descriptive research designs. Once a researcher has selected a mixed methods approach for a study, the next step is to decide on the design that best addresses the research problem (Creswell & Plano Clark, 2018). This decision requires the researcher to have a thorough knowledge of the common variants of mixed method designs, their intent, timing and weighting, mixing key procedures, inherent strengths, and challenges (Creswell & Plano Clark, 2018).

To assess the strength and significance of the correlations between the variables proposed in the conceptual model of this study, it is necessary to conduct quantitative research to test the hypotheses described in Chapter 1. Quantitative research provides a rigorous and structured approach, aiming to provide findings that can be generalised to cause-and-effect correlations (Jick, 1979). On the other hand, qualitative research emphasises the interpretation of verbal material (Atkinson, 2017). The development of a quantitative research instrument necessitates a comprehensive understanding of the research subject, which, in the context of this study, pertains to the internal audit units established within state universities in Zimbabwe. Prior to gathering data for quantitative analysis, it is advisable to do qualitative research to have a comprehensive understanding of the nature and features of the targeted audience. In addition, qualitative research can assist in customising the quantitative research instrument to suit the specific characteristics of the target population, thereby enhancing its comprehensibility and applicability for the respondents (Creswell, 2003). This thesis employed a combination of qualitative and quantitative research methods to accomplish its study aims.

The integration of qualitative and quantitative research methodologies has been a topic of discussion among scholars since the 1900s, as evidenced by the works of Weigel (1917), Jick (1979), Mathison (1988), as well as Greene, Carcelli and Graham (1989). This approach has been actively employed in several disciplines, such as sociology, evaluation, education, and management, since the 1980s (Mathison, 1988). Mixed techniques gained popularity in the 1990s, as noted by Creswell and Plano Clark (2018). Mixed methods have emerged as a widely accepted research strategy, methodology, and design approach for studies that incorporate both qualitative and quantitative research components (Creswell & Plano Clark, 2018; Kaya, 2013). This approach involves the integration of various research strands, including the formulation of research questions, data collection and analysis, and the interpretation of results (Kothari, 2004). The exploratory sequential approach involves a first phase of qualitative data gathering and analysis, followed by a subsequent phase of

quantitative data collection, with the qualitative findings informing the quantitative data collection process (Jick, 1979). The exploratory sequential design involves a two-phase research process. Initially, the researcher gathers and examines quantitative data. Subsequently, the insights gained from the quantitative analysis guide the gathering and analysis of qualitative data (Creswell & Creswell, 2013). In the field of embedded design, researchers integrate the gathering and examination of both quantitative and qualitative data within the framework of either a conventional quantitative research design or a qualitative research design. The acquisition and examination of the secondary dataset might take place prior to, during, and/or subsequent to the execution of the data gathering and analysis methods conventionally linked to the overarching principle framework (Creswell & Plano Clark, 2018).

Moreover, triangulation design is the most common and well-known approach to mixing methods (Creswell & Plano Clark, 2018). According to Morse (1991), the purpose of this design is “to obtain different but complementary data on the same topic” to best understand the research problem, as also mentioned in Creswell and Plano Clark (2018). The intention of using this design is to bring together the differing strengths and non-overlapping weaknesses of quantitative methods (large sample size, trends, generalisation) with those of qualitative methods (small sample size, details, in-depth) (Creswell & Plano Clark, 2018). This method is used when a researcher wants to directly compare quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data. In this mixed method approach, both the quantitative and qualitative strands are used to answer the same research questions, which distinguishes it from the embedded design where the qualitative strand is tied to but different from the purpose of the quantitative strand (Creswell & Plano Clark, 2018).

5.3.1 Rationale for mixing the methods

Reasons for mixing the methods have been cited by other authors, including Greene, Carcelli and Graham (1989) as well as Bryman (2006). Research methods can be mixed to seek convergence, corroboration, and correspondence from the different methods. Another reason for mixing methods could be to seek elaboration, enhancement, illustration, and clarification of the results from one method with the results from the other method. Research methods can also be mixed for development purposes, where the results from one method are used to help develop or inform the other method, and development is broadly construed to include sampling and implementation as well as measurement decisions. This research study mixed the research methods for triangulation, complementarity, completeness, expansion, explanation,

credibility and context reasons (Greene, Carcelli & Graham, 1989; Bryman, 2006). Table 5.2 below presents each of the reasons for mixing methods in this research in detail.

Table 5.2: Reasons for mixing the methods

Greene, Caracelli, and Graham (1989:255-274)	Bryman (2006:97-113)
Triangulation aims to achieve the convergence, corroboration, and consistency of findings derived from various research methodologies.	Triangulation, also known as enhanced validity, pertains to the conventional perspective that the integration of quantitative and qualitative research methods can be employed to triangulate findings, hence facilitating mutual corroboration.
Complementarity: The concept of complementarity involves the pursuit of further explanation, improvement, exemplification, and elucidation of the findings obtained via one approach by utilising the findings obtained through another approach.	The concept of offset pertains to the proposition that the research methodologies employed in quantitative and qualitative research include distinct advantages and disadvantages. By integrating these methodologies, researchers can compensate for their respective limitations and leverage the strengths of both approaches.
Development: The objective of development is to utilise the findings obtained from one approach to aid in the advancement or enlightenment of another approach. Development, in a comprehensive sense, encompasses the processes of sampling, implementation, and measuring choices.	Completeness: The concept of completeness entails the researcher's ability to achieve a fuller understanding of their field of investigation by utilising both quantitative and qualitative research methods.
Initiation: The process of initiation involves the exploration of paradoxes and contradictions, the exploration of novel viewpoints within existing frameworks, and the integration of questions or conclusions from one technique into the framework of another method.	Process refers to quantitative research providing an account of structures in social life, while qualitative research provides a sense of process.
Expansion aims to broaden and diversify the scope of investigation through the utilisation of various methodologies across distinct components of inquiry.	Different research questions: The notion of distinct research inquiries pertains to the contention that quantitative and qualitative research methodologies are capable of addressing dissimilar research concerns.

	Explanation: The term 'explanation' denotes the utilisation of one element to aid in clarifying the outcomes produced by another.
	Unexpected results: The concept of unexpected results pertains to the proposition that the integration of quantitative research might yield profitable outcomes when one obtains unanticipated findings that can be comprehended by utilising the other approach.
	Instrument development: Instrument creation involves the utilisation of qualitative research methods to create and refine questionnaires and scale items. This process aims to enhance the wording and comprehensiveness of closed-ended responses, improving the quality of the instruments.
	Sampling is a method employed to assist in the selection of participants or cases in various scenarios.
	Credibility: The concept of credibility pertains to the notion that utilising both methodologies contributes to the robustness and trustworthiness of research findings.
	Context refers to situations where the integration is justified by qualitative research that offers contextual comprehension, together with either generalisable, externally valid findings or comprehensive correlations among uncovered factors.

Source: Author (2023)

5.3.2 Choosing the mixed method research strategy

According to Creswell (2003), there are six major mixed methods models: sequential explanatory design, sequential exploratory design, sequential transformative design, concurrent triangulation design, concurrent embedded design, and concurrent transformative design. The sequential explanatory strategy is a popular strategy for mixed methods design that often appeals to researchers with strong quantitative leanings. It is characterised by the collection and analysis of quantitative data in the first phase of research, followed by the

collection and analysis of qualitative data in the second phase that builds on the results of the initial quantitative results. Weight is typically given to the quantitative data, and the mixing of the data occurs when the initial quantitative results *inform* the secondary qualitative data collection. Thus, the two forms of data are separate but connected. An explicit theory may or may not inform the overall procedure. The sequential exploratory strategy involves a first phase of qualitative data collection and analysis, followed by a second phase of quantitative data collection and analysis that *builds* on the results of the first qualitative phase. Weight is generally placed on the first phase, and the data are mixed by being connected between the qualitative data analysis and the quantitative data collection. The design may or may not be implemented within an explicit theoretical perspective.

The sequential transformative strategy has two distinct data collection phases, one following the other as in sequential exploratory and sequential explanatory strategies. The theoretical lens is introduced in the introduction to a proposal, shapes a directional research question aimed at exploring a problem, creates sensitivity to collecting data from marginalised or underrepresented groups, and ends with a call for action. The concurrent embedded strategy collects data in one phase and has a primary method that guides the project. The secondary method is given less priority and is therefore nested within the primary method. The concurrent embedded strategy uses the two methods to answer different questions or to assess different levels in an organisation. The concurrent transformative approach is guided by the researcher's use of a specific theoretical perspective, just like the sequential transformative design, but only differs in that it collects both quantitative and qualitative data concurrently. The concurrent triangulation approach is probably the most familiar of the six major mixed methods models. In a concurrent triangulation approach, the researcher collects quantitative and qualitative data concurrently and then compares the two databases to determine whether there is convergence, differences, or some combination. This comparison is also referred to as confirmation, disconfirmation, cross-validation, or corroboration (Creswell, 2009).

Certain aspects must be considered when choosing a model for particular research. These aspects are shown below in Figure 5.1, such as timing, weighting, mixing, and theorising.

Figure 5.1: Aspects to Consider in Planning a Mixed Methods Design

<i>Timing</i>	<i>Weighting</i>	<i>Mixing</i>	<i>Theorising</i>
No sequence concurrent	Equal	Integrating	Explicit

Sequential- Qualitative first	Qualitative	Connecting	Implicit
Sequential- Quantitative first	Quantitative	Embedding	

Source: Creswell (2009), adapted from Creswell *et al.* (2003)

Timing: Consideration has to be made of the order in which quantitative and qualitative data will be collected (Creswell, 2009), whether it will come in phases (sequentially) or gathered at the same time (concurrently). Data in this research was collected concurrently. In-depth interviews were conducted simultaneously as the online self-administered questionnaire. This approach supported the researcher in efficiently collecting data against the tight timelines for the study.

Weighting: Weighting is about the priority given to either quantitative or qualitative research in a particular study. Some studies give equal weight to both quantitative and qualitative research, while others tend to emphasise one or the other. Weighting depends on the interests of the researcher. This research gave equal weight to both the quantitative and qualitative research components of the study. This meant that there was the possibility of looking at the multiple perspectives of the phenomenon.

Mixing: At what stage will the data be mixed? And how does mixing occur? Answers to these questions will deal with the 'mixing' part of a mixed method study (Creswell, 2009). Mixing of the two types of data occurred at several stages: the data collection, data analysis, interpretation, or at all three phases.

5.4 Concurrent triangulation research strategy

The concurrent triangulation approach was chosen for this empirical study. The method was chosen because it used separate quantitative and qualitative methods as a means to offset the weaknesses inherent within one method with the strengths of the other (or conversely, the strength of one adds to the strength of the other) (Creswell & Creswell, 2018; Saunders & Lewis, 2017; Shan, 2022). In this approach, the quantitative and qualitative data collection was concurrent, happening in one phase of the research study. Ideally, the weight is equal between the two methods, but often, in practice, priority may be given to one or the other. The mixing during this approach, usually found in an interpretation or discussion section, is to actually merge the data by transforming one type of data into another or integrating or comparing the results of two databases side by side in a discussion. This side-by-side

integration is often seen in published mixed methods studies in which a discussion section first provides quantitative statistical results, followed by qualitative quotes that support or disconfirm the quantitative results (Saunders & Lewis, 2017).

Concurrent triangulation served the purpose of increasing the reliability of the research outcome (Creswell, 2009). The research questions presented in this study were exploratory and descriptive at the same time, hence the use of the mixed method design. On the one hand, the research problem was plainly structured, thus calling for a descriptive study design. On the other hand, exploratory research brings to light and clarifies the influence of internal audit function on the performance of state universities in Zimbabwe.

A quantitative approach is best suited where there is a need to test a theory or explanation or identify factors that impact the results, use an intermediary, or understand the predictors of outcomes (Creswell & Creswell, 2018). Thus, the proposed conceptual model in Chapter 4 required a quantitative approach. However, the qualitative approach is most appropriate where there is a need to explore and understand an idea because the idea has been under-researched (Creswell & Creswell, 2018), as noted in this study. Qualitative research is mostly suitable when the variables to be examined are not known. Qualitative research methods generate knowledge in an application context and lead to a more creative research outcome (Wolf & Rosenberg, 2012). Qualitative research requires in-depth analysis, which will aid in getting descriptive data that will be used to explain the causal relationships shown by the quantitative strand of the study. This research, therefore, required and applied both the quantitative and qualitative outcomes, hence the triangulation of the two methods. Triangulation of methods is achieved by using both qualitative and quantitative methods within the same research. The weaknesses of one method are countered by the other, making the mixed methods approach the most suitable for this study (Schoonenboom & Johnson, 2017; Shan, 2022).

This study analysed quantitative data separately from qualitative data and presented the quantitative results first, followed by a discussion of the qualitative results to support the former. In-depth information on the experiences of the chief internal auditors (CIA) (referred to as the chief audit executives (CAE) in the private sector) was obtained through qualitative interviews. In contrast, the perceptions of the independence of internal auditors in state universities were gathered through a quantitative research instrument from the auditees. The “independence topic in internal auditing is a very sensitive topic” (Goodwin & Yeo, 2001:107), and a deeper understanding of the contextual factors that affect the independence of internal auditors in Zimbabwean state universities could be better be obtained through face-to-face or one on one, in-depth interviews.

The main advantage of the concurrent triangulation mixed methods model is that it results in well-validated and substantiated findings (Cameron, 2011; Creswell & Creswell, 2013; Creswell, 2016). It collects data over a shorter period than the sequential approaches because both qualitative and quantitative data are gathered at one time at the research site). The model, however, also has several limitations; for example, it requires great skill and effort to appropriately study a phenomenon with two separate methods. Discrepancies between the quantitative and qualitative results can also be difficult to resolve if they emerge at the data analysis stage (Cameron, 2011; Creswell & Creswell, 2013; Creswell, 2016).

5.5 The qualitative component of the study

5.5.1 Primary and secondary data

Primary data, such as surveys, interviews, or experiments, have been generated by the researcher and specially designed to understand and solve the research problem at hand. Secondary data is described by Neuman (2014) as data that is not first-hand data or if it is obtained from the opinion or work of previous researchers. Kothari (2004) states that conclusions and statistical analysis from research papers are also considered secondary data since they are obtained from the work of other researchers. Primary data can also include newspaper information, such as whether the news reporter was actually present when the event was reported. Newspapers can be secondary data if the news is not first-hand information to the reporter. This study, being an empirical study, meant that primary data was considered more essential in informing the empirical findings and results. Furthermore, the analysis included secondary data obtained from the yearly Auditor General reports on ZSUs for the period spanning from 2013 to 2020, in addition to the primary data collected, to provide additional substantiation. The researcher conducted a comprehensive analysis of all auditor general reports that were accessible until January 2022.

5.5.2 In-depth interviews

Implementation process: After identifying the study objective, in-depth interviews follow a six-step approach (Bogner, Littig & Menz, 2009). The steps are sample identification, interview guideline development, interview preparation and conduct, interview recording, qualitative data analysis, and interpretation.

Identification of the sample: Managers occupying elevated or specialised positions are frequently regarded as experts in the field of management science (Bogner *et al.*, 2009). The

purpose of conducting in-depth interviews is to collect a substantial amount of expert knowledge pertaining to the topic being investigated. In this research endeavour, the population of interest for sampling consisted of university chief internal auditors. A purposive sampling technique was used to select participants who possessed relevant and precise information (Creswell & Creswell, 2018).

The use of theoretical or purposive sampling is deemed suitable as it allows researchers to optimise their chances of uncovering differences and consolidating categories within the population (Yin, 2014). Purposive sampling is a technique employed to select a sample that encompasses a diverse variety of perspectives rather than adhering strictly to statistical criteria. When determining the sample size, it is important to note that this research's qualitative research strand pursued a somewhat exploratory approach. In contrast, the quantitative research strand aims to derive generalisable findings. Therefore, broadness is more relevant than generalisability for the qualitative study, and it is preferable to study a few cases thoroughly rather than cover many cases with little depth. The number of cases is accordingly influenced by the scope of differences expected in the population rather than by statistical considerations and is ultimately an individual decision of the researcher (Yin, 2014).

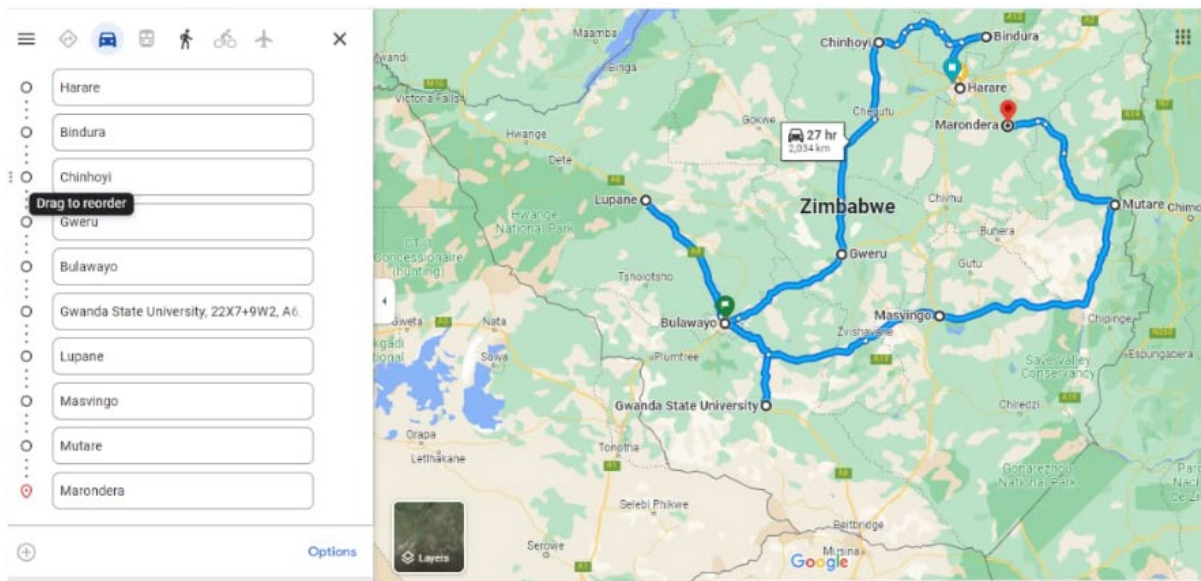
5.5.3 Interview guidelines, the study employed

To fulfil the aims of the qualitative research component of this research, in-depth interviews were conducted with relevant audit staff members from Zimbabwean state universities. In-depth interviews are well recognised as a commonly employed method for gathering empirical data. An in-depth interview is an open-ended, discovery-oriented method to obtain detailed information about a topic from a stakeholder. In-depth interviews are a qualitative research method; their goal is to explore in depth a respondent's point of view, experiences, feelings, and perspectives (Bogner, Littig & Menz, 2009). This type of interview, compared to semi-structured interviews, is often used where topics being explored are overly sensitive in nature, and people may be uncomfortable sharing their honest feelings in a group setting. It involves a researcher asking questions and following up on the responses of the interviewee in an endeavour to extract as much information as possible from the interviewee, who has expertise on the topic/s the interviewer is interested in. This approach is usually premised on the interviewee having direct experience of the topic under review and produces what Bogner *et al.* (2009) have called 'interview knowledge'. Another strength of the in-depth interview lies in its ability to create a research space in which the interviewee is able to tell their story and give the researcher a range of insights and thoughts about a particular topic. Through in-depth interviews, the researcher is able to obtain an understanding of the social reality under

consideration and, depending on the circumstances, collect rich data fairly rapidly (Bogner, Littig & Menz, 2009). The purpose of these interviews is to gather information rather than validate the researcher's preconceived notions or adhere to the subjective theories of the interviewees (Kothari, 2004). To ensure that the interview rules consider the theoretical research implications while also allowing for openness and flexibility, Bogner *et al.* (2009) suggest using open-ended questions and maintaining a low degree of specificity. The interview employs a framework of leading questions to organise the discussion, allowing participants to offer further elaborations and bring supplementary perspectives (Boyce & Neale, 2006).

In-depth interviews can be conducted either face-to-face or through telephone communication. Face-to-face interviews afford the interviewer a heightened level of control over the interview process, allowing for the establishment of a rapport with the interviewee and facilitating the acquisition of additional contextual information, such as visual cues. Conversely, telephone interviews offer increased flexibility in terms of scheduling and duration (Kallio *et al.*, 2016). According to Boyce and Neale (2006), it is recommended that interviews commence by providing a thorough overview of the study environment and the scientific goals associated with the interview. Additionally, it is important to allocate sufficient time to comprehend the interviewee's specific circumstances since these may have potential ramifications for the interpretation of the obtained data. The researcher applied face-to-face, in-depth interviews to obtain qualitative data. Due to the busy schedules of some of the CIAs, interview appointments were made before the researcher visited each SU. Figure 5.2 shows the route followed by the researcher in travelling to the ZSUs. The researcher started with the ZSUs in Harare, then to Bindura, Chinhoyi, Gweru, Bulawayo, Lupane, Gwanda, Masvingo, Mutare and Marondera.

Figure 5.2: Researcher's journey across Zimbabwean state universities



Source: Google Maps (2023)

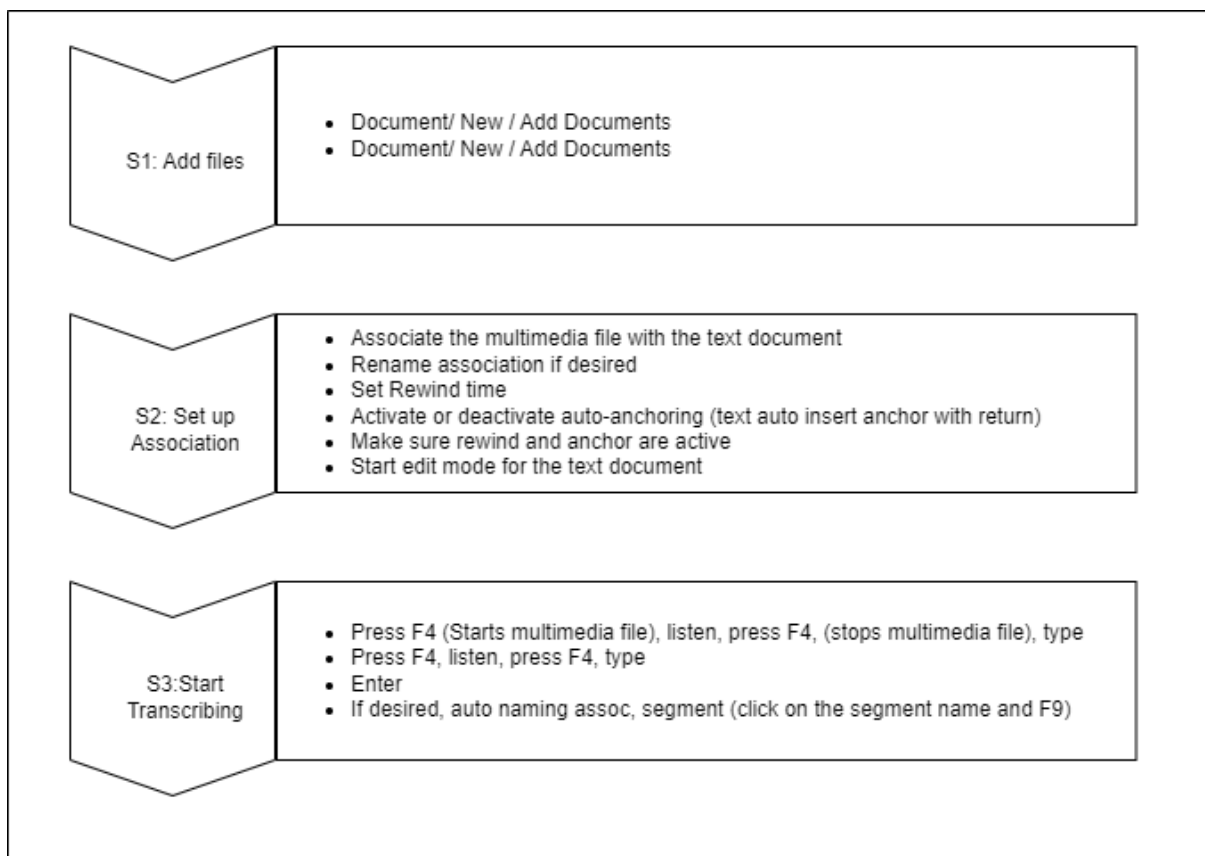
The researcher sent emails to the university registrars asking for permission to collect data from the relevant sample staff members. The emails also requested the email addresses of the chief internal auditors. The request for permission emails was accompanied by the permission letter, which was obtained by the researcher from the MHTEISTD (see Appendix B). Prior to the interview, the researcher sent emails to the CIAs to set up appointments for the face-to-face interviews. The researcher made follow-up telephone calls to accelerate the responses to the email as electricity load shedding delayed the respondents' reading of the emails. The researcher was courteous and flexible in arranging the date and time of the interview. Confirmation of the date, time, and place of the interview was made before the interview. The researcher made it clear that the interview was for academic purposes only and that the length of the interview would be between 30 to 60 minutes. The CIAs were also guaranteed that the information they gave would not be attributed to the person interviewed for data analysis and presentation purposes. The face-to-face interviews were carried out in the CIAs' offices, an environment in which the interviewees felt comfortable and had privacy. The same interview guidelines were used for all the interviews.

Recording the interview: To comprehensively capture all relevant information and mitigate the potential influence of subjective interviewer interpretation, it is imperative that the interview be recorded (Boyce & Neale, 2006; Kallio *et al.*, 2016), with the explicit consent of the interviewee. To conduct a comprehensive analysis of the collected data, the recorded in-depth interviews were also transcribed. The researcher sought consent to record the interview. All

the interviewees consented to the recording of the interviews but begged the researcher to keep the privacy and confidentiality aspect of her promise as some of the information given was overly sensitive and would put their jobs at risk. The researcher reiterated and guaranteed that responses would not be attributed to the person interviewed or a specific state university.

The researcher used ATLAS.ti for transcribing. There are three stages in transcribing audio data with ATLAS.ti.: adding files, associating multimedia and text files, and transcribing. The researcher added the audio files to the ATLAS.ti project that she created. A new text file was created and associated with the multimedia file. The text and multimedia files were displayed side-by-side to enable the researcher to manage both simultaneously. After everything was set up, the researcher transcribed the multimedia file. The researcher would listen to half a sentence, stop the recording, and then type what she had heard. She continued with the process until she finished the transcribing process. Figure 5.3 below shows the stages in the process of transcribing.

Figure 5.3: Stages in the transcription process



Source: Zakaria et al. (2007)

The subsequent analysis and interpretation of the information are discussed in the following section.

5.5.4 Secondary data

The comprehensive report on state-held firms includes the annual reports for ZSUs released by the auditor general. The reports on ZSUs from 2013 to 2021 were obtained from the official website of the Zimbabwe Auditor General's office. The research specifically selected and included in the sample of secondary data all the reports that were easily obtainable and accessible at the time of the research. The research period did not include published reports from the era after 2021. The reports were put onto the ATLAS.ti software program, which was utilised for coding and analysis purposes. The study employed qualitative content analysis (Mayring, 2004) to offer a comprehensive textual depiction of the enhanced value provided by the IAF in ZSUs. The definition of internal auditing states that the goal of the Internal Audit Function (IAF) is to enhance the value and the operations of an organisation in relation to corporate governance, risk management, financial reporting, and internal control systems, which serve as the basis for coding the reports.

5.5.5 Qualitative content analysis as a qualitative analysis procedure

Content analysis is a research methodology that involves the condensation of textual material into a reduced number of content categories or themes, adhering to established coding rules (Mayring, 2004). This technique enables the systematic examination of substantial volumes of textual data, facilitating a comprehensive understanding of the underlying contexts (Weber, 1987). The aforementioned objectives align with the aims of the qualitative research conducted in this study and demonstrate the suitability of content analysis for this topic (Mayring, 2004). Content analysis is a methodical approach that can be used to examine the content of in-depth interviews. This approach ensures that all units of analysis are treated equally, regardless of when they are included in the analysis. Additionally, promoting objectivity by disregarding the identity and location of the analyst.

Qualitative content analysis primarily focuses on the utilisation of word counts to ascertain the main themes of interest and categorise the data (Mayring, 2004). The emergence of qualitative content analysis can be attributed to the criticism directed at quantitative content analysis, which is accused of oversimplifying and thereby compromising the accuracy of the analysis. Hsieh and Shannon (2005) differentiate between three types of content analysis: conventional, guided, and summative. The use of directed content analysis is appropriate in situations where there is an existing theoretical framework or previous study on a particular phenomenon that is either insufficient or would benefit from more explanation (Hsieh & Shannon, 2005). This pertains to the present study, in which the qualitative analysis component is informed by

theoretical frameworks and prior research in the domain of internal audit independence. The technique of directed content analysis involves a systematic approach that begins with the identification of essential concepts drawn from theory, which are then used as initial coding categories (Kibiswa, 2019). According to Krippendorff and Weber (1987), the priori codes undergo revision and reduction until they reach a state of maximum mutual exclusivity and exhaustiveness.

The utilisation of this strategy has significant ramifications for the methodology employed during the interviewing process. Open-ended inquiries can be followed by focused questions related to predetermined categories, as suggested by Hsieh and Shannon (2005), aligning with the previously described in-depth interview methodology. In the implementation of this methodology, it is crucial to exercise caution to prevent bias resulting from preconceived coding that might influence the interviewee to produce responses that align with the researchers' predetermined coding framework. The transcription of the interviews serves as the primary source material for the directed qualitative content analysis. According to Elo and Kyngäs (2008), interview paraphrases are initially classified into pre-defined categories. If none of the predetermined categories are suitable, the categories are then modified until all paraphrases are appropriately classified. The obtained results either corroborate or refute prior theoretical frameworks. According to Yin (2014), one interpretation technique that can be employed is systematic combining. This technique involves a systematic evaluation of data in relation to existing theory, the research framework, and relevant empirical findings. The primary objective of the researcher is to establish a congruence between theoretical concepts and empirical observations. To do this, the researcher modifies the research framework to reconcile any potential inconsistencies that may arise between the theoretical framework and the findings from the specific study.

This research pertains to the validation, modification, or refutation of the variables and hypotheses encompassed within the study model. The results are subsequently presented in a comprehensive manner, allowing the reader to experience a sense of active participation in the research and evaluate the validity of the findings (Kallio *et al.*, 2016). Simultaneously, the presentation of interview data is limited to the information that directly addresses the research questions (Yin, 2014; Assarroudi *et al.*, 2018). According to Mayring (2004), there are several methodologies available for evaluating the dependability and credibility of the results obtained from qualitative content analysis, which are applicable to the current study.

5.6 Methodology of the quantitative component of the study

5.6.1 Online survey as a quantitative data gathering instrument

The qualitative research approach aims to evaluate the practical application of internal audit independence mechanisms that have been theoretically developed. Conversely, the quantitative research approach aims to examine and test the hypotheses pertaining to these internal audit independence mechanisms.

5.6.2 Written survey

The utilisation of standardised written surveys is widely acknowledged as the most appropriate and commonly employed method to attain quantitative objectives in social sciences, particularly in the field of management research (Creswell, 2009). When considering oral or telephone-based surveys in comparison to written surveys, it becomes evident that the latter offers some advantages that are pertinent to achieving the objectives of the proposed quantitative research. To begin with, it is important to note that interviewer effects, which are commonly associated with measurement error, were not present in this study. Furthermore, respondents could engage in thoughtful contemplation of the inquiries for an extended period of time and are even permitted to consult supplementary resources (Regmi *et al.*, 2016). In addition, the survey instrument affords respondents greater freedom in terms of the timing and location of survey completion. According to Schonlau, Fricker and Elliot (2002), the implementation of this approach has the potential to enhance motivation and improve response rates. In a similar vein, it may be argued that employing a written survey as a main research method is more economically advantageous compared to other approaches that necessitate a substantial volume of replies to facilitate the formulation of generalisations (Regmi *et al.*, 2016).

5.6.3 Online operationalization

Written surveys can be conducted using either mail or internet methods, which are the two prevalent options available (Schonlau, Fricker & Elliot, 2002; Dillman, Smyth & Christian, 2014). Although online surveys provide the benefit of obtaining prompt replies at a minimal expense, their suitability for every research topic is not universal. According to Schonlau *et al.* (2002) as well as Regmi *et al.* (2016), online surveys are a suitable method of data collection when the sample size is sufficiently broad and geographically dispersed, when the target population has internet access, and when the inclusion of electronic features, such as

interactive elements, enhances the survey experience for respondents. The survey on internal audit independence does not entirely adhere to these three requirements. Although the sample size is very wide and encompasses many provinces in Zimbabwe, the issue of internet access and electricity availability poses a challenge in the country. One of the most widely debated aspects of online surveys is the potential for coverage mistakes that arise from the target population's internet access and familiarity (Couper, 2008). This aspect is not relevant when surveying chief internal auditors in Zimbabwe who have regular access to email.

5.6.4 Implementation process

According to Schonlau *et al.* (2002) and Leeuw, Hox and Dillman (2008), there are six steps to operationalising an online survey after determining the study's purpose. The identification of the sample is the first step, and the creation of an online questionnaire is the second step. The third step entails pre-testing and optimisation of the questionnaire. Subsequently, in the fourth step, the survey is launched, and data collection takes place. The fifth step involves quantitative data analysis, and finally, in the sixth step, the collected data is interpreted.

5.6.5 Determining the identity or characteristics of the sample

To customise the survey for the intended demographic elements, the initial step in the implementation process involves determining the unit of analysis and target population for the questionnaire, as well as devising a strategy to sample a subset of this population. The researcher opted for non-probability purposive sampling to maximise the inclusion of potential respondents (Kothari, 2004; Singh, 2007). The primary objective of this study was to gather empirical data that would address research inquiries concerning the independence of internal auditors within the context of Zimbabwe. The researcher deliberately selected individuals in positions of authority, such as heads of departments, university principal officers, and other auditees, to obtain their perspectives on the topic being investigated.

5.6.6 Creating an online questionnaire

It is imperative to exercise meticulousness in the design of a questionnaire to mitigate the presence of common method bias, which poses a significant threat to the accuracy of measurements in online self-administered surveys (Singh, 2007; Dillman, Smyth & Christian, 2014). According to Singh (2007) and Leeuw, Hox and Dillman (2008), there are four primary categories of potential causes that contribute to common method bias. These categories include item characteristic effects, item context effects, measurement context effects, and

common rater effects. The concepts of item characteristic effects and item context effects pertain to biases that arise from the impact of item properties (such as positive or negative connotations) or the context in which an item is presented (such as its printing or its placement alongside other items). These biases can be mitigated in survey design by employing neutral wording, formatting, and a survey structure that avoids explicitly linking the causes and effects that the researcher aims to investigate (Schonlau *et al.*, 2002; Kothari, 2004; Singh, 2007). Controlling measurement context effects is a challenge in self-administered online surveys. Nonetheless, the use of a self-administered survey design mitigates the potential for respondents to provide socially desired responses when compared to a personal interview (Schonlau *et al.*, 2002). So, the main remaining risk comes from common rater effects, which include the consistency motif, respondents' tendency to give the same answers, implicit theories, social desirability, leniency bias and acquiescence bias.

In the context of this study's survey, it is possible that bias from university principal officers, who might want to protect their reputation as government representatives, could have an impact on respondents' assessments of the independence of internal auditors. Say, for example, that the only way to reduce the effect of common rater bias is to get measurements of the exogenous and endogenous variables from different places. Incorporating data from diverse sources will augment the intricacy of the survey and jeopardise the attainment of sufficient response rates. Conducting in-depth interviews with chief internal auditors might offer a more impartial comprehension of the topic at hand. The survey design of this study acknowledges the potential presence of common rater bias. It aims to mitigate it through several strategies, such as ensuring respondent anonymity and employing data triangulation techniques (Greene, Carcelli & Graham, 1989).

5.6.7 Pre-testing and optimisation of the questionnaire

Pre-testing is a method used to detect potential problems related to the wording, order of questions, visual design, and/or navigation of a survey instrument (Dillman, Smyth & Christian, 2014). It is crucial to evaluate the performance of a questionnaire during actual data collection conditions (Leeuw *et al.*, 2008). The questionnaire underwent modifications in response to the feedback from the initial group of pre-testers, and a second group of pre-testers then retested it using Leeuw *et al.* (2008) "think-aloud" pre-testing methodology.

5.6.8 Survey launch and data collection

The design of a survey launch should be optimised to facilitate increased rates of participation. Tailored survey design is a methodology employed to accomplish this purpose by conceptualising surveys as a mechanism of social interaction wherein survey participants must perceive incentives. According to Dillman *et al.* (2014), it is imperative for participation expenses to be kept at a minimal level while simultaneously establishing a sense of confidence. This guidance was integrated into the initiation of the survey conducted for this study.

5.6.9 Quantitative data analysis and interpretation

The process of quantitative data analysis and interpretation entails the use of descriptive statistics to portray the attributes of the sample. Additionally, it necessitates the application of a suitable statistical methodology to analyse and interpret the data. The following section delves into techniques that are relevant and can be applied.

5.7 Structural equation modelling as a quantitative analysis procedure

Structural equation modelling (SEM) has emerged as a prominent research methodology for assessing causal links between components (Matsueda, 2012). The aforementioned approach encompasses a range of statistical techniques designed to estimate a network of causal connections, as defined by a theoretical framework, that links multiple latent complex concepts. Each of these concepts is measured using observable indicators. This approach also explicitly incorporates the modelling of measurement error, as discussed by Gefen (2000). The utilisation of SEM has become increasingly prevalent among quantitative social scientists due to the growing accessibility of user-friendly software packages. This statistical technique has been widely applied in economic and managerial research, making it one of the most popular methodologies in this field (Nitzl, 2014; Hair *et al.*, 2017; Sarstedt, Ringle & Hair, 2020). The selection of SEM as the most suitable statistical method to test and assess the conceptual model in this study is based on its capability to handle latent variables.

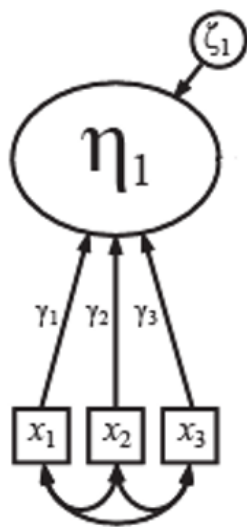
5.8 Basics of structural equation modelling

SEM encompasses two distinct categories of models, namely measurement and structural models, as outlined by Hoyle (2012) and Westland (2015). Measurement models, also known as outer models, enable the quantification of constructs through the use of observable

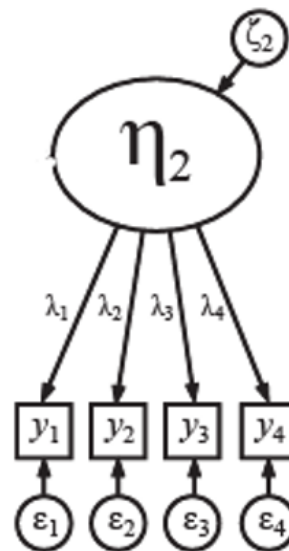
indicators. These models assess the extent to which constructs are accurately represented by these indicators. Each concept is associated with a measurement model that illustrates the relationship between the construct and its corresponding indicators. There are two options available for measuring constructs, which depend on the causal relationship between the indicators and the construct, which are formative and reflective measurement models. The two types of measurement models are shown in Figure 5.4.

Figure 5.4: Measurement models

Formative measurement model



Reflective measurement model



Source: Adapted from Hoyle (2012: 57)

In **reflective measurement models**, the indicators utilised to assess a construct are influenced by a shared underlying notion, and the causal relationship between the construct and the indicators is such that it originates from the construct and extends to the indicators.

Formative measurement models claim that the indicators are responsible for the formation or causation of the construct, with the causal relationship flowing from the indicators to the construct. Constructs do not possess inherent qualities of reflection or formation. The selection of a measurement strategy is contingent upon the conceptualisation and research aims of the study (Hair *et al.*, 2014). Furthermore, it is imperative that the chosen approach aligns with theoretical concerns (Kline, 2012; Westland, 2015). In a SEM framework, it is possible for both types of operationalisations to coexist, each serving different constructions. Scholars in the field of SEM advise researchers to exercise caution while selecting the appropriate measurement perspective, specifically distinguishing between formative and reflective approaches. Failure to accurately specify the measuring perspective can result in

measurement mistakes and, therefore, lead to erroneous results. This concern has been highlighted by Kline (2012) and Westland (2015).

Reflective measurement is a suitable approach to employ when there is a causal relationship between the construct and the indicators. Additionally, the construct should be regarded as a trait that accounts for the indicators rather than being a mere aggregation of the indicators (Gefen, 2000; Kline, 2012; Westland, 2015). The indicators of reflecting measurement models commonly exhibit identical content, and so demonstrate a correlation (Gefen, 2000; Bowen *et al.*, 2012).

Formative constructs have a causal relationship where the indicators influence the construct. The construct is formed by a mixture of indicators that do not necessarily need to correlate or have identical content. Measurement errors can arise at the indicator level in reflective measurement models and at the construct level in formative measurement models (Gefen, 2000; Kline, 2012). Table 5.3 provides a comprehensive overview of the differentiation criteria utilised for the purpose of specifying the measuring approach.

Table 5.3: Guidelines for choosing a measurement model

Criterion	Reflective measurement	Formative measurement	Source
Direction of causal priority	From the construct to the indicators	From the indicators to the construct	Diamantopoulos & Winklhofer (2001)
Explanatory power	Construct is a trait explaining the indicators	Construct is a combination of the indicators	Fornell & Bookstein (1982)
Indicator correlation	Prerequisite	Undesirable (multicollinearity)	Chin (1998a)
Indicator interchangeability	Desirable	Not required	Jarvis <i>et al.</i> (2003)
Occurance of potential measurement mistakes	On indicator level	On construct level	Ringle (2004)

Source: Hair *et al.* (2014)

5.8.1 Selection of the applicable SEM approach: CB-SEM vs. PLS-SEM

There are two well-established ways for estimating structural equation models: covariance-based approaches, also known as CB-SEM and variance-based approaches, that follow the partial least squares approach, also known as PLS-SEM.

CB-SEM development is credited to Joreskog (1967, 1970) and Joreskog and Sorbom (1982, 1994), and it is commonly linked with utilising software packages such as LISREL and AMOS. The primary objective of CB-SEM is to estimate a collection of model parameters that minimise the disparity between the theoretical covariance matrix suggested by the structural equations system and the covariance matrix observed empirically (Hair *et al.*, 2017). This is commonly achieved using a maximum likelihood function (Joreskog, 1967; Joreskog & Sorbom, 1994). CB-SEM has been criticised for some restrictions associated with the maximum likelihood function. The aforementioned factors encompass the necessity for multivariate normality in the data under examination, the need for substantial sample size, and the challenges associated with handling missing data (Malone & Lubansky, 2012).

Partial least squares structural equation modelling (PLS-SEM) is well recognised as being primarily associated with the contributions of Wold (1980). PLS-SEM, as described by Wold (1980:334) as a "soft modelling approach", is characterised by its lack of stringent assumptions regarding distribution, sample size, and measurement scale. Consequently, PLS-SEM is a suitable method for testing hypotheses. The approach can be utilised in both confirmatory and exploratory research, as stated by Hair *et al.* (2017). According to Hair *et al.* (2014), the partial least squares (PLS) algorithm is utilised to estimate the model parameters to optimise the explained variance for all endogenous constructs inside the model. This is achieved through a sequence of least squares (OLS) regressions.

CB-SEM aims to reduce the residual covariance, while PLS-SEM aims to minimise the residual variance of endogenous variables in the structural model (Hair *et al.*, 2017). PLS-SEM achieves this by predicting the observable indicators associated with a construct through iterative least squares regressions, which are based on canonical correlation analysis (Shmueli *et al.*, 2019). The procedural iteration of the PLS-SEM algorithm can be delineated in the following manner. During the initial phase, the estimation of construct scores commences with arbitrary values in the first iteration. In the subsequent phase, the partial regression model is computed using the scores. The estimation of outer weights in each formative measurement model is conducted by partial multiple regressions, where the construct is treated as the dependent variable. According to Hair *et al.* (2014), in reflective measurement models, the estimation of outer loadings involves using single regressions to

determine the relationship between each indicator variable and its corresponding construct. The estimation of the inner weight coefficients, which represent the path coefficients of the structural model, is conducted using a partial regression model. This model is applied to each dependent construct, specifically the endogenous constructs and their direct preceding constructs. The two stages are iteratively performed until a point is reached where further iterations no longer improve the fit of the model. This occurs when the discrepancy between the observed indicators or estimated construct scores and the values predicted by the corresponding measurement or structural model is minimised, and the coefficients of determination (R^2) for the endogenous constructs are maximised.

The prevalence of CB-SEM as the primary SEM method in management research until the late 1990s might be attributed to the existence of suitable statistical software packages like LISREL, AMOS, and EQS (Ringle *et al.*, 2023). In recent times, researchers have shown a growing interest in the utilisation of the variance-based PLS approach. This increased attention can be attributed to the development of software packages that facilitate the application of this approach (Hair, Ringle & Sarstedt, 2012). Despite being referred to as "soft modelling" by its advocates (Wold, 1980), the PLS-SEM technique is not without its limitations. The scores generated by the PLS algorithm are calculated as linear combinations of the indicator data. As a result, these scores are susceptible to measurement error caused by both the empirical data and the specification of the measurement model. This measurement inaccuracy can only be mitigated as the number of observations and indicators approaches infinity. If this condition is not met, the presence of measurement error persists and introduces bias to the model. The linkages within the path model are often undervalued, whereas the parameters associated with the measurement models, such as loadings and weights, are commonly overstated (Hair *et al.*, 2014). One of the primary limitations of PLS-SEM is the presence of structural bias, as discussed by Hair *et al.* (2017).

The appropriate selection of an SEM strategy should be conducted with careful consideration of methodological factors and the fundamental research philosophy (Sarstedt, Ringle & Hair, 2020). According to Hair *et al.* (2017), the following factors should be considered: research philosophy (exploratory vs confirmatory), considerations of sample size, assumptions about the distribution of variables, ability to handle formative measurement models, complexity of the model, and criteria for the evaluation of fit.

5.8.2 Theoretical considerations

When there is substantial theoretical and empirical support, CB-SEM is appropriate for confirmatory purposes, verifying the coherence between the proposed model and the actual data (Rigdon, Sarstedt & Ringle, 2017). The maximum likelihood function used in CB-SEM, which necessitates a thorough pre-specification of the model to produce significant results, is less ideal for obtaining optimal predictions for dependent variables in situations where the theory is relatively new, the SEM has not been tested, or new constructs are introduced (Hair *et al.*, 2017).

5.8.2.1 Sample size

According to Rigdon *et al.* (2017), in the context of CB-SEM, it is recommended to have sample sizes of at least five, preferably ten times the number of parameters to be estimated by the model. Additionally, it is advisable to have sample sizes exceeding $n = 200$ to minimise the possibility of non-convergence and obtaining inappropriate solutions. According to Hair *et al.* (2017), in the context of PLS-SEM, it is generally recommended to have a sample size that is at least ten times the number of indicators used to measure the most intricate construct or ten times the number of exogenous constructs that explain an endogenous construct. The larger of these two values should be considered as the minimum sample size requirement. As a result, the PLS-SEM method enables the estimation of models with a minimum of 20 observations for basic models. It is widely favoured as a structural equation modelling technique for dealing with small sample sizes, as indicated by studies conducted by Hair *et al.* (2014), Hair *et al.* (2017), and Sarstedt, Ringle and Hair (2020).

5.8.2.2 Distributional assumptions

The utilisation of the maximum-likelihood function in CB-SEM necessitates the presence of a (multi-)normal distribution (Joreskog, 1967) for the observed values. However, achieving such a distribution in empirical research is sometimes unattainable (Shmueli *et al.*, 2019). PLS-SEM has the capability to handle data that follows a normal distribution, as well as data that deviates significantly from normality, without imposing tight assumptions about the underlying distribution (Hair *et al.*, 2014). Additionally, PLS-SEM handles missing data more well than other statistical techniques (Hair *et al.*, 2017).

5.8.2.3 Integration of formative measurement models

In contrast to the commonly misstated assertion that CB-SEM lacks the capability to specify formative measurement models, it is important to note that both CB-SEM and PLS-SEM are

equipped to handle both formative and reflective measurement models, as demonstrated by Hair *et al.* (2017).

5.8.2.4 Model complexity

Complex models are distinguished by their inclusion of numerous constructs and route linkages, as well as the presence of moderating relationships and/or higher-order constructs. PLS-SEM exhibits numerous advantages within this particular context. The application of modelling moderating effects with an interaction variable may only be utilised in variance-based structural equation models, as previously mentioned (Hair *et al.*, 2017). Additionally, prior research has demonstrated that the bias in PLS-SEM is minimal in cases where there is a high number of constructs, indicators, and routes and a small sample size (Hair *et al.*, 2017; Ringle *et al.*, 2023). The specification of these models in CB-SEM presents challenges due to the extensive theoretical support required for each measurement model and structural relationship to establish valid models. As a result, scholars specialising in PLS-SEM recommend its use for complex models (Hair, Ringle & Sarstedt, 2012; Hair *et al.*, 2017; Ringle *et al.*, 2023).

5.8.2.5 Availability of evaluation-of-fit criteria

In comparison with PLS-SEM, covariance-based structural equation modelling (CB-SEM) provides the advantage of incorporating both global and local criteria for assessing the fit of the model. PLS-SEM utilises local goodness-of-fit indices to assess certain elements of the structural equation model, such as the structural model or the measurement model in isolation. The use of CB-SEM is supported by global goodness-of-fit criteria, which reinforce its suitability for theory testing, assuming that the distributional assumptions are satisfied (Hair *et al.*, 2012; Hair *et al.*, 2017). Despite the existence of numerous local goodness-of-fit criteria that can be applied to PLS-SEM, the lack of a global goodness-of-fit criterion continues to be a subject of criticism in the field (Hair *et al.*, 2017).

Based on the aforementioned requirements, the statistical approach chosen for the quantitative research strand of this study is CB-SEM. This is based on the following motivations and considerations:

5.8.3 Research philosophy (theoretical considerations)

This study employed CB-SEM since it is well suited for confirmatory purposes, namely for assessing the consistency between the observed data and the theoretical model, particularly

in cases where there is substantial theoretical and empirical support (Bentler & Chou, 1987). The research objective was to assess the performance of the IAF in ZSUs in terms of independence. The construct (IAF independence) is a trait explaining the indicators in this research (availability of resources, budget status, objectivity, reporting lines, IIA membership and certification, appointment and dismissal of CIA, CIA status in organisation, internal audit mandate and frequency of meetings with the audit committee). Empirical evidence and publications by the IIA gave guidelines on indicators that show the presence or lack of IAF independence (Macrae & Van Gils, 2014). This research sought to test the consistency between the IIA's description of IAF independence as highlighted in (Macrae & Van Gils, 2014; IIA, 2017b) and the status of IAFs in Zimbabwean state universities.

5.8.4 Considerations of sample size

The research sample used in this study exceeded 200, which is more than the minimum requirement of 150 for the CB-SEM (Bentler & Chou, 1987). According to Marsh *et al.* (1998), in the context of CB-SEM, it is recommended to have sample sizes of at least five, preferably ten observations per parameter (Bentler & Chou, 1987), to be estimated by the model. Additionally, it is advisable to have sample sizes above $n = 200$ to minimise the possibility of non-convergence and obtaining inappropriate solutions. Assumptions about the distribution of variables. The research had no missing data, which made the CB-SEM the most appropriate selection. Despite the requirement of a (multi-) normal distribution of observable values in the maximum-likelihood function employed in CB-SEM, it is often unattainable in empirical research, as highlighted by Joreskog (1967).

5.8.5 The capacity to effectively manage formative measurement models

In contrast with the commonly misunderstood assertion that CB-SEM lacks the capability to specify formative measurement models, it has been argued that CB-SEM is indeed capable of accommodating both formative and reflective measurement models (Davcik, 2014). Furthermore, it has been observed that the strategy preferred by a majority of researchers when incorporating reflectively assessed components into their model is CB-SEM (Davcik, 2014).

5.8.6 Complexity of the model

Complex models are distinguished by their inclusion of numerous constructs and route linkages, as well as the presence of moderating relationships and/or higher-order constructs.

Although the model is complex in this research, CB-SEM has been chosen because the complexity is counter-matched by the extensive theoretical support that is present to support each measurement model and structural relationship to establish valid models (Hair *et al.*, 2012; Hair *et al.*, 2017; Ringle *et al.*, 2023).

5.8.7 Criteria for the evaluation of fit

Compared with PLS-SEM, covariance-based structural equation modelling (CB-SEM) provides the advantage of incorporating both global and local criteria for assessing the model's fit. The use of CB-SEM is supported by global goodness-of-fit criteria, which reinforces its suitability for theory testing, assuming that the distributional assumptions are satisfied (Hair *et al.*, 2017).

5.9 Research strategy

Surveys and multiple case studies were used for this research. The rationale for choosing this research design is premised on the research purpose (Creswell, 2009). Quantitatively, the research aimed to establish the relationships between IA, independence and IAF performance, and IAF and the performance of the SUs. Qualitatively, the research aimed to identify and explain the contextual factors that influence IA, independence and IAF. According to Yin (2014), case-based studies can either be single or multiple. This research considered multiple cases primarily to better understand the phenomena under investigation (Yin, 2014). The state universities are the identified cases, as each operates independently and is located in a variety of provinces within Zimbabwe.

5.10 Case study

According to Yin (2014), a comprehensive investigation can be conducted by a researcher on several subjects, such as a pursuit, occasion, plan of action, method, or individuals inside a certain region, entity, group, unit, or industry. As seen in figure 5.6 below, case studies can be intrinsic and instrumental or collective. The first two are single case studies with an internal focus, and the third combines several cases with an internal and external focus. According to Yin (2014), a case study focuses on either a single instance or multiple cases. This study focused on a selection of cases, specifically 13 state universities in Zimbabwe. According to Creswell (2009), case study research designs are widely recognised and utilised across various academic disciplines, including accounting, internal auditing, management, and business studies. The aforementioned perspective aligns with the area of inquiry within

internal auditing, elucidating the rationale for employing a case study as the appropriate research design. Nevertheless, it is worth noting that case studies may present challenges in terms of their length, comprehensibility, and examination (Denzin & Lincoln, 2018). To effectively address this issue, it is imperative to establish clear boundaries and delineate the precise geography and circumstances of the research study. This study focused on examining the independence and performance of internal auditors within the context of Zimbabwe State University.

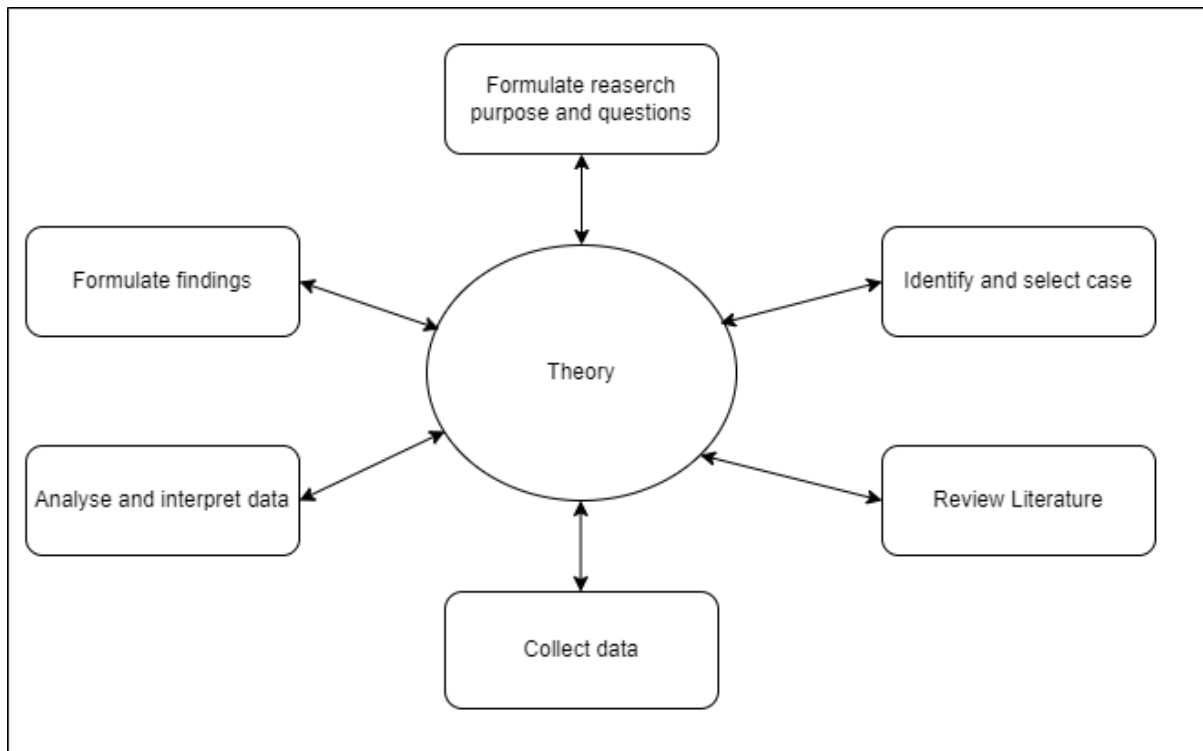
According to Saunders (2012), the concept of unity of analysis refers to the specific level at which research is conducted and the objects that are the subject of investigation. In this context, the focus of analysis is the IAF, and it seeks to understand how the independence of internal auditing is influenced by theories such as agency theory, stakeholder theory, and institutional theory. Given the Auditor General's findings of financial misappropriation, misuse of government resources, and instances of corruption spanning from 2013 to 2021, it is crucial to direct our attention towards the numerous occurrences of state universities in Zimbabwe within the context of this research. Furthermore, there is a lack of research about the independence and effectiveness of the IAF within an assurance, consulting, and IT Audit services framework in the context of Zimbabwean state universities. Therefore, the aforementioned factors collectively influenced the decision to select SUs as the subject of a multiple case study. Creswell *et al.* (2018) propose that the multiple case study design is employed to gather additional information in diverse domains, such as evaluation. This design facilitates a comprehensive examination of a case, which may involve a programme, event, activity, process, or one or more individuals, through the researcher's diligent efforts. A multi-case study refers to a comprehensive investigation of phenomena or issues within their authentic context (Yin, 2014).

The implementation of a multi-case study strategy was deemed the most suitable approach for this particular study. This choice can be attributed to its inherent capacity to effectively conduct and analyse data inside its specific application framework. A multi-case study methodology enables a comprehensive exploration and comprehension of specific concerns pertaining to IAFs within the context of agency, stakeholder, and institutional theories. This approach is particularly valuable when there is a scarcity of existing research in the field, thus offering an opportunity to delve into the subject matter in more depth (Yin, 2014). In their study, Saunders *et al.* (2019) make a distinction between research strategies that are applicable to orthodox situations and those that are applicable to emergent cases. The term 'orthodox case study' refers to a research approach that is characterised by a rigorous definition and a highly structured framework established prior to the commencement of the study. This approach is

typically pursued in a linear manner and is often associated with realist philosophical assumptions (Saunders *et al.*, 2019). The emergent multi-case study strategy involves the deliberate selection of multiple cases by a researcher for the purpose of conducting research. This approach allows the researcher to actively engage in collaboration within the chosen setting, including various stages of data collection and analysis, while also incorporating relevant literature. Typically, this strategy is guided by a pragmatic philosophy (Saunders *et al.*, 2019). According to Yin (2018), case studies can serve as a valuable research method for exploratory-driven studies.

The primary motivation of interpretivist researchers is the development of comprehensive and intricate descriptions of their case study research (Yin, 2014). Yin (2014) asserts that researchers engage in many activities to enhance the quality and depth of their work. These activities include refining, extending, and generating theory, as well as analysing data to discover themes and patterns. Additionally, researchers employ an inductive approach to their work. The case study method is sometimes subject to criticism due to its low capacity for generalising findings. Additionally, there are misconceptions regarding its ability to generate trustworthy, generalisable, and theoretical contributions to knowledge. One limitation of the case study method is its lack of automatic generalisability, as the findings may not be universally applicable. Additionally, the many themes identified during the interviews may not necessarily be transferable to an equivalent context (Yin, 2014). According to Yin (2009), a case study research design is appropriate when the researcher lacks control over the specific behavioural occurrences associated with the phenomenon being studied and when the focus of the study is on current events rather than historical ones. By conducting a comprehensive examination and evaluation of the actual experiences of public Zimbabwe SUs, over which the researcher lacks control, it is acknowledged that employing a case study research methodology would offer the greatest opportunity to achieve the research aims. The procedure of case study research is illustrated in Figure 5.5. The model suggests a linear progression, either from theory to research (deductive) or from research to theory (inductive).

Figure 5.5: A dialogical approach to theory in case study



Source: Rule and John (2015:8)

According to Yin (2014), the findings of the case study can be applied to theory but not to the broader population. One of the limitations associated with case studies is the narrow focus of the collected data, which primarily pertains to the specific case under investigation. This limited scope introduces the potential for bias, which can influence both the findings and conclusions drawn from the study. Additionally, the narrative format of case studies often results in lengthy presentations of information, which may diminish the reader's engagement. Furthermore, case studies heavily rely on human interpretations, particularly those of internal auditors, which introduces subjectivity into the analysis. Moreover, the absence of control over research variables in case studies can lead to issues of internal validity. Consequently, the findings of case studies may not be easily generalised to other domains within the government.

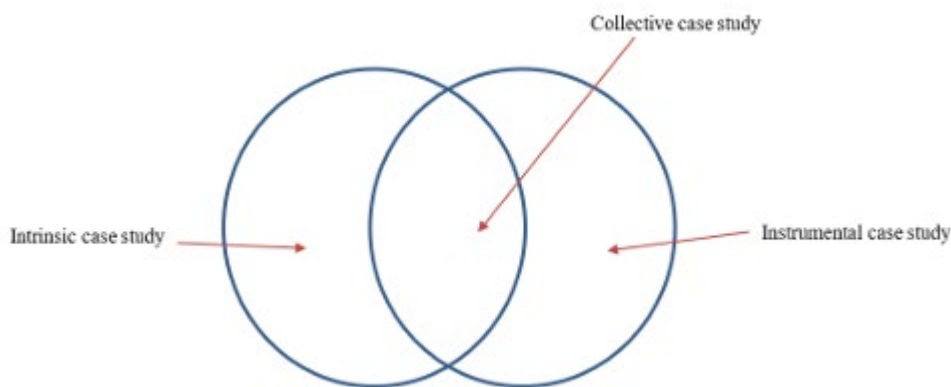
5.11 Justification for using the case study research design

Kekeya (2021) included intrinsic, instrumental, and collective research case studies. The intrinsic and instrumental case studies are single case studies. This research used the collective or multiple case study design. This was considered to be most appropriate for this study as it sufficiently covered all the targeted units of the population and reduced the risk of subjectivity where only a single case (SU) is relied upon. The decision on the number of cases

(Sus) to focus on was, however, reached after taking several considerations into account. According to Creswell (2013), sample size depends on what the researcher wants to know, the purpose of the inquiry, what will be useful, what will have credibility, and what can be done with available time and resources. The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observation/analytical capabilities of the researcher than with the sample size.

This research focused on all the state universities in Zimbabwe as the multiple cases for this study. The research sought to assess the IAFs in ZSUs for independence and performance because the multiple case study approach allows evaluation of all cases for similarities and differences in this regard (Johnson & Onwuegbuzie, 2008). Comparisons and contrasts between and among cases help researchers to better comprehend the phenomena (Kekeya, 2021). Policymakers, such as government agencies, may review policies and make educated judgments based on various case studies, and practitioners, like CIAs, can apply recommendations and proposals to improve their internal auditing techniques. This research focused on state universities in Zimbabwe, providing adequate findings for the government and other university stakeholders to make decisions for ZSUs.

Figure 5.6: A framework illustrating the differences between collective, intrinsic, and instrumental case studies



Source: Kekeya (2021: 35)

5.12 Demarcation/delimitation of study

The research scope was narrowed to SUs with internal audit departments in Zimbabwe. Zimbabwe has the following state-owned universities: Bindura State University of Science Education (BUSE); Chinhoyi State University of Technology (CUT); Great Zimbabwe State University (which was formerly named University of Masvingo); Gwanda State University

(GSU); the Harare Institute of Technology (HIT); Lupane State University (LSU); Manicaland State University of Applied Sciences; Marondera State University of Agricultural Sciences and Technology; Midlands State University (MSU); the National State University of Science and Technology; Zimbabwe (NUST); the University of Zimbabwe (UZ); Zimbabwe National Defence University (ZNDU), and Zimbabwe Open University (ZOU). However, ZNDU was excluded from the research because it has no functional internal audit department.

This research sought to contribute to the public sector. State universities are particularly interested in this research because the public funds them. Internal audit units are responsible for safeguarding the interests of the public by making sure that the universities excel in their overall performance.

5.13 Unit of analysis

The unit of analysis is within each of the SUs identified in the previous section, bar ZNDU. In the field of social science research, it is imperative to establish a clear definition of the object of study. This object serves as the unit of analysis, referring to the specific entity from which data is collected (Creswell, 2013). The unit of analysis in a study can encompass either individuals or social groups. This study focused on chief internal auditors, university principal executives, and auditees with relevant experience and knowledge pertaining to the subject area under investigation. Both female and male participants were included in this study as they possessed comparable experiences and were employed at the state colleges that were identified.

5.14 Population and sampling

Kothari (2004) defines population as the whole group of entities and persons (social artefacts) from which data is sought. Creswell (2014) points out that a population is an entire group or group chosen for study or investigation. A population is a group of people or items selected for investigation in a given research environment. Saunders *et al.* (2019) define a population as a source of samples. The study population includes all key factors for the researcher.

Note that a study population includes all valuable aspects inside a group that is the focus of the research (Creswell, 2013). According to Neuman (2014), a population is a group of individuals or elements to which study findings are applied. A research study's target audience includes relevant organisations and people, according to Kekeya (2021). This comprises individuals, institutions, papers, and campaigns that define the target population as the entire set of factors a researcher uses to make decisions. The target population is the population of

interest in research (Willig & Stainton-Rogers, 2012). Neuman (2014) defines a target population as a well-defined and inclusive broad group.

This research required participants to be stakeholders of the IAF, as well as the IAF staff themselves. The study population was drawn from all the state universities in Zimbabwe. The study focused on public universities only, as these are institutions that are required by national regulations to have sound governance processes in place. Moreover, state universities are of particular interest in this research because public funds fund them, and the IAF is responsible for safeguarding the interests of the public by making sure that the universities excel in their overall performance (Jachi & Yona, 2019; Mukono, 2021).

During the time of data collection, the targeted population consisted of a combined total of 14 SUs (OAG, 2016). In this study, a purposive sampling method was employed to select a total of 14 state institutions. The selection criteria were based on the specific types of state universities present in Zimbabwe. The study's participants consisted of individuals who were specifically selected from each of the studied SUs. These participants were chosen based on their authority to implement the recommendations of the IAF, as well as their roles in management and internal auditing, and they were deemed to possess a high level of expertise in the subject matter under investigation.

To mitigate any disruptions, all participants were questioned at their respective workplaces. To achieve a comprehensive understanding, the present study prioritised the inclusion of participants who possessed the most pertinent information for the purpose of conducting interviews and completing questionnaires. This provided an authentic representation of the entity in relation to the constructs being examined (Saunders *et al.*, 2009). The rationale for this approach was to deliberately focus on individuals holding key positions within CIAs, university principal officers, finance/procurement staff members, and directors of several departments. By doing so, the study aimed to obtain the most significant data regarding the independence of IAFs.

5.14.1 Sample size

According to Saunders *et al.* (2019), a sample refers to a subset or segment of a larger population. The study's sample comprised individuals occupying high-level managerial positions at the selected SUs alongside internal auditors. The researcher employed a non-probability sampling procedure to collect data from the sample size associated with the present qualitative research methodology. The utilisation of non-probability sampling techniques encompassed convenience and purposive sampling methods. Furthermore, the

utilisation of non-probability techniques is commonly favoured when conducting case study research. In the present study, a mixed-method research technique was employed to investigate the research issue.

A total of 365 individuals within the sample of interest were purposefully selected for the quantitative strand of the investigation. These participants were sent online self-administered questionnaires to complete as a means of data collection. However, only 279 questionnaires were successfully completed. Thirteen experts were deliberately selected for in-depth interviews as part of the qualitative component of the study, though only 11 participated in the final face of the qualitative data collection process. According to Creswell (2014), a range of 5 to 25 interviews is deemed appropriate for qualitative research purposes as it aids in reaching the data saturation determination. Data saturation determination in research refers to the point at which no current information or themes are observed in the data (Creswell, 2014). Data saturation determination is predominantly associated with qualitative research, as it indicates that sufficient data has been collected to understand the phenomenon under study fully. Although the sample size of 11 individuals in this study can be deemed modest for an in-depth interview data collection technique, it proved to be effective in achieving the study's objectives. Baker and Edwards (2012). However, they argue that despite the number of interviews performed, it is necessary to have a suitably large sample size to reduce bias and sampling error. The qualitative strand of the study involved selecting key informants who held roles responsible for implementing audit recommendations and addressing audit issues. Consequently, the participants provided significant and relevant contributions and perspectives to this research. Table 5.4 presents an enumeration and summation of the individuals involved in the research.

Table 5.4: List and aggregate of planned and actual participants/respondents

Role	Planned sample number	Actual sample number
Auditees	365	279
Chief internal auditors (qualitative strand)	13	11
Total	378	290

Source: Author (2022)

5.14.2 Sampling frame

According to Saunders *et al.* (2019), a sampling frame refers to a depiction of the constituent elements of the target population. The sampling frame consisted of a roster of employees derived from the payroll records of the strategically chosen SUs for the purpose of this study. According to Saunders *et al.* (2019), a sampling frame is a comprehensive compilation of all instances within a given population, which serves as the basis for drawing a probability sample. However, if the sample cannot be easily reached, the researcher can adopt a non-probability sampling technique, which was the case in this study.

5.14.3 Sampling method/technique

Sampling techniques can be classified into two main categories: probability sampling and non-probability sampling. The present study employed non-probability sampling as it adopted a qualitative research approach, and the sample frame sample could not be easily reached or obtained. Moreover, due to limited resources such as time and budget and the unavailability of the researcher daily, non-probability sampling became the most viable sampling technique for this study.

5.14.4 Non-probability sampling

The term 'non-probability sampling' (also known as 'non-random sampling') is used to refer to several sampling methods that involve subjective judgement, including quota, purposive (judgemental), volunteer (snowball), and haphazard (convenience) sampling (Dooley, 1995). For this reason, a thorough, in-depth interview that examines a few cases should be chosen for a particular study. Nonprobability sampling was used in the current study by the researcher. Wilson (2010) defines a non-probability sampling strategy as picking respondents without having the knowledge necessary to do so because the researcher is unaware of the population's size or composition. The chosen sample meets the criteria the researcher sought during the investigation, which is the justification. One should be purposefully chosen in an examination based on a few qualities, such as position held and educational background. The drawback of purposive sampling is that it is not concerned with population representativeness and can be biased. Purposive sampling offers a case study that is information-rich and allows the researcher to explore the independence of IAFs and get pertinent or theoretical insights (Palinkas *et al.*, 2015).

When choosing a sample in purposive sampling, a researcher's assessment is heavily weighted. It is called judgmental sampling for this reason. Participants in purposive sampling are chosen for their good understanding of the information the researcher seeks. This is in line with Bryman (2006), who states that the primary participants are chosen due to their status, prior experience, qualifications, and other merits that provide them the opportunity to have the specific knowledge the researcher requires. Notably, Johnson and Onwuegbuzie (2004) assert that the researcher must identify respondents who match the study's purpose while considering budget and time constraints. Purposive sampling was determined to be suitable for the objectives of this investigation. With purposive sampling, the researcher utilises discretion to select cases that best support meeting the study objectives and responding to the research questions (Saunders *et al.*, 2019). According to Saunders *et al.* (2019), purposive sampling is a non-probability strategy in which the researcher's judgement is used to select the examples that make up the sample. This decision is typically based on critical evaluation, extremes, heterogeneity (maximum variety), and homogeneity (maximum similarity). Purposive sampling enables one to gather data on the variables impacting the independence and performance of IAFs in Zimbabwean SUs as well as to explain the major trends that may be seen (Bryman, 2006).

This method was perfect since it was designed to obtain rich data from an appropriate sample of SU personnel, including managers, supervisors, directors, and CEOs (Creswell *et al.*, 2014). The researcher purposely chose all the IAF heads at ZSUs to better comprehend internal auditing in an interpretivist paradigm (Onwuegbuzie & Leech 2007). Purposive sampling in initial data collection selects "information-rich" respondents for an in-depth investigation of internal auditing viewpoints (Saunders *et al.*, 2019). Purposive sampling is the deliberate inclusion of people in research to justify explanatory frameworks with abundant data (Saunders *et al.*, 2019). Internal audit departments and the Auditor General of Zimbabwe audits are required for public sector organisations like SUs in Zimbabwe. This case used purposive sampling to identify and select information-rich cases to maximise resource use by identifying individuals or groups knowledgeable and experienced in phenomena of interest, such as SUs and internal auditing. Although purposive sampling does not statistically represent the targeted population (Saunders *et al.*, 2019), this study countered it by using participants from all Zimbabwean state universities. Hence, the findings were representative of all Zimbabwean state universities. The next section discusses the data collection methods.

5.15 Data collection methods

The timeline, requirements, and restrictions of the study were met by conducting in-depth interviews, making them suitable. Interviews were conducted with each of the 11 SUs who were willing and able to participate in the study. The survey questionnaire was also utilised to collect data from the 279 auditees.

5.16 Data collection instruments

5.16.1 Interview guide

An in-depth interview guide was developed for chief internal auditors working within ZSUs. The interview guide was developed in accordance with the research objectives and existing literature pertaining to the independence of internal audit functions (IAFs). The researcher utilised an in-depth interview guide consisting of open-ended questions to provide guidance during the interviewing procedure (Saunders *et al.*, 2019). An experienced researcher and expert in internal auditing checked the in-depth interview guide, and errors in the questions were corrected. A technique refers to a method employed for the purpose of collecting data or information from a sample population (Bryman, 2006). The utilisation of a discussion/interview guide with open-ended questions enabled the researcher to gather data efficiently from the participants. To achieve data harmonisation and mitigate bias, the process involved conducting interviews with internal auditors using standardised questions. The utilisation of digital audio recorders and tape recorders facilitated the enhancement of theoretical methodologies during the conduct of in-depth interviews.

5.16.2 Survey questionnaire

The quantitative instrument used in this study was an online self-administered structured questionnaire (see Appendix O) in the form of a Google Forms checklist posted and distributed online. The instruments used were created in accordance with the guidelines of the selected state-owned universities in Zimbabwe.

The independent variable consisted of five questions, as did the dependent variable, whereas the moderated variable consisted of four items. The development of the items for all constructions was informed by prior research conducted within the same field (Macrae & Van Gils, 2014) and through an operationalisation process.

The questionnaires were distributed self administered online to the respondents (auditees) among 13 SUs; however, only 11 state-owned universities in Zimbabwe took part in the final data collection phase, as the other two dropped out at the final data collection phase, accommodating a total of 279 complete responses. Two state universities had to be excluded from the study as one of them did not give permission to the researcher, whilst the other did not have an in-house internal audit department and opted not to participate in the research, hence the reduction of the sample from 13 to 11 state universities. The first draft of the questionnaire underwent a pilot study and expert evaluation to arrive at the final version of the questionnaire. The pilot study questionnaire was manually given to the respondents to minimise potential ambiguity in the questions and prevent any potential delays in the completion of the survey. The entire procedure of disseminating the questionnaire and gathering the results spanned around five months.

5.17 Data collection

5.17.1 Participant consent and confidentiality during data collection

Ethics clearance certificate number 2020 FOBREC798 (Appendix A) was granted to the researcher by CPUT. This statement signifies that the researcher adhered to ethical guidelines and treated the participants respectfully, minimising potential risks to the respondents. The Ministry of Tertiary and Higher Education, Science, Innovation and Technology (MHTEISTD), which is the parent ministry of Zimbabwean state universities as well as the state universities, granted permission letters for the research (see Appendices B,C,D,E,F,G,H,I,J,K,L,M) and provided access to policies, Acts, and numerous online documents.

5.17.2 Preparing for field data collection

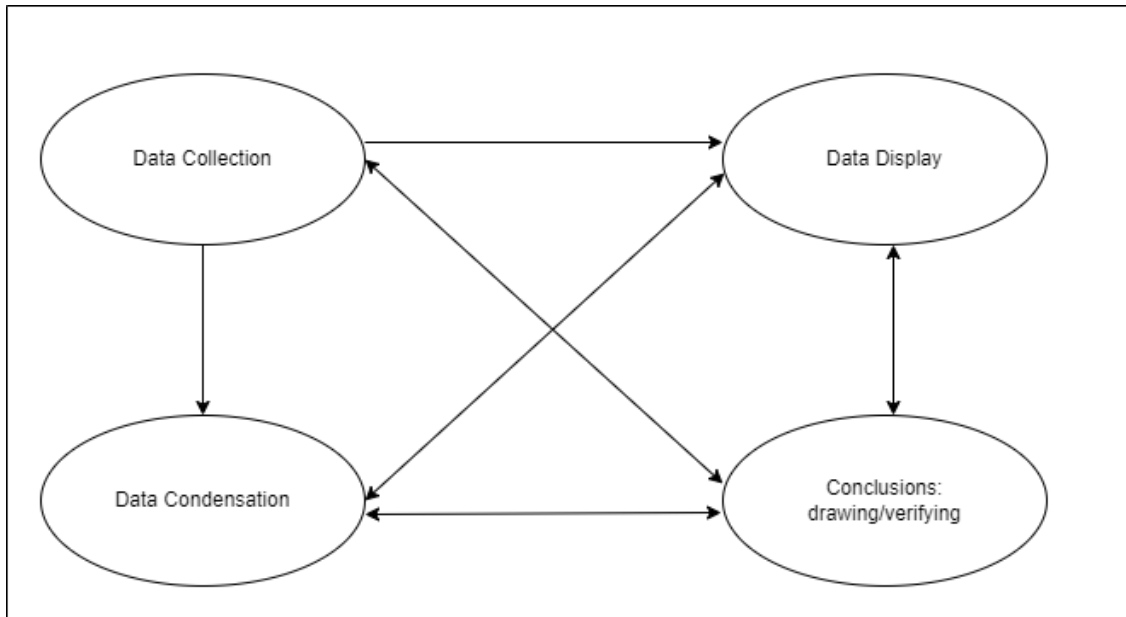
The process of data collection underwent refinement after thorough preparatory measures. The documents underwent thorough examination, yielding significant information for the study. Interviews were conducted in boardrooms and respondents' offices because of their quiet and undisturbed environment. This aligns with the perspective put forth by Gill *et al.* (2008), who argue that interviews must be conducted in environments devoid of any potential sources of disturbance. The participants provided informed consent by signing the consent forms, acknowledging their voluntary participation and demonstrating their comprehension of the study. The researcher conducted interviews with respondents who were purposefully selected, with the assistance of a research assistant for note-taking purposes as required. Once again, the researchers requested permission to utilise a tape recorder, as certain individuals

expressed discomfort with being recorded and did not wish to have their conversations documented. This aligns with the perspective of Dunne (1995), who argues that notetaking serves as a straightforward, expedient, and effective method for integrating information. One of the advantages of notetaking is that it allows for the documentation and recording of participants' feedback in conjunction with relevant inquiries. Additionally, the use of a notebook ensures the security of the recorded data and avoids any potential intimidation of respondents, leading to timesaving during the compilation of reports (Dunne, 1995; Saunders *et al.*, 2009). As a result of the benefits, the researchers employed notetaking as a method for recording information obtained from interviews. Immediately following the completion of each interview, while the researcher's cognitive faculties were still imbued with up-to-date information, the comprehensive report was compiled. The subsequent section delves into the process of data analysis for the present investigation.

5.18 Qualitative data analysis

The data underwent qualitative data analysis, a distinct approach from quantitative data analysis. Qualitative data analysis differs from quantitative data analysis in that it involves the examination and interpretation of non-numerical data, employing procedures such as aggregating and counting to assess numerical data. Qualitative data analysis involves the use of textual information, extended written passages, and static or dynamic visual representations, such as photographs, for the purpose of data examination (Miles *et al.*, 2014), with content analysis being a preferred data analysis technique in this study. Furthermore, the process of analysing qualitative data involves examining various forms of textual information, such as written documents, written observations, or transcribed interviews. This analysis is conducted through a range of methodologies, including content analysis, global analysis, narrative analysis, discourse analysis, grounded analysis, conventional analysis, ethno-methodological analysis, or a combination of multiple analytical approaches (Bhattacharjee, 2012). Qualitative data analysis encompasses the processes of summarising, coding, and identifying themes as a means of condensing the data. It also involves the use of graphs, charts, expanded text, and networks to present and draw conclusions from the data. Additionally, the analysis entails the exploration and examination of the shown information, leading to the formulation of conclusions (Miles *et al.*, 2014). Figure 5.7 illustrates the interconnected and iterative nature of qualitative data analysis, as depicted by the stated steps. It demonstrates that this analytical approach does not follow a linear progression.

Figure 5.7: An interactive model of the components of data analysis



Source: Miles *et al.* (2013)

5.19 Content analysis

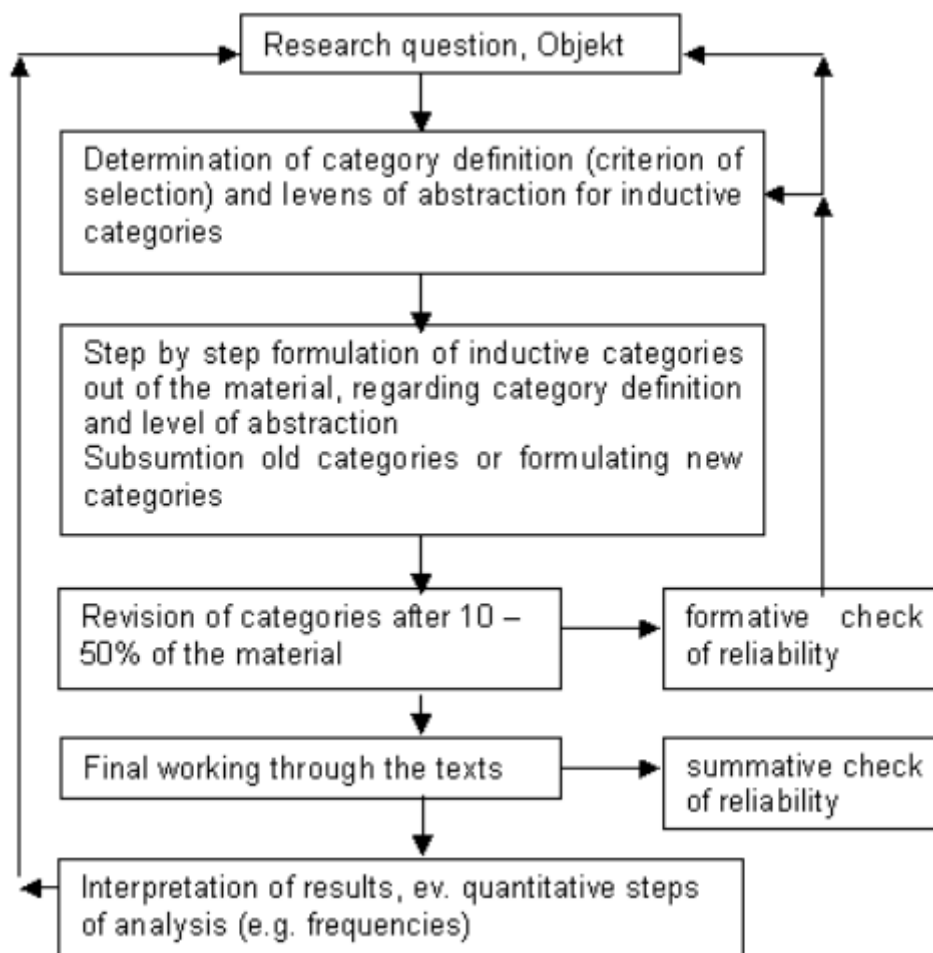
Content analysis is a method that may be used with either qualitative or quantitative data and in an inductive or deductive way. Kibiswa (2019) says that content analysis can follow either the inductive or the deductive approaches. Synonyms used for directed content analysis are deductive category application (Mayring, 2004) and deductive content analysis (Elo & Kyngäs, 2008). Content analysis involves the condensation of textual data into a reduced number of content categories, adhering to coding guidelines. This approach enables the systematic analysis of extensive volumes of data, facilitating a comprehensive understanding of the underlying contexts (Mayring, 2004). The previously mentioned goals align with the aims of the qualitative research conducted in this study and demonstrate the suitability of content analysis for this topic (Mayring, 2004). It is widely used in health studies, with more than 4 000 articles published between 1991 and 2002, according to the Cumulative Index to Nursing and Allied Health Literature (Hsieh & Shannon, 2005). Qualitative content analysis refers to a systematic and controlled empirical methodology for analysing texts in their communication environment. This approach adheres to content analytical criteria and follows step-by-step models without hasty quantification (Mayring, 2004). In their study, Hsieh and Shannon (2005) differentiate between three types of content analysis: conventional, guided, and summative. The application of directed content analysis is appropriate in cases when there is an existing theory or earlier research on a phenomenon that is either inadequate or would benefit from

additional explanation (Hsieh & Shannon, 2005). This pertains to the present study in which the qualitative analysis component is based on theoretical frameworks and prior research within the realm of internal auditing.

5.19.1 The inductive approach

The inductive approach draws the categories used to label text directly from the data collected (Kibiswa, 2019). Here, the researcher starts the analysis by reading the data and identifying themes from the data. Then, initial categories are created to reflect those initial data-based themes. It is important to note that inductive content analysis is used in cases where there are no previous studies dealing with the phenomenon or when it is fragmented (Elo & Kyngäs, 2008). Figure 5.8 below shows the inductive category development model according to Mayring (2004).

Figure 5.8: The inductive category development model

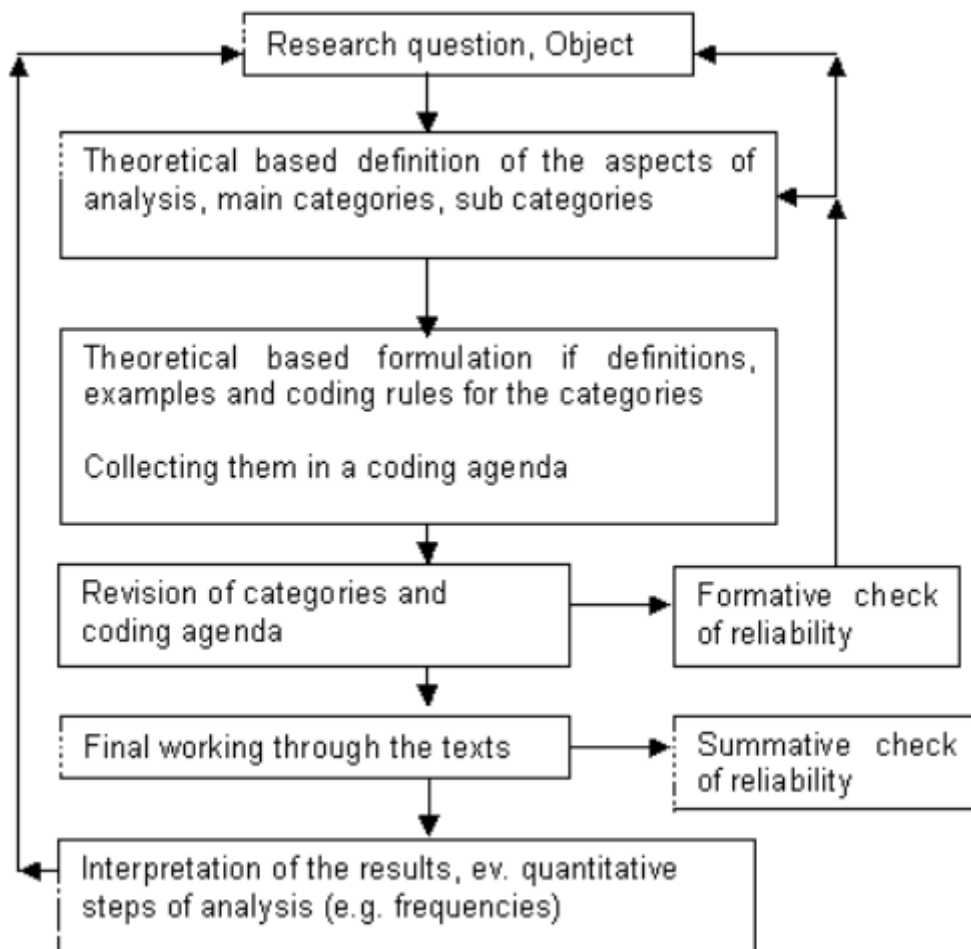


Source: Mayring (2004)

5.19.2 The deductive approach

Deductive content analysis is used when the structure of analysis is operationalised on the basis of previous knowledge (Mayring, 2004). The deductive approach draws categories from previously formulated, theoretically derived aspects of analysis, bringing them in connection with the current text (Mayring, 2004). The qualitative step of analysis consists of a methodologically controlled assignment of these categories to a passage of text. Deductive qualitative content analysis is also useful where prior research exists about a phenomenon that is incomplete or would benefit from further description (Hsieh & Shannon, 2005). Existing research can provide predictions about the variables of interest or about the relationships among variables, thus helping to determine the initial coding scheme or relationships between codes. This research followed the deductive qualitative content analysis. Figure 5.9 below presents the step model of the deductive category application.

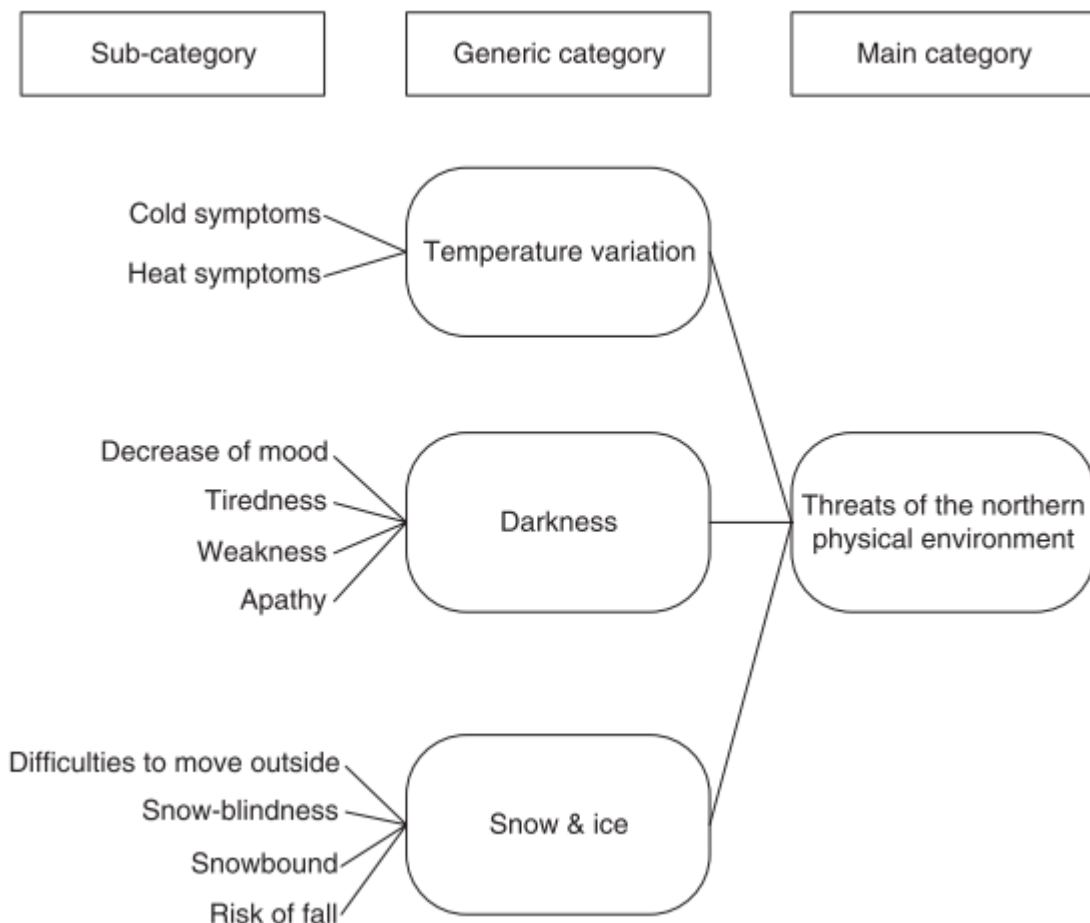
Figure 5.9: Step model of the deductive category application



Source: Mayring (2004)

If a deductive content analysis is chosen, as has been done for this research, the next step is to develop a categorisation matrix and code the data according to the categories. Using existing theory or prior research, researchers begin by identifying key concepts or variables as initial coding categories (Hsieh & Shannon, 2005). The categorisation matrix can be structured or unconstrained depending on the aim of the study (Elo & Kyngäs, 2008). After a categorisation matrix has been developed, all the data are reviewed for content and coded for correspondence with or exemplification of the identified categories. When using an unconstrained matrix, different categories are created within its bounds, following the principles of inductive content analysis. If the matrix is structured, only aspects that fit the matrix of analysis are chosen from the data (Elo & Kyngäs, 2008). In qualitative content analysis, the abstraction process is the stage during which concepts are created (Elo *et al.*, 2014). Figure 5.10 below shows the abstraction process for the deductive approach.

Figure 5.10: Example of the abstraction of the process



Source: Elo and Kyngäs (2008)

Assarroudi *et al.* (2018) reviewed literature from various international databases with the aim of elaborating and integrating a stepwise method of data analysis for directed qualitative content analysis. They proposed the following 16-step method for directed qualitative data analysis as shown in table 5.6.

Table 5.5: The 16-step method for directed qualitative data analysis

Steps		References
Preparation phase		
1	Acquiring the necessary general skills	Elo <i>et al.</i> (2014)
2	Selecting the appropriate sampling strategy	Adapted by the author of the present study from Elo <i>et al.</i> (2014)
3	Deciding on the analysis of manifest and/or latent content	Elo and Kyngäs (2008)
4	Developing an interview guide	Adapted by Elo <i>et al.</i> (2018) from Hsieh and Shannon (2005)
5	Conducting and transcribing interviews	Elo and Kyngäs (2008),
6	Specifying the unit of analysis	Graneheim and Lundman (2004)
7	Being immersed in data	Elo and Kyngäs (2008)
Organisation phase		
8	Developing a formative categorisation matrix	Adapted by Elo <i>et al.</i> (2018) from Elo and Kyngäs (2008)
9	Theoretically defining the main categories and subcategories	Mayring (2004, 2014)
10	Determining coding rules for main categories and subcategories	Mayring (2014)
11	Pre-testing the categorisation matrix	Adapted by Elo <i>et al.</i> (2018) from Elo <i>et al.</i> (2014)
12	Choosing and specifying the anchor samples for each main category	Mayring (2014)
13	Performing the main data analysis	Graneheim and Lundman (2004), Mayring (2004, 2014)
14	Inductive abstraction of main categories from preliminary codes	Elo and Kyngäs (2008)
15	Establishment of links between generic categories and main categories	Suggested by Elo <i>et al.</i> (2018)

Steps	References
Reporting phase	
16	Reporting all steps of directed content analysis and findings
Elo and Kyngäs (2008), Elo <i>et al.</i> (2014)	

Source: Adopted from Elo *et al.* (2018)

5.19.3 The coding frame for this study's directive qualitative content analysis

This study used Kibiswa's (2019) three-phase and eight-step schema of textual analysis that unfolds in iterative and non-linear ways, inspired by schemas described by Elo and Kyngäs (2008). The preparation phase includes the development of the study's framework and operational definitions, determining the unit of analysis and sampling materials to be analysed, and getting a sense of the data. The data analysis phase includes coding and organising the data, making connections, interpreting them, drawing conclusions, verifying interpretations' plausibility and discussing trustworthiness. The reporting phase includes making an appropriate outline for a detailed research presentation and a detailed description of the research process and findings. Kibiswa (2019) recommends the use of software during the coding process, and this study utilised ATLAS.ti version 9. Table 5.6 below summarises the themes that emerged from the transcripts.

Table 5.6: The coding frame

Previous research	Themes/ Categories/ Codes	Subthemes/ Subcategories/ Subcodes	Meanings/operational definitions/coding rules (statements that suggest or reveal or portray the following)
	Independence of internal auditors	1.1 Availability of resources	Availability of financial and human resources to fund IA activities.
		1.2 Budgetary independence	Independence for budgeting purposes.
		1.3 Internal audit scope	Unlimited audit scope, not limited by availability of resources or TM interference.
		1.4 Access to information	Unrestricted access to information
		1.5 Reporting structure	Administrative and functional reporting of the CAE.
		1.6 Economic interest	Salary grade of the CAE: the auditor audits the department of an individual who subsequently makes decisions that directly affect the

Previous research	Themes/ Categories/ Codes	Subthemes/ Subcategories/ Subcodes	Meanings/operational definitions/coding rules (statements that suggest or reveal or portray the following)
			auditor's future employment opportunities or salary.
		1.7 Ownership structure	Political influence on IAF independence.
		1.8 Human resource policy	How the CAE is hired and fired.
	Factors that influence independence	2.1 Audit Committee involvement	The CAE's unrestricted access to the Audit Committee; the AC's involvement in drafting the IAC; the role of the AC in influencing the budget; the role of the AC in influencing the scope of the IAU; the active involvement, oversight, review and follow-up of the IAF by AC; The AC involvement in decisions to hire or remove the CAE.
		2.2 Top management involvement	TM influence on the budget; TM influence on the allocation of resources to IAUs; TM influence on the scope of the IAUs; TM involvement in decisions to hire or remove the CAE; TM support is achieved by recognising the IAF as a crucial part of the university.
		2.3 Legislation/mandate	Existence of IAF legal guidance
		2.4 Internal audit quality (skill, number of staff)	Availability of professional internal auditors/IIA registered internal auditors; number of staff in IAUs; Internal audit quality reviews.
		2.5 Organisational independence	Independence and reporting level of the CAE.
	Impact of IAF	Corporate governance system status	Improved or strong corporate governance systems, as displayed by compliance with regulations.

Previous research	Themes/ Categories/ Codes	Subthemes/ Subcategories/ Subcodes	Meanings/operational definitions/coding rules (statements that suggest or reveal or portray the following)
		Risk management	Robust risk management that minimises negative risks and maximises positive risks.
		Internal control system	Efficient internal control policies that detect loopholes for fraud and unnecessary losses.
		Financial reporting	Profitable ventures, reduced losses, and financial reporting that complies with international accounting standards.
		Education 5.0 Agenda	Teaching and learning output, research, etc.

Source: Author (2023)

Mayring (2014) argue that the act of imparting coherence, organisation, and significance to extensive data is referred to as qualitative data analysis. This process involves crucial elements such as data reduction, organisation, interpretation, and substantiation. Recordings of a digital nature were preserved using a durable electronic storage medium. In addition, a comparison was made between complete handwritten notes and verbatim transcribed text scripts. The process of transcription held significance in mitigating the risk of data loss and data distortion. The skill of choosing precise vocabulary, phrases, and data elements has become an essential component in data analysis, as it facilitates the process of classifying, categorising, and organising meaningful units. To facilitate content verification, the process of mapping, establishing connections between themes and patterns, and networking various themes and patterns, the data obtained during the present study underwent analysis using the ATLAS.ti version 9 software (Friese, 2016). Subsequently, the data was interpreted. The researcher employed the method of directed qualitative content analysis (DQCA) to categorise the data based on thematic patterns and allocate codes to these themes (Mayring, 2019). The process entailed the establishment of information categories through the utilisation of predetermined and developing codes. These categories were then interconnected and positioned within the context provided by the literature review, as outlined by Creswell (2009). To mitigate the occurrence of information loss, it was imperative to promptly record field notes within a 24-hour period. Another rationale for transcribing recorded interviews was to facilitate the process of content analysis, wherein the statements made by individual participants were examined, and key messages were derived. This involved condensing the data by categorising it into major themes, which were determined by theoretical frameworks and

existing literature, as well as themes that emerged from the participants' own statements (Mayring, 2019).

5.20 Analysis of data in ATLAS.ti

The process of analysing data (including text, audio, and video) with the use of a computer was facilitated by ATLAS.ti software (Lewis, 2006). This software assists in the effective management and organisation of data, as well as in conducting preliminary analyses through the utilisation of search functions, automated coding, and network perspectives (Frieese, 2014). The current investigation conducted by the researcher employed a method known as directed content analysis. Appendix N contains screenshots of the Atlas.Ti data output that were captured.

5.20.1 Data coding using ATLAS.ti version 9

For qualitative data to be effectively utilised in research, it was imperative that the coding process aligned with the methodology employed in a study conducted by (Elo *et al.*, 2014), wherein the researcher collaborated with an independent expert to ensure consistency and accuracy. Hsieh and Shannon (2005) coined the phrase "qualitative data coding" to refer to the process of breaking down, conceptualising, and reassembling data in novel ways. In the present study conducted by the researcher, the data was coded utilising the open, axial, selective, and NVivo coding techniques recommended by Corbin and Straus (2008). The subsequent sections provide descriptions of the various methods used for coding data.

5.20.2 Content analysis of interview steps using ATLAS.ti version 9

The researcher examined several analytical methodologies (Frieese, 2014) and followed the guidelines provided by Braun and Clarke (2014), as outlined in the subsequent phases and facilitated using ATLAS.ti version 9 software. The utilisation of ATLAS.ti version 9 facilitated the enhancement of rigour, the integration and management of data, and the demonstration of transparency in analysis (Leech & Onwuegbuzie, 2007). Following the collection of interview data, ATLAS.ti software facilitated the organisation and analysis of the data. In the subsequent stage of coding, an impartial specialist aided by safeguarding the integrity of the data. This was achieved by intertwining the empirical findings with theoretical perspectives that formed the foundation of the research. The process necessitated the utilisation of open coding, which involves the amalgamation of data into distinct categories, as well as the precise classification

and documentation of themes that arose, as highlighted by Leech and Onwuegbuzie (2009). The researcher and an independent expert engaged in a collaborative process of reviewing quotations and codes, adhering to the steps outlined by Braun and Clarke (2014).

The procedures undertaken were as follows:

- The project was created using the ATLAS.ti version 9 software due to its reputation for being user-friendly. In collaboration with the independent expert, the researcher ensured that the documents utilised in the study were devoid of any identifiable respondent information.
- All of the main data, specifically the transcripts, were migrated to ATLAS.ti software. The procedure for obtaining accurate textual data inside the data sets, specifically interview transcripts, was conducted.
- All the main data, specifically the transcripts, were migrated to ATLAS.ti. The procedure for obtaining accurate textual data inside the data sets, specifically interview transcripts, was conducted as described by Friese (2014). The method of "directed content analysis," as described by Kibiswa (2019), was employed in the implementation of interim coding.
- The data held importance in assisting the researcher in formulating open codes based on relevant themes (Friese, 2014).
- The transcripts were regularly examined and commenced with relevant themes, employing deductive analysis. The researcher demonstrated flexibility by allowing for the emergence of new concepts through the use of inductive analysis (Yin, 2011). The purpose of this study was to carefully analyse and identify key factors that contributed to the understanding of the phenomenon of IAF independence.
- The codes were assembled in a manner that complemented the data and the prefixes that were created. At this stage, significant decisions were taken independently of software reliance (Friese, 2014). The data was regularly examined (Mayring, 2004), events were investigated, diverse evidence was analysed, and hypotheses of a conflicting nature were taken into account. Subsequently, a re-examination of the literature was conducted to provide interpretations within the expansive theoretical framework proposed by (Assarroudi *et al.*, 2018).
- In this phase, the researcher conducted a thorough examination of both negative and positive codes, leading to resolutions through careful analysis of categories and sub-categories. The objective was to minimise the likelihood of obtaining a limited number of items (Assarroudi *et al.*, 2018).

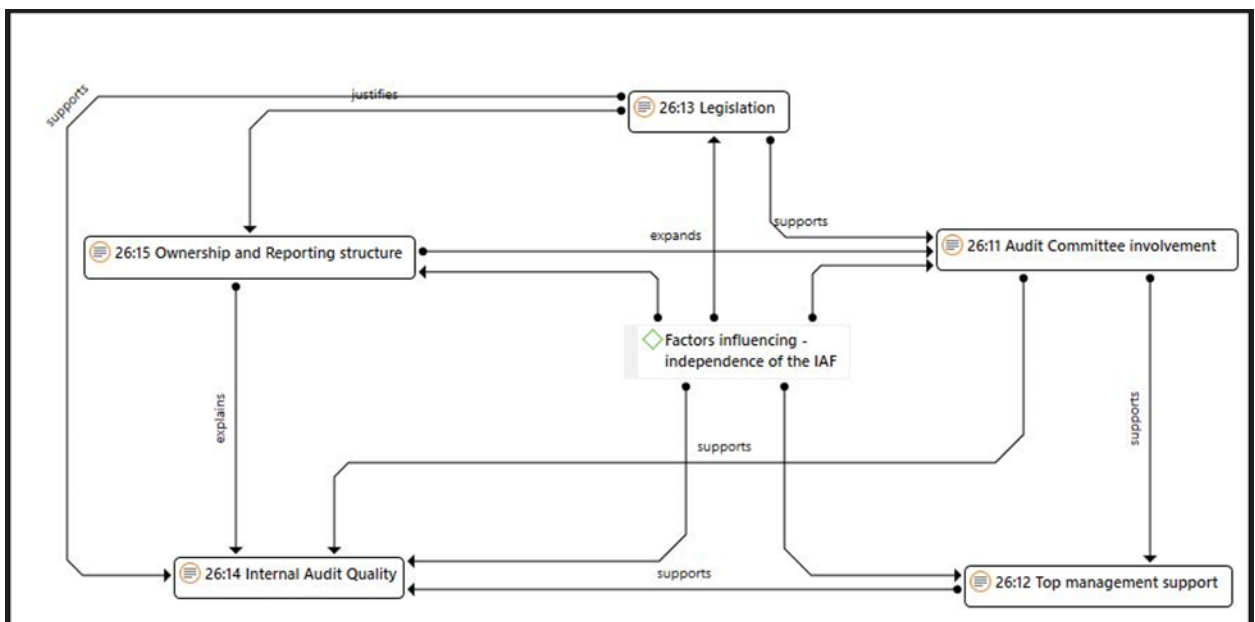
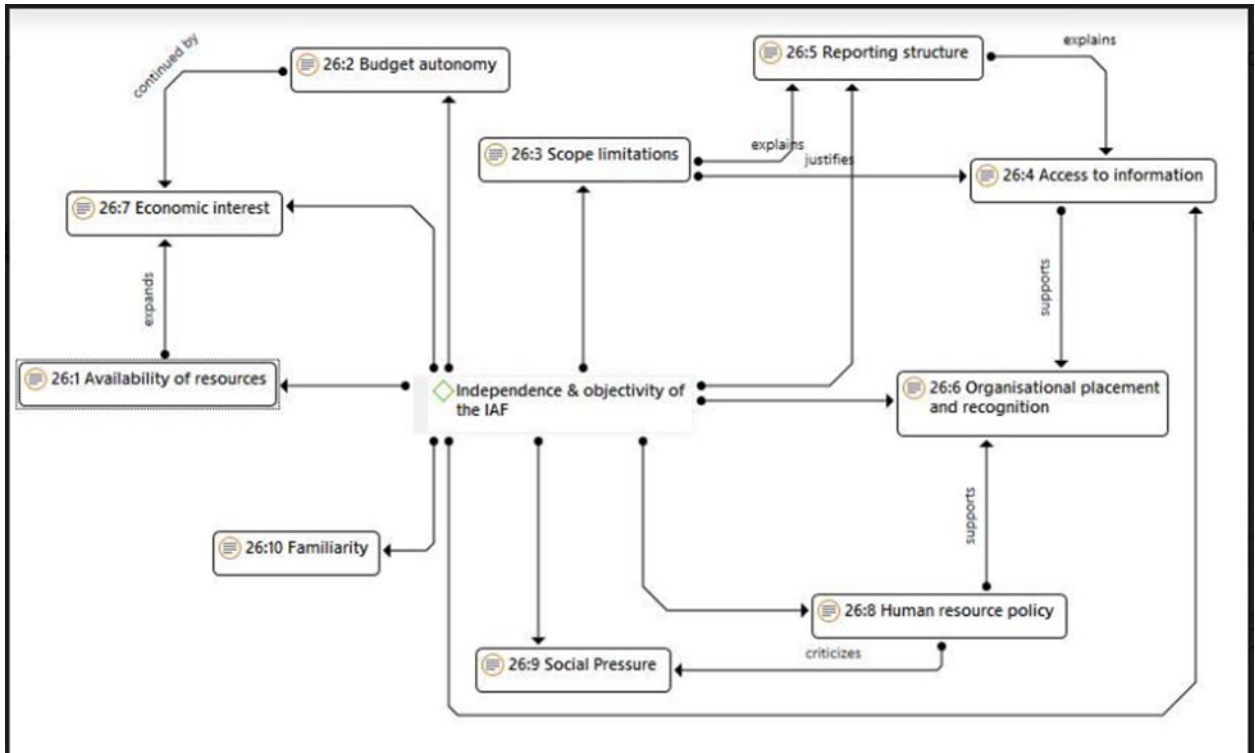
- The data was analysed in accordance with the research goals. At this stage, the data underwent iterative analysis to specifically investigate its associations with the research inquiries.

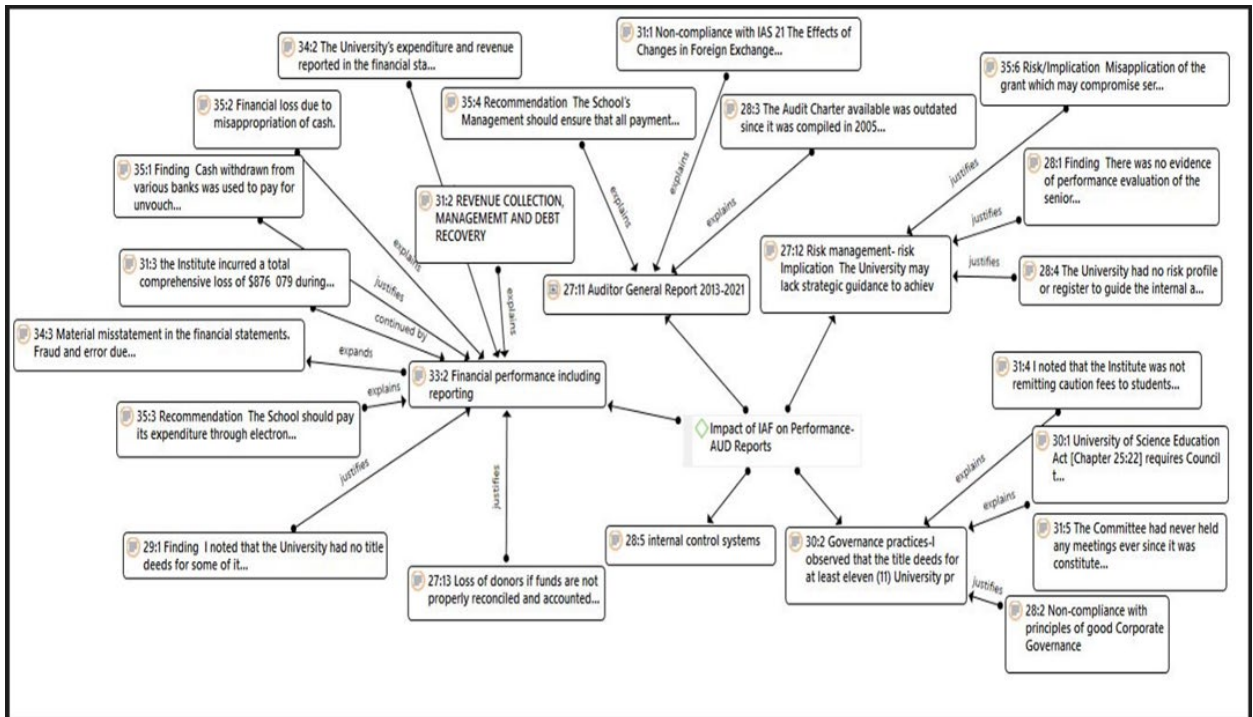
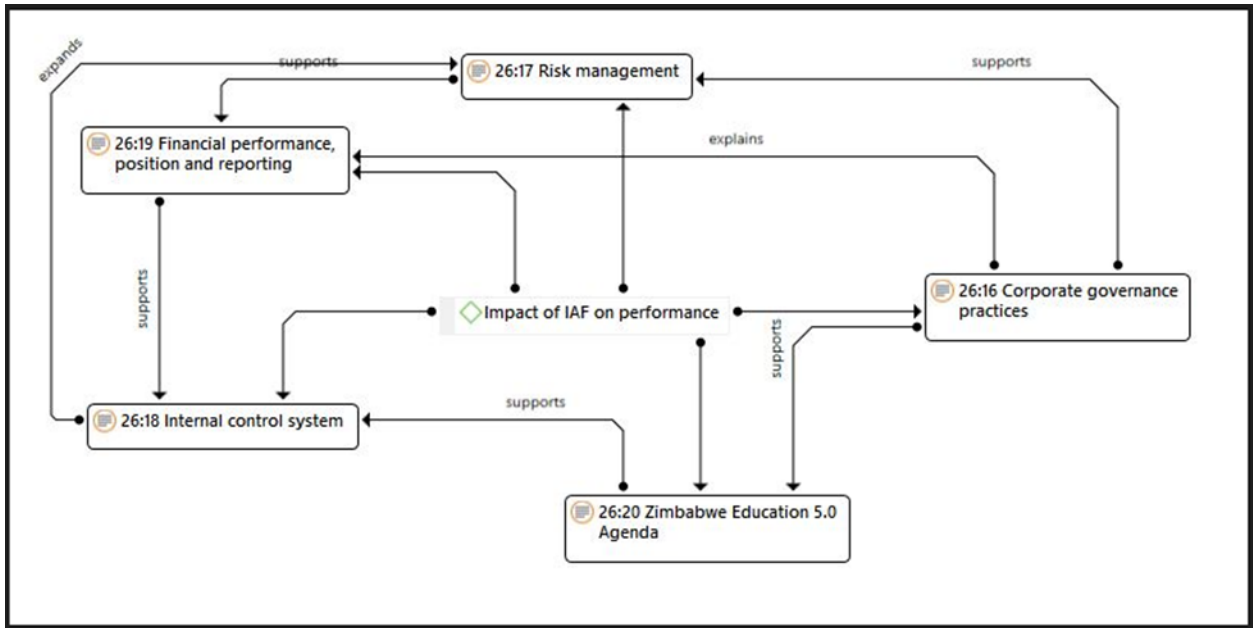
Following the completion of the analysis, the results were documented along with their corresponding interpretation. Continuous analysis was conducted, accompanied by the updating of intermediate codes. Simultaneously, codes exhibiting similarity were generated, while more current codes contributed to the augmentation of the dataset.

The process of crystallising the document review and interview analysis was undertaken with the aim of achieving success rather than seeking validation (Elo *et al.*, 2014). This provided a chance for a deep understanding of the independence and performance of the IAF as a phenomenon within the qualitative interpretive paradigm (Kibiswa, 2019). The data was presented using two methods. Firstly, it was presented in textual form, with varying degrees of quality and disposition. Secondly, it was displayed using well-prepared and constructed networks in ATLAS.ti or tables that reflected the themes that arose, as proposed by Miles *et al.* (2014). The data was presented in tabular format, and networks were generated and exported from ATLAS.ti. Additionally, themes that emerged from the transcripts were summarised and are displayed in Table 5.6.

The visual representation depicted in Figure 5.11 highlights a screenshot of the codes and phrases derived from transcribed interview materials within ATLAS.ti.

Figure 5.11: Screenshots showing thematic networks developed from the analysis of interview responses and Auditor General reports





Source: Author (2023)

5.21 Trustworthiness of qualitative research instrument

Four strategies were employed to establish trustworthiness in this study: transferability, credibility, confirmability, and dependability (Lemon & Hayes, 2020). Transferability assesses the extent to which study findings can be applied to different situations (Creswell *et al.*, 2019). The researcher is of the view that the findings from this study can be applied in other SUs

outside Zimbabwe. Yin (2014) proposes that credibility examines the researcher's confidence in the findings based on the phenomena under study. Hence, correctly screening the interview participants using appropriate screening questions within the interview guide allowed the participants to be more accurate and enabled the researcher to derive more credible responses from the proposed sample of interest. Confirmability ensures interpretations and conclusions are grounded in participants' lived experiences and minimises researcher biases (Saunders *et al.*, 2019). The researcher uses best practice tools such as ATLAS.ti to process the data analysis without depending on the researcher's own knowledge, hence confirming the appropriate interpretation of the results and findings of the qualitative data collection process. Dependability asserts that conclusions are specific to a particular context and consistent across the data (Creswell & Creswell, 2018). The participants conformed to the context of the research within Zimbabwean SUs and not any other types or country-based universities, thereby ensuring that the data collected depended on the nature and context proposed for this research, as stipulated in Chapter 1.

5.22 Validation and reliability test of the questionnaire

- Validity encompasses the extent to which the findings can be applied to a broader population and is evaluated through external validation, predictive validity, and construct validity (Mayring, 2010).
- Construct validity is established through the process of evaluating the plausibility of the results in relation to established theories.
- External verification is the process of comparing obtained results with those derived from external studies.

Two content experts examined the survey items and suggested minor modifications, supported by the conducted pilot testing of the questionnaire. Following the experts' suggestions, the questionnaire scale items were revised. Later, a pilot study was conducted to determine the adequacy and understandability of the survey items. Pilot study questionnaires were distributed to a group of respondents, which consisted of content experts and employees of one university. Based on the feedback from the pilot test, the questionnaire was refined and revised, and the final questionnaire was developed.

The Cronbach's alpha reliability test was conducted to test the internal consistency of the indicators of each of the eight constructs. The reliability statistics show that the alpha coefficients for all eight scales were above .70 (ranging from .870 to .963), suggesting that the

items have relatively high internal consistency (Davcik, 2014). The Cronbach alpha value of the constructs is introduced in Table 5.7.

Table 5.7: Reliability statistics

	mean	sd	Cronbach's α
scale	4.5	0.36	0.97

Source: Author (2023)

The scale reliability statistics in Table 5.7 indicate a high level of internal consistency for the items comprising the scale. The mean score is 4.50 with a standard deviation (SD) of 0.360, suggesting that the responses are relatively consistent and clustered around the mean. Most importantly, the Cronbach's alpha (α) is 0.970, which is well above the commonly accepted threshold of 0.70. This high alpha value indicates excellent internal consistency, demonstrating that the scale items were highly correlated and measured the same underlying construct effectively. Overall, these reliability statistics confirm that the scale used in this study was both reliable and consistent, ensuring the validity of the findings and the robustness of the measurement tool.

5.22.1 Inter-item correlation

To establish a satisfactory level of correlation between the item and test, it is recommended that the correlation coefficient be equal to or greater than 0.2. A low correlation between an item and test scores suggests that the item's content should be updated or the item should be excluded from the test (Aller *et al.*, 2013). The KMO and Bartlett test is presented in Table 5.8.

Table 5.8: KMO and Bartlett's Test of CFA

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.845
Approx. Chi-Square	1219.721
Bartlett's Test of Sphericity	
df	21
Sig.	.000

Legend, df= degree of freedom, Sig.= significance

Source: Author (2023)

According to the data presented in Table 5.8, the findings of the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test fall within the acceptable range. Specifically, the KMO value exceeds the threshold of 0.5, while Bartlett's test statistic is below the significance level of 0.05. This indicates that the available data is sufficient for conducting more analysis.

5.23 Ethical considerations

Certain ethical considerations were deemed essential in conducting this study. All the SUs that took part in this study gave their approval for the study to go forward. Since it has authority over the subject at hand, the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development also granted permission. The use of digital recording devices for conducting interviews also ensured the precision and dependability of the obtained results. The use of member verification served to enhance the veracity of the research outcomes. The act of participating in the study was voluntary, and prior to their involvement, participants were provided with comprehensive information and their agreement was obtained. The final study report provided assurance of maintaining confidentiality and anonymity for all participants.

A research ethics clearance certificate (2020FOBREC 798) was acquired from the Cape Peninsula University of Technology (CPUT) to conduct the research. The presence of ethical considerations does not have a detrimental effect on the validity and reliability of the research. Further, it is imperative to prioritise ethical considerations to highlight the ethical dilemmas inherent in the entirety of the research process (Belmont report). Ethics encompasses a set of rules, guidelines, and principles that researchers are expected to adhere to during the conduct

of their research (Belmont report). The study adhered to the following ethical considerations as inferred from the Belmont report:

- Ensuring the utmost importance of maintaining the confidentiality and anonymity of participants by refraining from sharing any information or documents for public consumption.
- Informing participants about the benefits of the study, specifically by informing the top management of SUs about the purpose and expected usefulness of the study
- Obtaining informed consent from SU registrars by clearly communicating that their participation in the study was voluntary and that they were not obligated to engage in any activities that made them uncomfortable.
- Participants were informed that they had the option of discontinuing their participation in the study at any time they desired (Jones, 2022).
- Regarding the debriefing process, the principal officers of the SUs were provided with the opportunity to receive the research findings and conduct subsequent follow-up activities. When the participants chose the option, they were consensually requested to provide their contact information (Jones, 2022).

Confidentiality and anonymity are considered crucial factors in the handling of responders, as emphasised by Gill *et al.* (2008) and Bhattacharjee (2012). Information about the participants in the study was not revealed in the presentation of the findings, and the data that was corrected in the study was not shared with third parties. The data was used for academic research purposes. This study followed these guidelines to ensure that there was no harm to the participants.

5.24 Summary

This chapter provided an overview of the full research methodology and design employed in this study. The rationale behind the use of philosophical assumptions, the research paradigm of pragmatism, and the mixed method approach were elucidated, addressing the question of why these choices were made. The study also examined various aspects, such as the population and the sample under investigation. The research employed both the survey and a case study approach. This chapter presented an overview of the study's extent and the sample population, encompassing only the SUs in Zimbabwe, understudy. Moreover, to comprehend the characteristics of the data, the chapter delved into a comprehensive overview of data analysis, specifically focusing on the methodologies employed to analyse the data. The qualitative data was analysed using ATLAS.ti version 9 software, employing content

analysis, which will be discussed further in Chapter 7. A rationale was provided to support the use of CB-SEM as a suitable approach for the quantitative data analysis to test the relationships proposed in the conceptual model that guides this study, which will be discussed in detail in the next chapter (Chapter 6). The subsequent chapter presents the results and findings from the mixed methodological approach, starting with quantitative empirical outcomes.

CHAPTER SIX: QUANTITATIVE ANALYSIS AND DISCUSSIONS

6.1 Introduction

This chapter presents the results of a quantitative analysis of the data that was collected using a survey. At this stage, it is imperative to highlight that the survey responses revealed that the IA stakeholders in ZSUs have limited knowledge of the independence and performance of the IAFs. Overall, respondents' assessment of all the variables of the internal audit function independence was interpreted as **not sure**. However, the majority of the respondents agreed that “the independence of the IAF is a key enabler of IA effectiveness”, with an average mean of 4.61 and a standard deviation of 0.59. These findings are in line with previous research by Grzesiak (2021), whose study revealed that internal audit stakeholders in Poland have very limited knowledge of the roles and responsibilities of internal auditors and the purposes of their work. Grzesiak (2021) concluded that the knowledge gap that exists between the internal auditors and the auditees has a significant influence on IA independence and, hence, its ineffectiveness and that there is a need to create effective measures for dealing with insufficient awareness about internal audits. Abu-Azza (2012) revealed that IAFs lack independence in Libya and identified the lack of awareness of the role of IA as one of the contributing factors. The results and discussions are presented in the following order.

6.2 Demographic profile of the respondents

6.2.1 Gender

Table 6.1 shows the frequency and percentage distribution of the respondents in terms of gender. Of the 279 respondents, 108 (38.71%) were females, while 171 (61.29%) were males. This may mean that males dominate the internal audit departments in ZSUs.

Table 6.1: Distribution of the respondents in terms of gender

Gender	Frequency	Percentage
Male	171	61.29
Female	108	38.71
Total	279	100

6.2.2 Educational qualification of respondents

Table 6.2 shows the frequency and percentage distribution of respondents in terms of highest academic qualification. As shown in the table, the largest group of respondents (131, or 46.95%) held a bachelor's degree. There were 71 (25.45%) who had completed their master's degree, 55 (19.71%) held diploma certificates, 22 (7.89%) had a doctoral degree, and no one had IIA certification. The finding that none of the CIAs in ZSUs hold an IIA certification is evidence of the lack of IAF objectivity and independence and is consistent with previous research, which showed that internal auditors who hold an IIA certification or are internal auditors by profession are more likely to comply with the code of professional conduct as required by IIA (Sarens, 2009).

Table 6.2: Frequency and percentage of academic qualifications of respondents

Highest academic qualification	Frequency	Percentage
Diploma/Certificate	55	19.71
Bachelor's Degree	131	46.95
Master's Degree	71	25.45
Doctoral Degree	22	7.89
IIA Certification	0	0.00
Total	279	100.00

6.2.3 Number of years in the department

Table 6.3 shows the frequency and percentage distribution of respondents by experience in terms of the number of years in their respective departments. The largest group of respondents, 109 (39.07%), had less than two years, followed by five to six years (23.66%), 53 (19.00%) had more than six years, and 51 (18.28%) had two to four years.

Table 6.3: Frequency and percentage distribution of the respondents in terms of experience

Number of years in the department	Frequency	Percentage
Less than 2 years	109	39.07
2 to 4 years	51	18.28
5 to 6 years	66	23.66
More than 6 years	53	19.00
Total	279	100.00

6.2.4 Job position of respondents

Table 6.4 shows the frequency and percentage distribution of respondents in terms of position. Twenty-four (8.60%) of the respondents were university principal officers; 128 (39.07%) were directors/managers/deans/heads of department, and 127 (39,07%) were finance/bursar/procurement office staff members.

Table 6.4: Frequency and percentage distribution of the respondents in terms of position

University principal officer	24
Finance/procurement office staff member	127
Head of department/manager/dean/director	128
Total	279

6.3 Summary of results

6.3.1 Assessment of the respondents of the internal audit functions in Zimbabwean state universities in terms of independence

Table 6.5 shows the assessment of respondents in terms of independence in the internal audit function. Most respondents **agreed** that "the independence of the IAF is a key enabler of its effectiveness," with a weighted mean of 4.61 and a standard deviation of 0.59. This was closely followed by "The IAF has unrestricted access to every department and all of the

University's information," with a weighted mean of 3.96 and a standard deviation of 1.15, interpreted as uncertain (**not sure**). The results also show that the respondents were **not sure** if "The Chief Internal Auditor (CIA) reports directly to the Vice-Chancellor functionally", "The IAF is free from university management interference when performing their duties", and "Internal auditors are the university management police dogs" all had the same weighted mean of 3.36 with standard deviations of 1.42, 1.23, and 1.25, respectively.

With a weighted mean of 3.10 and a standard deviation of 1.45, respondents were **not sure** whether "the CIA's position on the university organogram enables him or her to act objectively". On the other hand, respondents disagreed that "the IAF is an autonomous budget centre in the university" (with weighted mean of 2.81 and a standard deviation of 1.01); "the IAF has sufficient financial resources to enable it to work independently" (with weighted mean of 2.30, standard deviation of 1.06); and "the IAF has sufficient human resources to enable it to work effectively" (with a weighted mean of 2.20) standard deviation of 1.10. In general, the assessment of respondents was **not sure** about IAF effectiveness in terms of independence, with a general weighted mean of 3.14 and a standard deviation of 1.13.

The results were in line with the previous research that identified organisational independence (Mihret & Yismaw, 2007) as a key enabler of IA effectiveness (Mutchler & Chang, 2001) and a crucial factor needed for the IAFs to add value to organisations. There is a consensus among scholars that independence and objectivity are essential attributes for both internal and external auditors to uphold the credibility of audit services (Goodwin & Yeo, 2001; Gramling *et al.*, 2004). For internal auditors to efficiently carry out their assurance and consulting services, it is crucial to prioritise the preservation of organisational independence and individual objectivity (De Zwaan, Stewart & Subramaniam, 2011).

The results showed that the auditees disagreed with the fact that the IAF had sufficient resources to enable work independently. They also disagreed that the IAF was an autonomous budget centre in the university. These results were indications of a lack of IA independence in ZSUs. This was consistent with the findings of previous studies by (Goodwin & Yeo, 2001; Christopher *et al.*, 2009; Alzeban & Gwilliam, 2014; Razali *et al.*, 2016; Bi, 2019). Lack of resources has been considered to be a threat to independence by Razali *et al.* (2016). Lack of budget autonomy is a threat to IA independence, as revealed by previous research. According to Christopher *et al.* (2009), the approval of the IAF budget by top management posed a significant risk to its independence since it allowed management to potentially limit the scope and effectiveness of the IAF through the imposition of budgetary restrictions.

Table 6.5: Assessment of the respondents on the internal audit function effectiveness in terms of independence

		5	4	3	2	1	AWM	SD	Interpretation
1	The independence of the IAF is a key enabler of its effectiveness	179	95	3	0	2	4.61	0.59	Agree
2	The IAF has sufficient financial resources to enable it to work independently	37	28	19	113	82	2.37	1.35	Disagree
3	The IAF has unrestricted access to every department and all the information in the university	124	66	49	33	7	3.96	1.15	Not Sure
4	The Chief Internal Auditor (CIA) reports directly to the Vice-Chancellor functionally	83	75	5	91	25	3.36	1.42	Not Sure
5	The IAF is an autonomous budget centre in the university.	11	77	44	141	6	2.81	1.00	Disagree
6	Internal auditors are the university management police dogs.	41	124	49	25	40	3.36	1.25	Not Sure
General Weighted Mean							3.41	1.13	Not Sure

6.3.2 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of objectivity

Table 6.6 presents respondents' assessment of the objectivity of the internal audit function (IAF). It shows that most respondents **agree** that "Objectivity is a key enabler for the IAF's effectiveness", with a weighted mean of 4.33 and a standard deviation of 0.71, and that "IA audits the work of the individual or department that makes decisions that directly affect his or her future employment opportunities and salary", with a weighted mean of 1.14 and a standard deviation of 0.77. However, some respondents were **not sure** if "The university management is responsible for the appointment and remuneration of the Chief Internal Auditor", with a weighted mean of 3.68 and a standard deviation of 1.17; "IA are sometimes exposed to social pressure threats from university pressure groups", with weighted mean of 3.52 and a standard deviation of 0.73; "Internal auditors feel free to include any audit findings in their audit reports", with weighted mean of 3.37 and a standard deviation of 0.95.

The remaining items ("Internal auditors (IA) act as facilitators of control self-assessment exercises which they may be asked to review afterwards" and "The IAF is highly valued by management as demonstrated by the priority given budget") with the same weighted mean of **3.18** and a standard deviation of **0.93** and **1.12** respectively were both interpreted as **not sure**. The statement "IA sometimes approaches audit work with preconceived notions" had a weighted mean of **3.5** and a standard deviation of **1.09**, which was also interpreted as **not sure**. The respondents, on the other hand, disagreed that "the university is a multicultural or gender entity and the IA has a bias towards auditee employees of their culture or gender", with a weighted mean of **2.94** and a standard deviation of **0.92**. The respondents disagreed that "The Chief Internal Auditor is financially motivated and happy with their salary grade", with a weighted mean of **2.39** and a standard deviation of **0.95**.

Whilst respondents agreed that objectivity is a key enabler of IA effectiveness, overall, respondents' assessment of the objectivity of the internal audit function was interpreted as **not sure**, with a general weighted mean of 3.55 and a standard deviation of 0.97. As defined by Stewart and Subramanian (2010), independence refers to the state of being free from circumstances that pose a risk to objectivity or the perception of objectivity. Lack of knowledge on independence and objectivity by the auditees is an indication of lack of independence as independence should be both in appearance and in fact (ISSAI, 2010).

Table 6.6: Assessment of the respondents of internal audit function effectiveness in terms of objectivity

		5	4	3	2	1	AWM	SD	Interpretation
1	Objectivity is a key enabler for IAF effectiveness.	127	119	30	3	0	4.33	0.71	Agree
2	Internal auditors (IA) act as facilitators of control self-assessment exercises, which they may be asked to review afterwards.	13	105	89	64	7	3.18	0.93	Not Sure
3	The university management is responsible for the appointment and remuneration of the Chief Internal Auditor.	86	67	101	1	24	3.68	1.17	Not Sure

		5	4	3	2	1	AWM	SD	Interpretation
4	Internal auditors feel free to include any audit findings in their audit reports.	20	120	84	52	3	3.37	0.90	Not Sure
5	The IAF is highly valued by management as demonstrated by the priority given to the budget.	41	72	73	83	10	3.18	1.12	Not Sure
General Weighted Mean							3.55	0.97	Not Sure

6.3.3 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of value added

Table 6.7 below shows the assessment of the respondents in terms of the value added by the internal audit function to the university. The majority of the respondents were **not sure** that "The IAF has added value to the university by ensuring that the internal controls are robust and functioning in terms of detecting and preventing fraudulent acts against the university", with a weighted mean of **3.69** and a standard deviation of **0.96**; "The IAF has added value to the university by ensuring that sound corporate governance principles are adhered to by university management", with a weighted mean of **3.56** and a standard deviation of **0.84**; "The IAF has added value to the university by ensuring that all the pillars of Education 5.0 are being implemented into curriculum development and the teaching and learning processes of the university", with an average mean of **3.51** and a standard deviation of **0.87**. Furthermore, "The IAF has added value to the university by ensuring that university strategic goals and objectives are met", with a weighted mean of **3.47** and a standard deviation of **0.88**, interpreted as not sure. The same assessment was applied to "The IAF has added value to the university by ensuring that the university complies with all the state laws and regulations", with a weighted mean of **3.46** and a standard deviation of **0.90**. Further, "The IAF has added value to the university by ensuring that financial reporting is always accurate and up to date", with a weighted mean of **3.41** and standard deviation of **0.88**, and "The IAF has added value to the university by ensuring that the positive risks are enhanced and capitalised on by the university", with the same weighted mean of **3.20**, a standard deviation of **0.71**, and **1.29** interpreted as **not sure**.

Also, respondents were not sure whether "The IAF has added value to the university by ensuring that the university's internal quality assurance unit is fully functional to minimise the risk of poor service delivery", with a weighted mean of **3.18** and a standard deviation of **1.01**;

and "The IAF has added value to the university by ensuring that the residual risks affecting the functional and organisational units of the university are kept at manageable levels", with a weighted mean of 3.18 and a standard deviation of 1.01.

In conclusion, the participants who expressed uncertainty regarding the contribution of the internal audit function to the institution had an average score of 3.40, as measured by a general weighted mean, with a standard deviation of 0.97. These findings are consistent with the perceptions of IA stakeholders in previous research who did not find IA to be beneficial to their organisations (Grzesiak, 2021; Mashayekhi *et al.*, 2022).

Previous research has endeavoured to identify the primary factors that may contribute to the improvement of IA value-creation processes (Bou-Raad, 2000; Mihret & Woldeyohannis, 2008; Barac, Plant & Motubatse, 2009; Eulerich & Eulerich, 2020). It is important to acknowledge that research has brought attention to the fact that the lack of organisational independence within the IAF hinders the ability of internal auditors to effectively fulfil their role in providing assurance to the board and audit committee in discharging their corporate governance responsibilities (Christopher *et al.*, 2009; Chambers & Odar, 2015).

Table 6.7: Assessment of the respondents on internal audit function effectiveness in terms of value added

		5	4	3	2	1	AWM	SD	Interpretation
1	The IAF has added value to the university by ensuring that the internal controls are robust and functioning in terms of detecting and preventing fraudulent acts against the university.	48	146	36	48	1	3.69	0.96	Not Sure
2	The IAF has added value to the university by ensuring that the residual risks affecting the functional and organisational units of the university are kept at manageable levels.	8	94	103	74	0	3.13	0.84	Not Sure
3	The IAF has added value to the university by ensuring that the university complies with all the state laws and regulations.	40	84	120	34	1	3.46	0.90	Not Sure
4	The IAF has added value to the university by ensuring that all the pillars of Education 5.0 are being implemented in curriculum	46	74	137	21	1	3.51	0.87	Not Sure

	development and the teaching and learning processes of the university.								
5	The IAF has added value to the university by ensuring that the departmental goals for my department are achieved.	44	93	57	44	41	3.20	1.29	Not Sure
General Weighted Mean							3.40	0.97	Not Sure

6.3.4 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of management

Table 6.8 summarises the respondents' assessment of the relationship between management and the IAF. Most of the respondents were **not sure** that the "Management supports the IAF by considering internal auditors as advisors to management on matters relating to internal controls and governance issues", with weighted mean of **3.97** and a standard deviation of **0.90**; "Management supports the IAF in that the Vice-Chancellor and top university management are responsible for the appointment of the Chief Internal Auditor (CIA)", with weighted mean of **3.87** and a standard deviation of **1.15**; "Management supports the IAF by promoting IA independence by not intervening in the IA processes", with an weighted mean of **3.47** and a standard deviation of **0.94**; "Management supports the IAF by valuing and taking timely corrective action on audit findings and recommendations", with weighted mean of **3.10** and a standard deviation of 0.96; "Management supports the IAF by facilitating and funding regular continuous professional development for internal auditors", with an weighted mean of **3.39** and a standard deviation of **1.10**; and "Management supports the IAF by including the IA plan in the university calendar", with an weighted mean of **3.20** and a standard deviation of **1.13**.

Furthermore, respondents disagreed that "Management supports the IAF by placing value on and communicating the role of IAF to the university stakeholders", with a weighted mean of **2.95** and a standard deviation of **1.18**; "Management supports the IAF by compensating the CIA on a level matching the value added by the IAF to the organisation", with a weighted mean of **2.92** and a standard deviation of **1.35**; "Management supports the IAF by ensuring that the IA unit has adequate manpower to enable it to carry out its duties", with a weighted mean of **2.77** and a standard deviation of **1.44**; "Management supports the IAF by ensuring that the internal audit department has adequate financial resources required in order for it to carry out its duties", with a weighted mean of **2.66** and a standard deviation of **1.35**. In general, the

respondents were not sure about the relationship between management and the IAF, with a general weighted mean of **3.23** and a standard deviation of **1.11**.

The auditees disagreed with the statement that management supports the IAFs by placing value on and communicating the role of the IAF to the university stakeholders. The absence of top management support threatens the independence of the IAFs in ZSUs. Chang *et al.* (2023) emphasise that independence of the IAF is achieved where top management displays active interest in it. Alzeban and Gwilliam (2014) in their research also concluded that management support affects the effectiveness of the IA.

Table 6.8: Assessment of the respondents on the internal audit functions in terms of management

		5	4	3	2	1	AWM	SD	Interpretation
1	Management supports the IAF by placing value on and communicating the role of the IAF to the university stakeholders.	17	99	54	72	37	2.95	1.18	Disagree
2	Management supports the IAF by compensating the CIA on a level matching the value added by the IAF to the organisation.	27	102	32	57	61	2.92	1.35	Disagree
3	Management supports the IAF by valuing and taking timely corrective action on audit findings and recommendations.	49	104	46	77	3	3.43	1.10	Not Sure
4	Management supports the IAF by facilitating and funding regular, continuous professional development for internal auditors.	31	122	53	72	1	3.39	1.00	Not Sure
5	Management supports the IAF by promoting IA independence by not intervening in the IA processes.	45	77	129	20	8	3.47	0.94	Not Sure
	General Weighted Mean						3.23	1.11	Not Sure

6.3.5 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of the audit committee

Table 6.9 shows the responses on the audit committee's (AC) relationship with the IAF. Most respondents **agree** that a non-executive director chairs the AC," with a weighted mean of **4.13** and a standard deviation of **0.81**. The respondents were **not sure** if "The university has a functional audit committee", with a weighted mean of **3.94** and a standard deviation of **0.88**; if "The CIA reports functionally to the audit committee", with a weighted mean of **3.93** and a standard deviation of **0.89**; if "The AC approves a timely, risk-based and agile internal audit plan", with a weighted mean of **3.82** and a standard deviation of **0.82**; if "The CIA always provides reports directly to the audit committee", with a weighted mean of **3.66** and a standard deviation of **0.94**; if "the CIA confirms the independence of the IAF to the AC at least annually", with a weighted mean of **3.23** and a standard deviation of **0.99**.

Moreover, respondents disagree that "The AC supports the IAF by making sure that the department is well-resourced for it to carry out its duties effectively". The AC received a weighted mean of **2.84** and a standard deviation of **1.14**; "The AC is responsible for and approves the internal audit budget and resource plan" with a weighted mean of **2.72** and a standard deviation of **1.02**; and "The audit committee oversees employment and remuneration decisions of the CIA", with a weighted mean of **2.54** and a standard deviation of **1.20**.

In general, the assessment of respondents on the audit committee's relationship with IAF was not sure, with a general weighted mean of **3.05** and a standard deviation of **1.05**.

Previous research showed that the audit committee has a responsibility to safeguard and ensure the independence of the IAF (Goodwin & Yeo, 2001; Goodwin, 2003; Gramling *et al.*, 2004; Christopher *et al.*, 2009). The results of the current study show that the audit committees in the ZSUs are not playing an oversight role in the independence of the IAFs. The oversight role includes overseeing the employment and remuneration decisions of the CIA as well as making sure that the department is well-resourced to enable it to function independently.

Table 6.9: Assessment of the respondents on the internal audit function in terms of the audit committee

		5	4	3	2	1	AWM	SD	Interpretation
1	The university has a functional audit committee.	90	91	91	6	1	3.94	0.88	Not Sure
2	The audit committee oversees employment and remuneration decisions of the CIA.	30	14	93	81	61	2.54	1.20	Disagree
3	The CIA confirms the independence of the IAF to the AC at least annually.	40	54	118	65	2	3.23	0.99	Not Sure
4	The AC is responsible for and approves the internal audit budget and resource plan.	16	40	101	94	28	2.72	1.02	Disagree
5	The AC supports the IAF by making sure that the department is well-resourced so that it can carry out its duties effectively.	24	59	77	87	32	2.84	1.14	Disagree
General Weighted Mean							3.05	1.05	Not Sure

6.3.6 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of internal audit quality

Table 6.10 presents the assessment of respondents in terms of whether the IA unit upholds the IAQ. Most of all respondents agree that "the IA unit upholds the IAQ through providing feedback during audits", with a weighted mean of **4.15** and a standard deviation of **0.71**; this was closely followed by "The IA unit upholds the IAQ through formally following up and ensuring that appropriate actions are taken on audit findings and recommendations", with a weighted mean of **4.14** and a standard deviation of **0.71**; and "The IA unit upholds the IAQ through taking into consideration the university objectives and goals when planning audit programmes", with a weighted mean of **4.05** and a standard deviation of **0.77**.

The statements, "The IA unit upholds the IAQ through providing clear reports", had an weighted mean of **3.99** and a standard deviation of **0.89**; "The IA unit upholds the IAQ through

providing valuable recommendations”, with an weighted mean of **3.98** and a standard deviation of **0.89**; "The IA unit upholds the IAQ through providing timely reports”, with an weighted mean of **3.97** and a standard deviation of **0.80**; "The IA unit upholds the IAQ through providing accurate findings”, with an weighted mean of **3.76** and a standard deviation of **0.81**; "The IA unit upholds the IAQ through providing independent and objective service”, with an weighted mean of **3.47** and a standard deviation of **1.08**; "The IA unit upholds the IAQ through the use of qualified, experienced, and professional staff members”, with weighted mean of **3.32** and a standard deviation of **1.01**; and lastly, "The IA unit upholds the IAQ through maintaining and using a sufficient number of IA staff members”, with weighted mean of **3.03** and standard deviation of **1.06**. They were all interpreted as **not sure**. In conclusion, respondents were not sure that the IA unit upholds the IAQ, with a general weighted mean of 3.81 and a standard deviation of **0.87**.

Internal audit quality (IAQ) has been used as a measure of internal audit effectiveness by previous studies (Alzeban & Gwilliam, 2014; Sihombing, 2023). This study employs IAQ as one of the indicators of IAF independence as perceived by auditees. Whilst the respondents agreed that the internal auditors provide feedback after audit and follow up after recommendations, they were not sure whether the internal auditors were objective, qualified personnel and whether the recommendations provided were useful. However, the study by Demeke and Kaur (2021) did not demonstrate a statistically significant correlation between IAQ and independence of IAFs. It should be noted that the research by Demeke and Kaur (2021) primarily concentrated on a distinct demographic group originating from Ethiopia, and the results cannot be generalised to other settings.

Table 6.10: Assessment of the respondents on the internal audit function in terms of internal audit quality

		5	4	3	2	1	AWM	SD	Interpretation
1	The IA unit upholds the IAQ by formally following up and ensuring that appropriate actions are taken on audit findings and recommendations.	87	151	35	6	0	4.14	0.71	Agree
2	The IA unit upholds the IAQ by providing feedback during audits.	82	161	32	4	0	4.15	0.67	Agree
3	The IA unit upholds the IAQ by providing valuable recommendations.	78	146	27	27	1	3.98	0.89	Not Sure

		5	4	3	2	1	AWM	SD	Interpretation
4	The IA unit upholds the IAQ by providing independent and objective service.	57	83	78	56	5	3.47	1.08	Not Sure
5	The IA unit upholds the IAQ by using qualified, experienced, and professional staff members.	30	105	74	65	5	3.32	1.01	Not Sure
General Weighted Mean							3.81	0.87	Not Sure

6.3.7 Assessment of the respondents on the internal audit functions in Zimbabwean state universities in terms of legal mandate

Table 6.11 displays the assessment of the respondents on the legal mandate of the internal audit units (IAUs) and the internal audit charter (IAC). It can be seen that most respondents were **not sure** if the "The IAC clearly states that the CIA reports functionally to the AC and administratively to the Vice-Chancellor", with a weighted mean of **3.85** and a standard deviation of **0.89**; "The IAC gives the IAF the legal mandate to audit every key result area of the university", with a weighted mean of **3.65** and a standard deviation of **0.67**; and "The university has an internal audit charter (IAC) that complies in all aspects with the requirements of the International Internal Auditing Standards", with a weighted mean of **3.52** and a standard deviation of **1.03**.

Both statements, "The IAC clearly spells the duty of the CIA to ensure independence and objectivity of the IAF" and "The IAC emphasises the value the governing body places on the independence of the IAF", have the same weighted mean of **3.45** and a standard deviation of **0.96** and **1.02**. "The university has a formal internal audit manual that outlines the scope and authority of the IAF and documents the standards, guidelines and procedures for the IAF" has a weighted mean of **3.42** and a standard deviation of **1.05**; "The IAC clearly shows the position of the Internal Audit Unit (IAU) within the university organogram", has a weighted mean of **3.37** and a standard deviation of **0.69**; "The structure of the Internal Audit Department is clearly shown in the IAC", has a weighted mean of **3.34** and a standard deviation of **0.73**; "The University Act provides for the establishment, structure and operation of the IAF" has a weighted mean of **3.26** and a standard deviation of **1.13**, which is interpreted as **not sure**. The statement "The IAC is available to stakeholders either freely or by request and is subject to scrutiny by all staff members as to its appropriateness in terms of coverage and the mandate provided to internal audit" was interpreted as **disagreeing** with the weighted mean of **2.93** and standard deviation of **1.16**.

In conclusion, the respondents were not sure about the legal mandate of the internal audit unit and internal audit charter, with a general weighted mean of **3.40** and a standard deviation of **1.05**. The findings are in line with the findings by Zakaria (2006), who established that the IAFs in Malaysian state universities lacked effective legal mandates and, hence, independence. This finding also aligns with the research conducted by Al-Akra, Abdel-Qader, and Billah (2016), which showed that the independence of the IAFs was compromised in nations where the corporate governance legislation did not incorporate a clause to guarantee IA independence.

Table 6.11: Assessment of the respondents on the legal mandate of the internal audit unit (IAU)

		5	4	3	2	1	AWM	SD	Interpretation
1	The University Act provides for the establishment, structure, and operation of the IAF.	50	63	86	69	11	3.26	1.13	Not Sure
2	The university has a formal internal audit manual that outlines the scope and authority of the IAF and documents the standards, guidelines, and procedures for the IAF.	58	59	105	55	2	3.42	1.05	Not Sure
3	The university has an internal audit charter (IAC) that complies in all aspects with the requirements of the International Internal Auditing Standards	72	41	126	39	1	3.52	1.03	Not Sure
4	The IAC is available to stakeholders either freely or by request and is subject to scrutiny by all staff members as to its appropriateness in terms of coverage and the mandate provided to internal audit	9	100	85	33	52	2.93	1.16	Disagree
5	The IAC clearly states that the CIA reports functionally to the AC and administratively to the Vice-Chancellor	79	92	98	8	2	3.85	0.89	Not Sure
		General Weighted Mean					3.40	1.05	Not Sure

6.4 Development of structural equation model

6.4.1 Measurement model

The development of a measurement model of the relationship between independence and internal audit factors in terms of objectivity, added value, and internal audit quality is demonstrated in this study. This study also demonstrates the development of a measurement model for the relationship between independence and management, audit committee, and legal mandate, respectively.

Structural equation modelling (SEM) was utilised in this work to analyse the data, with the purpose of evaluating the measurement error and examining the associations among the constructs under investigation (Lee *et al.*, 2007). The present study evaluates the two SEM models proposed by Hair *et al.* (2012). The initial model is the measurement model, also known as the outer model, which aims to identify and evaluate the latent variables at the level of observation. Additionally, it evaluates dependability (such as internal consistency reliability) and accuracy (such as convergent and discriminant validity). The second model, referred to as the structure model or inner model, examines the interrelationships among latent variables at the theoretical level (Hair *et al.*, 2012).

Prior to evaluating the model, it is imperative to analyse and scrutinise the data thoroughly. The following section presents an analysis and evaluation of the data examination and screening outcomes. This process entails the examination and evaluation of the absent data as well as the identification of any anomalous observations. Multiple tests were performed to analyse the data and assess its dependability (Hair *et al.*, 2010). The assessment of goodness of fit provided insight into the accuracy and appropriateness of the final measurement model, indicating its suitability for the development of the SEM. SEM techniques using AMOS graphics were employed to evaluate the fit of both the measurement and structural components of the proposed model.

Kline (2005) suggested five steps [(i) model specification, (ii) model identification, (iii) data preparation and screening, (iv) estimation of the model, and (v) model re-specification (if necessary)] were followed while conducting SEM. To assess the model's overall goodness of fit, nine model-fit-measures from three categories (absolute fit indices, incremental fit indices, and parsimonious fit) indices were used. The study reports Chi-square statistics (CMIN), relative Chi-square, root mean squared error of approximation (RMSEA), standardised root mean residual (SRMR), comparative fit index (CFI), incremental fit index (IFI), normal fit

indices (NFI), Tucker Lewis index (TLI) and Akaike information criterion (AIC). Though CMIN is sensitive to large samples, all other fit indices used in this study are less sensitive to sample size.

6.4.2 Data examination

The process of scrutinising or evaluating the study data may appear banal and insignificant, but it serves as a crucial initial stage for data analysis to gain a more comprehensive understanding of the data (Hair *et al.*, 2010). Additionally, it is beneficial for the researcher to consider the necessary data circumstances that underlie the analysis. Tabachnick and Fidell (2007) assert that the evaluation process for the data encompasses several key steps, including the identification of missing values, the detection of outliers, and the assessment of the assumption of normalcy. This section provides a comprehensive description of the processes employed in the present study for data screening. These procedures encompassed the analysis of missing data and the identification of outliers. However, it is important to note that the normality assumption test is not included in these procedures, as the SEM model utilises prediction-oriented metrics, which are nonparametric in nature (Chin, 2010).

6.5 Missing data

Missing values occur when survey participants fail to provide responses to one or more of the survey questions. As a result, the analysis will face obstacles due to the lack of precise data for one or more variables. To gain a comprehensive understanding of the fundamental mechanisms that contribute to the occurrence of missing data, it is crucial to initially determine the pattern and extent of the missing data (Hair *et al.*, 2010).

According to Hair *et al.* (2010), research may encounter two distinct categories of missing data. The initial category pertains to missing data that can be disregarded. This category does not necessitate explicit interventions as it is inherent to the research design. For instance, the researcher may construct a questionnaire with skip patterns, allowing respondents to bypass topics that are not relevant to them. Alternatively, the researcher may exert control over this aspect. The second category pertains to non-ignorable missing data. This sort of situation does not necessitate the implementation of remedies, as it is anticipated to arise due to various causes associated with the respondents themselves (for example, respondents lacking the information to provide accurate answers). To determine the ignorable nature of the missing data, it is necessary to evaluate the scope and patterns of the missing data (Hair *et al.*, 2010). Hair *et al.* (2010) suggest that missing data below 10% can typically be disregarded, but

variables exhibiting substantial levels of missing values, such as 15%, may be considered for elimination. According to Hair *et al.* (2010), researchers are faced with the challenge of striking a balance between the benefits of removing instances and/or variables with missing data and the resulting decrease in sample size and variables that accurately represent the ideas under investigation.

In the present investigation, the initial procedure was examining the cases (i.e., respondents) for any instances of missing data utilising the Statistical Package for the Social Sciences (SPSS). Consequently, the absence of missing data was observed.

6.6 Data screening and normality test

A descriptive analysis of the data and their distribution was conducted. No missing data were found since the survey software (Google Survey) prevented saving any partially completed survey. Both univariate and multivariate normality of data were tested before conducting CFA and SEM. The skewness and kurtosis of the data ranged from 0.061 to -2.071 and from -0.950 to 2.309, respectively. The skewness and kurtosis indices did not exceed [3] and [10], so the data for this study were considered univariately normal (Kline, 2005). Multivariate normality was assessed using Mardia's coefficient (1970) or critical ratio (c.r. values). Bentler (2005) suggested that c.r. value > 5.00 is indicative of non-normally distributed data. With Kurtosis of 953.739 and c.r. value of 152.280, the data indicates that the multivariate normality assumption was violated (see Table 6.12). Therefore, the Bollen-Stine bootstrap method was used instead of the maximum likelihood estimation method for inference of exact measurement and structural model (Byrne, 2013).

Table 6.10: Assessment of normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
LegMan1	1.000	5.000	.061	.413	-.950	-3.239
LegMan2	1.000	5.000	.158	1.077	-1.017	-3.468
LegMan3	1.000	5.000	.230	1.568	-1.091	-3.719
LegMan4	1.000	5.000	-.459	-3.131	-.936	-3.193
LegMan5	1.000	5.000	-.197	-1.342	-.626	-2.134
AddedV5	1.000	5.000	-.340	-2.318	-1.011	-3.446
AddedV4	.000	5.000	.096	.658	.073	.248

Variable	min	max	skew	c.r.	kurtosis	c.r.
AddedV3	1.000	5.000	.139	.948	-.601	-2.048
AddedV2	2.000	5.000	.048	.325	-1.009	-3.439
AddedV1	1.000	5.000	-.602	-4.107	-.509	-1.736
IAQ5	1.000	5.000	-.146	-.998	-.862	-2.941
IAQ4	1.000	5.000	-.126	-.861	-.972	-3.313
IAQ3	1.000	5.000	-.898	-6.124	.412	1.406
IAQ2	2.000	5.000	-.471	-3.214	.364	1.240
IAQ1	2.000	5.000	-.575	-3.919	.309	1.054
Obj5	1.000	5.000	.111	.758	-1.018	-3.470
Obj4	1.000	5.000	-.285	-1.945	-.620	-2.114
Obj3	1.000	5.000	-.679	-4.632	-.021	-.071
Obj2	.000	5.000	-.312	-2.130	-.416	-1.418
Obj1	2.000	5.000	-.742	-5.057	-.008	-.027
Man1	1.000	5.000	-.174	-1.184	-1.103	-3.760
Man2	1.000	5.000	-.147	-1.001	-1.371	-4.676
Man3	1.000	5.000	-.160	-1.089	-1.205	-4.109
Man4	1.000	5.000	-.203	-1.388	-1.100	-3.750
Man5	1.000	5.000	-.105	-.717	-.039	-.133
AudCom1	1.000	5.000	-.211	-1.439	-.881	-3.005
AudCom2	1.000	5.000	.558	3.804	-.343	-1.169
AudCom3	1.000	5.000	.371	2.527	-.701	-2.391
AudCom4	1.000	5.000	.334	2.277	-.277	-.945
AudCom5	1.000	5.000	.195	1.331	-.802	-2.733
Ind6	1.000	5.000	-.697	-4.750	-.587	-2.000
Ind5	1.000	5.000	.504	3.437	-1.036	-3.532
Ind4	1.000	5.000	-.212	-1.447	-1.500	-5.115
Ind3	1.000	5.000	-.784	-5.345	-.506	-1.726
Ind2	1.000	5.000	.846	5.766	-.554	-1.890
Ind1	1.000	5.000	-	-	2.309	14.330
			2.071	14.120		
Multivariate					953.739	152.280

6.7 Summary assessment of the respondents on the internal audit functions in Zimbabwean state universities

Table 6.13 shows a summary of the assessment of the respondents on the internal audit functions in Zimbabwean state universities. The respondents were **not sure** about the effectiveness of the internal audit function in terms of independence (AWM = 3.41, SD= 1.13); objectivity (AWM = 3.55, SD= 0.97); value added (AWM = 3.40, SD= 0.97); management (AWM = 3.23, SD= 1.11); audit committee (AWM = 3.05, SD= 1.05); audit quality (AWM = 3.81, SD= 0.87); and legal mandate (AWM = 3.40, SD= 1.05). This indicates that, on average, respondents are neutral on the statements. The data seems to be anomalous as the researcher did not expect the respondents to be overall not sure of the effectiveness of the IAFs in terms of independence. Jick (1979), however, states that it is possible to have unexpected findings from research. The divergence, as noted by Jick (1979), showed hidden contextual factors that influence the independence of the IAF in ZSUs, hence answering the second research objective, which sought to identify the factors that influence IA independence in ZSUs. “Not sure” is an indication of a lack of awareness of the role and purpose of IAFs in ZSUs. This aligns with the findings by Grzesiak (2021), in which the IA stakeholders professed ignorance about issues related to the IA in Poland. Lack of awareness has been linked to IA ineffectiveness and lack of independence (Abu-Azza, 2012).

Table 6.11: Summary assessment of the respondents on the internal audit functions in Zimbabwean state universities

AREAS	AWM	SD	Adjectival Rating
Independence	3.41	1.13	Not Sure
Objectivity	3.55	0.97	Not Sure
Value Added	3.40	0.97	Not Sure
Management	3.23	1.11	Not Sure
Audit Committee	3.05	1.05	Not Sure
Audit Quality	3.81	0.87	Not Sure
Legal Mandate	3.40	1.05	Not Sure

6.8 Confirmatory factor analysis

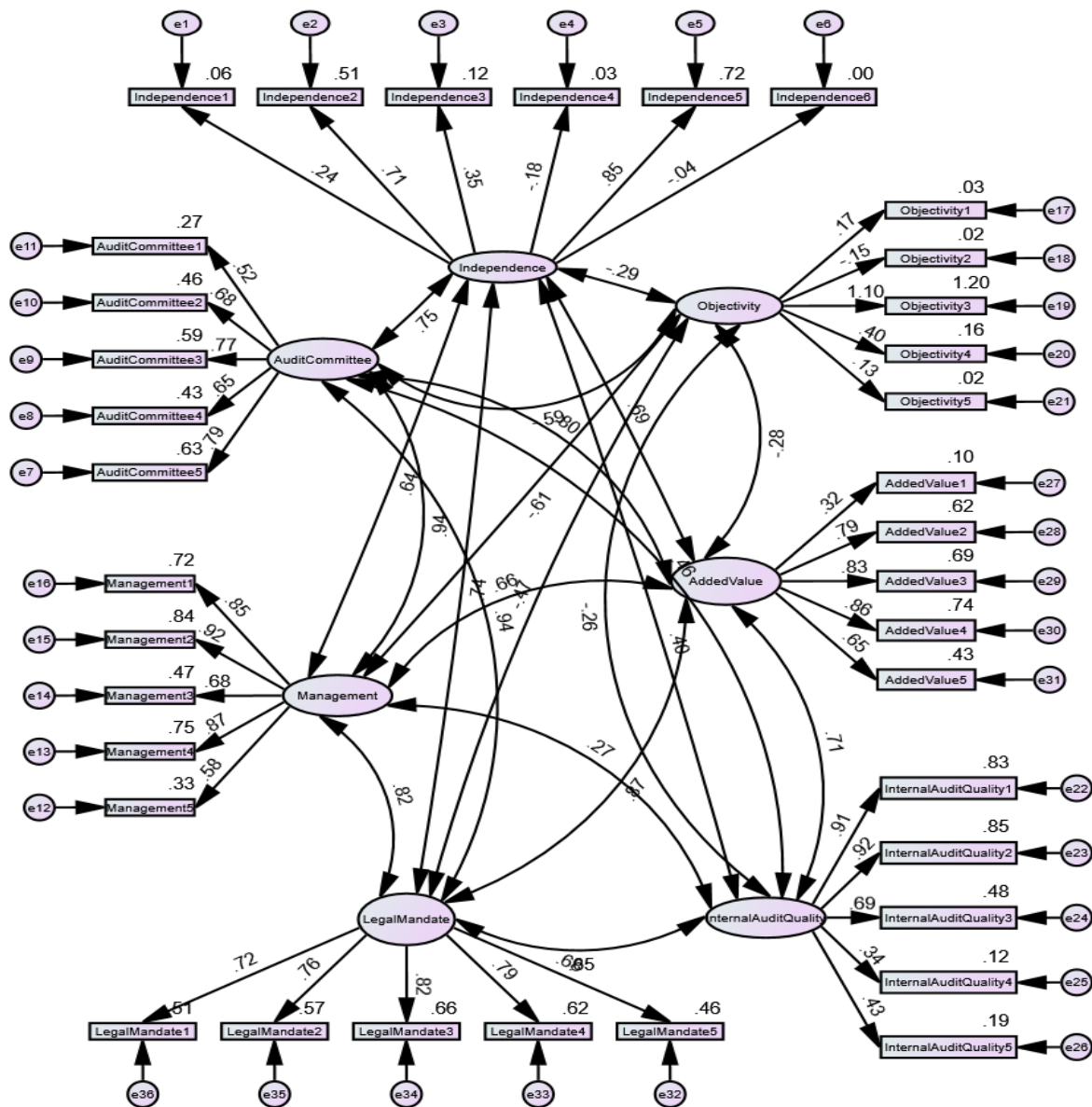
The results of the confirmatory factor analysis (CFA) provide robust insights into the relationships between observed variables and their underlying latent constructs (Brown, 2015). The indicators for the construct of Independence show strong factor loadings, with estimates ranging from 0.567 to 0.890, and each indicator is highly significant ($p < .001$). For instance, Independence1 has an estimate of 0.61 and a Z-value of 13.556, demonstrating its substantial contribution to the construct of independence. Similarly, the Objectivity indicators exhibit strong factor loadings, ranging from 0.45 to 0.742, with all indicators showing high significance ($p < .001$). Objectivity5, with an estimate of 0.732 and a Z-value of 15.25, highlights a particularly strong relationship with the objectivity construct. The indicators for the Audit Committee also display robust factor loadings, ranging from 0.71 to 0.921, and are all highly significant ($p < .001$). Audit Committee6 stands out with an estimate of 0.921 and a Z-value of 20.932, indicating a critical role in measuring the audit committee construct. The Legal Mandate indicators show very high factor loadings, from 0.74 to 0.93, with each indicator being significant ($p < .001$). Legal Mandate3 has the highest loading at 0.93 and a Z-value of 20.667, indicating a very strong relationship with the legal mandate construct.

Top management indicators, ranging from 0.72 to 0.97, also indicate strong loadings and are all significant ($p < .001$). Management9, with an estimate of 0.97 and a Z-value of 21.087, demonstrates an exceptionally strong relationship with the management construct. Value Added indicators show robust factor loadings from 0.69 to 0.91, with each indicator highly significant ($p < .001$). Value Added10, with an estimate of 0.91 and a Z-value of 19.362, is particularly notable. Finally, the Internal Audit Quality indicators demonstrate high factor loadings, ranging from 0.71 to 0.93, with all indicators significant ($p < .001$). Internal Audit Quality8, with an estimate of 0.93 and a Z-value of 20.217, stands out as particularly strong.

Overall, the CFA results confirm that all observed variables significantly contribute to their respective latent constructs. The factor loadings are robust, with estimates generally well above 0.60 and highly significant p-values ($p < .001$). These results underscore the validity and reliability of the measurement model, indicating that the

constructs of independence, objectivity, audit committee effectiveness, legal mandate, management, value added, and internal audit quality are well-represented by their respective indicators. The strong model fit is further supported by high Z-values and low standard errors, reinforcing the robustness of the measurement model (Brown, 2015). Figure 6.1 shows the hypothesised factor measurement model.

Figure 6.1: The hypothesised factor measurement model



Source: Author (2023)

The standardised parameter estimates and the critical ratios for all 36 items were significant, which supported the items and their relationships with the relative constructs as shown in table 6.14.

Table 6.12: Standardised parameter estimated of the 36-item measurement model (7 correlated factors)

Indicator	Estimate	SE	Z	p
Independence1	0.61	0.045	13.556	< .001
Independence2	0.735	0.053	13.868	< .001
Independence3	0.64	0.048	13.333	< .001
Independence4	0.567	0.055	10.309	< .001
Independence5	0.714	0.049	14.571	< .001
Independence6	0.89	0.051	17.451	< .001
Independence7	0.775	0.048	16.146	< .001
Independence8	0.824	0.047	17.532	< .001
Independence9	0.71	0.045	15.778	< .001
Independence10	0.655	0.052	12.596	< .001
Objectivity1	0.45	0.042	10.714	< .001
Objectivity2	0.672	0.05	13.44	< .001
Objectivity3	0.583	0.045	12.956	< .001
Objectivity4	0.601	0.046	13.065	< .001
Objectivity5	0.732	0.048	15.25	< .001
Objectivity6	0.68	0.049	13.878	< .001
Objectivity7	0.742	0.047	15.787	< .001
Objectivity8	0.612	0.048	12.75	< .001
Objectivity9	0.674	0.047	14.34	< .001
Objectivity10	0.59	0.049	12.041	< .001
Audit Committee1	0.835	0.043	19.419	< .001
Audit Committee2	0.746	0.045	16.578	< .001
Audit Committee3	0.802	0.046	17.435	< .001
Audit Committee4	0.861	0.047	18.319	< .001
Audit Committee5	0.795	0.045	17.667	< .001
Audit Committee6	0.921	0.044	20.932	< .001

Indicator	Estimate	SE	Z	p
Audit Committee7	0.84	0.046	18.261	< .001
Audit Committee8	0.783	0.045	17.4	< .001
Audit Committee9	0.92	0.046	20	< .001
Audit Committee10	0.71	0.049	14.49	< .001
Legal Mandate1	0.879	0.046	19.109	< .001
Legal Mandate2	0.891	0.047	18.979	< .001
Legal Mandate3	0.93	0.045	20.667	< .001
Legal Mandate4	0.87	0.046	18.913	< .001
Legal Mandate5	0.82	0.047	17.447	< .001
Legal Mandate6	0.795	0.048	16.563	< .001
Legal Mandate7	0.811	0.045	18.022	< .001
Legal Mandate8	0.74	0.046	16.087	< .001
Legal Mandate9	0.852	0.047	18.128	< .001
Legal Mandate10	0.91	0.048	18.958	< .001
Management1	0.87	0.045	19.333	< .001
Management2	0.911	0.047	19.383	< .001
Management3	0.85	0.046	18.478	< .001
Management4	0.89	0.045	19.778	< .001
Management5	0.78	0.047	16.596	< .001
Management6	0.83	0.046	18.043	< .001
Management7	0.81	0.048	16.875	< .001
Management8	0.95	0.045	21.111	< .001
Management9	0.97	0.046	21.087	< .001
Management10	0.72	0.049	14.694	< .001
Value Added1	0.74	0.046	16.087	< .001
Value Added2	0.69	0.047	14.681	< .001
Value Added3	0.82	0.046	17.826	< .001
Value Added4	0.76	0.045	16.889	< .001
Value Added5	0.88	0.046	19.13	< .001
Value Added6	0.86	0.047	18.298	< .001
Value Added7	0.855	0.045	19	< .001

Indicator	Estimate	SE	Z	p
Value Added8	0.82	0.046	17.826	< .001
Value Added9	0.78	0.048	16.25	< .001
Value Added10	0.91	0.047	19.362	< .001
Internal Audit Quality1	0.77	0.045	17.111	< .001
Internal Audit Quality2	0.74	0.046	16.087	< .001
Internal Audit Quality3	0.71	0.047	15.106	< .001
Internal Audit Quality4	0.75	0.045	16.667	< .001
Internal Audit Quality5	0.8	0.046	17.391	< .001
Internal Audit Quality6	0.79	0.047	16.809	< .001
Internal Audit Quality7	0.76	0.045	16.889	< .001
Internal Audit Quality8	0.93	0.046	20.217	< .001
Internal Audit Quality9	0.9	0.047	19.149	< .001
Internal Audit Quality10	0.88	0.046	19.13	< .001

Source: Author (2023)

6.8.1 Structural equation model evaluation

The evaluation of SEM relies on the examination of fit indices pertaining to both individual path coefficients, such as the p-value and standard error, as well as the overall model fit, including the χ^2 and root mean squared error of approximation (RMSEA). The literature suggests that model fit indexes exhibit a certain degree of flexibility in terms of their usability (Kline, 2023). In general, when many fit indices are utilised in an SEM, there is an increased likelihood of rejecting a misspecified model. This implies that there is a higher probability of rejecting good

models. This also implies that it is advisable to utilise a mix of at least two fit indices (Hu & Bentler, 1999). Several studies have proposed cut-off values for certain indices; however, it is important to note that none of these values can be universally applied as definitive guidelines for all applications (Fan *et al.*, 1999; Chen *et al.*, 2008; Hoyle, 2012).

The chi-square test (χ^2) is a statistical method used to assess whether there is a significant difference between the covariance matrix derived from a statistical model and the actual covariance matrix. Hence, the lack of statistical significance is favoured. To achieve the most suitable fit for the selected SEM, it is recommended to utilise the χ^2 test, where a p-value greater than 0.05 is considered desirable (Bentler & Bonett, 1980; Mulaik *et al.*, 1989; Hu & Bentler, 1999). Excessive preoccupation with the χ^2 test is not advisable because of its susceptibility to sample size variations and its lack of comparability across different structural equation models (Bentler & Bonett, 1980; Joreskog & Sorbom, 1993; Hu & Bentler, 1999; Curran *et al.*, 2002).

The RMSEA and the standardised root mean square residual (SRMR) are two often used measures in statistical analysis. The RMSEA is a statistical measure used to assess the goodness of fit of a model. A value of 0 indicates a perfect fit, whereas larger values indicate a lack of fit (Browne & Cudeck, 1993; Hu & Bentler, 1999; Chen *et al.*, 2008). The test is advantageous in identifying model misspecification and has a lower degree of sensitivity to sample size compared to the χ^2 test. According to several studies (Browne & Cudeck, 1993; Hu & Bentler, 1999; Fan *et al.*, 1999), it is recommended that the RMSEA should be below 0.06 to be considered acceptable. The SRMR bears some resemblance to the RMSEA and is considered indicative of a satisfactory model fit when its value is below 0.09, as suggested by Hu and Bentler (1999)

- **The Comparative Fit Index (CFI)** is a statistical measure used to assess the degree to which a covariance matrix accounts for variance. The range of values spans from 0.0 to 1.0. A greater value of the CFI signifies a more optimal fit of the model. According to Hu and Bentler (1999), it is recommended that the CFI should ideally be equal to or greater than 0.95 in practical applications. According to previous research conducted by Fan *et al.* (1999) and Tabachnick and Fidell (2001), the CFI is found to be less influenced by sample size compared to the χ^2 test.
- **The goodness-of-fit index (GFI)** is a statistical measure used to assess the degree to which observed data fits a specified theoretical model. The GFI exhibits a range from 0 to 1.0, with the optimal fit being achieved at a value of 1.0. However, MacCallum

and Hong (1997) and Sharma *et al.* (2005) recommend not using the GFI due to its susceptibility to sample size effects.

- **The normed fit index (NFI)** is a statistical measure that is known to be greatly influenced by the size of the sample, as noted by Bentler in 1990. Due to this rationale, the utilisation of NFI for evaluating model fit has become obsolete (Bentler, 1980; West, Taylor & Wu, 2012).
- **The Tucker-Lewis index (TLI)** is a non-normed fit index (NNFI) that addresses some of the limitations of the NFI and also introduces a fit index that is not influenced by sample size (Bentler and Bonett, 1980; Bentler, 1990). According to Hu and Bentler (1999), a total loadings index (TLI) value of more than 0.90 is deemed to be appropriate.

The Akaike information criterion (AIC) and Bayesian information criterion (BIC) are statistical measures used for model selection and comparison in the field of statistics. The AIC and BIC are two measures that are used in the context of model selection rather than for conducting null hypothesis tests. The AIC provides a measure of the amount of information that is lost when a particular model is employed to generate data. This concept has been discussed by Akaike (1974) and West *et al.* (2012). The BIC is a measure used to assess the parsimony of a model in comparison to other potential models (Schwarz, 1978; West *et al.*, 2012). The use of AIC and BIC lies in model selection to mitigate overfitting rather than in proving the null hypothesis (Burnham & Anderson, 2004; Johnson & Omland, 2004).

Model fit was assessed using the combination of several fit indices (Hair *et al.*, 2010) from distinct categories: absolute fit indices, increment fit indices and parsimonious fit indices. The results of the CFA are shown in Table 6.15.

Table 6.13: Fit indices of the proposed measurement model

	Recommended Level Fit	Proposed Measurement Model
Absolute fit indices		
Chi-square	Not significant at $p < 0.05$	5432.700, $df=573$, $p=0.000$
Relative Chi-square (CMIN/DF)	2~5, <5 (Bentler, 1990)	3.344

	Recommended Level Fit	Proposed Measurement Model
RMSEA (root mean square of error estimation)	0 perfect fit (Browne & Cudeck, 1993; Hu & Bentler, 1999; Chen <i>et al.</i> , 2008)	0.00
GFI (Goodness of fit Index) Incremental fit indices	0-1.0 (Sherma <i>et al.</i> , 2005)	0.413
CFI (Comparative fit index)	0-1 (Hu & Bentler, 1999) or >.90 (Browne & Cudeck, 1992)	0.589
IFI (Incremental fit index)	>.90 (Bentler, 1990)	0.492
TLI (Tucker Lewis index)	>=.90 (Marsh <i>et al.</i> , 1998)	0.438

Except for IFI and TLI, all fit indices reached recommended levels of fit: ($\chi^2 = 1076.694$, $df = 322$, $p < .001$, $CMIN/DF = 3.344$, $RMSEA = 0.233$, $GIF = 0.413$, $CFI = 0.958$, $NFI = 0.492$, $AIC = 10205.424$). Since χ^2 is sensitive to a large sample size, for a sample size greater than 250, the significant χ^2 value is acceptable (Hair *et al.*, 2010). So, the significant χ^2 value is acceptable for this research. The ratio of Chi-square to the number of degrees of freedom is also reported, and it meets the recommended level of fit since the fit indices met the recommended level.

6.8.2 Discussion

This thesis focused on assessing the performance of the IAFs in terms of independence to establish an independent internal audit function framework for ZSUs. This thesis also attempted to determine how different contextual factors, including IA stakeholders, affect the independence of the IAFs within ZSUs to improve the applicability of the expected findings. A mixed method approach was employed, incorporating interviews and questionnaire-based data collection methods to evaluate the correlation of the study. Triangulation of data was done to get a comprehensive understanding of the research problem so that a practical solution could be arrived at. Literature has shown that most state universities in different countries have continued to have malpractices occurring despite the presence of IAFs (Christopher, 2012; Kehinde *et al.*, 2016; Purpera, 2017; Mokono & Nasieku, 2018; DeSimone & Rich, 2019). The interviews and the analysis of the auditor general reports provided additional clarification regarding the unanticipated findings of the descriptive statistics and structural model analysis.

6.9 Hypotheses testing

Hypothesis testing is a method to test the probability that a hypothesis is true or false. The hypothesised relations between constructs were put in null hypotheses, which presume truth.

6.9.1 Regression weights of direct hypotheses

Regression analysis was employed to examine the direct impact of hypotheses. Table 6.16 presents the positive estimates for the independent variables, together with their respective p-values. The significance of these associations is indicated by the p-values being less than 0.05. All the factors were correlated. The standardised parameter estimates and the critical ratios for all 36 items were **significant**, which supported the items and their relationships with the relative constructs, except for the independence items and objectivity items no. 4 and 6.

Table 6.14: Regression weights of direct hypotheses

			Estimate	S.E.	C.R.	P
Ind1	<---	Independence	1.000			
Ind2	<---	Independence	6.780	2.284	2.968	.003
Ind3	<---	Independence	2.777	1.095	2.536	.011
Ind4	<---	Independence	-1.555	.946	-1.643	.100
Ind5	<---	Independence	5.803	1.945	2.983	.003
Ind6	<---	Independence	-.316	.719	-.440	.660
AudCom5	<---	Audit Committee	1.000			
AudCom4	<---	Audit Committee	.758	.053	14.374	***
AudCom3	<---	Audit Committee	.525	.055	9.526	***
AudCom2	<---	Audit Committee	.739	.065	11.421	***
AudCom1	<---	Audit Committee	.402	.050	8.052	***
Man5	<---	Management	1.000			
Man4	<---	Management	1.608	.150	10.726	***
Man3	<---	Management	1.396	.151	9.259	***
Man2	<---	Management	2.230	.205	10.854	***
Man1	<---	Management	1.759	.171	10.292	***
Obj1	<---	Objectivity	1.000			
Obj2	<---	Objectivity	.894	.249	3.583	***

			Estimate	S.E.	C.R.	P
Obj3	<---	Objectivity	1.950	.407	4.790	***
Obj4	<---	Objectivity	10.344	5.877	1.760	.078
Obj5	<---	Objectivity	1.596	.356	4.487	***
IAQ1	<---	Internal Audit Quality	1.000			
IAQ2	<---	Internal Audit Quality	1.005	.049	20.498	***
IAQ3	<---	Internal Audit Quality	.952	.072	13.243	***
IAQ4	<---	Internal Audit Quality	.543	.102	5.331	***
IAQ5	<---	Internal Audit Quality	.642	.092	6.943	***
AddedV1	<---	Added Value	1.000			
AddedV2	<---	Added Value	1.956	.344	5.686	***
AddedV3	<---	Added Value	2.227	.387	5.751	***
AddedV4	<---	Added Value	2.274	.394	5.771	***
AddedV5	<---	Added Value	2.261	.428	5.278	***
LegMan5	<---	Legal Mandate	1.000			
LegMan4	<---	Legal Mandate	1.274	.109	11.667	***
LegMan3	<---	Legal Mandate	1.332	.098	13.575	***
LegMan2	<---	Legal Mandate	1.107	.099	11.218	***
LegMan1	<---	Legal Mandate	1.276	.106	11.984	***

The study's findings with regard to the performance of the internal audit function in terms of independence indicate that there is a need for ongoing enhancements and adjustments to the organisational independence of the IAFs in ZSUs. This is crucial to facilitate the successful performance of the expected theoretical role of the IAFs, which is to add value and improve the operations of the state universities.

6.9.2 Regression weights of moderating effect hypotheses

Research objective 2: to determine the factors that prevent or improve the independence of the IAF in Zimbabwean state universities and the extent.

To examine the moderating impact, interaction terms were created using the imputation function in AMOS. Subsequently, the data was imported from SPSS and analysed. Regression analysis was employed to examine the moderating hypotheses. The regression coefficients in relation to the moderator variable are presented in Table 6.16.

Hypothesis 1 examines the relationship between the audit committee and its influence on the independence of internal auditors. According to the data shown in Table 6.17, the path coefficient for the audit committee on independence is 0.191. This coefficient suggests that a one-unit rise in the interaction of the audit committee results in a corresponding increase in independence by 0.0191. The estimated value exhibits a low standard error (SE) of 0.029, and the critical ratio (CR) of 5.160 surpasses zero. The probability (P) of observing a ratio of 0.00 suggests that the regression weight for the interaction of the audit committee in predicting independence is statistically significant. This implies that the audit committee has an influence on independence. Therefore, the hypothesis under consideration is deemed to be valid. These findings are consistent with the findings by (Tušeka, 2015; Jachi, 2019). Bi (2019) found no support for the hypothesis that IAFs in organisations with an AC have a higher level of independence.

Hypothesis 2 posits that the presence of independence serves as a moderating factor in the relationship between performance and its value added. According to the findings shown in Table 6.16, the path coefficient between objectivity and independence is 0.090. This value suggests that a one-unit rise in the level of objectivity results in a corresponding increase in independence by 0.090. The estimated value has a minimal standard error (SE) of 0.018, and the confidence interval (CI) of 5.160 is found to be greater than zero. The probability of obtaining this ratio is 0.00, suggesting that the regression weight for the interaction between objectivity and independence prediction is statistically significant. This implies that the

presence of independence serves as a moderating factor in the relationship between performance and its effects. Therefore, the hypothesis under consideration is deemed to be valid and accepted. When compared to previous research, these findings align with Demeke and Kaur (2021), whose research rejected the hypothesis that IA objectivity has a significant influence on IA effectiveness. The current findings, however, align with those of Abbott *et al.* (2016), who concluded that IA objectivity is associated with IA effectiveness.

Hypothesis 3 posits that the presence of additional value is essential for the impact of independence. In contrast, internal audit independence influences the performance of the internal audit function. According to the data shown in Table 6.17, the path coefficient between added value and independence is 0.191. This coefficient suggests that a one-unit rise in the interaction of added value corresponds to a 0.191 increase in independence. The estimated value has a negligible standard error of 0.023, and the confidence interval, with a lower bound of 4.139, is found to be greater than zero. The probability of obtaining this ratio is 0.00, suggesting that the regression weight for the interaction of added value in predicting independence is statistically significant. This implies that the presence of additional value serves as a moderating factor in influencing the impact of independence. Therefore, the hypothesis under consideration is deemed to be valid and accepted. This is in line with previous research (Cohen & Sayag, 2010; Alzeban & Gwilliam, 2014; Abbott *et al.*, 2016) that revealed a positive association between IAF and organisational performance. Shewamene (2014), however, rejected the hypothesis that IA independence is associated with IA effectiveness.

Hypothesis 4 posits that top management has a positive influence on internal audit independence. According to the data shown in Table 6.17, the path coefficient between management and independence is 0.040. This suggests that a one-unit increase in the interaction of management results in a corresponding increase in independence by 0.040. The estimated value exhibits a minimal SE of 0.028, and the CI of 1.456 is found to be greater than zero. The probability (P) associated with obtaining this ratio is 0.145, exceeding the threshold of 0.05. This suggests that the regression weight for the interaction between management and the prediction of independence is not statistically significant. This implies that the management does not exert control over the impact of relevance on the independence of internal auditors. Therefore, the hypothesis under consideration is deemed invalid.

Hypothesis 5 postulates that legal mandate has a positive influence on internal audit independence. According to the findings presented in Table 6.17, there is a negative path coefficient (-0.141) between the variable of legal mandate and the independence of internal

auditors (IA). This suggests that an increase in the level of legal mandate by one unit is associated with a decrease in IA independence by -0.141. The estimated value exhibits a minimal standard error of 0.028, and the confidence interval, with a critical ratio of -5.051, falls below zero. The probability of obtaining this ratio is 0.00, suggesting that the regression weight for the interaction of legal mandate in predicting independence is statistically significant. This implies that the presence of a legal mandate serves to attenuate the impact of independence. Therefore, the hypothesis under consideration is deemed to be valid. These findings corroborate the research by Jachi and Yona (2019), who confirmed the importance of the IA legal mandate associated with IA independence. Al-Akra *et al.* (2016) also found that internal audit independence is increased in organisations located in countries that have incorporated a clause to safeguard independence in their legislation.

Hypothesis 6 The positive relationship between internal audit quality and the performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced. According to the data shown in Table 6.17, the path coefficient between management and independence is -0.024. This coefficient suggests that a one-unit rise in the interaction of internal audit quality results in a corresponding fall in IA independence by -0.024. The estimated value exhibits a minimal standard error of 0.019, and the confidence ratio of -1.279 falls below zero. The probability associated with obtaining this ratio is 0.201, exceeding the threshold of 0.05. This suggests that the regression weight for the interaction between internal audit quality and the prediction of independence is not statistically significant. This implies that the moderating role of independence of internal audit quality on the relationship between performance and IA quality is not observed. Therefore, the hypothesis under consideration is deemed invalid. When compared to previous research, these findings contradict Alshbiel (2017) and Cohen and Sayag (2010), whose research established that IAQ positively influences IA performance.

Table 6.15: Regression weights with moderator

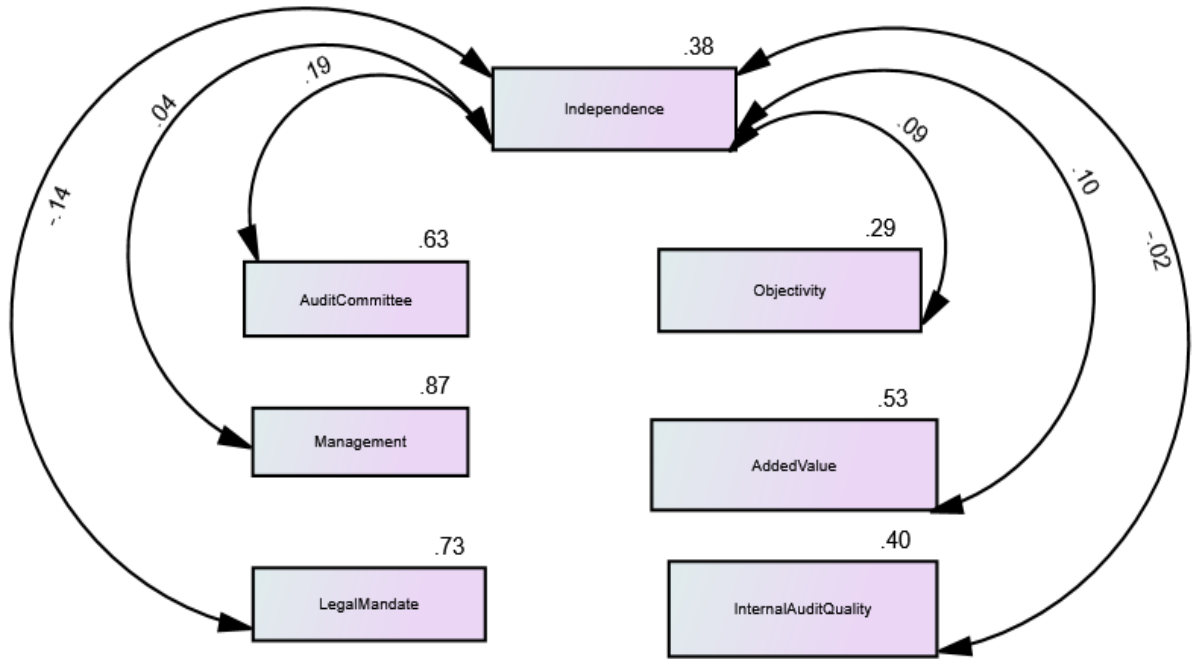
			Estimate	S.E.	C.R.	P
H ₁	Independence <-->	Audit Committee	.191	.029	6.717	***
H ₂	Independence <-->	Objectivity	.090	.018	5.160	***
H ₃	Independence <-->	Added Value	.095	.023	4.139	***
H ₄	Independence <-->	Management	.040	.028	1.456	.145
H ₅	Independence <-->	Legal Mandate	-.141	.028	-5.051	***
H ₆	Independence <-->	Internal Audit Quality	-.024	.019	-1.279	.201

The summary of all hypotheses, including the direct and moderating hypotheses, is introduced in Table 6.18 below.

Table 6.16: Summary of research hypotheses

No.	Hypothesis	Result
1	H1: Audit committee has a positive influence on IA independence	Accepted
2	H2: The positive relationship between objectivity and performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced	Accepted
3	H3: Internal audit independence has a positive influence on the performance of the internal audit function	Accepted
4	H4: Top management has a positive influence on IA independence	Rejected
5	H5: Legal mandate has a positive influence on IA independence	Accepted
6	H6: The positive relationship between internal audit quality and the performance of IAF is moderated by the independence of IAF, such that the relationship is stronger as independence is enhanced	Rejected

Figure 6.2: Structural equation model – Factors that influence the independence of the IAF in Zimbabwean state universities



6.9.3 Discussion

To determine the factors that prevent or improve the independent functioning of the IAF in Zimbabwean state universities in terms of management, legal mandate, and audit committee. According to the data shown in Table 6.19 and Figure 6.2, the path coefficient for the variable "Audit Committee on Independence" is 0.191. This coefficient suggests that a one-unit rise in the interaction of the Audit Committee results in a corresponding increase in independence by 0.0191. The estimate exhibits a relatively low standard error (of 0.030, and the critical ratio of 6.339 surpasses zero. The probability of obtaining a ratio of 0.00 suggests that the regression weight for the interaction of the audit committee in predicting independence is statistically significant. This implies that the audit committee has a moderating impact on independence functioning of the IAF. Therefore, the hypothesis under consideration is deemed to be valid.

On the other hand, the path coefficients of management and legal mandate on independence are 0.062 and -0.086, respectively as shown in table 6.19. This estimate has

a small standard error of 0.030 and 0.028. Also as shown in table 6.19 the critical ratio of management is 2.061, which is above zero, while the legal mandate has a critical ratio of -3.057, which is below zero. The probability of getting this ratio is 0.39 (management) and 0.002 (legal mandate), which is more than 0.05, indicating that the regression weight for the interaction of management and legal mandate in predicting independence is insignificant. Thus, the proposed hypothesis is rejected.

Table 6.17: Regression weights with independence and IAF in terms of management, legal mandate, and audit committee

	Estimate	S.E.	C.R.	P
Independence <--> Management	.062	.030	2.061	.039
Independence <--> Legal Mandate	-.086	.028	-3.057	.002
Independence <--> Audit Committee	.191	.030	6.339	***

Research objective 4: To examine the relationship between the independence and performance of the IAF and the value they add to state universities in Zimbabwe

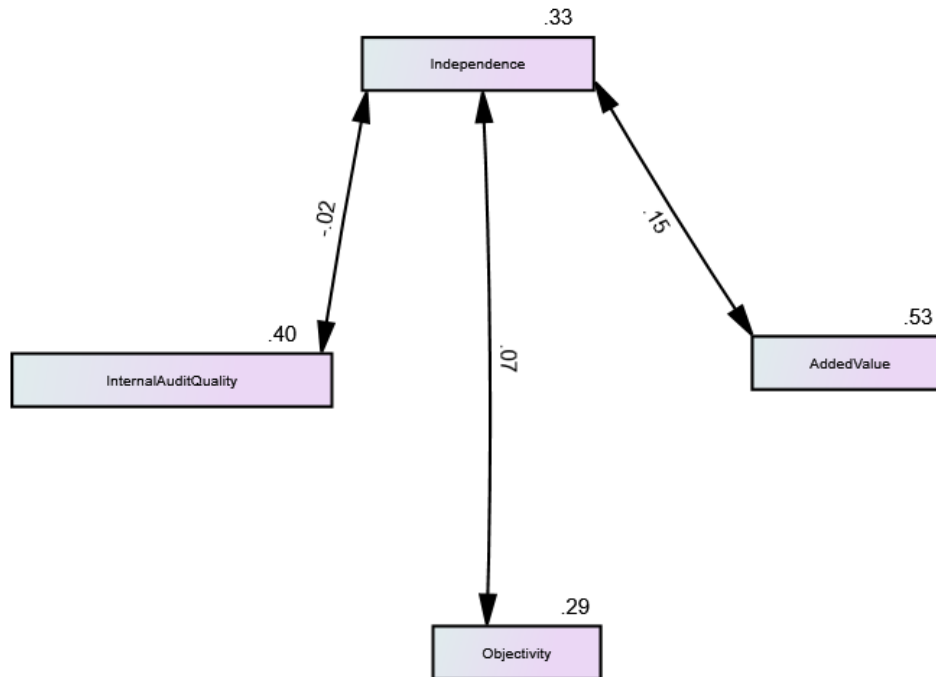
To determine the relationship between the independence and performance of the IAF and the value they add to Zimbabwean State Universities in terms of internal audit quality, added value, and objectivity. As shown in Table 6.20, the path coefficient of internal audit quality on Independence is -0.016, which indicates that the increase in the interaction of the Audit Committee by one unit leads to a decrease in Independence by -0.016. This estimate has a small standard error (SE) of 0.020 and a critical ratio (CR), -0.813 is below zero. The probability(P) of getting this ratio is 0.416, which is more than 0.05, indicating that the regression weight for the interaction of management and legal mandate in predicting independence is insignificant. This means that the management and legal mandate do not moderate the effect of IA independence and performance. Thus, the proposed hypothesis is rejected.

On the other hand, the path coefficients of added value and objectivity on independence are 0.152 and 0.74, respectively. This estimate has a small standard error (SE) of 0.026 and 0.018 and a critical ratio (CR) of 5.844 and 4.166, which is above zero. The probability(P) of getting this ratio is 0.000, indicating that the regression weight for the interaction of legal mandate in predicting independence is significant. This means that the legal mandate moderates the effect of independence. Thus, the proposed hypothesis is accepted.

Table 6.20: Regression weights with independence and the performance of IAF in terms of internal audit quality, added value, and objectivity in terms of added value only

	Estimate	S.E.	C.R.	P
Independence <--> Internal Audit Quality	-.016	.020	-.813	.416
Independence <--> Added Value	.152	.026	5.844	***
Independence <--> Objectivity	.074	.018	4.166	***

Figure 6.3: Structural equation model – Independence and the performance of IAF in terms of internal audit quality, added value, and objectivity



6.10 Summary of the quantitative data presentation, analysis, and discussion

This chapter started by presenting the demographic profile of the survey respondents' Descriptive statistics for the survey responses were then presented on an objective-by-objective basis. This was followed by the development of the structural equation model. This study also demonstrates the development of a measurement model for the relationship between independence and management, audit committee, and legal mandate. Structural equation modelling (SEM) was utilised in this work to analyse the data, with the purpose of evaluating the measurement error and examining the associations among the constructs under investigation (Lee *et al.*, 2007). Two models were evaluated: the initial model is the measurement model, also known as the outer model, and the second model is referred to as the structure model or inner model. Five steps followed while conducting SEM were also presented in the chapter. Nine model-fit-measures from three categories (absolute fit, incremental fit and parsimonious fit) indices were presented to assess the model's overall

goodness of fit. CFA was used to test the factorial structure of the hypothesised factor measurement model. Regression analysis was employed to examine the direct impact of hypotheses, and the results were presented in the chapter. The following chapter presents qualitative data and its analysis. The qualitative data complements the quantitative data by providing in-depth insights from the experts on the same areas investigated through the survey.

CHAPTER SEVEN: QUALITATIVE ANALYSIS AND DISCUSSIONS

7.1 Introduction

This chapter provides an analysis and examination of the qualitative research findings. It presents, interprets, and discusses the results obtained from the in-depth interviews (from the data obtained from the 11 study participants) and documentary reviews. The participants were assigned (P1-P11) to represent the chief internal auditors of state universities. Participant identification numbers were employed throughout the presentation of research findings to uphold the principle of anonymity. As articulated in the preceding chapters, the main aim of this study was to establish a pragmatic framework for the IAFs to operate autonomously and efficiently, thereby facilitating their ability to contribute value to state universities in Zimbabwe. This framework is grounded in the theoretical foundations of stakeholder theory, institutional theory, agency theory, and theory. This chapter presents and analyses the data that has been collected and processed to obtain results, with a focus on evaluating its relevance to the research objectives. The chapter is organised in the following manner: it begins with providing background information, followed by the development of themes derived from the analysis of interviews conducted with chief internal auditors. Additionally, it includes a documentary analysis and concludes with the presentation of findings.

7.2 Demographics

The demographic characteristics of the participants in this study are provided in the subsequent sections and tables (recall Tables 6.1 and 6.2). The respondents' profiles encompass demographic variables such as age and gender, as well as professional attributes, including years of experience and the highest level of academic credentials attained. For the qualitative part of the study, a total of eleven individuals participated in the in-depth interviews. Quantitative measures, such as percentages and frequencies, are employed in situations when their application is deemed appropriate.

7.2.1 Response rate

An 85% response rate was attained from the purposefully sampled individuals, as they showed a willingness to participate in the study. According to Amin (2005), it is considered optimal for approximately 50% of replies to be representative of the predetermined sample size in most investigations. It can be inferred that the response rate of 85% was deemed enough for the qualitative component of the study. Only 11 of the 13 people the researcher intended to interview were actually interviewed. Due to the absence of an internal audit department in one university and non-responsiveness to the researcher's request for permission to conduct the study by the other university, the remaining two participants were unable to be visited. The process of coding the interview transcripts commenced concurrently with the ongoing interview phase. Interviews were stopped before 13 participants were reached, following two conclusions. First, data saturation was indicated by the lack of fresh themes discovered following the first coding. New themes stop emerging as data saturation sets in (Mason, 2010). Secondly, to complete the research on schedule, recruitment had to cease as the final university continued to delay in granting the researcher study clearance. Gathering additional information from the remaining two participants meant that the researcher had to incur further travelling expenses. According to Strauss and Corbin (1998), it is argued that researchers can always discover additional information in reality. However, both Strauss and Corbin (1998) and Eisenhardt (1989) propose that gathering this additional information may not be beneficial in terms of practical factors such as time and financial resources, especially when it contributes minimally to the understanding of the phenomenon being investigated. The methodology employed in this study also involved triangulation with document review as a means of gathering secondary data from a selection of reports issued by the Auditor General of Zimbabwe. It is important to acknowledge that the findings from interviews and document analyses were integrated with the quantitative data gathered to establish a comprehensive framework for assessing the independence and effectiveness of state universities in Zimbabwe. The response rate is displayed in Table 7.1.

Table 7.1: Response rate for the study participants [n=11]

Instrument	Planned		Actual	Percentage (%)	Shortfall (%)	Total (%)
Interviews	13		11	85	15	100
Total	13		11	85	15	100

Table 7.1 indicates that 11 out of the 13 targeted respondents were successfully interviewed, showing a response rate of 85%. The qualitative sample comprised 13 CIAs from the 13 ZSUs.

Of the two universities that did not participate in the study, the registrar of one informed the researcher that the university had no IAU and hence could not participate in the research, and the responsible authorities of the other state university did not grant the researcher permission to collect data at the university. The researcher, therefore, had no option but to refrain from collecting data from these two state universities.

7.2.2 Demographic information of participants

Presenting and evaluating a study sample's demographic profile helps researchers comprehend its mental and physical state (Mukono, 2021). The first phase of the interview guidelines included ten demographic questions. The survey asked about job titles, years of experience, highest education, gender, university affiliation, and professional designation. The following samples accentuate gender, years of experience, and highest academic qualifications. Academic research requires valuing solid understandings and connecting topics. According to Purdie *et al.* (2002), profiling research participants involves assessing demographic variables such as age, gender, years of experience, and highest academic attainment. In social sciences, respondents' personal qualities affect their reactions to the issue (Purdie *et al.*, 2002). Thus, Section A of the interview guide covered the gender, education, and professional experience of 11 participants. This study carefully validated, presented and used these details to reach conclusions. Van Staden and Steyn (2009) found strong empirical evidence that the chief audit executive's qualities improve internal audit quality.

Table 7.2: Interviewee profile

University code	Informant's code	Gender	Length of the interview	Position	Length of time in Position	In-house Internal Audit department	Number of staff in the Internal Audit department	Academic qualification of Informant	IIA Certification
U1	P1	Male	30mins	S/CIA	17 years	Yes	2	Master's	None
U2	P2	Male	30mins	A/CIA	5 years	Yes	5	Master's	None
U3	P3	Male	30mins	A/CIA	6 months	Yes	1	Master's	None
U4	P4	Male	30mins	S/CIA	16 years	Yes	1	Master's	None
U5	P5	Male	30mins	S/CIA	12 years	Yes	1	Master's	None
U6	P6	Male	30mins	S/CIA	4 years	Yes	1	Master's	None
U7	P7	Male	30mins	S/CIA	10 years	Yes	2	Master's	None
U8	P8	Male	30mins	A/CIA	9 months	Yes	4	Master's	None
U9	P9	Male	30mins	A/CIA	3,5 years	Yes	1	Master's	None
U10	P10	Male	30mins	A/CIA	8 years	Yes	2	Master's	None
U11	P11	Male	30mins	S/CIA	4 years	Yes	3	Bachelor's	None
U12	P12	No internal audit unit							
U13	P13	Permission to collect data not granted							

Source: Author (2023)

7.2.3 Gender of the respondents

The gender of the respondents comprised 100% males, as shown in Figure 7.1.

Figure 7.1: Gender of respondents

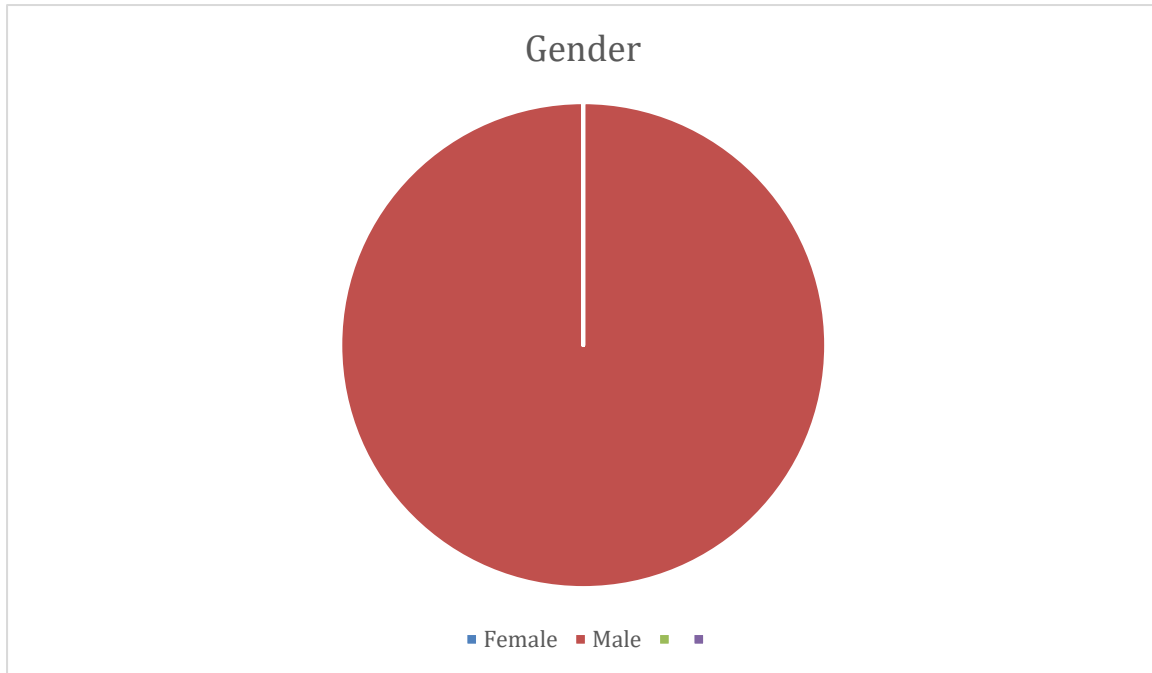


Figure 7.1 indicates that all the respondents were male. According to Eagly and Karau (2002), leadership roles, such as managerial positions, are traditionally considered masculine, and women who occupy such positions are perceived to be defying gender stereotyping. Other explanations advanced for the presence of relatively fewer women in managerial positions include family responsibilities (Greenhaus & Parasuraman, 1999) and women's lack of traits needed to attain success at higher organisational levels (Browne, 2006). Oussii and Klibi (2019) carried out research to investigate whether the gender of chief audit executives mattered to internal audit effectiveness. Twenty per cent (20%) of the CAEs of companies listed on the Tunisia stock exchange are females. The results showed that female CAEs are more likely to use quality assurance procedures in fieldwork than male CAEs. Therefore, women-managed IAUs are more effective in terms of this criterion.

7.2.4 Respondents' years of experience

Respondents' years of experience were presented statistically to show the number of years individuals have been working at ZSUs as chief internal auditors, either in an acting or substantive capacity.

Table 7.3: Respondents' years of experience [n=11]

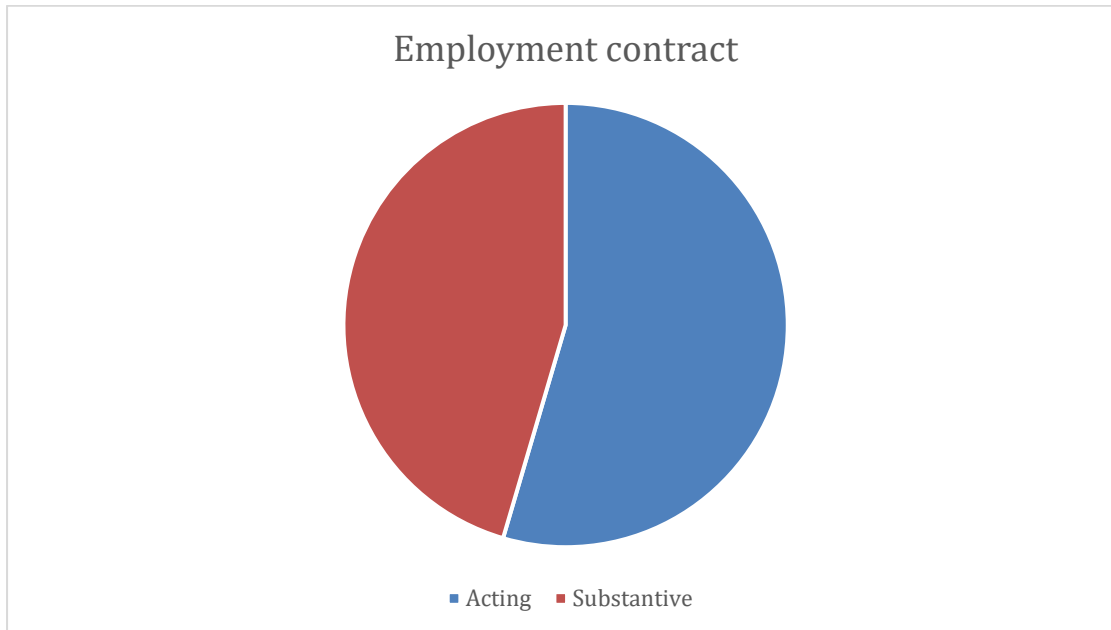
Years of experience	Number of Respondents	Frequency	Percentage (%)
0 - 2 years	3	2	27
3 – 4 years	2	3	18
5 – 6 years	1	1	9
6+ years	5	5	46
Total	11	11	100

Table 7.3 displays the number of years of experience of participants. Six respondents had over five years of experience as ZSU chief internal auditors. This shows that the data was collected from experienced persons, hence increasing the trustworthiness of the data collected.

7.2.5 Type of CIA contract

Figure 7.2 below shows that of the eleven respondents who participated in the study, 6 (55%) were acting as CIAs, whilst five (45%) held a substantive CIA position.

Figure 7.2: Type of contract



7.2.6 Professional qualifications of the respondents

Table 7.2 shows that 100% of CIAs in ZSUs were not certified by IIA as internal auditors. Research done by Arena and Azzone (2009) showed that the effectiveness of the IAF is improved when the CAE is affiliated with the IIA. Internal audit functions are considered to be more competent and independent or objective when they fully comply with IIA standards (Breger, Edmonds & Ortegren, 2020). Compliance with the IIA Standards is essential if the responsibilities of internal auditors to their organisations are to be fulfilled (Sadler, Marais & Fourie, 2008). The IIA framework of objectivity for internal auditors suggests training internal auditors as a safeguard for objectivity. An internal auditing professional qualification increases compliance with IIA standards. This implies that there is a lack of compliance with IIA standards in ZSUs, which requires that CAEs be holders of an IIA certification.

7.2.7 Number of staff in internal audit units at Zimbabwean state universities

Table 7.2 shows the number of staff in the IAUs at ZSUs. Four of the respondents are from ZSUs with single staff member IAUs, whilst two respondents are from ZSUs with two members of staff, and three respondents are IAUs with three to four members of staff. Only one respondent had an IAU with a total of five members of staff. According to the IAU recommended structures for ZSUs, the departments are expected to have at least eight staff members (Mukono, 2021). Anderson *et al.* (2010) discourage benchmarking of internal audit

departments with departments in similar organisations, giving the reason that the appropriate size of the internal audit department ought to be based on the specific mission of the function and should vary with the scope, experience of personnel, the technology it utilises and the control emphasis of the organisation. There is a lack of independence owing to the fact that 100% of the IAF in ZSUs had staff below the recommended number, according to the requirements of the Public Finance Management Act, Chapter 22:19, and the Public Entities Corporate Governance Act, Chapter 10:31. Table 7.4 below shows the percentage shortfall at each state university.

Table 7.4: Number of staff in internal audit units at ZSUs

University	Number of staff	Recommended	Shortfall	Shortfall %
U1	2	8	6	75
U2	5	8	3	37.5
U3	1	8	7	87.5
U4	1	8	7	87.5
U5	1	8	7	87.5
U6	1	8	7	87.5
U7	2	8	6	75
U8	4	8	4	50
U9	1	8	7	87.5
U10	2	8	6	75
U11	3	8	5	62.5

7.3 Main Findings

The ensuing segment is an outline of the findings with details that support and enlighten each finding.

7.4 Themes

The interview questions were general and in-depth. General questions covered participants' backgrounds, whereas the in-depth questions covered aspects of the study's ZSUs. The interview data revealed the following themes:

1. Independence of internal audit units;
2. Factors influencing independence;

Impact of internal audit function.

The present work provides a comprehensive exploration of the three underlying ideas. The aforementioned themes are intricately intertwined with the sub-themes that were derived from the data through the process of induction. The primary themes and sub-themes were derived from the in-depth interviews, which served as the foundation for the identification and development of these sub-themes and themes. The authors of the study utilised thematic analysis to categorise recurring patterns in the data, which subsequently informed the presentation of the research findings (Guest, Macqueen & Namey, 2012). The findings are presented in a comprehensive manner, aligning with the identified themes and sub-themes. The analysis, interpretation, and discussion of the themes derived from the research objectives are presented in the subsequent section, as depicted in Table 7.5.

Table 7.5: Themes and sub-themes

Key themes	Sub-themes
Key theme 1 Independence of internal audit	Availability of resources and budget status
	Objectivity
	Scope limitations and access to information
	Reporting lines
	IIA membership and certification
	Appointment, dismissal and remuneration of CIA
	Status in organisation
	Internal audit charter
	Frequency of independent meetings with audit committee
Key theme 2 Factors influencing independence	Audit committee involvement
	Top management support
	Legal mandate
	Internal audit quality
	Ownership structure
Key theme 3 performance of internal audit functions	Corporate governance
	Risk management
	Internal control system
	Financial reporting
	Organisational performance

7.4.1 Theme 1: Independence of internal audit functions

As per the definition of internal auditing outlined in The IIA's International Professional Practices Framework (IPPF), internal auditing is characterised as an independent and objective activity that provides assurance and consulting services with the aim of enhancing an organisation's operations and adding value (IIA, 2017). The effectiveness of the internal audit function (IAF) is contingent upon the independence of the internal auditor, as emphasised by the definition of internal auditing provided by the Institute of Internal Auditors (IIA). Amongst the factors which were identified by researchers as determinants of internal audit effectiveness, internal audit independence was considered the most fundamental and critical in ensuring the effectiveness of internal audit in any tertiary institution of higher learning (Alzeban & Gwilliam, 2014; Ogunwole & Oluwakemi, 2019; Turetken, Jethefer & Ozkan, 2020). The focus of this research is, therefore, internal audit independence. By definition, internal auditing is expected to provide the objective and independent consultancy and assurance services on the management of risk, internal control and other governance processes that are needed to add value and improve the operations of organisations (IIA, 2020). According to Mutchler (2003), it is important that the IAF be independent of other business activities and be independent in the determination of the scope of its work and the communication of outcome. Christopher *et al.* (2009:202) defined independence as:

“Full utilization of the internal audit’s potentials to improve the corporate governance system is largely conditioned by the independent and objective approach of internal auditors in defining the scope of their work (having full control over the nature of their work), implementing activities (freedom to collect and evaluate evidence), and communicating results (freedom in reporting the results of their work without any pressure)”.

Interview question 5 asked the CIAs whether their IAFs were independent. The question was a general one that sought to obtain the CIA’s understanding of the term ‘independence’ in internal auditing. All participants’ answers from here onwards are stated verbatim. The following responses were given by the CIAs:

Yes, we are independent because this is one aspect I was trying to hammer home.

P6

There is inherent limitation of the audit department because we are employees and are sometimes forced by situations to compromise objectivity. There is lack of

financial independence. I sometimes audit the individuals that have influence over my job security, salary, and release of resources, for example, laptop, data, etc. The laptop I have is supposed to have been written off, but I have been requesting with no success. I once had issues with the VC when the audit report findings implicated his office. So, we are not in good books now. **P4**

Yes, of course, it is independent in terms of being free from being assigned operational responsibilities. **P12**

The department is independent to a certain extent; we have access to information, but there is a lot of management interference. **P1**

From the aforementioned sentiments, it is clear that 80% of the participants viewed their departments as being independent to a certain extent and emphasised that the fact they were employees of the organisation jeopardised their objectivity. Their response is in line with Razali *et al.* (2016), who found that the dual roles of internal auditors as both assurance providers and consultants expose them to conditions that could threaten their objectivity.

About 20% of the respondents (see P3's response above) indicated that they were very independent, but after responding to other interview questions, it emerged that they were not independent. This might be an indication of the CIA's lack of understanding of the term 'independence'.

When viewed through the agency theory lens, the internal auditors are the agents of the owners who are there to monitor the top management and ensure that the management carries out its procedures in the best interest of the owners. When they are not independent, the internal auditors will not be able to protect the interests of the owners, in this case, the government. Institutional theory discusses how changes brought about by normative forces, including both internal and external sources like laws and regulations or the professions, influence organisational structures and practices. Lack of objectivity has been identified as the root cause of internal auditors' failure to discharge responsibilities diligently (Razali *et al.*, 2016). Independence and objectivity have been concluded as determinants of IAF effectiveness (Đorđević & Đukić, 2017).

7.4.1.1 Sub-theme 1.1: Availability of resources

Lack of resources has been considered to be an independence threat by Razali *et al.* (2016). Limited internal audit resources can significantly diminish internal audit activities and, as a result, the independence of the IAF (Christopher *et al.*, 2009). All of the participants reaffirmed their positions, as evidenced by the following claims:

Mostly, on all what we budget for, nothing is normally done except on fuel when we want to roam around. It is difficult to complete all planned audit activities because of resources. Less than 20% of funds requested are approved... **P7**

Two members. Not adequate but it is what it is. We obviously cannot audit the whole university just the two of us... **P7**

The Internal Audit Department is under the Vice-Chancellor's office. Financial independence is not present. Scenarios have occurred where the planned audits cannot be implemented because of lack of funds. You see this whole bunch of papers here? These are memos requesting for funds and turned down. I keep them all. Because of this, less than 50% of the internal audit plan is achieved... **P4**

Only two members instead of the 10. We cannot attract staff because of low remuneration, packages and competitiveness... **P12**

From the aforementioned sentiments, it is deduced that the IAF in ZSUs do not have enough financial and human resources to enable them to function independently. This implies a lack of independence in terms of resources for the IAUs. This finding is in line with prior research that showed that internal audit resources affect internal audit quality, effectiveness and independence (Razali *et al.*, 2016; Mbewu & Barac, 2017).

7.4.1.2 Sub-theme 1.2: Budget status

The governing body's role in influencing the budget for and scope of internal audit activities has been considered by IIA as one of the factors that contribute towards the independence and organisational status of the internal audit unit. On being questioned about their budget status, all the CIAs echoed that the internal audit department was not independent for budgeting purposes, as shown by the following responses;

For administration purposes, we [are] under the VC's office, together with other departments like the security, marketing departments. The budget is under the VC's programme and is approved by the VC... **P5**

The department is a not separate cost centre. We submit budget to the bursar for approval. There is lack of resource independence. Funding is not available most of the times, and that affects the ability to fulfil the internal audit plan. **P6**

There is no financial independence. Funds for capex are never available. There are some cases where we even failed to carry out our audit plans due to lack of funds, affect[ing] the financial independence. **P1**

Lack of financial independence causes the IAF to depend on auditees or top management, in this case, the Vice-Chancellors, to fund the IAA. The CIAs echoed that the management could sabotage the IAF with the aim of crippling it. This is in line with findings from Christopher *et al.* (2009) and Mihret (2017), which show that independence is highly threatened when the CEO is responsible for approving the internal audit budget. This was considered to be a serious threat to the independence of the IAF, as imposing budget constraints is a powerful tool with which management can reduce the scope and impact of the IAF, as reiterated by Participant P4: "Scenarios have occurred where the planned audits cannot be implemented because of lack of funds. You see this whole bunch of papers here? These are memos requesting funds and turned down. I keep them all. Because of this, less than 50% of the internal audit plan is achieved...." Đorđević and Đukić (2017) asserted that the greater the influence of management on the IAF, the less independent they are in carrying out activities. An internal audit function is considered to be independent if it has financial independence.

7.4.1.3 Sub-theme 1.3: Internal audit scope

According to Mutchler and Chang (2001), the independence of the internal audit unit correlates with the scope of engagements that can be undertaken. According to the Basel Committee's Internal Audit Paper (2012), the internal audit scope covers the internal control systems, risk management, and corporate governance. On being questioned about the internal audit scope within state universities, the following are some of the responses from the CIAs:

Our mistake as the CIA is that we limit ourselves by only including the traditional areas in the internal audit plan. The traditional view to internal audit limits the scope of internal audit function, so they may be limited access to some areas that are not

traditionally viewed as the internal auditor's responsibility. I am sure you will be given access to everything once you include everything on the internal audit plan. I am still new here, but where I was for 12 years, there were many restrictions to information and limited scope. **P6**

Where I was it was been declared by management that Internal audit unit has no business in academics but from this end what I have simply done is I am trying to improve all departments. In internal audit we cover all department as such we should have access in all departments. **P6**

Participant P6 explained that because of a lack of knowledge, the CIA limited their scope of engagement by sticking to the traditional view of internal auditing. Mutchler and Chang (2001) point out that when there is high-level reporting, the scope of engagements is less limited than when there is lower-level reporting. The CIA reports to the highest authority in the ZSUs, which makes them less limited in terms of scope. However, they are limited by a lack of knowledge as they are still sticking to the traditional view of internal auditing. This can be attributed to the fact that none of the internal auditors in the ZSUs possess an IIA certification.

7.4.1.4 Sub-theme 1.4: Access to information

Access to information is one of the measures of internal audit independence, according to IIA Standard 1111 (IIA, 2017). The IAF should have unrestricted access to information to enable them to function independently (Nyaga & Kamau, 2018). The following are responses on access to information;

Information is sometimes delayed, but eventually, it is released, which may indicate indirect restricted access as custodians of information profess to be busy. **P12**

We are unrestricted [with regard] to almost all the information except that we have no access to for the performance contracts. Our scope is limited to financial and operational audits. Academic issues are outside the scope of the internal audit department. There are cases where information may be delayed, not because the departments being audited are unwilling, but because there are other commitments. This delay the full implementation of the audit plan which affect its effectiveness... **P1**

We have access to any information except the records on executive payroll and incentives, that one is confidential. **P7**

I have been here for a few months so far, so I am not yet sure on this one. **P8**

From the aforementioned sentiments, it is clear that the IAF in ZSUs have restricted access to information, as the majority do not have access to the executive payroll and incentives. The unavailability of heads of department for scheduled audits, as well as the delay in the submission of the requested information by the auditees, can also imply imposed restrictions on information. Unrestricted access is part of the measures of independence of the IAF, according to the IIA Standard 1111 (IIA, 2017). The IAF should have unrestricted access to information to enable them to function independently (Nyaga & Kamau, 2018). This is in line with findings by Mihret (2017) and MacRae and Van Gils (2014) that full and unrestricted access to all activities, records and properties is needed for auditors to achieve effective audit work.

7.4.1.5 Sub-theme 1.5: Reporting structure

The reporting structure has also been given by the IIA Standard as a factor that contributes to the independence of the IAUs (IIA, 2017). The IIA Standard 1110 requires that the CIA reports only administratively to the VC and functionally to the AC. The following responses show the reporting structure for the CIAs in Zimbabwe.

There is dual reporting, which actually hinders independence. The standards require us to report only administratively to the Vice-Chancellor and functionally to the audit committee chairperson. But there is no difference between administrative and functional reporting so we end up reporting both administratively and functionally to the Vice-Chancellor of the university. **P7**

Both administratively and functionally to the CEO. In terms of managing relations with the CEO and politics, the reports go to the VC so that you do not surprise them, especially when you have picked some anomalies that concern senior management. There is need for IIA to look into how the IAF can exist at Board/Council level. Sometimes, we do things in the fear that if you act objectively, you end up not getting management support. At the end of the day I do want my benefits. **P6**

Reporting directly to the audit committee would only build animosity between you and the VC. It's difficult to jump the gun and send the report to the audit committee chairperson first. I am supposed to report functionally to the Audit Committee and administratively to the VC. The VC should just give us access to funding and not approve the budget. The IIA guidance on difference between administrative and functional reporting is still hazy. **P6**

These responses showed that the CIAs report both functionally and administratively to the VCs which is contrary to the requirements of the IIA standards. The IIA Standard 1110 requires that the CIA reports only administratively to the VC and functionally to the AC. The current reporting status in ZSUs compromises the independence of the IAF. These views are shared with the thoughts of Christopher *et al.* (2009) and Nyaga and Kamau (2018), who indicate that one of the significant independence threats is the flawed reporting structure.

7.4.1.6 Sub-theme 1.6: Economic interest

The lack of internal auditor objectivity shows that there is a lack of independence. IIA highlight that economic interest is a threat to objectivity. According to the IPPF, the economic interest threat arises when the auditor has an economic stake in the organisation (IIA, 2017). This potential risk also emerges when the auditor conducts an audit on the tasks or division of an individual who may thereafter make decisions that directly impact the auditor's future employment prospects or remuneration. To assess the presence of the economic interest threat, the CIAs were asked about their salary grades, and the following were their responses;

Our grade is low, I think that our grade should be matched with the value we add to the university. As internal auditors, we might end up selling stuff to other employees to supplement our income, and that will compromise our objectivity. Imagine auditing someone who owes you or is a bad debt. **P5**

We do not have a CIA. I am on the audit manager salary grade. The grade is low and demotivating, but that does not affect my objectivity as internal auditor. It only affects my personal life. **P3**

We are in grade 5, at the same level with junior staff; we should be at the same level with senior management. We should be in grade – executive grade, that is from grade 3. The grade level make us feel less important, demotivated, struggle

for people to follow instructions, even the Vice-Chancellor's authority comes from the president, and with that authority they become very powerful. **P7**

According to the IIA standards, economic interest also occurs when the internal auditors audit a department or individuals who have an influence on the remuneration and incentives of the CIA. The responses of all the participants show that the CIA is on a salary grade that is the same as that of other department heads. The CIA salary grade is not an executive grade in ZSUs. This is supported by the IPPF, which states that CIAs should be placed in a position that is high enough to enable them to be independent and objective in their conduct.

7.4.1.7 Sub-theme 1.7: Human resource policy

The human resource policy can be used as a safeguard for the independence and objectivity of the IAF, where the responsibility to hire and fire the CAE is given to the audit committee. The responses to the question about the hiring and firing of the CIA in ZSUs were as follows:

Hiring is the responsibility of top management. They decide on incentives; salary grade is from the ministry. **P11**

The Vice-Chancellor chairs the interview meetings for the Chief Internal Auditor. Salary grading for state universities is done by the Ministry of Higher Education. **P5**

The audit committee is not functional. Top management has all the powers when it comes to hiring and firing of all workers. As an auditor, I have to remember that I am also a breadwinner and protect my job. **P7**

Job security is one of the problems that auditors face every day. If you do your job according to the book, you may end up developing animosity with top management, which is not good for you since they are your employers. **P6**

Hiring is the responsibility of top management; they decide on incentives only, salary grade is from the ministry. Top management cannot fire you but can make your work environment very hostile. **P4**

The responses from the participants show that hiring CIAs is the responsibility of the top management, while the government grades all the ZSU employees' salaries. Incentives for the CIAs are determined at the institutional level of each university. The aforementioned

responses indicate the existence of a threat to independence and objectivity, which is consistent with findings from prior research. Previous studies have demonstrated that the IAF is susceptible to the independence threat when the evaluation and compensation of internal auditors are not overseen by the audit committee (Christopher *et al.*, 2009; Goodwin & Yeo, 2001; Perez-Lopez, 2013). The delegation of the power to recruit and terminate the services of the internal auditor holds significant importance within the realm of corporate governance, as it serves as a crucial mechanism in safeguarding against the production of deceitful financial statements. According to the criteria set by the IPPF, it is recommended that the audit committee has a role in the process of hiring and terminating internal auditors. This recommendation is made to avoid the concentration of decision-making power only among the individuals who are subject to audit by the internal auditors.

7.4.1.8 Sub-theme 1.8 Internal audit mandate

The provision of internal auditor independence can be achieved by the establishment of an internal audit unit in accordance with management policy, as well as the clear and formal definition of the tasks and authorities of the internal audit function in legislation and the internal audit charter (Mokono & Nasieku, 2018). The following were the responses when asked about the presence of an IIA-compliant internal audit charter.

We do have an outdated internal audit charter, and the University Act does not mandate the internal audit department; it only mentions the external audit. **P7**

The University Act has nothing on the internal audit department. The approved charter is not there. The one currently in use was approved in 2005... **P12**

The University Act is silent about the internal audit department, yet it is the university enabling Act. We do have the documents, but for 2022, they are still yet to be approved. The internal audit charter has never been made available to the university community... **P7**

Participant P12 reported that the internal audit charter that the IAF was using was last approved in 2005, a situation that may possibly indicate that the IAF at ZSUs does not have adequate guidance as recommended by the IIA standards. According to the IIA (2017), one of the uses of the IAC is to enforce and provide for the independence and objectivity of the IAF. Various authors have provided explanations regarding the significance of having a well-

defined audit charter within organisations, as it enhances the effectiveness of auditors. O'Regan (2002) asserts that the presence of a well-crafted charter is a crucial factor in determining the efficacy of IA operations. The establishment of clear guidelines aids in effectively guiding the activities of audit personnel and delineates the expectations of the board regarding the assurance to be provided by the internal audit function in relation to internal control. According to Van Peurseem (2005), the inclusion of a robust charter enhances the formal and esteemed level of authority associated with the role of the internal auditor inside the organisation. According to Christopher (2015), the internal audit charter serves as substantiation for the authorisation of the IAF to function in a reputable and autonomous manner.

7.4.1.9 Sub-theme 1.9: Self-review/Familiarity

The potential for self-review threats emerges when an auditor undertakes the evaluation of their own work conducted in a prior audit or consultancy assignment. As an illustration, an auditor has the option of conducting multiple audits on a department in a recurring manner or consecutively over several years. Alternatively, the auditor may offer consulting services related to a system implementation, which later necessitates an audit. The potential for a threat to emerge might be attributed to an auditor's extensive familiarity with the audit client. The presence of familiarity has the potential to compromise an auditor's objectivity during the course of an audit since it may lead the auditor to develop an excessive level of sympathy for the client. The following responses were given by the respondents:

We have five staff members and the department is adequately staffed for admin purposes. **P5**

Two members. Not adequate but it is what it is. We obviously cannot audit the whole university, just the two of us. **P7**

The department is operating like one-man band. **P6**

Only one member. There is shortage of manpower at all times; there is very little I can achieve alone. **P9**

Length of tenure and the number of staff in the department, when combined, can cultivate the self-review and familiarity threat. For instance, one state university in the study had one

member in the internal audit department. Department owners consult the same auditor who will assess their systems for efficiency and effectiveness hence self-review. This implies the presence of the self-review and familiarity threats within the ZSUs.

7.4.2 Theme 2: Factors influencing independence

This theme is in line with research objective 2 (RO2): To ascertain the factors that prevent or improve the independent functioning of the IAF in Zimbabwean state universities.

The sub-theme developed from this research objective are audit committee, top management, legislation/mandate, internal audit quality, and ownership. The research objective aimed to ascertain the factors that influence the independent functioning of the IAF by focusing on the role played by the audit committee, top management, legislation, and ownership structure in this regard.

7.4.2.1 Sub-theme 2.1: Audit committee involvement

The interview questions examined potential threats to independence that arise from the interaction between the IAF and senior management. As a result of this examination, a number of threats were discovered. Gordon and Fischer (1996) present a range of findings regarding the level of independence that internal auditors in higher education institutions possess. The strongest indication of independence was demonstrated by auditors who were appointed by the president and/or board of directors, possessed written authorisation for unfettered access to records, and maintained regular interactions with the board.

The following are some interview responses:

The audit committee is not functional. Top management has all the powers when it comes to hiring and firing of all workers. And as an auditor I have to remember that I am also a breadwinner and protect my job. **P7**

We can call the audit committee directly. They want us to report on management, though management don't want surprises. *We never get the opportunity to meet the audit committee privately without the management.* We have never had a meeting with the Audit committee to discuss our independence. Mrs X is the audit committee chairperson; she is a chartered accountant. *But the secretary of the Audit Committee is the university registrar.* When the secretary takes minutes, they are not made available to us when we need them. **P7**

Audit committee is not itself independent. Once you submit the report to them, they will discuss it with the VC at their level before taking it further, which leaves the CIA vulnerable. *Audit committee are not aware that the IAF is their responsibility.* They are not aware that they are responsible for the budget, financial resourcing of the IAF, as well as recruitment of the Chief Internal Auditor. The audit committee is new; I have met the old committee. **P6**

The audit committee is not functional and not supportive. It is the one that is supposed to push for the solutions to our problems but is silent. I am not sure if they even know their duties as the audit committee. **P9**

We report functionally to the audit committee. We also report both functionally and administratively to the VC. Our plans are approved by the audit committee. We hardly meet with audit committee. **P1**

All the respondents (100%) echoed that the audit committees were not functional, and they doubted whether the ACs were fully aware of their duties, as lamented by Participant P9. According to Goodwin (2003), over 50% of audit committees are led by independent chartered accountants. Goodwin (2003) suggests that the independence of the audit committee is strengthened when its members possess the necessary technical expertise to comprehend the internal audit function's operations. The assertion that the AC lacks functionality and serves only symbolic purposes is suggestive of an ineffectual audit committee, as identified by Goodwin and Yeo (2001). According to Goodwin and Yeo (2001), a proficient audit committee has the ability to enhance the role of the internal audit function by serving as an autonomous platform where internal auditors can address issues that impact management.

All participants said that they reported directly to the audit committee, albeit in the presence of management. Participant P7 disclosed to the researcher that a member of the university's senior management team served as the secretary of the audit committee. This defeats the use of the functional reporting line for the IAF as the ultimate source of independence and authority, as reinforced by the IIA. The hiring, firing and remuneration of the CIA and IAF budgets and resourcing are supposed to be the responsibilities of the AC as recommended by IIA, but the participants indicated that this was not what was happening on the ground.

7.4.2.2 Sub-theme 2.2: Top management support

Potential threats to internal audit independence may stem from the relationship with top management. The participants repeated the following responses:

The management understands and values the internal auditor; the Bursar has a strong internal audit background. This is seen by the allocation of resources. **P5**

Establishing IA function is per [statute]. State universities tend to give special attention to external auditors due to their independence. Us internal auditors, we are employees, we can be easily be fired if you come across something that management does not want to be reveal. Management does not value the internal audit department and this is seen by the little resources they give us. Management, given an option, would do away with the internal audit department. The value attached to the internal audit department should be improved. The same way the external auditors are valued is the same way should be valued. **P7**

Yes, management interferes because we depend on them for financial resources, and this department is not allocated resources except for fuel. Management has also made it clear that it does not want surprises in the audit reports that go to the audit committee so we end up reporting to them functionally. **P7**

The top management does not value the internal audit department, as shown by them not giving us resources to do our assignments, even a laptop – it has been years with laptop requests being rejected, yet other departments have more expensive assets being bought for them. **P4**

Management gives me tasks that may be not listed on the Internal audit plan. Management interferes by not releasing resources for implementation of the internal audit plan. **P4**

The internal audit plan is submitted to the Vice-Chancellor, and then the Vice-Chancellor removes or add some tasks to the internal audit plan. **P12**

As shown above, all the respondents noted they reported administratively to the VC. This aligns with established best practice principles. The findings of the study suggest that, in practical terms, IAFs are appropriately positioned within the reporting hierarchy to uphold their independence. However, the analysis also showed the existence of additional potential indirect challenges to preserving independence.

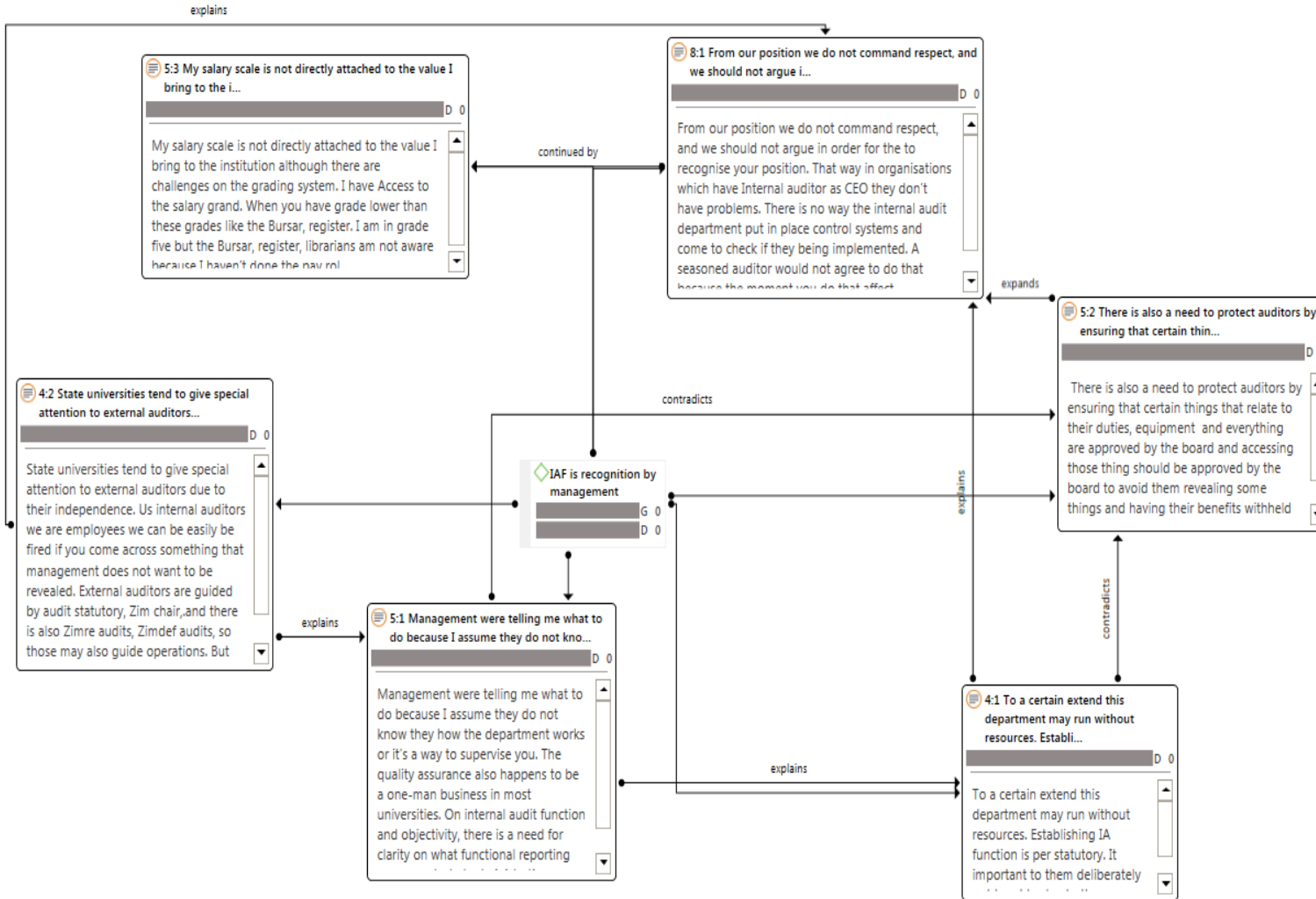
When asked if the top management valued the IAF, 90% (10 out of 11) of the respondents stated that the top management did not value the IAF, as shown by a lack of prioritisation for budget purposes. Only one respondent (Participant P5) said that their management values IAF, as evidenced by being given priority in resource allocation. Limited resource allocation implies limited scope and threatened independence. It can be inferred that CEOs who are

disinclined to have the IAF concentrate on particular areas possess the authority to enforce substantial financial limitations on the IAF, so compelling it to curtail its auditing scope (Christopher *et al.*, 2009). As noted above, Participant P4 lamented: “You see this whole bunch of papers here? These are memos requesting for funds and turned down.”

An additional recognised factor that may compromise the independence of the IAF is the potential for managerial interference in the allocation of the IAF's budget and the formulation of its internal audit strategy. All the participants reported that the IAF was under the VC's office for budgeting purposes and that the VC could remove or add tasks to the internal audit plan as he or she deemed fit. According to Christopher *et al.* (2009), IAF independence is threatened when the senior management is heavily involved in internal audit issues.

The quotations that relate to the recognition of the IAF by top management is shown in the figure 7.3 below.

Figure 7.3: Relationships of quotations related to recognition of IAF management



7.4.2.3 Sub-theme 2.3: Legislation

The provision of internal auditor independence can be achieved by the establishment of an internal audit unit in accordance with management policy, as well as the clear and formal definition of the tasks and authorities of the internal audit function in both legislation and the internal audit charter (Mokono & Nasieku, 2018). Legislation influenced the independence of the IAF, as shown by the absence of the internal audit mandate in the establishing acts of the universities. The following were the responses when asked about the legislation.

... the University Act does not mandate the internal audit department; it only mentions the external audit. **P7**

The University Act has nothing on the internal audit department ... **P12**

The University Act is silent about the internal audit department, yet it is the university enabling Act ... **P7)**

It can be seen from the responses above that the IAF in ZSUs has no direct statutory backing as the university acts are silent on IAF matters. The University Acts, however, provide support for external auditing functions. Statutory backing for the IAF would, however, provide for consistency in the implementation of internal audit best practices (Christopher *et al.*, 2009). The findings of this study are consistent with the findings by Mokono and Nasieku (2018), who evaluated the legislation and charters to measure the internal audit independence and authority in Kenyan state universities. Mokono and Nasieku (2018) concluded that the performance of the IAFs is largely influenced by the independence of the departments, which is, in turn, influenced by the legislation and internal audit charters that define the roles and authorities of the IAF.

7.4.2.4 Sub-theme 2.4: Internal audit quality

IAQ is determined by internal audit staff competencies, the number of staff in the department, and their professional qualifications. The following are the responses to the question about internal audit quality.

The range is 35%, 40% in terms of achievement. We are not aware that the IAF is supposed to reviewed. That has never happened in the past ten years. **P7**

The audit findings may be useful, but whether or not they are implemented is a different issue all together. Recommendations are not always implemented. **P7**

I have only been here for the past nine months, and IAF is new; I am actually setting it up. But my previous employer, who was also a state university, never had any quality reviews done for the IAF. I was with my previous employer for 12 years.

P6

The amount of time you put in assignments was a waste because of the tone from the top. The recommendations were not implemented. It's important for senior management to be very supportive and take audit reports seriously. **P6**

This is a one-man department, so obviously, I cannot audit all areas within the university. But I do complete maybe 50% of the internal audit plan. I know that independent quality review of the IAF is supposed to be done regularly, but that has never happened at this university. **P4**

Recommendations may not be implemented because of the financial lack, or recommendations may not be taken seriously. We have no power over what happens after the recommendations are issued to auditees. **P4**

The responses above show that the participants believe that their recommendations are useful, but they have no control over the implementation, and hence, the recommendations are not always implemented. The responses also show that the respondents believe that recommendations are not implemented because management does not take them seriously or because of a lack of resources.

Independent quality reviews of the IAF are not being done at all the ZSUs, which is not in line with the best practices. Independent quality reviews assess the IAF for effectiveness, independence and objectivity. The concept of internal audit quality pertains to the standard of internal audit activities, as discussed by Endaya and Hanefah (2013) and Mihret and Yismaw (2007). The determination of the quality of internal audit (IA) is contingent upon its internal capability to generate valuable and useful findings and recommendations. The quality of IA serves as an indicator of the proficiency of staff members, the breadth of work conducted, and the degree to which the audit is adequately planned, executed, and communicated (Mihret & Yismaw, 2007). Moreover, the notion of IA job quality pertains to the extent to which it aligns with established internal auditing standards (Arena & Azzone, 2009; Cohen & Sayag, 2010). The internal auditing standards place significant emphasis on the importance of maintaining independence and objectivity within the IAF to effectively contribute value to a business.

7.4.2.5 Sub-theme 2.5: Ownership structure

The internal audit function is influenced by the ownership structure. According to a study conducted by Rönkkö *et al.* (2018), foreign ownership, dispersed ownership, and state ownership are factors that contribute to a higher probability of firms using internal audit practices. This is in line with the findings by Talab *et al.* (2018), who found that listed companies that established internal audit departments and whose shares were substantially held by the government performed very well due to strong monitoring mechanisms. The ownership structure of an organisation has an influence on the independence of the internal audit function (Rönkkö *et al.*, 2018). The following are responses from participants when they were asked about the impact of the ownership structure on the IAF.

Lack of independence at the chancellor level somehow filters down to the functional areas in the university. The Vice-Chancellor is too powerful because they can communicate with the president via the ministry. **P7**

That position can be used to promote the culture of valuing the internal audit function in state universities or other public entities the same way the praesidium is making noise about procurement issues. Otherwise, currently, that position has no effect on IAF. Salary grading is centralised for all ZSUs and is done by the Ministry of Higher Education. **P6**

The ownership structure affect[s] the performance of universities in general. Vice-Chancellor positions are political and biased. **P4**

Lack of political independence does not affect how the internal audit department functions. The Chancellor, being the president, is not appointed on merit, but he is not directly involved in university operations. **P12**

The interview response from Participant P4 is in line with Rönkkö *et al.* (2018), who postulated that the state could positively influence the independence of the IAF. The government, through the university council, can monitor and ensure that the IAFs in state universities are always independent.

7.4.3 Theme 3: Impact of the internal audit function

This theme is in line with research objective 3 (RO3): To determine the impact of the IAF (value added) on the performance of the state universities. The sub-themes are corporate governance practices, risk management, internal control systems, and financial performance, position and reporting. The research objective was addressed by the in-depth interview

questions as well as the qualitative analysis of the audit reports published yearly by the Zimbabwe Auditor General.

The problem in state universities is resources. We do not have resources to audit the whole university. We mostly focus on the finance and procurement department, academic sections of the university are not part of our scope. **P11**

Personally, I am not sure, but I know it's important... **P12**

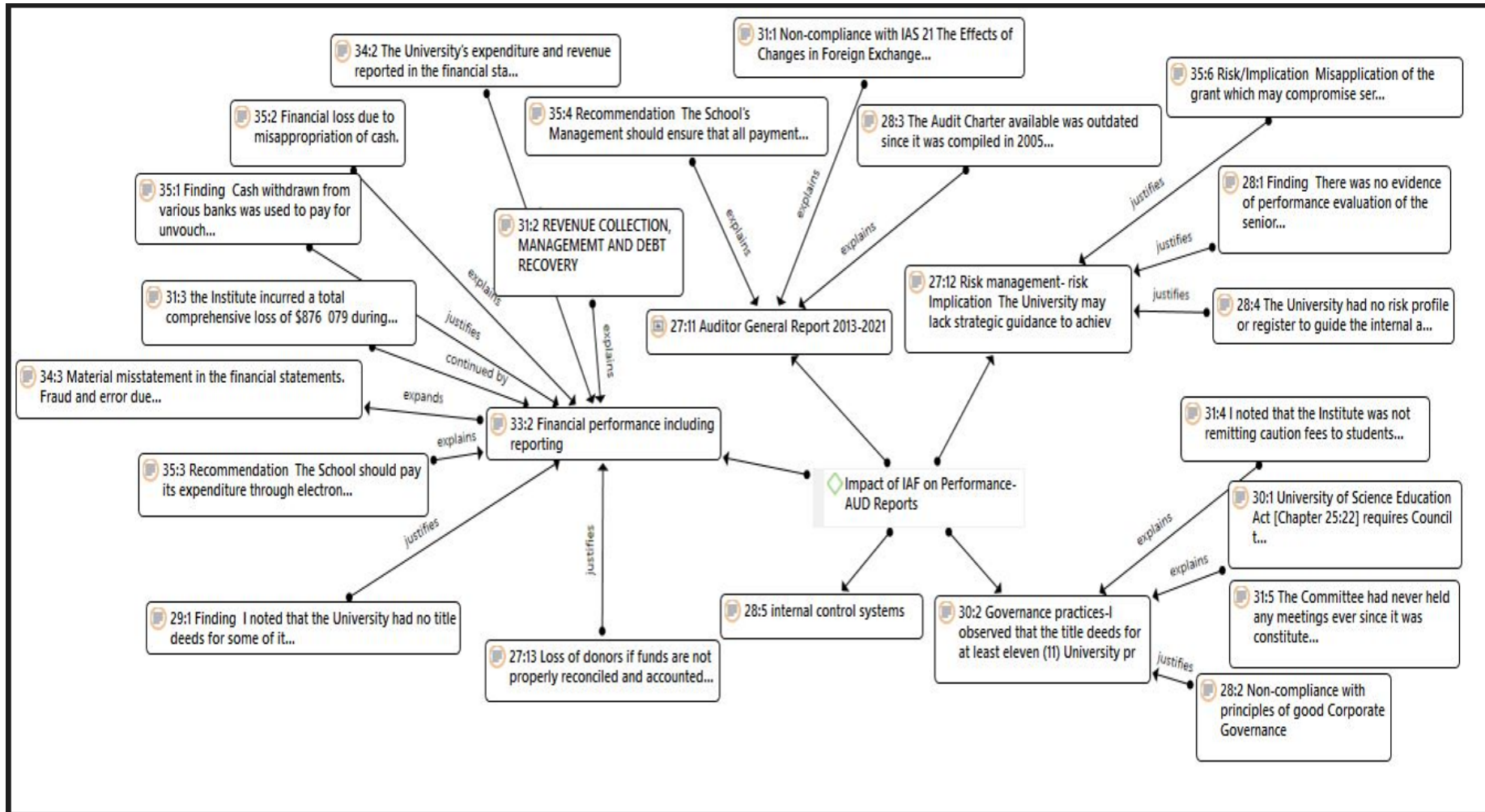
The internal audit department has an a limited impact because of limited scope and resources... **P1**

Indirectly yes, we do have an impact. Without the internal auditors, the environment is not controlled, and anything can happen... **P8**

From the above interview responses, it can be concluded that the participants were not exactly sure how their departments contributed or added value to the university. The IAFs mainly focus on the traditional audits of the finance and procurement departments, as highlighted by Participant P11. Academic sections were outside the scope of the IAF, and hence, there was minimal contribution towards the fulfilment of the Zimbabwe Education 5.0 Agenda.

The research objective was addressed by the in-depth interview questions as well as the qualitative analysis of the audit reports published yearly by the Zimbabwe Comptroller and Auditor General. The figure below shows the network diagram generated from ATLAS.ti using the interview responses and the Auditor General reports to address RO3. In explaining this result, it can be stated in Figure 7.3 that the IAF has an impact on the performance of the university. Figure 7.4 specifies impact elements, including financial reporting, internal controls, academic performance, risk management, and corporate governance practices.

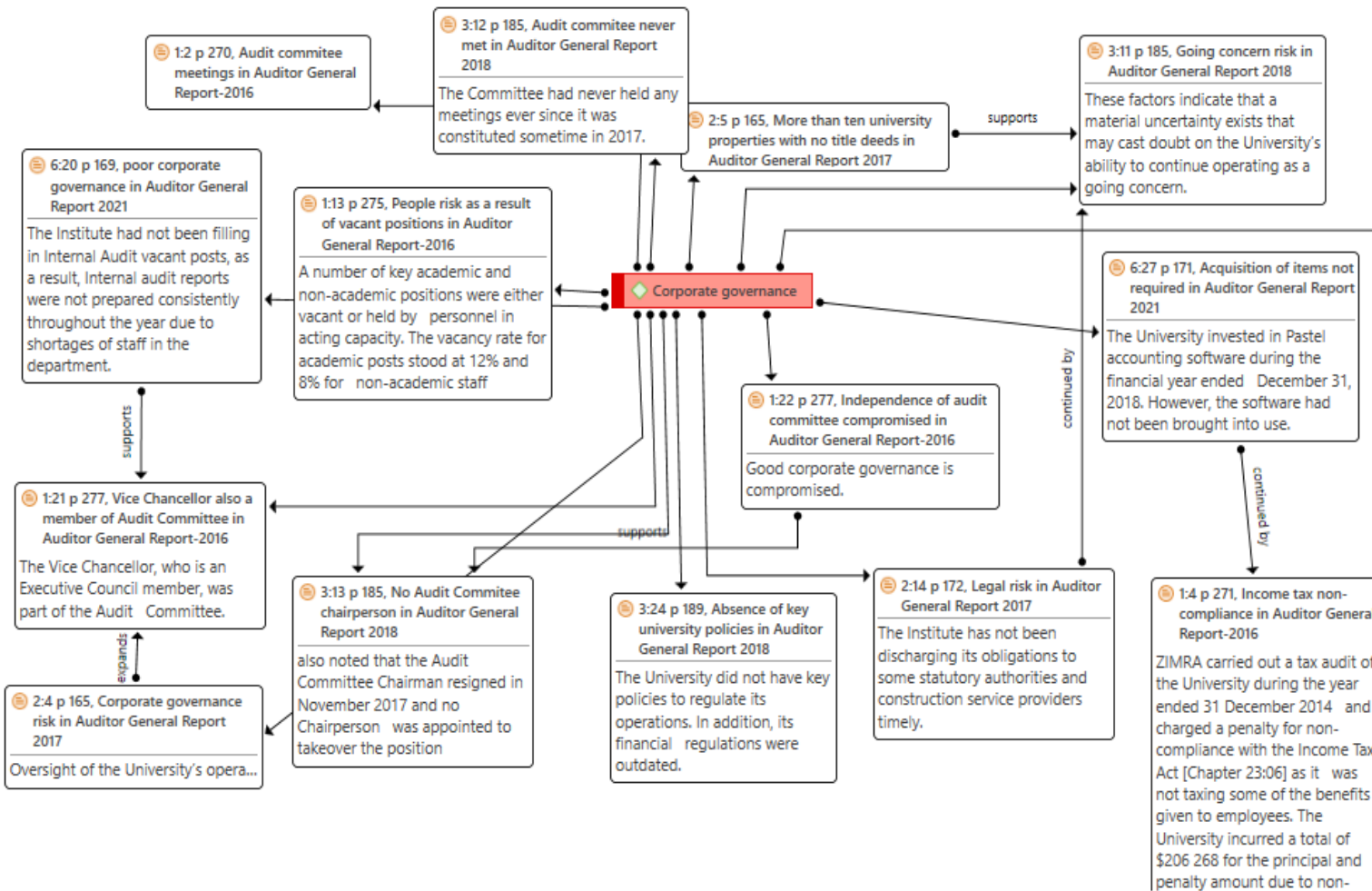
Figure 7.4: Screenshots showing thematic networks developed from the analysis of interview responses and Auditor General reports



7.4.3.1 Sub-theme 3.1: Corporate governance practices

Internal audit functions have been established in institutions in response to corporate governance scandals (Arena, 2013). Poor corporate governance has been blamed for the failure of a majority of companies. The following network diagram, Figure 7.5, indicates relationships of quotations related to the internal audit department's impact on corporate governance practices.

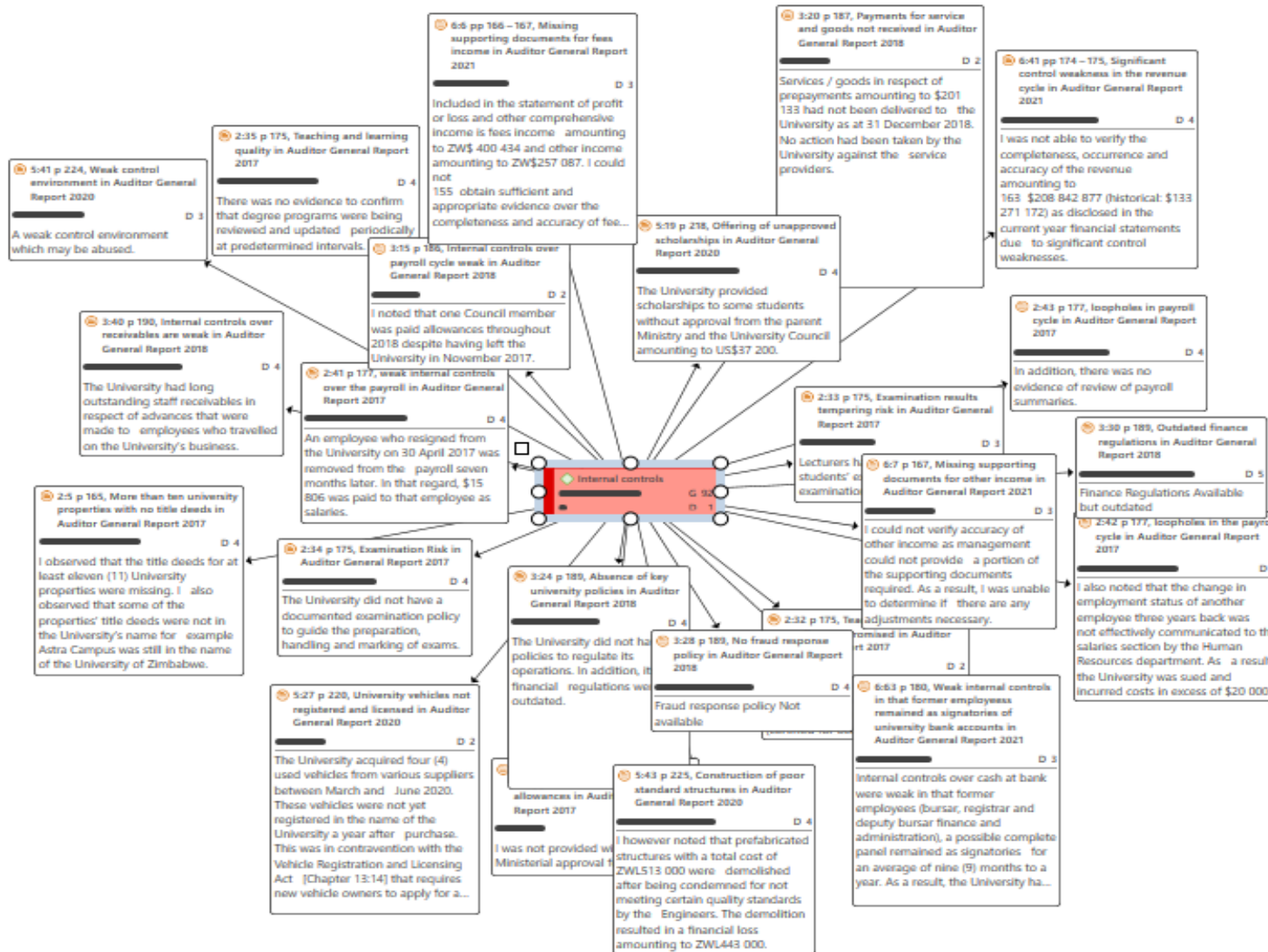
Figure 7.5: Impact of internal audit function on corporate governance practices



7.4.3.2 Sub-theme 3.3: Internal control system

Internal auditors are responsible for evaluating and overseeing a range of management governance decisions and providing guidance to management regarding the sufficiency and efficiency of internal controls. The qualitative analysis of the Auditor General reports showed a predominantly weak internal control environment within state universities. One shocking incident was when two principal officers resigned from the university but continued as signatories for nine months, which led to the siphoning of funds out of the university bank accounts. Another incident involved the university's 11 properties that had no title deeds, and another one involved the university's operation for over a decade without key policies. According to Adetoso and Akinselure (2016) and Rupšys and Boguslauskas (2007), the primary purpose of the internal audit function is to proactively identify and mitigate errors and fraudulent activities. Additionally, the internal audit function is responsible for generating a comprehensive report that accurately reflects the true and fair picture of the financial statement upon the conclusion of the audit.

Figure 7.6: Impact of IAF on Internal Control Systems

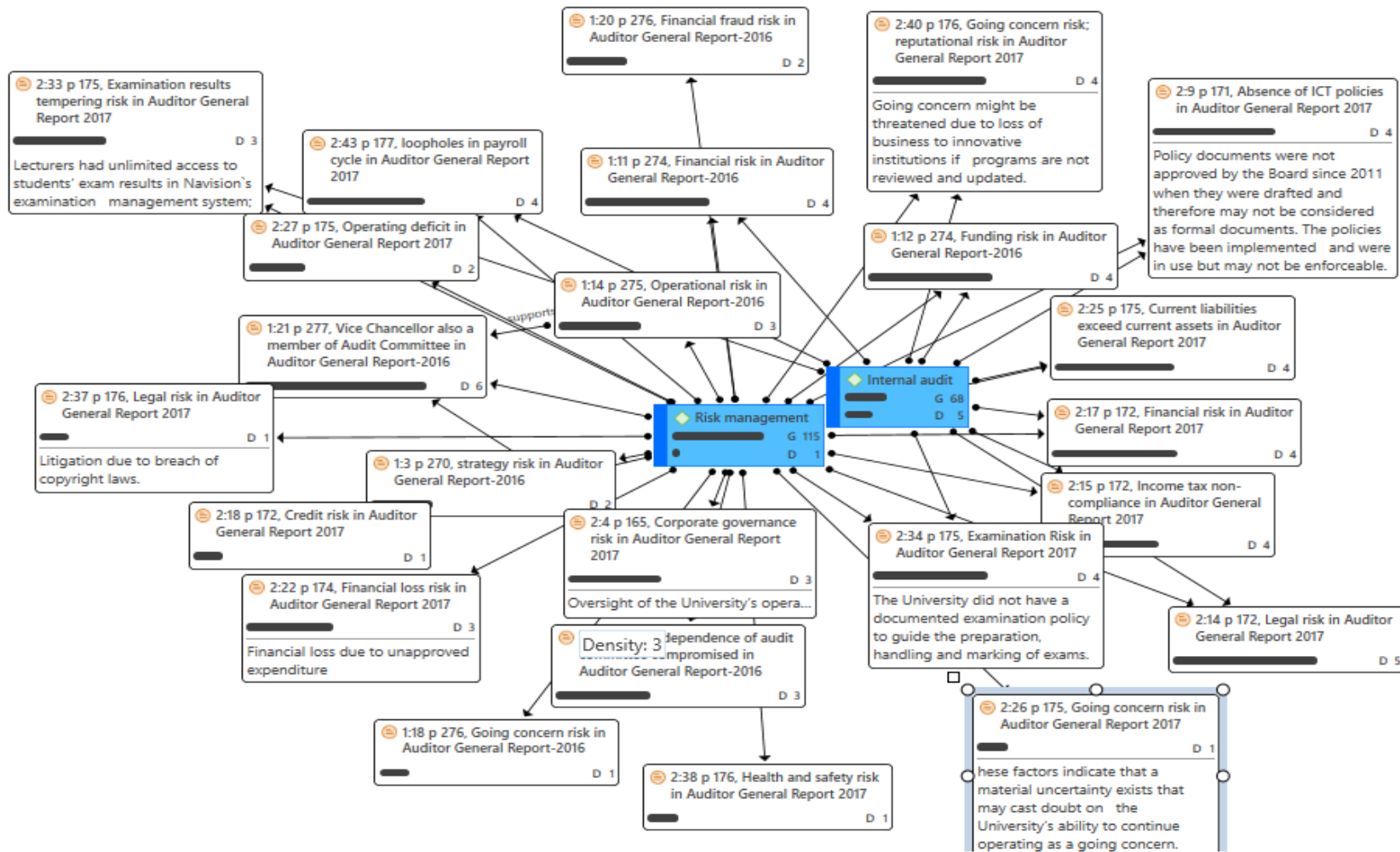


As can be seen in Figure 7.6 above, Quotation 5.41 shows that there is a weak internal control environment in ZSUs, which is prone to abuse. Quotation 3.24 shows that a certain ZSU had no key university policies, such as the fraud response policy. Quotation 6.63: "...weak internal controls in that former employees remained as signatories of university bank accounts...". These and other quotations on the network diagram show that the internal control systems in most ZSUs are weak. This is evidence of a dysfunctional internal audit system in state universities, as one of the roles of the IAF is to ensure an effective internal control system. Nyaga and Kamau (2018) used the number of internal control deficiencies detected as a measure of internal audit effectiveness. Weak internal control systems are a common problem in state universities, as evidenced by research carried out by Zakaria *et al.* (2006) in Malaysian public universities and by Adetoso and Akinselure (2016) in Nigerian state universities.

7.4.3.3 Sub-theme 3.2: Risk management

According to the IIA definition of internal audit, the scope of the internal audit includes the examination and evaluation of the effectiveness and adequacy of risk management procedures and risk assessment methodologies (Rupšys & Boguslauskas, 2007). Figure 7.7 below is a network diagram showing the risks faced by universities in the presence of internal auditors. Some universities have been reported to be facing a going concern risk, amongst many other risks.

Figure 7.7: Impact of internal audit on risk management



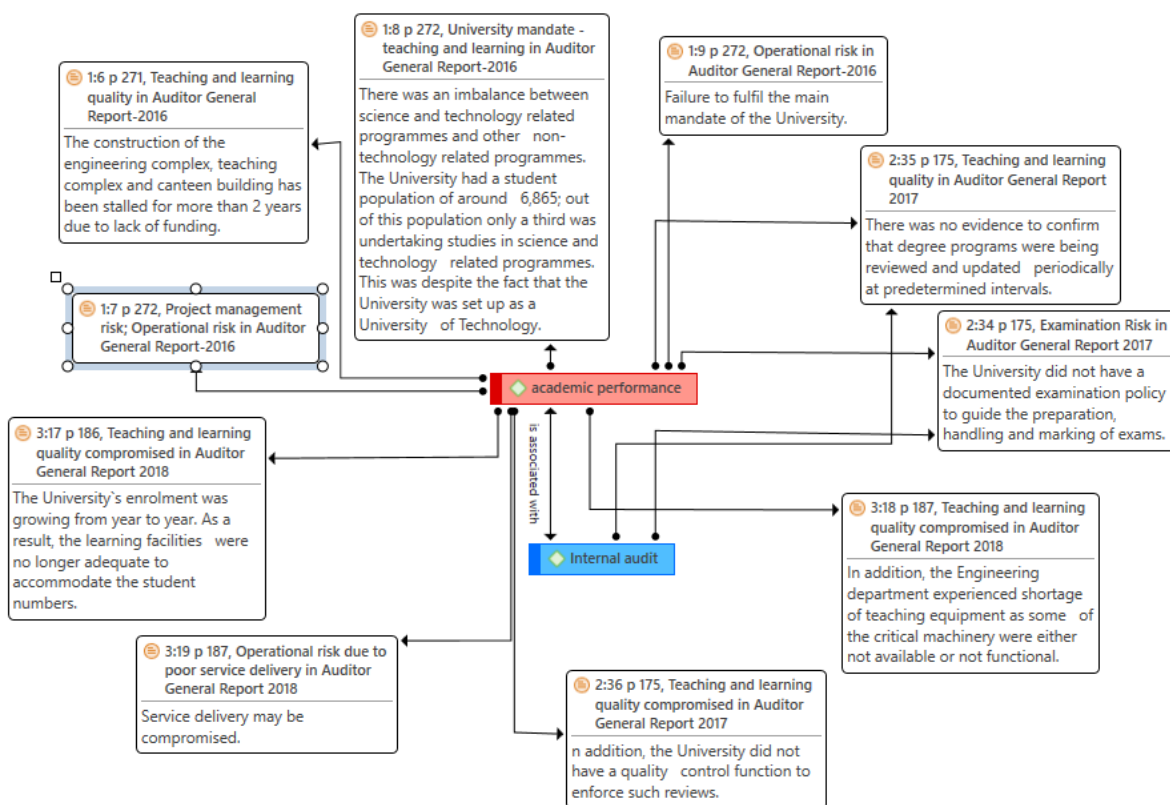
Quotation 2.33: "Examination results tampering risk... lecturers had unlimited results to students results." Quotation 2.22: "Financial loss risk due to unapproved expenditure..."
Quotation 1.16: "Going concern risk..."

Figure 7.7 reveals numerous risks faced by the ZSUs despite the presence of their internal audit functions. Mustapha and Abidin (2017) identified similar risks in a study conducted in the context of Malaysian state universities. ElHaddad *et al.* (2020) carried out a similar study on the role of internal audit in risk management in Libyan universities. The study concluded that the internal audit offices and departments of the Libyan universities carried out their activities related to risk management evaluation and added value to the work of the departments. These results are in line with the findings by Ackermann and Marx (2016), whose research concluded that internal audits provide a broad scope of risk management work that assists senior management in the discharge of their responsibilities. However, research by Ninson and Tetteh (2022) was different to earlier studies (ElHaddad *et al.*, 2020; Ackermann & Marx, 2016) in that they concluded that weak implementation of internal audit recommendations and lack of internal audit resources resulted in ineffective risk management practices.

7.4.3.4 Sub-theme 3.5: Academic performance

According to the International Professional Practices Framework (IPPF), internal auditing is characterised as an independent and objective activity that provides assurance and consulting services with the aim of enhancing an organisation's operations and adding value (IIA, 2017). The implementation of a systematic and disciplined method to assess and enhance the efficacy of risk management control and the governance process aids an organisation in achieving its objectives. This concept places greater focus on the objective of internal auditing, which is to enhance value within firms. The primary business of universities is the provision of academic services in the form of teaching and learning services, research, and community engagement. Figure 7.8 below shows quotations regarding the academic performance of state universities in Zimbabwe.

Figure 7.8: Impact of internal audit function

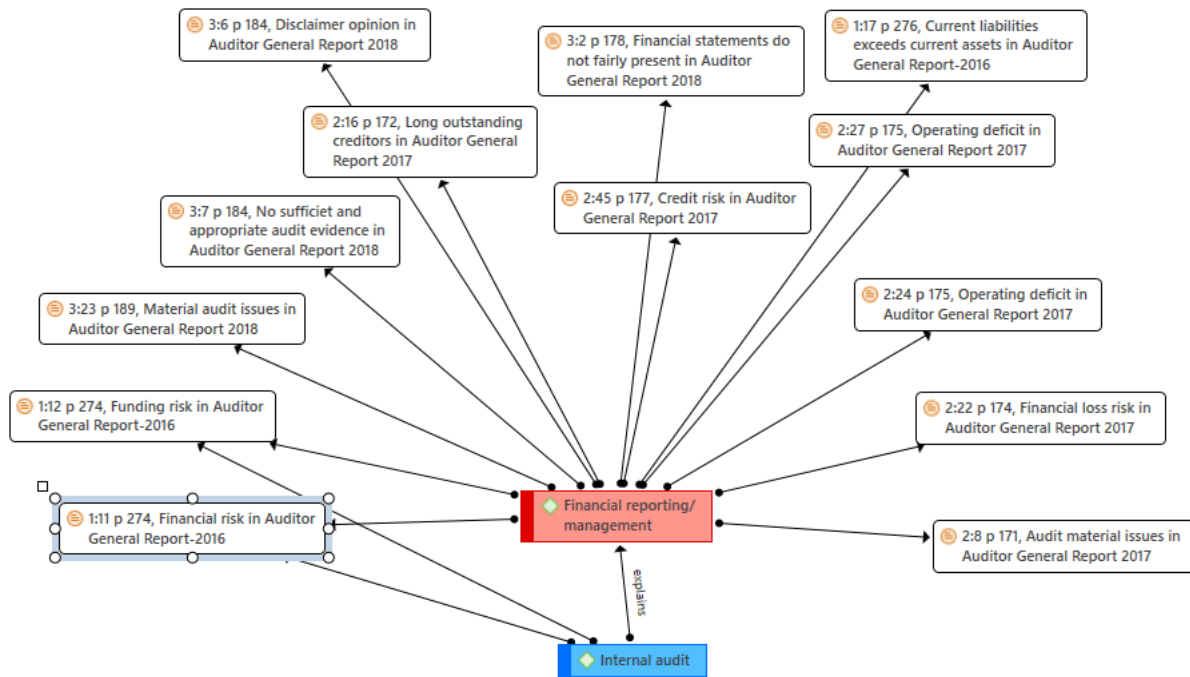


Quotations 2.34 and 2.35 show that the university degree programmes were not being reviewed and that the university concerned had no examination policy to guide the preparation, handling and marking of exams. The assertion made by this research is inconsistent with the conclusions drawn by DeSimone and Rich (2020). According to DeSimone and Rich (2020), the existence of an IAF exhibits a negative correlation with reported material deficiencies in large programmes at statistically significant levels. However, no significant association was found between the presence of an IAF and reported problems in financial reporting controls.

7.4.3.5 Sub-theme 3.4: Financial performance, position and reporting

The internal auditing function, as an integral component of the corporate governance framework, assumes a progressively significant role in overseeing the internal control system and financial reporting mechanisms of the organisation (Zakaria *et al.*, 2006). DeSimone and Rich (2020) conducted a study that showed a positive correlation between the existence of an IAF within public universities and enhanced financial reporting practices. This is in line with the response from P7, who said that without the IAF, the internal controls would be weak, and university performance would be weak. Figure 7.9 below shows the network of quotations associated with financial reporting in ZSUs.

Figure 7.9: Impact of internal audit function on financial reporting



The quotations in the network diagram show that material audit issues were reported in every Auditor General report for state universities in Zimbabwe. This is an indication of the impact of the IAF on financial reporting issues.

7.4.4 Theme 4: Relationship between independence of IAF and performance of the ZSUs

The analyse function of ATLAS.ti (version 9) was used to examine the relationship between the independence and performance of the IAF and the value they add to state universities in Zimbabwe. The co-occurrence tool was also used to find the codes that co-occur in the margin area.

Figure 7.10: Internal audit independence and performance code co-occurrence analysis

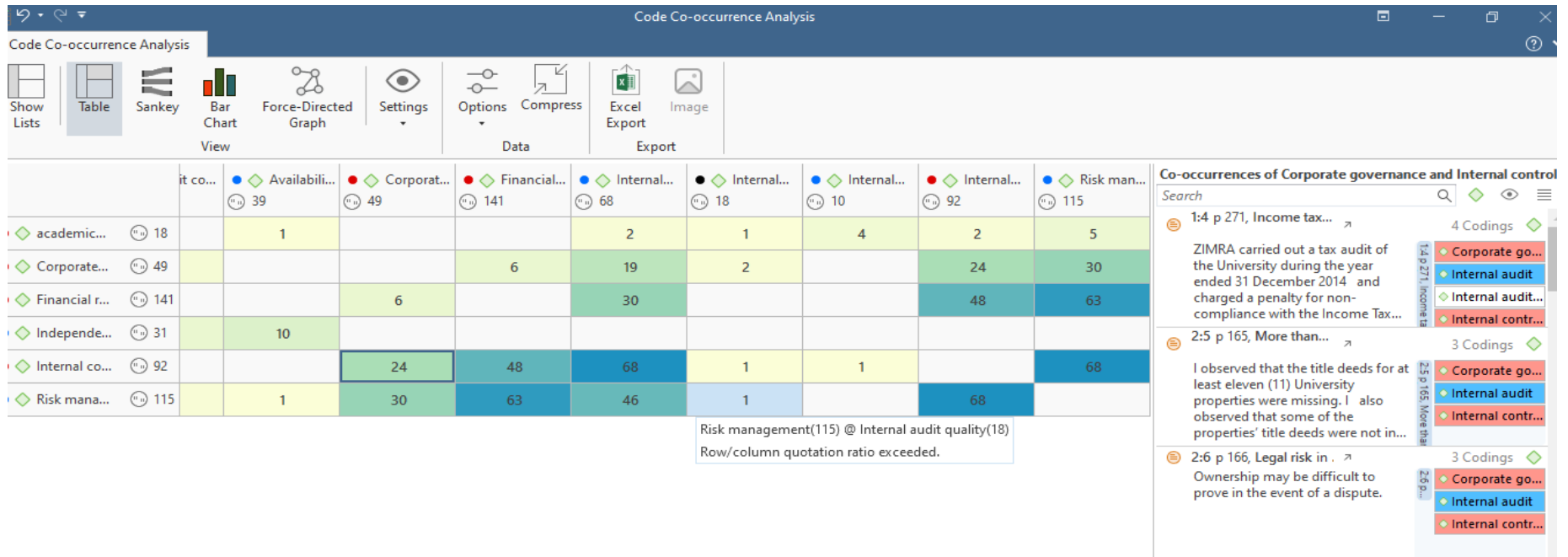


Figure 7.10 shows that internal controls co-occur with corporate governance, financial reporting and risk management. This shows that there is a relationship between internal controls and corporate governance, financial reporting and risk management. Independence also co-occurs with the availability of resources, which also shows that there is a relationship between independence and the availability of resources. These findings are, however, not in line with prior research indicating that the risk management and control role of internal audit was negatively related to good governance, and its contribution to good governance was not statistically significant (Geda, 2018).

7.5 Summary

The chapter presented an analysis of the 11 in-depth interviews conducted with chief internal auditors of ZSUs and the Comptroller and Auditor General annual reports. The background information of the participants showed some interesting facts about the IAF in ZSUs. One of which is the fact that CIAs are not professional internal auditors, as none of them possess IIA certification. Another interesting fact is that all the CIAs are male. The following were the major topics that emerged from the interview data: 1. Independence of internal audit units; 2. Factors influencing independence; and 3. Impact of the internal audit function.

The chapter identified factors impacting internal audit independence. The interviews with 11 managers of internal audit units and the Auditor General annual reports on state universities identified factors that prevented the independence of the IAUs in ZSUs: audit committee involvement, top management support, legislation, internal audit quality and ownership structure. Audit committee involvement was one of the most significant factors impacting the independence of internal audit units in ZSUs. This audit committee involvement was reflected in the failure of the audit committee to play a role in ensuring the availability of resources, budget independence, hiring and firing of the chief internal auditor, rewarding of the CIA and determination of the internal audit scope and authority. Legislation influenced the independence of the IAF, as shown by the absence of the internal audit mandate in the establishing acts of the universities. The interviews and Auditor General reports also showed the impact of the internal audit function on the performance of the ZSUs through corporate governance, risk management, internal control system, financial reporting, and academic performance. Weak internal control systems are prevalent in ZSUs, thus exposing the institutions to several types of risks. The data also showed a direct association between the internal control system and risk management, financial reporting, corporate governance, and academic performance. The next chapter presents the summary, discussion, conclusions, and recommendations of the study.

CHAPTER EIGHT: CONCLUSION AND RECOMMENDATIONS

8.1 Introduction

This chapter summarises the findings and conclusions of this study and proposes recommendations based on the results generated by the research. The chapter triangulates the data in the discussion section. Conclusions are therefore drawn from the discussion of the triangulated data. Mixed method research was used to examine the same dimension of the research through in-depth interviews with the chief internal auditors and quantitative surveys of the auditees in ZSUs. The current chapter also draws upon the theoretical framework discussed in Chapter 4 pertaining to agency, institutional, protection motivation and stakeholder theories. A summary of the chapter is provided at the end of this chapter. It should be quickly pointed out that the quantitative results did not converge with the qualitative data as expected by the researcher. This is in line with research by Jick (1979:603), who stated, “there were also some surprises and discrepancies in the multimethod results, which led to unexpected findings”. When different measures yield dissimilar results, they demand that the researcher reconcile the differences somehow. In fact, divergence can often turn out to be an opportunity to enrich the explanation. The divergence, as noted by Jick (1979), showed hidden contextual factors that influence the independence of the IAF in ZSUs. Though the discrepancy of data is known to pose complications to the researcher at the interpretation stage, the researcher, who is a professional accountant, could relate to and interpret the data using the ISA 200 professional judgement as supported by Glasser and Strauss (1965), cited in Jick (1979) who stated that the fieldworker’s intuition has to be relied on in such circumstances. This was also further validated by the fact that the researcher physically visited all the ZSUs and carried out face-to-face, in-depth interviews with the CIAs.

8.2 Summary of findings

This section presents the main findings of the study. To assess the performance of the ZSU internal audit functions in terms of independence, a theoretical framework was used grounded in AT, PMT, ST, and IT. The research showed that almost all ZSUs have complied with the legal requirement of establishing an in-house internal audit unit in each university. Yet, material irregularities are a common feature of the external audit reports compiled by the Auditor General on a yearly basis. The research has revealed that IAFs in ZSUs lack

independence and that legislation in Zimbabwe has failed to resolve the problem, as is the case in most countries (Al-Akra *et al.*, 2016). In the context of the institutional theory, it can be concluded that the establishment of the IAF has been induced by normative pressures in the form of government regulations. As stated in the internal audit charters (IACs) of the state universities, the IAFs are expected to comply with the requirements of the IIA standards up to the extent possibly made by the availability of resources. A view through the institutional theory lens shows that decoupling is taking place in ZSUs. It is clear from the research findings that management is striving to display organisational legitimacy whilst their actions on the ground tell a different story. Sentiments expressed by the CIAs showed that whilst independence and objectivity are the cornerstones of internal auditing, the CIAs are forced to act otherwise because of fear, as postulated by the protection motivation theory. IIA standards require that IAFs be independent and objective in order for them to be able to add value to the state universities (Masunda, Hove, Marumbwa & Ndlovu, 2022; Pawandiwa, Ndlovu, Shava, Charumbira, & Mathonsi, 2022).

This research sought to assess the independence of the IAF through research objective 1: **To assess the performance of the Internal audit functions in Zimbabwean state universities in terms of independence.** When viewed through the agency theory lens, an independent functioning internal audit unit reduces the agency problem by assuring the university council/governing board that the university management's actions are aligned with the government objectives. The monitoring expenditure by the principals incurred through the establishment of the IAU has not provided the desired solutions to the boards, as material irregularities continue to be seen in the AG reports on a yearly basis. The agency problem can be reduced if the principals take further steps to ensure the independent functioning of the IAU in state universities. The seven suppositions of the agency theory have all been confirmed through this study; for instance, the fifth supposition states that the agent can embezzle the resources of the principal. In one AG report, employees of the state university who had resigned embezzled funds as they continued to be signatories of university bank accounts for nine months after resigning.

State university IAFs were assessed for the availability of resources, budget status, objectivity, scope limitations, access to information, reporting lines, IIA membership and certification, appointment and dismissal of the CIA, status in the organisation, internal audit mandate and frequency of independent meetings with the AC. The descriptive statistics from the questionnaire survey data showed that the university communities, i.e., the auditees in general, were not aware of the availability of resources, budget status, scope limitations, access to information, reporting structure, objectivity, appointment and dismissal of the CIA,

organisational status, legal mandate, and frequency of independent meetings with the AC. This shows that awareness still needs to be raised within state universities on the function and purpose of the IAF. The CIAs reported that they were not independent in terms of budget status and resource availability as they depended heavily on the Vice-Chancellors for budget approval and resource allocation. Of the ten indicators set out to evaluate the independence of IAFs in ZSUs, the study found that the IAFs in ZSUs are only satisfactory in terms of access to information. The remaining nine areas are lagging (i.e., availability of resources, budget status, objectivity, reporting lines, IIA membership and certification, appointment and dismissal of CIAs, status in the organisation, internal audit mandate and frequency of independent meetings with ACs). Evidence from the study suggests that the ACs are minimally involved in the operations of the IAFs; for example, the ACs play no role in the approval and allocation of resources and budget of the audit committees. This has implications for the independence of the IAFs. This irregularity is also displayed in the unfitting positioning of the CIAs in the organisations and the lack of budget independence. The study also provided evidence of CIAs reporting both administratively and functionally to the VCs. In addition, the CIAs had no independent meetings with the ACs, besides meetings in which internal audit reports were presented to the university councils.

8.3 Addressing the research objectives

This research used the **concurrent triangulation approach**. Both quantitative and qualitative data were gathered by the researcher, who then compared the two databases to see whether there were any convergences, differences, or a mix of both (Creswell, 2009). The mixing during this approach was done in the interpretation or discussion section. The purpose of the concurrent triangulation design was “to obtain different but complementary data on the same topic” (Morse, 1991) to fully comprehend the research issue. Based on the triangulation, the following conclusions are generated.

The primary research objective which the study addressed was:

The study aimed to develop a practical independent internal audit framework to enable the IAFs to add value to state universities in Zimbabwe. To improve the applicability of the expected findings, the following research objectives were developed.

1. To assess the performance of the Internal audit functions in Zimbabwean state universities in terms of independence.

2. To ascertain the factors that prevent or improve the independent functioning of IAFs in ZSUs.
3. To examine the impact of the factors on the performance of the IAFs via Independence.
4. To establish the value added by the IAFs in ZSUs in terms of:
 - 4.1 Corporate governance practices;
 - 4.2 Educational objectives
 - 4.3 Financial reporting;
 - 4.4 Risk management; and
 - 4.5 Internal control systems.
5. To determine the role that IA stakeholders can play in improving the independence and performance of the IAFs in ZSUs.

The following subsections expand on each research objective:

8.3.1 Main Findings on the demographic profile of the respondents

This sub-section describes the main findings on the demographic profile of the respondents based on the data gathered via interviews, questionnaires, and secondary data. Most of the respondents were male, held a bachelor's degree and served the institution for less than two years. Most of the respondents were audited once. Both the internal auditors and the auditees, together with those charged with governance, participated in the study. The auditors gave the status of their independence, whilst the auditees gave their perceptions of the independence of the IAFs in Zimbabwean state universities. This is because the appearance or perception of a lack of independence and objectivity could be as damaging as the actual condition (ISSAI, 2010). Generally, the auditees' responses to the questionnaire showed that while they were aware that there was an IAF in the universities, they were not sure of their independence and performance. Both the auditees and the internal auditors agreed that independence and objectivity are key to the effective functioning of the IAF. The respondents were profiled and determined that none of the internal auditors in Zimbabwean state universities possessed the IIA certification or membership. Perez-Lopez (2013) suggested that training internal auditors promotes their objectivity and independence.

8.3.2 Main findings on the assessment of the performance of the internal audit functions in Zimbabwean state universities in terms of independence

This sub-section describes the main findings on the performance of the IAFs in ZSUs in terms of independence. The primary approach employed to meet this objective was analysing the in-depth interview responses provided by the participants. The qualitative analysis was conducted with the assistance of ATLAS.ti.

The qualitative analysis confirmed that the IAFs in ZSUs suffer from a lack of independence. Prior studies have shown that internal audit independence can be measured by observing the following indicators: availability of resources, budget status, objectivity, reporting lines, IIA membership and certification, appointment and dismissal of CIA, status in the organisation, internal audit mandate and frequency of independent meetings with AC (Mutchler & Chang, 2001).

Availability of resources: The qualitative findings showed that the IAFs in ZSUs do not have enough financial and human resources to enable them to function independently. None of the CIAs are members of the IIA or hold an IIA certification. Thus, the IAFs are being led by individuals who are not professional internal auditors. Moreover, the staff complements for the ZSUs are less than the recommended number of staff. This aligns with research conducted by Ahmad *et al.* (2009) and Abuazza *et al.* (2015), which found that internal audit units in developing nations frequently suffer from insufficient staffing, a lack of expertise, and inadequate support from management. These are several variables that might contribute to a lack of action in appropriately addressing audit findings.

Budget status: The qualitative data analysis showed that the IAFs do not have budget independence but instead fall under the VC's offices for budget purposes. The CIAs echoed that they depended on the VCs for the approval of the budget and the allocation of financial resources, which compromised their independence. This observation aligns with the conclusions drawn from previous studies (Christopher *et al.*, 2009; Mihret, 2017; Mukono, 2021), which indicate that the independence of internal audit functions is significantly compromised when the CEO assumes the authority to approve their budgetary allocations. The imposition of budget limits was perceived as a significant threat to the independence of the IAF since it provided the administration with a potent means to curtail the scope and influence of the IAF.

Objectivity: The qualitative analysis shows that the CIAs are faced with economic interest threats to their objectivity as they audit the work or department of individuals who are responsible for their future employment opportunities or salary. This is not in line with the recommendations of the IPPF, which recommends that employment opportunities and remuneration of the CIA be the responsibility of an independent AC.

Reporting lines: The CIAs report administratively to the highest authority in the universities, namely the VCs, and functionally to the ACs. In addition to reporting administratively to the VCs, the CIAs also report functionally to the VCs as the CIAs echo that the VCs do not like surprises, so it would be better for their relations that they also report functionally to the VCs. This threatens independence.

IIA membership and certification: None of the CIAs hold IIA certification or membership.

Appointment and dismissal of CIAs: Top management is heavily involved in the appointment and dismissal of the CIAs, which is against the recommendations of the IPPF as it compromises the independence of the IAF.

Status in organisation: The CIAs are on the same level as other line managers in the organisation. Although the CIAs report directly to the VCs, the CIA is not an executive position in the ZSUs, as evidenced by the salary grade. The IIA recommends that the CIA position be correctly placed in the organisation at a level that ensures the organisational independence of the IAF.

Internal audit mandate: Though an IAC is present at the ZSUs, it is outdated at most institutions, with one university using an IAC, which was last approved in 2005. The IAC is also not available to the university community to enable them to hold the IAF accountable. The ZSUs' establishing acts also do not provide for the IAF, hence the use of the PECGA and the PFMA for guidance. The universities need to have current IACs to give sufficient mandate to the IAF, as is the case in Australian universities. Christopher (2014) examined internal audit functions and how they enhance university sector governance in Australian universities. The findings of Christopher (2014) showed that the universities in Australia have current internal audit charters that empower the IAF to perform its tasks as required. Consequently, the result of the study further showed that the performance of the internal audit was effective, and the department covered a broad range of audit tasks consisting of financial, operational, performance-based, compliance, IT, fraud, and consultancy audits. Hence, internal audits in Australian universities add value through their effective and efficient task performance.

Frequency of independent meetings with AC: The CIAs reported that they did not frequently meet with the AC except when they presented the quarterly internal audit reports.

8.3.3 Main findings on the factors that prevent or improve the independent functioning of the IAF in Zimbabwean state universities

Methodology: This study used the conceptual framework illustrated in Chapter 4. Indicators of independence, as identified from previous studies, filled the conceptual framework and their application was tested in the two empiric research streams based on qualitative expert feedback and the frequency distribution of quantitative data.

The literature reviewed has shown that the independence and objectivity of the internal auditors are the key elements of an effective IAF (Arena & Azzone, 2009). Some of the factors that influence the independence of internal auditors in the public sector, as shown by the literature, are placement and organisational status, reporting relationship, competency, and legislative requirements (ISSAI, 2010). Quantitative data analysis accepted the hypothesis that most of the factors under study influence the independence of the internal auditors in SUs. Table 6.16 indicates all estimates for independent variables are positive, and their p-values, which are less than 0.05, show that these relationships are significant. The first research objective assessed the independence of the IAF in ZSUs.

Top management support: The CIAs disagreed with the statement that management supports the IAF by placing value on and communicating the role of the IAF to university stakeholders. Lack of management support for the IAF is also evidenced by the low salary grade for the CIAs, failure to implement internal audit recommendations timeously and religiously, insufficient funding for the continuous professional development of the internal auditors, and interference in the internal audit plan. However, this contradicts the regression analysis that tested and rejected H4, which hypothesized that management moderates the effect of independence. The observed path coefficient between the variable of management and the variable of independence is 0.040. This coefficient suggests that a one-unit rise in the level of management is associated with a corresponding increase in independence by 0.040 units. The estimated value exhibits a minimal standard error (SE) of 0.028, and the confidence interval (CI) of 1.456 was found to be greater than zero. The probability (P) associated with obtaining this ratio is 0.145, which is above the threshold of 0.05. This suggests that the regression weight for the interaction between management and the prediction of independence is not statistically significant.

Involvement of the audit committee: Both the quantitative (recall Table 8.1) and qualitative findings show that the universities have ACs that are chaired by non-executive directors. Most AC chairpersons are chartered accountants. On the one hand, the auditees were generally not sure about the involvement of the ACs in the IAF issues, whilst on the other hand, they strongly disagreed that the AC was responsible for the hiring and remuneration of the CIA, approval of the budget and internal audit resource plan and for making sure that the IAF was well resourced. The CIAs explained that they were not sure of the role that the AC was supposed to play in ensuring their independence; they echoed that they doubted that even the AC members knew what their role was. They suggested that the AC members needed to be trained; otherwise, the AC committee would be a ceremonial committee established for the sake of complying with corporate governance statutes. The CIAs explained that they presented the audit reports to the ACs, and besides that, no other interaction took place. All the CIAs were not aware that IIA standards require that they hold independent meetings with the AC where the independence of the CIA is reviewed, and other issues related to their objectivity and independence are discussed. This confirmed hypothesis H1 that the audit committee moderates the effect on IA independence.

Internal audit quality: The use of adequate, qualified, experienced, and professional staff was assessed as a measure of IAQ and independence. Auditees professed ignorance about whether the internal audit department at their universities had qualified, experienced, and professional staff members. They agreed, however, that the internal audit departments had too few staff members. The CIAs for all the ZSUs also expressed concern over the fact that their departments were short-staffed. They explained that this was caused by low remuneration levels that caused them to fail to attract the right calibre of staff. They also explained that they had no control over the recruitment process – all they could do was submit their requests for more staff members to the CEO. When asked whether the IAFs were subject to quality reviews as required by IIA, the CIAs expressed ignorance about the need for quality reviews. One participant who has over ten years as a substantive CIA asked, "...I have never been audited or had a quality reviews done...Who is supposed to do that?"

H6, which hypothesised that internal audit quality moderates the effect of IA independence, was tested and rejected. As shown in Table 6.19, the path coefficient of management on independence is -0.024, which indicates that the increase in the interaction of internal audit quality by one unit leads to a decrease in IA independence by -0.024. This estimate has a small SE of 0.019, and a CR = -1.279 is below zero. The *P* of getting this ratio is 0.201, which is more than 0.05, indicating that the regression weight for the interaction of internal audit

quality in predicting independence is insignificant. This means that the internal audit quality does not moderate the effect of relevance on the IA independence.

Ownership structure legal mandate: In summary, the most significant quantitative research component findings showed that The IAC is not made available openly or on request to university stakeholders, nor is it reviewed by all staff members to see whether it is acceptable in terms of scope and purpose. The auditees were not sure whether their university acts made provision for the establishment, structure, and operation of the IAF. The most significant qualitative research component findings showed that most universities had either outdated IACs or draft IACs in place. Out of the 11 CIAs interviewed, only 3 submitted their IACs to the researcher. All the submitted IACs were drafts. The CIAs also informed the researcher that the university acts did not make provisions for the IAF, but they work with the PECGA and PFMA for legal guidance. They also said that the PECGA and the PFMA were not clear in terms of the organisational placement of the IAF in public sector entities.

8.3.4 Main findings on the impact of the IAF in terms of value added on the performance of the state universities

This study assessed the performance of the IAFs in terms of the value added to ZSUs. The influence of IAFs on ZSUs performance was examined. The influence of IA independence on ZSUs was assessed using descriptive statistics, confirmatory factor analysis, and SEM after triangulation. In-depth interviews and Auditor General reports (Chapter 7) were used to validate the results. The impact of IA independence (effectiveness) was examined in terms of numerous components: internal control, corporate governance, financial reporting risk management and university performance. The research objectives were addressed, and the following findings were drawn. The responses provided in relation to this inquiry mostly pertain to excerpts derived from the Auditor General reports on ZSUs, as indicated in the appendix. The findings drawn in response to this question were informed by the reports and the replies obtained from the questionnaire survey.

The quantitative analysis showed that the auditees were generally not sure about how the IAF added value to the ZSUs. This finding unearthed a lack of awareness and a knowledge gap generally amongst the IA stakeholders on how the IAF works and adds value to the university. This lack of knowledge about the IAF may indirectly affect the performance of the IA as minimum cooperation would be received by the stakeholders. Lack of information (information asymmetry) has been given as one of the agency problems. Adams (1994) posits that the presence of information asymmetry has a detrimental impact on the principals' capacity to adequately oversee the agents and ensure their alignment with the objectives of their

principals. IA can be viewed through both the agency and stakeholder theory lenses as agents of the principals or as stakeholders playing a monitoring role to ensure that management is serving the interests of the university stakeholders. Eisenhardt (1989) held that the information asymmetry problem can be alleviated if the principal invests in information. To promote the independence (effectiveness) of the IAF, the principal (the government) should invest in campaigns to raise the university community's awareness of the IAF. The internal audit charter should be displayed on the university website, and the IAF should have a prominent section dedicated to it on the website as well. This will also enable the stakeholders to hold the IAs accountable when they do not comply with the professional requirement of independence and objectivity.

The OAG reports, however, found material irregularities for each university, with the OAG expressing concern about the failure of ZSUs to adequately manage the risks they faced. The reporting of constant material irregularities is an indication of the impact the IAF has on the state universities. The quantitative results indicated that the IAF cannot be effective if it is not independent and objective. Quotations 49, 141, 31 and 115 reported on corporate governance, financial reporting, independence, internal control system and risk management irregularities, respectively, within Zimbabwean state universities. This finding is in line with the challenges being faced by public universities in other countries, as shown by previous research (Zakaria *et al.*, 2006; Adetoso & Akinselure, 2016; Musnida, 2017; Purpera, 2017; Mustapha & Abidin, 2017). One quotation cited that title deeds for at least eleven university properties were missing, with some properties not being in the university's name. The OAG reports, however, showed that the Auditor General does not review or audit the IAFs for independence, as evidenced by the absence of a section on the IAF in the OAG reports. The audit of the IAF in ZSUs by the Comptroller and Auditor General could have exposed the lack of organisational independence. An audit of the IAF by the Auditor General is best practice, as highlighted in Mamaile (2018).

This supports the acceptance of the hypothesis that added value moderates the effect of independence. As shown in Table 6.17, the path coefficient of added value on independence is 0.191, which indicates that the increase in the interaction of added value by one unit leads to an increase in independence by 0.191. This estimate has a small SE of 0.023, and a CR = 4.139 is above zero. The *P* of getting this ratio is 0.00, indicating that the regression weight for the interaction of added value in predicting independence is significant. This means that the added value moderates the effect of independence.

As far as the core academic business of the ZSUs is concerned, CIAs expressed that the academic operations were not within their scope, as they were overseen by the quality assurance department.

8.3.5 Main findings on the relationship between the organisational independence and performance of the IAF in state universities in Zimbabwe

This study triangulates four theories to explain the relationship between the independence and performance of the IAF in the ZSUs. The agency theory explains the need for an independent IAF to monitor the agent on behalf of the principal. The institutional theory focuses on the role of regulatory forces in ensuring the independence of the IAF. The stakeholder theory supplements the agency theory by adding that an independent IAF does not only monitor the agent on behalf of the principal but also on behalf of all the stakeholders. Last but not least, the PMT justifies the lack of independence on the part of the IAF in ZSUs. In the context of this study, this implies that independence can influence the performance of the IAF directly or indirectly. Most respondents to the quantitative survey **agreed** that "*the independence of the IAF is a key enabler of its effectiveness,*" with a weighted mean of 4.61 and a standard deviation of 0.59. Most respondents also **agreed** that "Objectivity is a key enabler for the IAF's effectiveness," with a weighted mean of 4.33 and a standard deviation of 0.71. On the one hand, the quantitative analysis of this study showed that independence and objectivity are key enablers of IAF effectiveness; on the other hand, the quantitative analysis showed that the members of the university community were not sure whether the IAF was independent or not. This has been corroborated by a multitude of previous studies that have found that adequate internal auditor independence is key for improved performance of the internal auditor (Njoroge, 2012; MacRae & Van Gils, 2014; Mokono & Nasieku, 2018). The IIA (see Mutchler & Chang, 2001) also confirmed that the IAF cannot remain a viable aspect of the corporate governance system if it does not sustain internal auditor independence in the face of the changing internal audit environment. This analysis is in line with prior literature that showed that internal audit independence is significantly associated with internal audit performance (Cohen & Sayag, 2010; Arena & Azzone, 2009).

The CIAs of the ZSUs confirmed the quantitative findings when they responded that they could never be completely independent as long as they were employed by the same management they were expected to monitor. According to Bello *et al.* (2018), the level of independence of the internal audit (IA) department has a discernible impact on the performance of Nigerian universities, albeit to a limited degree. Bello *et al.* (2018) continue that it is imperative for an

organisation's internal audit department to possess independence in both personnel and operational activities.

8.4 Suggested framework for the independence of IAF in Zimbabwean state universities

This research has shown that the IAF in ZSUs lack independence and, hence, cannot add the required value to their universities. Based on the same findings and the results obtained in this research, here is a suggested framework for any IAF to function independently and add the required value within their state university. The framework is based on the triangulation of the agency, institutional, stakeholder and protection motivation theories which were presented in detail in chapter 4 of this thesis. This research is the first to triangulate the four theories and the research findings and to develop a framework for the independence of IAF. Mutchler and Chang (2001) have proposed that the framework for the objectivity of internal auditors can only be implemented where an IAF is already in existence. This research does not, therefore, disregard the framework for objectivity (Mutchler & Chang, 2001) but provides a basis for its implementation where independence of the IAF does not exist. The framework suggests the involvement of the university council through the audit committee, the top management, the principal and other stakeholders in ensuring the independence (effectiveness) of the IAF. The independence of the IAF is, therefore, the responsibility of these key players, each key player having a unique role to play in the entire process.

Stakeholder	Responsibilities	Independence measure	Expected outcome
Chief Internal Auditor	Comply with IIA standards	Regular quality assurance and improvement program	Improved performance of IAF
	Continous professional development of IA		Enhanced governanced
	Establish Quality Assurance Program		Effective risk management
	IIA certification		Effective internal controls
Audit Committee	Appoint/Dismiss/Remunerate CIA	Facilitate budget independence	
	Ensure resource availability	Private meetings with CIA	
	Undergo training	Protect CIA from job insecurity	
	Facilitate IAF independence	Ensure that CIA is an executive position	
		Engage Ministry	
		Involve IIAZ	
Top management	Promote IA awareness	Avoid resource influence	Suportive environment
	Limit functional involvement in IAF	Limit involvement to administrative matters	Strong governance
Auditees	Engage in discussions with internal auditors	Cooperate with IAF	Enhanced effectiveness
Government	Incorporate IAF in university acts	Ensure Auditor General audits indepence	Strenthened legal framework
	Drive IA policy formulation supporting IAF independence	Mandate training for council memberes	
All stakehoders	Collaborate for IAF support	Engage ministry of tertiary and higher education	Collaborate culture

Institute of Internal auditors Zimbabwe (Z)	Provide support and resources for IAF development	Promote adherence to professional standards	Strengthened internal audit practices
	Facilitate training and certification of auditors	Intentionally advocate for the IAF independence in state universities	Improved skills and knowledge within IAF
	Advocate for the importance of IAF in governance	Involve IIAZ	Improved stakeholder satisfaction
Auditor General	Ensure oversight of the IAF's compliance with regulations	Conduct independent reviews of the IAF's operations	Assurance of audit quality and independence
	Report on the effectiveness of the IAF		

8.4.2 Framework for Internal Audit Independence in State Universities

Stakeholder	Responsibilities	Independence Measures	Expected Outcomes
Chief Internal Auditor (CIA)	<ul style="list-style-type: none"> - Ensure compliance with International Internal Audit (IIA) standards - Engage in continuous professional development and training in internal auditing - Develop and maintain a comprehensive Quality Assurance Program - Achieve IIA certification and maintain ongoing adherence to ethical standards 	<ul style="list-style-type: none"> - Implement a robust quality assurance and improvement program - Regular peer reviews and external assessments - Institutional support for IIA certification 	<ul style="list-style-type: none"> - Enhanced performance metrics of the Internal Audit Function (IAF) - Strengthened governance frameworks - Enhanced effectiveness of risk management practices - Improved internal control mechanisms - Strengthened oversight and accountability - Enhanced protection of CIA from external pressures

Stakeholder	Responsibilities	Independence Measures	Expected Outcomes
Audit Committee	<ul style="list-style-type: none"> - Oversee the appointment, dismissal, and remuneration of the CIA - Ensure adequate resources are allocated for internal audit activities - Participate in continuous training on internal auditing standards and practices - Foster independence of the IAF from management influence 	<ul style="list-style-type: none"> - Ensure budgetary independence for the IAF - Conduct private, confidential meetings with the CIA - Establish a policy framework that protects CIA job security - Engage with the Ministry of Education and IIAZ for support 	<ul style="list-style-type: none"> - Clear delineation of CIA's executive role - Creation of a supportive organizational culture - Reinforced governance integrity - Increased operational effectiveness of audits - Improved compliance with audit recommendations - A more robust legal framework supporting IAF independence - Cultivated a collaborative culture across stakeholders - Elevated standards of internal audit practices - Increased stakeholder satisfaction and confidence in audit processes - Assurance of high audit quality and independence - Enhanced public trust in audit findings
Top Management	<ul style="list-style-type: none"> - Advocate for the importance of internal audit within the university governance structure - Limit operational involvement in internal audit processes to administrative oversight 	<ul style="list-style-type: none"> - Avoid influencing resource allocation for the IAF - Clearly define management's role to enhance transparency 	
Auditees	<ul style="list-style-type: none"> - Actively engage in dialogue with internal auditors and provide necessary information - Implement recommendations from internal audit findings 	<ul style="list-style-type: none"> - Foster an environment of collaboration with the IAF 	

Stakeholder	Responsibilities	Independence Measures	Expected Outcomes
Government	<ul style="list-style-type: none"> - Legislate for the incorporation of IAF standards into university governance frameworks - Promote policies that encourage and facilitate the independence of the IAF 	<ul style="list-style-type: none"> - Guarantee the independence of the Auditor General's audits - Mandate training for governing council members on audit practices 	
All Stakeholders	<ul style="list-style-type: none"> - Collaborate to strengthen the internal audit framework within state universities 	<ul style="list-style-type: none"> - Establish partnerships with the Ministry of Tertiary and Higher Education 	
Institute of Internal Auditors Zimbabwe (IIA-Z)	<ul style="list-style-type: none"> - Provide resources and training programs for the development of the IAF - Facilitate certification and ongoing professional development for auditors - Advocate for the strategic role of internal audit in enhancing governance and accountability 	<ul style="list-style-type: none"> - Advocate for adherence to IIA standards across all institutions - Promote IAF independence at state universities - Foster collaboration with academic institutions and regulatory bodies 	

Stakeholder	Responsibilities	Independence Measures	Expected Outcomes
Auditor General	<ul style="list-style-type: none"> - Ensure oversight and compliance of the IAF with national regulations and standards - Provide public reports on the independence and effectiveness of the IAF and its contributions to governance 	<ul style="list-style-type: none"> - Conduct independent reviews and evaluations of the IAF's operations 	

Table 8.1: Independent internal audit function framework for Zimbabwe state universities

Independent internal audit function framework for Zimbabwe state universities			
Internal Audit Function			
Audit committee Involvement	Top management involvement	Principal involvement	Stakeholder involvement
<p>Ensure independence of IAF by taking up the responsibility for the:</p> <ol style="list-style-type: none"> 1. Appointment, dismissal, and remuneration of the CIA. 2. Approving an IAC that clearly defines the purpose, authority, responsibilities, independence, and position of the IAF in the university. 3. Approving a risk-based IAP that covers all areas of the university. 4. Ensure the availability of financial and human resources to enable the IAF to function independently. 5. Facilitate resource independence through budget independence. 6. Meet frequently and privately with CIA. 7. Undergo training to equip themselves with relevant IA knowledge to enable them to execute their roles efficiently. 	<p>Ensure independence of the IAF by:</p> <ol style="list-style-type: none"> 1. Raising awareness about the IAF in the university. 2. Facilitate the website/digital presence of the IAF to enable stakeholders to easily access IA. 3. Minimise involvement in the IAF to administrative involvement only. 4. Abstain from functional involvement in IA (IAP, IAC drafting and approval). 5. No involvement in the allocation of resources to IAF, hiring, dismissal and remuneration of the CIA. 	<p>Ensure independence of the IAF by:</p> <ol style="list-style-type: none"> 1. Giving the IAF an adequate and direct legal mandate by including a section on the IAF in the university establishing acts. 2. Auditor General to audit the independence of the IAF as they audit annually. 3. Push for the independence of the IAF in SUs from the top through 	<p>Ensure the independence of the IAF by involving all the following stakeholders:</p> <ol style="list-style-type: none"> 1. Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development. 2. Auditor General. 3. University Council. 4. University community. 5. Head of state and chancellor of the state universities. 6. Institute of Internal

		policy formulation. 4. Make the training of university council members mandatory.	Auditing Zimbabwe (IIAZ).	
Independent Internal audit functions				
Improved university performance				
Good corporate governance practices	Effective risk management	Financial reporting	Robust internal control system	Organisational performance

9.1 Other pertinent conclusions

9.1.1 The role of other university stakeholders in ensuring the independence of the internal audit function

In addition to the results stated in the prior sections, the role of other university stakeholders in ensuring the independence of the IAF in state universities cannot be ignored. The Comptroller and Auditor General certainly have a crucial role to play in ensuring the independence of the IAF in SUs, as it has the mandate to audit all the public entities in Zimbabwe. The Auditor General reports that were examined in this study show that the Auditor General does not audit the IAFs for compliance with the internal auditing standards and the IPPF. Compliance with IIA and, hence, independence of the IAF can be improved if the scope of the Auditor General audits is extended to cover the internal audit function of public entities. State universities fall under public entities in Zimbabwe. Equally important is the role of the principal or government in ensuring the independence and effectiveness of the IAF in SUs. One CIA suggested that the influence of the chancellor of all state universities, who is also the head of state in Zimbabwe, could be used to emphasise the importance of the independence of the IAF. The head of state has been on record for campaigning against corruption in SOEs, an action that could also be taken for the IAFs. Other important stakeholders are the state universities' parent ministry and the university councils. Formulating policies that support the IAF and including the IAF in the university's establishing acts are other ways of promoting internal audit independence.

9.1.2 The going concern status and sustainability of the state universities

One important theme that arose as a result of this study is the SUs' going concern status. While this particular subject does not directly pertain to any of the study aims, it is crucial as all the objectives speak to it. The Zimbabwean government deems state universities essential to meeting its economic development requirements, as indicated by the MHTEISTD strategic goals. State universities are the key players in the economic development of the country and are expected to contribute through the Education 5.0 agenda (Muzira & Bondai, 2020; Viriri, Ndimande-Hlongwa & Mufanechiya, 2024). The Auditor General has cast doubt on some state universities as going concerns in instances where the liabilities of the SUs exceed their assets. Hence, the significance of the sector's success and sustainability to the nation cannot be overstated. As suggested by the agency problem, the right way of dealing with the going concern problem is by improving the effectiveness of the IAF by enhancing its independence. Adam (1994) suggests an investment in the monitoring costs by the principal in order to ensure the effectiveness of the IAF.

However, the sustainability of the SUs seems to be guaranteed by the government as the closure of the universities is always prevented through grants that are provided by the government to the universities. Whilst the doors of the state universities may never be officially closed, the contribution of the state universities towards economic development may be adversely affected. This viewpoint is supported by empirical evidence from recent scholarly works, which have confirmed that state universities in developing countries are indeed struggling and failing to attract international students (Sawyer, 2016; Moshtari & Safarpour, 2023).

9.1.3 Ownership structure

State universities are owned by the state, and the politically elected head of state is the chancellor of all state universities. Some CIAs argue that the chancellor position in state universities is ceremonial and does not influence the independence of state universities in any way. However, Jachi and Yona (2019) blamed political interference for the poor performance of local authorities in Zimbabwe, as local authority audit committee appointments are done politically without taking into consideration the qualifications of the appointees. This study, however, encourages the government to take advantage of this ownership structure and use its powers to positively influence the independence of the IAF. The Zimbabwean government has already intervened in promoting good corporate governance practices in SOEs by making the establishment of in-house IAFs in SOEs mandatory. From an institutional theory

standpoint, it is imperative for the Zimbabwean government to actively advocate for the independence of IAFs within Zimbabwean State Universities (ZSUs) to prevent decoupling. It is imperative to intentionally include provisions regarding independence within the university statutes and other pertinent legislation. The instance of Ethiopia provides evidence of effective government intervention in information assurance (IA) systems, resulting in favourable outcomes and success (Mihret *et al.*, 2012). The Ethiopian government's strong support of accountability and transparency has been crucial in encouraging the broad adoption of effective internal audit (IA) systems throughout the country (Mihret *et al.*, 2012).

9.1.4 Addressing the gaps in literature vis-a-vis the findings

The issue of lack of understanding regarding the role of the IAF in SUs, as unearthed by the quantitative findings of this research, can be attributed to inadequate research on the subject in Zimbabwean state universities. This study reaffirms the dearth of research, particularly in the context of Zimbabwe, and presents a timely opportunity to address the existing knowledge deficit identified in previous studies. Moreover, the present research programme has endeavoured to tackle some recommendations and identified gaps outlined in Chapter 1 of this study.

Most of the research done on internal auditing so far focused on other parastatals and local government other than state universities (Baber, 1983; Van der Schyf, 2000; Brierley, El-Nafabi & Gwilliam, 2001; Goodwin, 2004; Mihret & Yismaw, 2007; Asare, 2009; Ahmad, Othman, Othman & Jusoff, 2009; Cohen & Sayag, 2010; McRae & Van Gills, 2010; Unegbu & Kida, 2011; Alzeban & Sawan, 2013; Jachi & Yona, 2019; Nerantzidis *et al.*, 2022). Little research has been made on internal auditing in state universities (Montondon & Fischer, 1999; Zakaria *et al.*, 2006; Christopher, 2012; Mallari & Santiago, 2013; Pelser *et al.*, 2020; Yigzaw *et al.* 2017; Ntim *et al.*, 2017; Purpera, 2017; Mustapha & Abidin, 2017; Eke, 2018; Mokono & Nasieku, 2018; Momanyi & Ngacho, 2018; DeSimone & Rich, 2019; Hazaea *et al.*, 2020; Siyaya *et al.*, 2021);

Most internal audit studies in the public sector used the views of the internal auditors and the managers instead of those of the other significant parties like auditees (Nerantzidis *et al.*, 2022). This research presented the views of both the internal auditors and the auditees, hence closing the gap and providing a fuller perspective of the subject under study. The auditors gave the actual status of their independence, whilst the auditees gave their perceptions of the independence of the IAF in Zimbabwean state universities. This is justified because of the possibility that the appearance or perception of a lack of objectivity and independence may be just as harmful as the real situation (ISSAI, 2010).

In Schmidt and Günther (2016), Gordon and Fischer (2008) call for investigations using agency theory concepts to gain insights from decision-making regarding the transparency of performance reporting within higher education institutions (HEI). Schmidt and Günther (2016) carried out a systematic literature review of public sector accounting research in the higher education sector, which covered 35 years up to 2014. The review showed that theory has been scarcely used in accounting research in the HEI context. This study was also inspired by Schmidt and Günther (2016) and Al Mamun *et al.* (2013), as well as Nerantzidis *et al.* (2022), who submit that the performance of the IAF cannot be illustrated by one theory; rather, it needs a combination of economic, behavioural and systemic theories. This is evidence that a gap also exists in the literature in this regard. By basing the research on the agency, stakeholder, institutional and PMT theories, this study addressed the gap reflected in the scarcity of higher education management studies done using the lens of theory.

Research done on internal auditing in institutions of higher learning mainly focused on developed countries like the USA, UK, and Australia (Christopher, 2012; Purpera, 2017; DeSimone & Rich, 2019). In Africa, little research on internal auditing in public universities has been done in Libya (Hazaea *et al.*, 2020), South Africa (Siyaya *et al.*, 2021), Kenya (Mokono & Nasieku, 2018) and Nigeria (Kehinde *et al.*, 2016). None of these studies assessed the independence and performance of the IAF in SUs and, specifically, in ZSUs. There is a paucity of studies that have focused on developing countries in Southern Africa. This research successfully closed the gap by examining the independence and performance of the internal audit function in Zimbabwean state universities.

Montondon and Fischer (1999), Zakari *et al.* (2006), Christopher (2012), Mallari and Santiago (2013), Yigzaw (2017), Ntim *et al.* (2017), Purpera (2017), Mustapha and Abidn (2017), Eke (2018), Mokono and Nasieku (2018) and DeSimone and Rich (2019) criticise the ineffectiveness of IAUs in SUs and colleges despite governments having made the creation of IAU mandatory in SUs the world over. This research has identified the independence of the IAF and its performance as a direct variable that influences the performance of SUs. The study also identified the indirect variables that affect the performance of state universities through the independence/performance of the IAF. None of the previous research highlighted above on internal auditing has attempted to study the association between the direct and indirect variables within the same research model. This research, therefore, closed this gap by examining the association between the direct and indirect variables as identified in the conceptual model. The connection between the variables was examined using SEM.

Wolf and Rosenberg (2012) argue that most research in business management is too scientific, and the results and recommendations cannot be used to solve practical problems.

This could be the reason universities in developed countries still regret the ineffectiveness despite research having been done in the area. The research closed this gap by proposing practically relevant research output in the form of a framework for the independence of the IAF in ZSUs. Although a framework for independence and objectivity of internal auditors has been developed by the IIA, the IIA framework is only applicable where the scope of an engagement and the organisational status of the IAF is appropriate (Mutchler & Chang, 2001). The IIA framework provides ways to manage objectivity where IAF independence is already present (Mutchler & Chang, 2001). This research argues that the starting point must be the creation of independence to facilitate the objectivity of the internal auditor, as there cannot be objectivity without independence (Drogalas, Arampatzis, & Anagnostopoulou, 2016; Mutchler & Chang, 2001). To reduce the gap between rigorous scientific research and practically relevant research, post-positivist epistemology was combined with pragmatist research methodology. Triangulation of the qualitative and quantitative research methods was used to increase the practicality and relevance of this research. Instead of just focusing on the seemingly knowledgeable persons as respondents to this study, as has been done by prior research, this research collected data from both the auditors and auditees within the ZSUs.

9.2 Contributions of the study

Being the first in Zimbabwe, this study is innovative. It tries to bring to the forefront the subject of internal audit independence in public universities. The study examined the IAF in ZSUs for independence and effectiveness. Given Zimbabwe's early age (43 years after independence), IA as a corporate governance mechanism in public universities and as part of the nation's growth plan is still in its infancy. This study acknowledges the importance of considering limitations and validating the results through similar studies conducted in diverse settings. Despite these considerations, the study provides valuable contributions and thus has implications for practice, policy, and further research, as outlined below.

9.2.1 Contributions to practice

The in-depth interview analysis unearthed the fact that none of the chief internal auditors leading the IAF in Zimbabwean state universities are professional internal auditors. At the time of the research, none of the CIAs were IIA-certified or were members of the IIA Zimbabwe. This lack of professionalisation amongst the CIAs has contributed to non-compliance with IIA standards and, hence, a lack of IA organisational independence. This research endeavour aims to augment practitioners' comprehension of the role and potentially stimulate IIA Zimbabwe to advocate for its initiatives, as well as raise awareness among public and

commercial sector entities regarding the IIA profession. This study adopts its perspective from a developing country, which is characterised by major contextual differences compared to developed countries. As a result, this study aims to contribute to the global and individual understanding of the IA profession, both internationally and inside the specific country.

9.2.2 Contributions to policymakers

The findings of this study carry significant consequences for policy. The study proposes a number of recommendations for enhancing the policy around IA systems inside the nation. The study reminds policy-makers that state universities are key role players in achieving Zimbabwe's Vision 2030 (MHTESTD, 2019). The target of Vision 2030 is to transform Zimbabwe into an upper-middle income economy with a per capita Gross National Income of over US\$5 000 in real terms by 2030. The Ministry of Higher and Tertiary Education is implementing the Education 5.0 agenda to move the nation forward towards attaining the upper-middle income economy status through state universities. This makes the efficient performance of state universities even more important. The importance of the IAF in the attainment of Vision 2030 can therefore not be overemphasised. Consequently, the research proposes policy measures aimed at enhancing the independence and effectiveness of IAF in state universities.

The efforts by the Zimbabwean government to regulate the corporate governance practices of public entities to date are commendable. The Zimbabwe Corporate Governance Code (ZimCode), the Public Entities Corporate Governance Act and the Public Finance Management Act have already been established by the Zimbabwean government. A review of the acts, however, shows that the documents lack adequate guidance on how to ensure the independence of the IAF in public entities (Zimbabwe, 2018). For example, the position of the IAF within an organisation is vague, as Section 256 of the PECGA simply states that the CIA should be on the same level as other managers in the organisation (Zimbabwe, 2018). As a result, the CIA has been placed on the line manager level in the state universities, a position which is not executive and does not promote IA independence. Furthermore, the results of this investigation have also exposed that the IAF lacks a direct legal mandate through the university establishing acts of parliament. The university acts must have a section on the IAF, which is missing from the documents.

The study recognised the presence of a number of rules and regulations intended to govern the operations of state universities in Zimbabwe. However, the crucial aspect that remains deficient is the effective execution of these measures. An independent IAF is a requirement of the PECGA of Zimbabwe, but evidence gathered by this research shows that the IAF in ZSUs

lacks organisational independence. As propounded by the institutional theory, evidence of decoupling can be seen in state universities. Non-adherence to additional necessary criteria and the implementation of policies, whether deliberate or inadvertent, is a significant issue that should not be overlooked without consequences. For example, it is imperative that Vice-Chancellors are held accountable for their obligation to provide annual reports, especially considering their regular remuneration. This study analysed the audit reports prepared by the Comptroller and Auditor General of Zimbabwe on an annual basis from 2016 to 2022. Annual audit reports for some state universities are missing from the Auditor General annual reports mainly because the financial statements will still be works in progress at the time of the audit. Some state universities are more than three annual reports behind, which is unacceptable and should not go without consequences for the Vice-Chancellors who are running the universities on behalf of the government. This study thus recommends that policymakers should actively enforce the current rules and prioritise their implementation, as the independence and efficacy of IA initiatives cannot be achieved without adhering to the governing legal framework.

Having highlighted the fact that IAF in SUs lacks independence, the study proposes a framework that encourages policymakers to take a leading role in ensuring the independent and effective functioning of IAF in SUs and the public sector at large. This study aims to provide policymakers with the necessary motivation to identify key goals for addressing the issue of independence in SUs. Additionally, it seeks to develop specific solutions that can enhance the performance of SUs by boosting the efficacy of the IAF.

It is anticipated that the outcomes of this study will make a valuable contribution to the current corpus of academic literature, as well as inform and shape professional practices and policymaking on the independence of the IAF and the performance of higher learning institutions. The results have also added to earlier empirical research on internal audits in developing nations' higher education institutions. Additionally, it has made useful suggestions in the hopes that they would encourage decision-makers to implement the appropriate laws to support the ideas put forward in this research for the expansion and improvement of internal auditing in public universities.

9.2.3 Other recommendations

- The findings showed that IAF in ZSUs are not financially independent, as they fall under the Vice-Chancellor's office for budget purposes. The Vice-Chancellors (VC) are also responsible for allocating resources to the IAF, a situation which threatens independence according to IIA standards and empirical evidence. The study recommends that the IA plan, together with the resources or budget, be approved by

the AC and that the department be separated from the Vice-Chancellor's office for budget purposes.

- The study also showed that the CIAs are on the same level as line managers on the university organogram, although they report to the VC. For remuneration purposes, the CIA is also a line manager grade, which is against the best practice. The CIA position should be an executive position in an organisation to enhance organisational independence and authority. The study, therefore, recommends that the position of the CIA on the organogram be reviewed.
- Findings also reviewed that most CIAs report both administratively and functionally to the VCs, which also threatens independence. This position should be reviewed, and CIAs should report only administratively to the VC.
- The Audit Committee is present in all state universities but not functional as far as the IA oversight responsibilities are concerned. The study recommends that the AC members be trained to equip them with appropriate skills to enable them to carry out their duties as required by international auditing standards. The AC plays an important role in ensuring IAF independence. It should be responsible for hiring, firing and remuneration of the CIA. It should also be responsible for approving the IAP and the resource plan. It should ensure that the IAF is adequately resourced to enable it to function independently.
- An interesting and strongly unanticipated outcome of the study was that IAF in Zimbabwean state universities are not professional internal auditors. Empirical evidence shows that professional internal auditors are more likely to comply with international internal auditing standards. It is a requirement of the internal auditing standards that the IAF be independent. This study recommends that universities invest in the certification of the CIAs and that policy makes the certification of the CIA in the public sector mandatory.
- The quantitative analysis showed that the auditees were generally not sure about how the IAF added value to the ZSUs. This finding unearthed an awareness and knowledge gap generally amongst the IA stakeholders on how the IAF works and adds value to the university. The study, therefore, recommends that IA awareness campaigns be carried out in state universities to educate the university stakeholders on the purpose and function of the IAF.
- The internal audit charter should be displayed on the university website, and the IAF should have a prominent section dedicated to it on the website as well as per best practices. Raising awareness and providing information about the IAF will enable the

stakeholders to hold the IA accountable when they do not comply with the professional requirement of independence and objectivity.

- A section on the IAF should be included in the university acts to give the IAF a direct legal mandate in the state university.
- The OAG reports showed that the Auditor General does not review or audit the IAF for independence, as evidenced by the absence of a section on IIA in the OAG reports as per best practice (Mamaile, 2018). The audit of the IAF in ZSUs by the Comptroller and Auditor General could have exposed the lack of organisational independence. This research, therefore, recommends that the Zimbabwe Comptroller and Auditor General add the review of IAF in public entities in its scope of annual audits.
- The researcher anticipates that the cooperation of the government, through the university council and the IIA Zimbabwe, together with the internal auditors, will be needed to change the IA trajectory in Zimbabwe.
- The findings indicate that there is a lack of research on the independence and performance of internal auditors, which is a cause for concern. One of the proposals put forth in this thesis is to contribute to the limited body of knowledge on IA performance. This suggestion aims to encourage academics in the field of accounting and its allied disciplines to expand their investigations into the realm of IA.

9.3 Limitations of the study

The present thesis possesses certain limitations, as is common with empirical studies, pertaining to the scope of research, theoretical framework, and methodological approach. Future studies have the potential to address these shortcomings. Moreover, the emergence of fresh research inquiries has given rise to more prospects for further investigation, as elucidated in the following discussion. The primary area of investigation: the empirical focus of this study intentionally restricts itself to the public sector, specifically state universities, to minimise the potential impact of industry-related factors on the research outcomes. The findings of this study confirm the viability of this topic. A thorough model may be formulated and has been mostly validated by empirical evidence.

9.4 Recommendations for future research

This section pertains to suggestions for future research endeavours. This thesis offers valuable insights into the independence and effectiveness of IAFs inside state universities in Zimbabwe, drawing from a pioneering research endeavour. The researcher is currently

equipped to provide recommendations that will contribute to future research endeavours and enhance the outcomes obtained.

This study has the potential to make a valuable contribution to the advancement of IA research by extending its application to many industries across the country since this study has been conducted in state universities only. It will, therefore, be interesting if IAFs in other public and private sector organisations are also assessed for their independence and effectiveness to establish a country-wide perspective.

- It would be intriguing to conduct a comparative analysis that examines the independence and performance of the full population of state-owned firms and the private sector in the context of the national sample, as well as within the area.
- The empirical findings, however, prompt an inquiry into the national and worldwide applicability of the model. The data collected for this study, both qualitative and quantitative in nature, reveal that IAF in ZSUs exhibits a deficiency in independence. It is important to note that independence serves as a fundamental principle in the field of internal auditing. To obtain study findings that can be applied on a broader national level, it would be of interest to assess the research framework established in this study by conducting tests with private universities in Zimbabwe as well as globally.

9.5 Summary of the study

The present research study has effectively achieved its research purpose, which was to investigate the independence and performance of the IAF inside state universities in Zimbabwe. Furthermore, it has successfully addressed the existing gap by making a valuable contribution to the literature, enhancing the independence and performance of the IAF in state universities in Zimbabwe. The findings were obtained by the use of triangulated theories and a thorough review of the available literature, study methodology, data analysis, and subsequent deliberations on the results. The utilisation of this methodology allowed the researcher to propose that enhancing IAF independence inside the Zimbabwean state universities could potentially lead to improvements in their overall performance. However, it is worth noting that achieving independence for the IAF will necessitate the collective endeavours of all university stakeholders.

The study commenced by utilising surveys, conducting in-depth interviews, and doing content analysis on a range of pertinent papers, journals, and books pertaining to internal auditing and its associated domains. Through the utilisation of AMOS and ATLAS.ti, the researcher gained the ability to examine the documents and engage in a comprehensive discussion of the

obtained results. The findings provided confirmation that the IAF inside the ZSUs' organisation exhibited a deficiency in its level of independence. Thus, the implementation of safeguards for IAF independence using the suggested IA independence framework is necessary. Consequently, campaigns for the independence of the IAF in ZSUs are one of the major elements proposed for raising IA awareness within the university community. Additionally, the continuous professional development of internal auditors in ZSUs and the training of AC members or university councillors to equip them with the necessary skills to efficiently perform their duties and oversee roles over the IAF are also proposed. Moreover, the inclusion of a section on IA in the university acts to give the IAF a direct legal mandate is further proposed.

Finally, in light of the anticipated contributions of state universities to Zimbabwe's Vision 2030, it is crucial to recognise the significance of utilising the conclusions and recommendations made by this research. By doing so, the IAF can effectively enhance the performance of state universities and consequently make a substantial contribution to the nation's economy. Consequently, these research findings enhanced the understanding of the weighty impact of the IAF and its effect on the performance of SUs. As a result, the main objective of this practically rigorous research – to develop a practical framework for IAFs to function independently and effectively to enable them to add value to state universities in Zimbabwe – has been convincingly addressed. The framework for the independence of IAF in Zimbabwe public universities has been developed and presented in this study. The findings have also demonstrated practical significance and indicated avenues for future scholarly investigation.

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Appendix A: Cape Peninsula University of Technology Ethical Clearance Certificate



P.O. Box 1906 • Bellville 7535 South Africa • Tel: +27 21 4603291 • Email: fbmsethics@cput.ac.za
Symphony Road Bellville 7535


Office of the Chairperson Research Ethics Committee	FACULTY: BUSINESS AND MANAGEMENT SCIENCES
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The Faculty's Research Ethics Committee (FREC) on **25 August 2020**, ethics **Approval** was granted to **Melania Chenjerai (220520224)** for a research activity **Doctor of Commerce in Internal Auditing** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	Independence and performance of internal audit functions within Zimbabwean state universities Lead Supervisor (s): Prof J. Dubihlela
---------------------------------------	--

Comments:

Decision: **APPROVED**

 Signed: Chairperson: Research Ethics Committee	10 September 2020 Date
---	----------------------------------

Appendix B: Zimbabwe Ministry of Higher and Tertiary Education, Innovation, Science, and Technology Development permission to conduct research

All official communications should be addressed to:
"The Secretary for Higher & Tertiary Education
Telephones: 795891-5, 796441-9, 730055-9
Fax Numbers: 792109, 728730, 703957
E-mail: thesecretary@mhet.ac.zw
Telegraphic address: "EDUCATION"



Reference:

MINISTRY OF HIGHER AND TERTIARY
EDUCATION, INNOVATION, SCIENCE AND
TECHNOLOGY DEVELOPMENT
P. BAG CY 7732
CAUSEWAY

01 June 2020

Ms. Melania Chenjerai

C/o Cape Peninsula University of Technology

AUTHORITY TO CARRY OUT RESEARCH AT STATE UNIVERSITIES: MINISTRY OF HIGHER AND TERTIARY EDUCATION, INNOVATION, SCIENCE AND TECHNOLOGY DEVELOPMENT

Reference is made to your memo in which you requested for permission to carry out an Academic Research at State Universities in the Ministry.

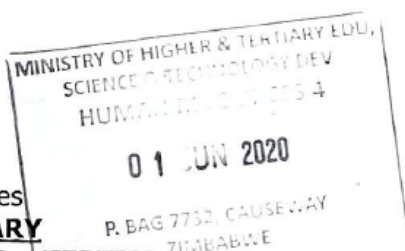
Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research at State Universities in Zimbabwe.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.

Mazani
Mazani V. (Mr)
Human Resources

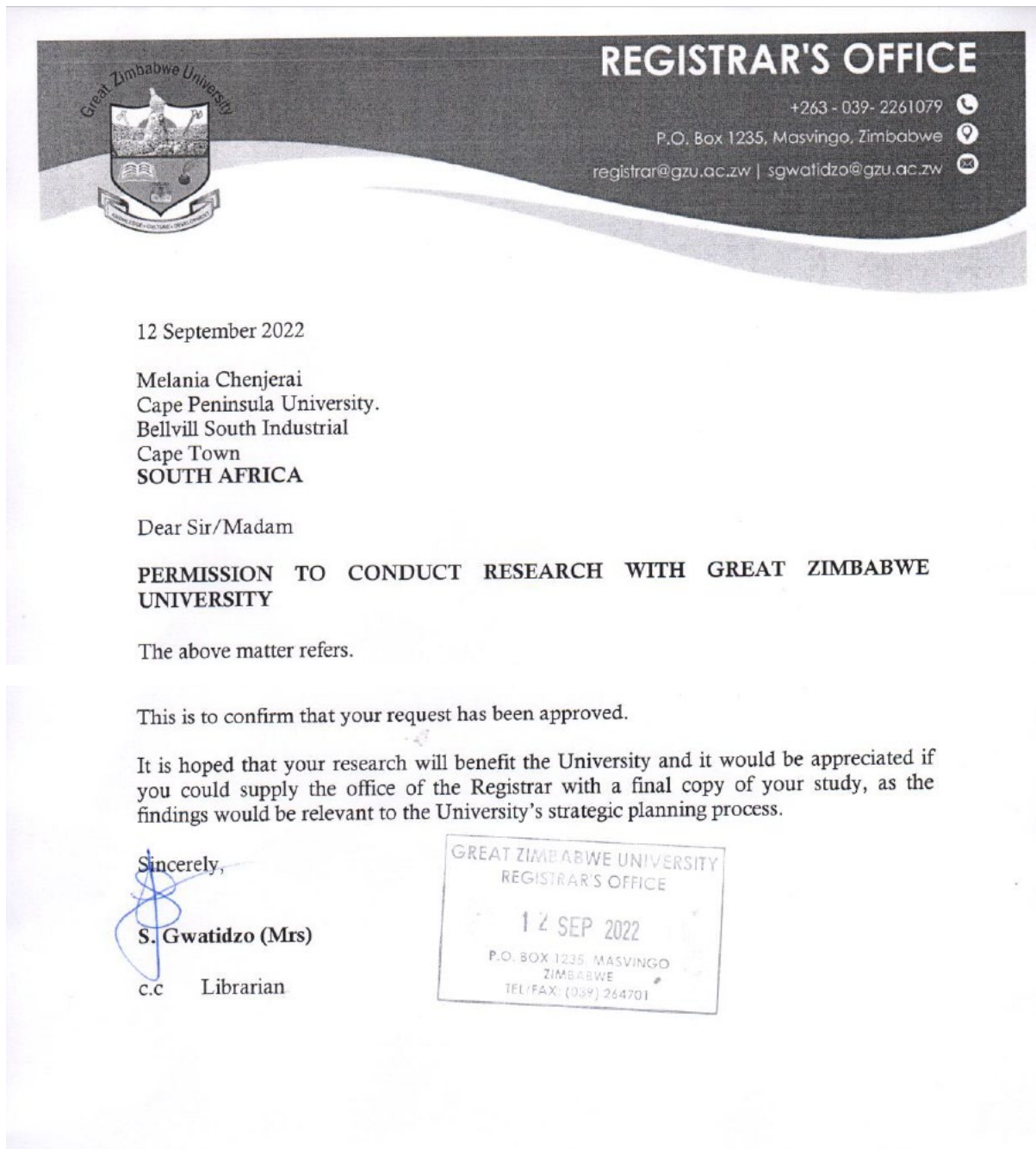
FOR: SECRETARY

HIGHER AND TERTIARY EDUCATION, INNOVATION, SCIENCE AND TECHNOLOGY DEVELOPMENT.



Cc: File

Appendix C: Great Zimbabwe University permission to conduct research



Appendix D: Midlands State University permission to conduct research

Office of the Registrar
Mr T Zishiri

P Bag 9055
GWERU
Telephone: +263-54- 260331/2260450

Email: zishirit@staff.msu.ac.zw



MIDLANDS STATE UNIVERSITY

01 June 2022

Ms Melania Chenjerai
Cape Peninsula University of Technology
Faculty of Business and Management Sciences
School of Accounting Sciences
Department of Internal Auditing Financial Information Systems
Capetown
South Africa

Dear Ms Chenjerai

Re: Application for Permission to Carry out a PhD Research at Midlands State University: on "Independence and Performance of Internal Audit Function in Zimbabwe State Universities"

Reference is made to your letter dated 10 May 2022 in which you requested permission to carry out an academic research on "Independence and Performance of Internal Audit Function in Zimbabwe State Universities at Midlands State University.

Please be advised that Midlands State University has granted you permission to carry out your research.

We would appreciate if you could supply the University with a final copy of your study. Also kindly note that the University expects you to use the information acquired during your study solely for research purposes.

I hope that you will get all the assistance and cooperation you need from the University Community.


Thank you.

Mr T Zishiri
University Registrar



Appendix E: Lupane State University permission to conduct research

9/13/22, 11:09 AM Lupane State University Mail - Request for permission to collect PhD research data at Lupane State University

 **Lupane State University**
Building Our Tomorrow's Knowledge

Sithembile Mlilo <smlilo@lsu.ac.zw>

Request for permission to collect PhD research data at Lupane State University

Melania Chenjerai <220520224@mycput.ac.za> 9 September 2022 at 12:24
To: "smlilo@lsu.ac.zw" <smlilo@lsu.ac.zw>

Dear Registrar

The above matter refers; I am a registered and active student at the Cape Peninsula University of Technology and am making an application in the above regard. I am pursuing a Doctor of Commerce Degree in Internal Auditing and am carrying out a research on the topic, "**Independence and Performance of Internal Audit Function in Zimbabwe State Universities.**"

The targeted respondents are the university principal officers, deans, academic directors, chairperson of academic departments, non-academic directors, internal audit office staff, procurement & stores office staff and bursary office staff.


Please be assured that any information or data received from your office will be strictly used for academic purposes by the researcher and it will be treated in strict confidence. Permission has been granted by the Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development.

Your assistance will be greatly appreciated. For further enquiry I have provided my contact details as well as that of my academic supervisor below.

Yours Sincerely

Melania Chenjerai (Student Registration Number 220520224) melaniachenjerai@gmail.com
+263775126254

Supervisor: Professor Job Dubihlela. (dubihlelaj@cput.ac.za.cell: +27(0)33 985 5136

 **Ministry Permission Response (1).pdf**
309K

LUPANE STATE UNIVERSITY
REGISTRAR'S OFFICE
RECEIVED
13 SEP 2020
P.O. BOX 170, LUPANE
TEL: 0389-488

Melania
Your request is approved however ensure that we also get a copy of your findings once you have completed your study.
Registrar

<https://mail.google.com/mail/u/0/?ik=9289e7b266&view=pt&search=all&permmsgid=msg-f%3A1743487295022489159&simpl=msg-f%3A1743487295...>

Appendix F: National University of Science and Technology permission to conduct research



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

NUST INSTITUTIONAL REVIEW BOARD

DATE: 15//09/2022

Dear Mrs Chenjerai Makumbe M

TITLE: Independence and Performance of Internal Audit Functions in Zimbabwe State Universities

Thank you for submitting your Research Proposal for review by the NUST IRB. Please be advised that the IRB reviewed your protocol and it was approved.

The approval by the NUST IRB was based on the following documents you submitted:

- (i) **Research Proposal Document of the Study, and**
- (ii) **Consent Form**

The approval number for the study is **NUST/IRB/2022/99** and should be used in all correspondence, consent forms and other documents as appropriate.

Approval Date : 16 September 2022

Expiry Date : 17 September 2023

After the expiry date, the project may only continue after renewal. Renewal application process should commence three months before the expiry date.

All problems related to the safety of participants must be reported to the NUST IRB within 3 working days. You should not deviate from the protocol and procedures stated in the proposal. Do not make any adjustments/changes to the protocol and consent forms without prior written approval to the NUST IRB.

Thank you

A handwritten signature in black ink, appearing to read 'P. Makoni', is shown within a light blue rectangular box.

Dr P. Makoni
Chief Research Officer

Appendix G: Zimbabwe Open University permission to conduct research



ZIMBABWE OPEN UNIVERSITY

"Empowerment Through Open Learning" ®

From the Office of the Registrar

Ref: NC14/1/1

19 September 2022

Melania Chenjerai
8 Sydney Road
Westlea
Mutare

Dear Madam

RE : REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Reference:

- 'A' Letter from the line Ministry
- 'B' Approved research proposal
- 'C' Ethical clearance letter from Cape Peninsula University of Technology

We acknowledge receipt of references 'A, B and C' above.

Please be advised that authority to conduct research titled, "**Independence and performance of internal audit functions within Zimbabwean State Universities**", has been granted.

Upon completion, we kindly request you to submit a copy of your research to the Registrar's Office and another copy to the Manager, Internal Audit Unit.

Thank you,

A handwritten signature in black ink, appearing to read 'Mr Paulo'.

MR P. PAULO
DEPUTY REGISTRAR, ADMINISTRATION



Appendix H: Manicaland State University of Applied Sciences permission to conduct research



MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

Stair Guthrie Road
Mutare
Zimbabwe

P. Bag 7001
Mutare
Tel: +263(20)2067572

DEPUTY REGISTRAR'S OFFICE

1 July 2022

Ms Melania Chenjerai
Cape Peninsula University of Technology
Faculty of Business and Management Sciences
School of Accounting Sciences
Department of Internal Auditing Financial Information Systems
Capetown
South Africa

Dear Ms Chenjerai

Re: Application for Permission to Carry out a PhD Research at Manicaland State University of Applied Sciences: "Independence and Performance of Internal Audit Function in Zimbabwe State Universities"

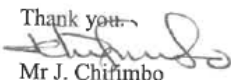
Reference is made to your letter dated 30 May 2022 in which you requested permission to carry out an academic research on "Independence and Performance of Internal Audit Function in Zimbabwe State Universities".

Please be advised that Manicaland State University has granted you permission to carry out your research.

We would appreciate if you could supply the University with a final copy of your study. Also kindly note that the University expects you to use the information acquired during your study solely for research purposes.

I hope that you will get all the assistance and cooperation you need from the University Community.

Thank you.


Mr J. Chirimbo
Acting University Registrar



Appendix I: Chinhoyi University of Technology permission to conduct research



CHINHOYI UNIVERSITY OF TECHNOLOGY

✉: P. Bag 7724, Chinhoyi ☎: 263-67-22203-5 📠: 263-67- 27214 E-mail : vicechancellor@cut.ac.zw

Vice-Chancellor's Office: Prof. D. J. Simbi - PhD, BSc, MIM, CEng, FZ'weIE, FICorr, FZAS, Hons FZ'weIE

HUMAN RESOURCES DEPARTMENT

9 September 2022

Ms. Melania Chenjerai
Cape Peninsula University of Technology
Faculty of Business and Management Sciences
School of Accounting Sciences
Department of Internal Auditing: Financial Information Systems
Cape Town
South Africa

Dear Ms. Chenjerai

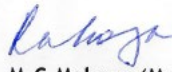
RE: REQUEST TO CARRY OUT A RESEARCH PROJECT AT CHINHOYI UNIVERSITY OF TECHNOLOGY

We acknowledge receipt of your application letter seeking permission to undertake research study at Chinhoyi University of Technology for Research entitled: *"Independence and Performance of Internal Audit Function in Zimbabwe State Universities."*

You are kindly advised that permission to undertake your study is hereby granted. However, you are reminded to observe the University Official Secrecy Oath.

The University would also expect results of your research upon completion.

Thank you


M.C. Makaza (Mr)
Deputy Registrar- Human Resources



Appendix J: Marondera University of Agricultural Sciences and Technology permission to conduct research

10/1/23, 12:02 AM Permission to Carry out an Academic Research at State Universities in Zimbabwe – Melania Chenjerai - melaniachenjerai@...

☰ Gmail Q GRACE GWATIDZO X 𠄎

Compose

Inbox 2,750 g Grace T Gwatidzo <grace.gwatidzo@muast.ac.zw> 𠄎
 to Jonathan, Musekiwa, Lesley, Wiseman, Esther, Ngqabutho, Courage, Godwill, Precious, Wonder, Caroline, ketiwe, me

Starred

Snoozed

Important

Sent

Drafts

Categories

Social

Forums

Promotions 14

More

Labels

[Imap]/Sent

Personal

Dear All

Please find attached documents relating to the above subject.

The Vice Chancellor approved that she carries out the research at MUAST.

May you kindly assist her as she carries out her research. The student will be approaching you via email. I am kindly requesting that you assist her in every way possible.

By copy of this email I am kindly requesting Melania to approach the listed members as she carries out her research.

Mr J Lieto - Registrar
 Mr M Kamba - Bursar
 Ms CL Gatsi - Director Marketing Public and International Relations
 Dr L Macheke - Director, Innovation and Industrialisation
 Prof N Mpofu-Hamadziripi - Director, Teaching and Learning Institute
 Dr EN Masvaya - Director, Climate Change and Food Security Institute
 Prof W Ngezimana - Director, Quality Assurance
 Dr C Bangira - Dean, Faculty of Earth and Environmental Sciences
 Dr P Hove - Dean, Faculty of Agribusiness and Entrepreneurship
 Dr G Madamombe - Dean Faculty of Plant and Animal Sciences and Technology
 Dr Zendah - Dean Student Affairs

Kind regards

Mrs Grace Gwatidzo, MBA

Deputy Registrar | Academic Registry Department

E. grace.gwatidzo@muast.ac.zw

M. +263 776904580

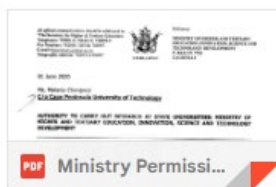
W. www.muast.ac.zw



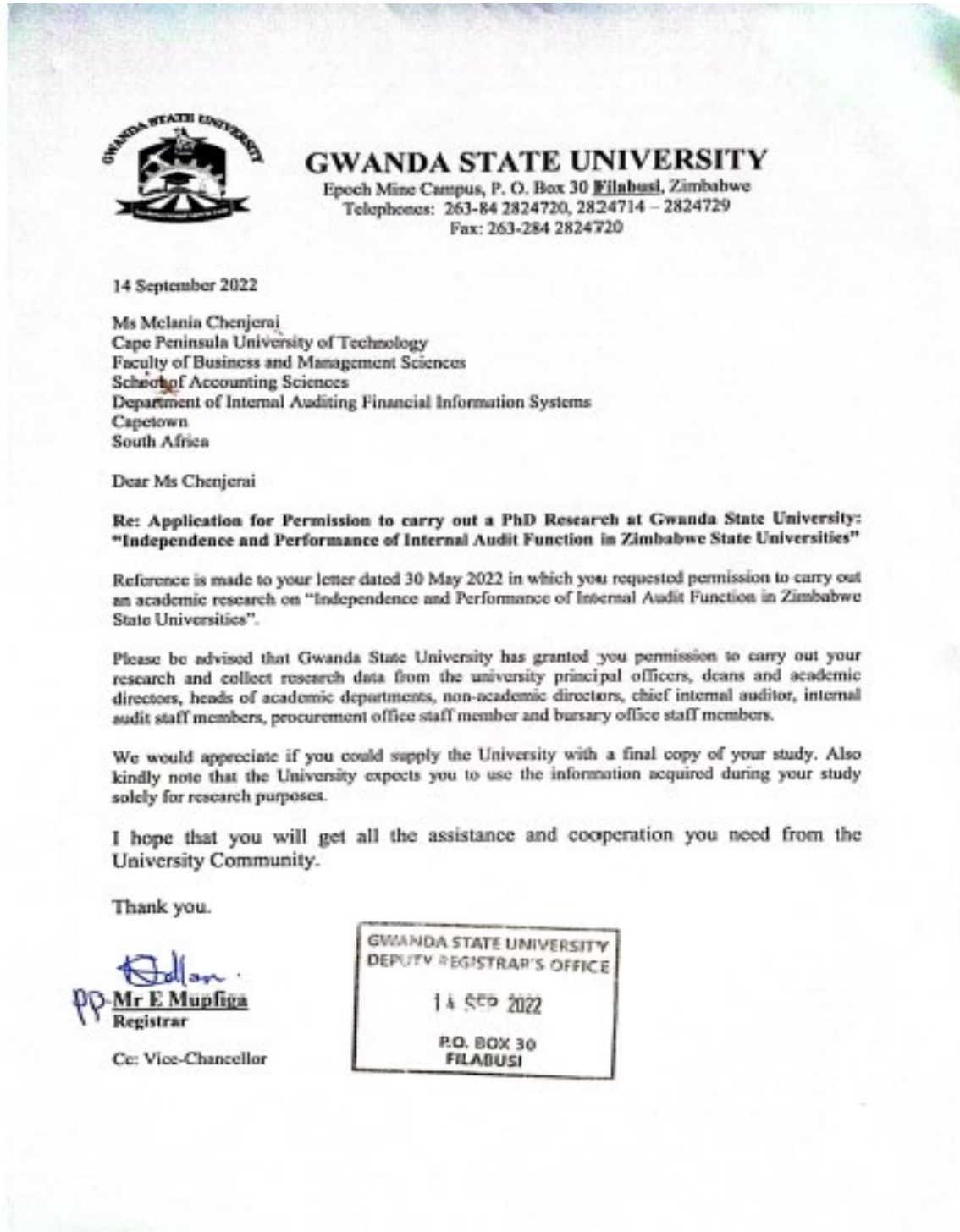
Plot 15 Longlands Road, P O Box 35 Marondera, Zimbabwe



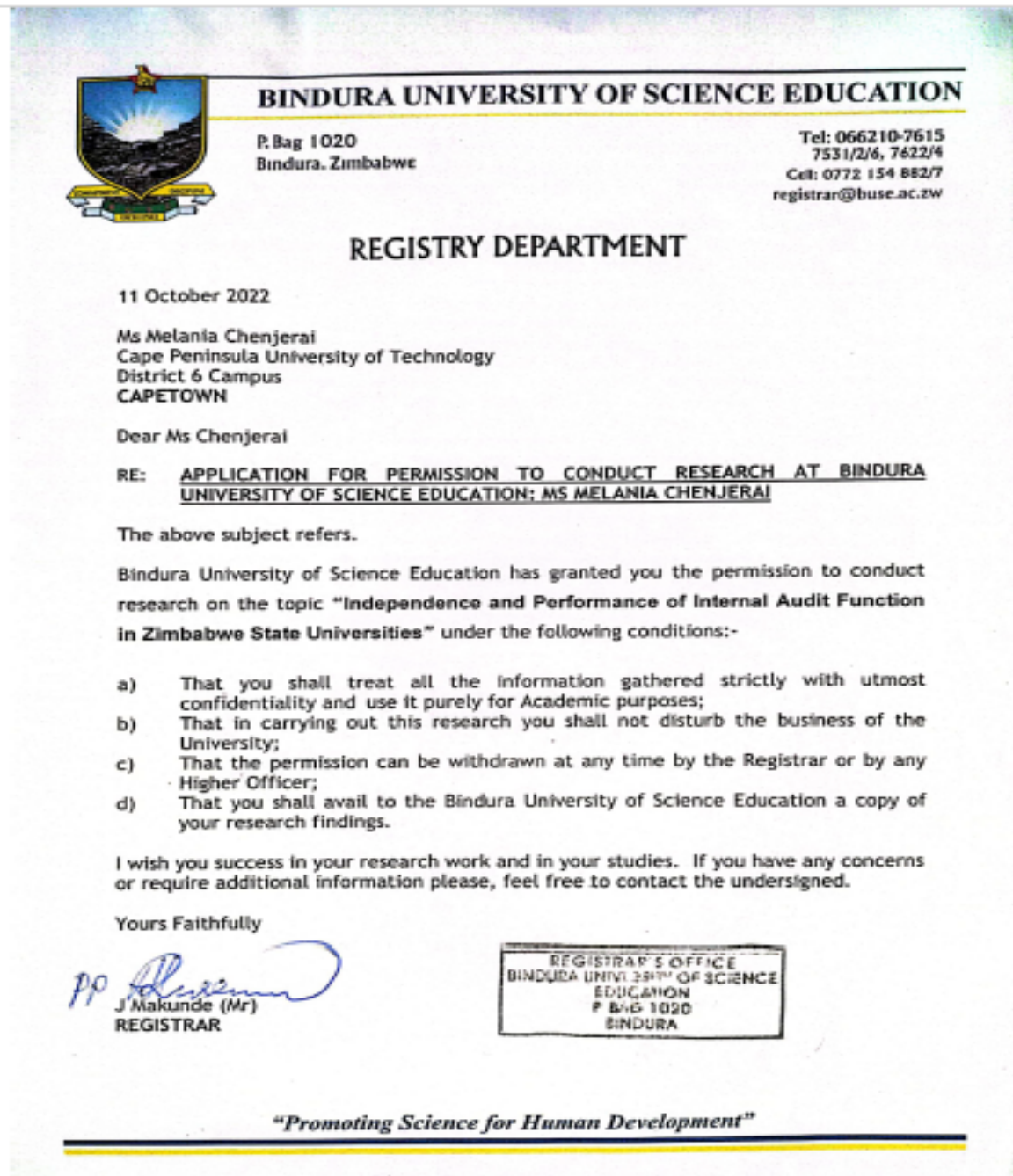
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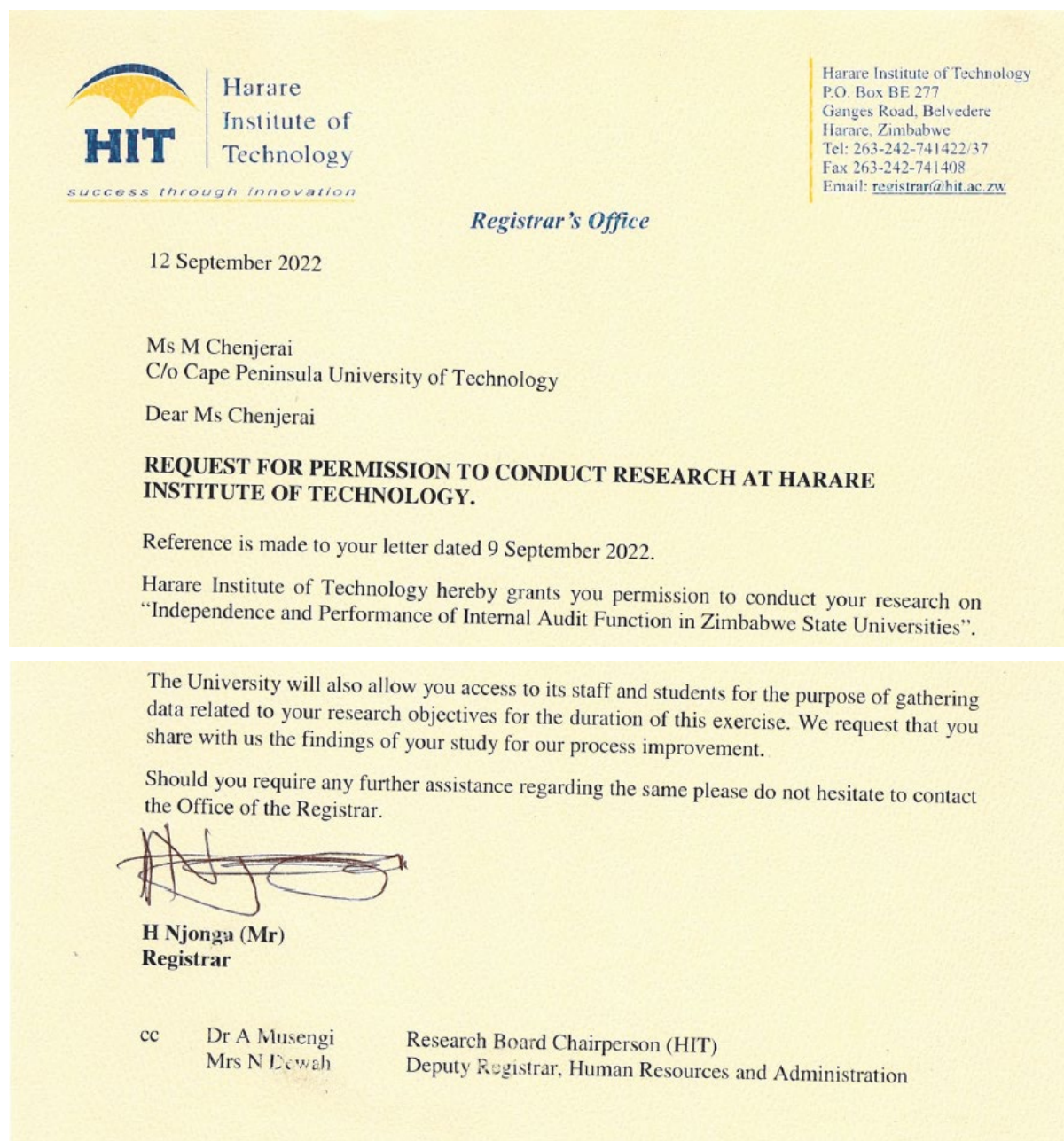
Appendix K: Gwanda State University permission to conduct research



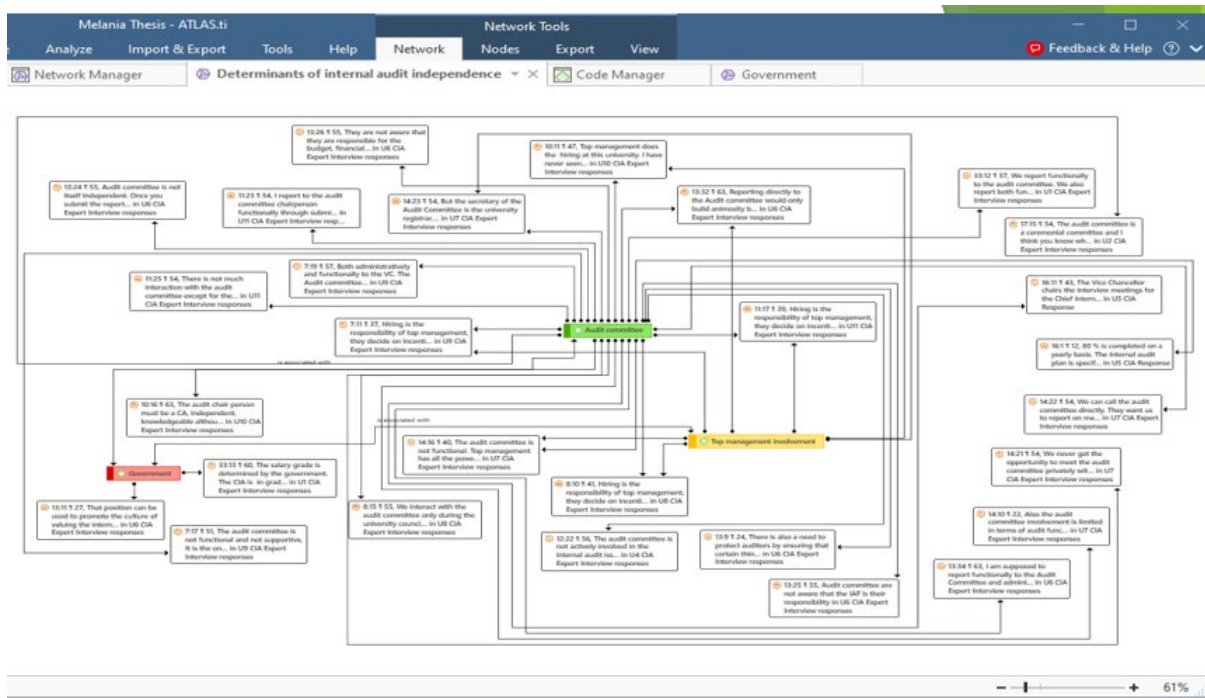
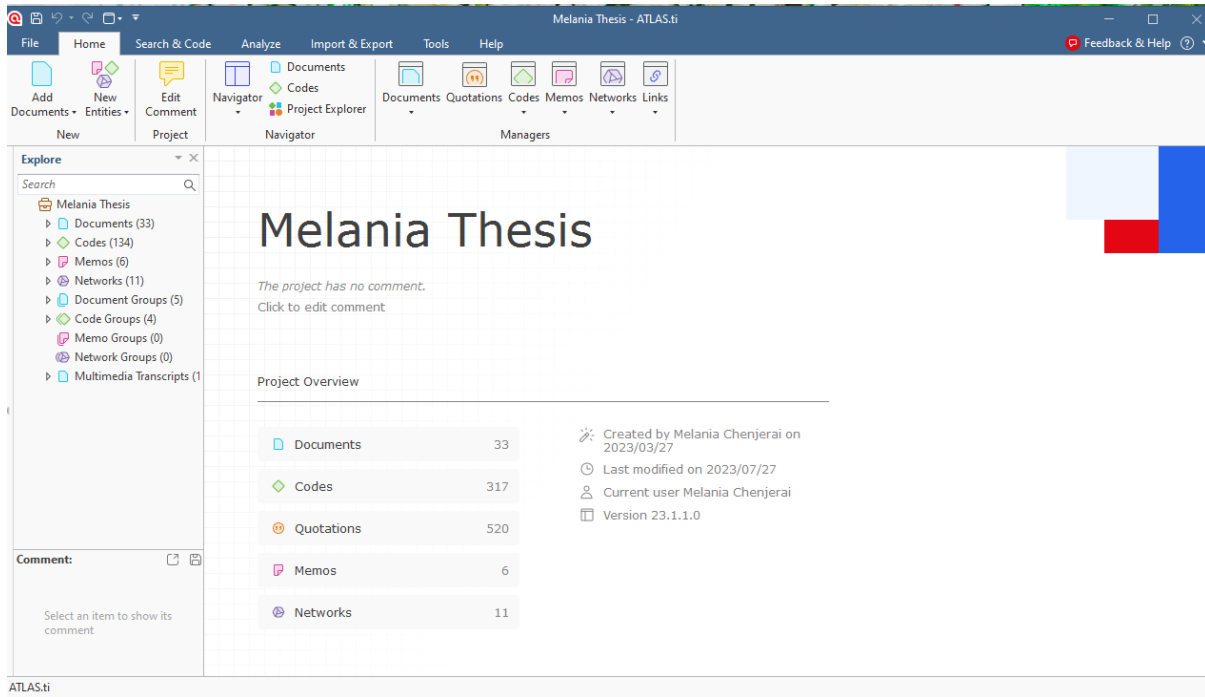
Appendix L: Bindura University of Science Education permission to conduct research



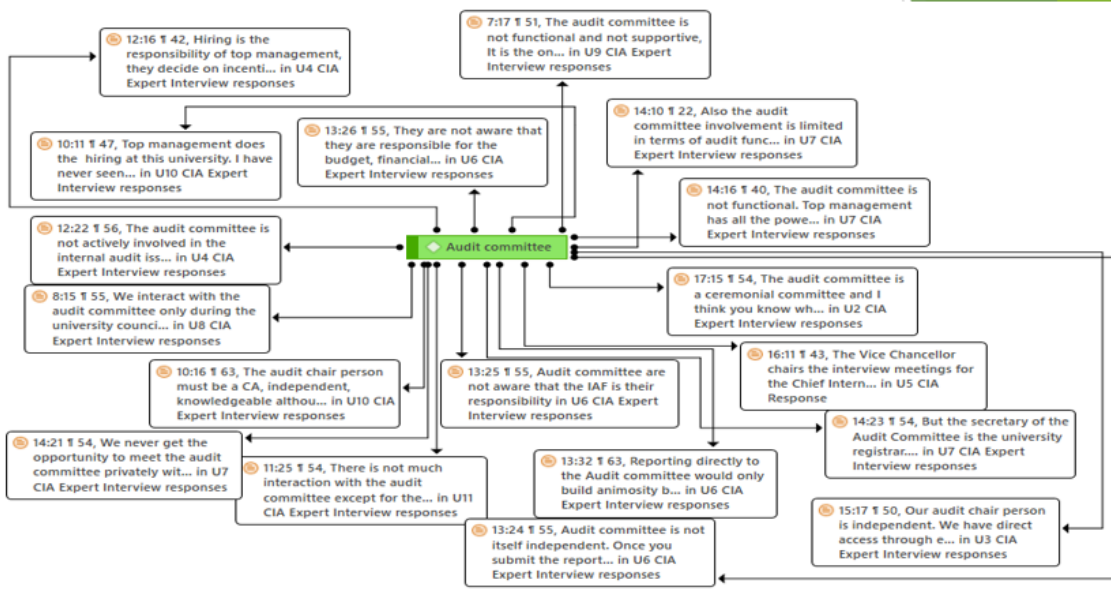
Appendix M: Harare Institute of Technology permission to conduct research



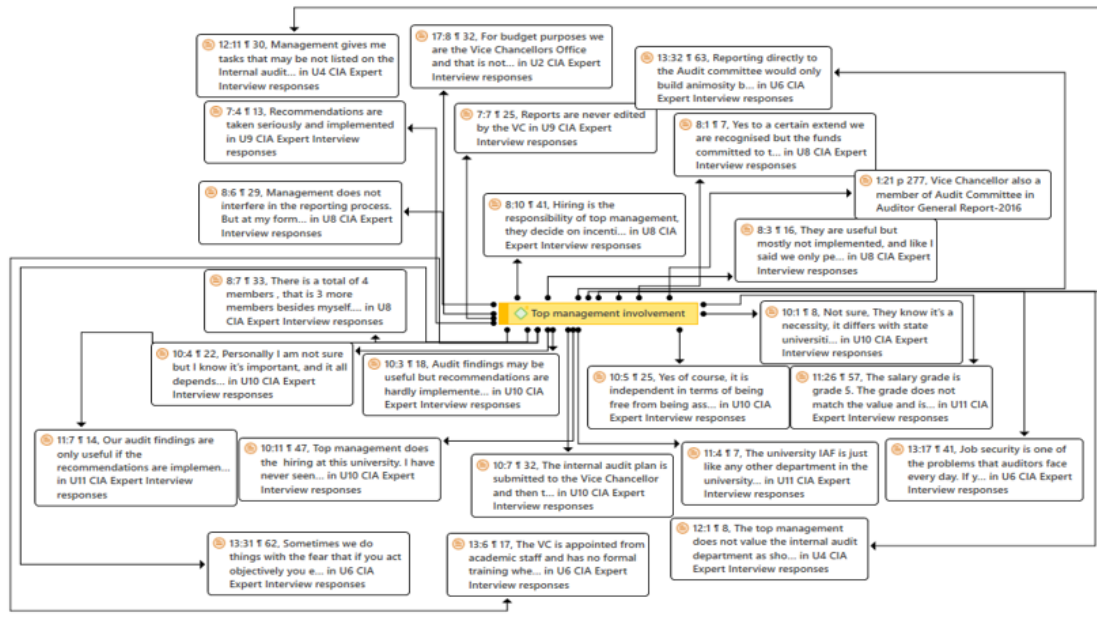
Appendix N: ATLAS.ti data output



Atlas.ti data output: Audit committee network



Atlas.ti data output: Top management network



Appendix O: Research questionnaire



Dear Respondent,

The undersigned is a Doctor of Commerce student at Cape Peninsula University of Technology, where she is currently working on her study titled “**Independence, and Performance of Internal Audit Function in Zimbabwean state universities.**” This questionnaire has been sent out to all state universities in Zimbabwe. The researcher has been granted permission to collect research data from both the parent ministry and your institution. It will be greatly appreciated if you could answer the questions completely. You are rest assured that information obtained from this questionnaire will be handled carefully, confidentially and be used strictly for academic purposes only.

Grateful and Respectfully yours,

(Sgd.) Melania Chenjerai (Email: melaniachenjerai@gmail.com/220520224@mycput.ac.za)

CONSENT (please tick in appropriate box): I hereby consent to participate in this survey and to the collection and retention of my personal information for academic purposes. Furthermore, all of this information will be stored for as long as is necessary for the fulfilment of the stated purpose and in accordance with applicable laws, including the provisions of the Data Protection Act Chapter 11:12. Yes [] No []

Section A: Personal Profile (Please provide responses in the spaces provided)

- 1.1 Name of state university.....
- 1.2 Gender.....
- 1.3 Highest academic qualification.....
- 1.4 Professional qualification.....
- 1.5 Name of department.....
- 1.6 Number of years in the department.....
- 1.7 Number of times per year the department has been audited.....
- 1.8 Job position.....
- 1.9** Email address.....

Section B - H: Factors influencing the independence and performance of university internal audit function (IAF);

Instructions:

Kindly tick in appropriate box using the key below;

Key: Strongly Agree [5], Agree [4], Not Sure [3] Disagree [2], Strongly Disagree[1]

Section B: The following statements pertain to independence of the Internal Audit Function (IAF)

	Independence of the Internal Audit Function	5	4	3	2	1
1.	The Internal Audit (IA) Independence is a key driver of the IAF.					
2.	The IAF has sufficient financial resources to enable it to work efficiently and independently.					
3.	The IAF has unrestricted access to every department and all the information in the university.					
4.	The Chief Internal Auditor (CIA) reports directly to the Vice-Chancellor functionally and administratively.					
5.	The IAF has sufficient human resources to enable it to work effectively.					
6.	The position of the CIA on the university organogram enables him or her to act objectively.					
7.	The university website has a dedicated section with all the information about the IAF.					
8.	The IAF is free from university management interference when performing its duties.					
9.	The IAF is an autonomous budget centre in the university.					
10.	Internal auditors are the university management police dogs.					

Section C: The following statements pertain to objectivity of the IAF:

	Objectivity of Internal Audit	5	4	3	2	1
1.	IA objectivity is a key driver of IAF.					
2.	Internal auditors (IA) are sometimes assigned to review their own work.					
3.	IA is sometimes exposed to social pressure threats from university pressure groups.					
4.	The IA audits the work of the individual or department that makes decisions that directly affect his or her future employment opportunities and salary.					
5.	The university management is responsible for the appointment and remuneration of the Chief Internal Auditor (CIA).					
6.	The university is a multicultural/gender entity, and the IA has a bias towards auditee employees of his or her culture/gender.					
7.	IAs sometimes approach audit work with preconceived notions.					
8.	IAs act as facilitators of control self-assessment exercises, which they may be asked to review afterwards.					

9.	Internal auditors feel free to include any audit findings in their audit reports.						
10.	The CIA is financially motivated and happy with their salary grade.						

Section D: The following statements pertain to the Audit Committee relationship with the IA Unit:

	The Audit Committee relationship with IAF	5	4	3	2	1
1.	A functional audit committee has been established.					
2.	The AC is chaired by a non-executive director.					
3.	The CIA always provides reports directly to the audit committee.					
4.	The audit committee oversees the employment and remuneration decisions of the CIA.					
5.	CIA has unrestricted access to and meets regularly with the audit committee.					
6.	The CIA confirms the independence of the IAF to the AC through a meeting at least annually.					
7.	The AC is responsible for and approves the annual internal audit budget and resource plan.					
8.	The AC approves a timely, risk-based and agile internal audit plan.					
9.	The AC supports the IAF by making sure that the department is well-resourced (financially and staff complement) to enable it to carry out duties effectively.					
10.	CIA reports functionally to audit committee					

Section E: The following statements pertain to the legal mandate of the IAF and its Charter:

	The Internal Audit Charter	5	4	3	2	1
1.	University Act provides for the establishment, structure and operation of the IAF.					
2.	The university has a formal internal audit manual that outlines the scope and authority of the IAF and documents the standards, guidelines and procedures for the IAF.					
3.	The university has an internal audit charter (IAC) that complies with all aspects of the requirements of the IIA.					
4.	The IAC clearly spells out the duties of the CIA to ensure the independence and objectivity of the IAF.					
5.	The IAC is available to everyone either freely or by request and is subject to scrutiny by all staff members as to its appropriateness in terms of coverage and the mandate provided to internal audit.					
6.	The IAC clearly shows the position of the Internal Audit Unit (IAU) within the university organogram.					
7.	The structure of the IA department is clearly shown on the IAC.					
8.	The IAC gives the IAF the legal mandate to audit every key result area of the university.					

9.	The IAC clearly states that the CIA reports functionally to the AC and administratively to the Vice-Chancellor.					
10.	The IAC emphasises the value the governing body places on the independence of the IAF.					

Section F: The following statements describe the relationship between university management and the IAF:

	Management supports the IAF by...	5	4	3	2	1
1.	Placing value on and communicating the role of IAF to the university stakeholders.					
2.	Compensating the CIA on a level matching the value added by the IAF to the organisation.					
3.	Valuing and taking timely corrective action on audit findings and recommendations.					
4.	Including the IA plan in the university calendar.					
5.	Considering internal auditors as advisors to management on matters relating to internal controls and governance issues.					
6.	Facilitating and funding regular continuous professional development for internal auditors.					
7.	Promoting IA independence by not intervening in the IA processes.					
8.	Ensuring that the internal audit department has adequate financial resources required in order for it to carry out its duties.					
9.	Ensure that the IA unit has an adequate workforce to carry out its duties.					
10.	The Vice-Chancellor and top university management are responsible for the appointment of the Chief Internal Auditor (CIA)					

Section G: The following describes how the IAF has added value to the university.

	The IAF has added value by ensuring that...	5	4	3	2	1
1.	The internal controls are robust and functioning in terms of detecting and preventing fraudulent acts against the university.					
2.	Financial reporting is always accurate and up to date.					
3.	The residual risks affecting the functional and organisational units of the university are kept at manageable levels.					
4.	The positive risks are enhanced and capitalised on by the university.					
5.	The university complies with all the state laws and regulations.					
6.	Sound corporate governance principles are adhered to by university management.					
7.	All the pillars of Education 5.0 are being implemented in curriculum development and the teaching and learning processes of the university.					
8.	University strategic goals and objectives are met.					

9.	The university's internal quality assurance unit is fully functional to minimise the risk of poor service delivery.					
10.	The objectives for my department are achieved.					

Section H: The following statements pertain to the Internal Audit Quality (IAQ):

	The IA unit upholds the IAQ through...	5	4	3	2	1
1.	Taking into consideration the university's objectives and goals when planning audit programmes.					
2.	Formal follow-up and ensure that appropriate actions are taken regarding audit findings and recommendations.					
3.	Providing feedback during audits.					
4.	Providing timely reports.					
5.	Providing clear reports.					
6.	Providing valuable recommendations.					
7.	Providing accurate findings.					
8.	Maintaining and using a sufficient number of IA staff members.					
9.	Providing independent and objective service.					
10.	Use of qualified, experienced, and professional staff members.					

Thank you for your cooperation.

Appendix P: Interview guide

INTERVIEW GUIDE

INTERVIEW GUIDE ON THE INDEPENDENCE AND PERFORMANCE OF INTERNAL AUDIT FUNCTIONS WITHIN ZIMBABWEAN STATE UNIVERSITIES
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Dear Respondent,

The undersigned is a Doctor of Commerce student at Cape Peninsula University of Technology, where she is currently working on her study titled “*Independence, and Performance of Internal Audit Function in Zimbabwean state universities.*” This questionnaire has been sent out to all state universities in Zimbabwe. The researcher has been granted permission to collect research data from both the parent ministry and your institution. It will be greatly appreciated if you could answer the questions completely. You are rest assured that information obtained from this questionnaire will be handled carefully, confidentially and be used strictly for academic purposes only.

Grateful and Respectfully yours,

(Sgd.) Melania Chenjerai (Email:melaniachenjerai@gmail.com/220520224@mycput.ac.za)

CONSENT (please tick in appropriate box): I hereby consent to participate in this survey and to the collection and retention of my personal information for academic purposes. Furthermore, all of this information will be stored for as long as is necessary for the fulfilment of the stated purpose and in accordance with applicable laws, including the provisions of the Data Protection Act Chapter 11:12. Yes [] No []

INTERVIEW QUESTIONS

1. Is the IAF is recognized by the university council, senior management, and external auditors as an important component of governance? Explain.
2. Do you consider your internal audit department to be independent, and why?
3. Does management interfere in any way when the IAF performs its functions? Please explain.
4. How many members do you have in your IAU? Is the staff complement adequate?
5. For how long have you been in the IAU of this university, holding the position of CIA?
6. Are there any specific legal acts or documents that guide the IAU in Zimbabwean state universities?

7. Is the IAU a separate university budget centre? Does that position affect your operations in any way?
8. What percentage do you achieve of the planned audit activities on an annual basis?
9. Are audit findings useful and recommendations implemented?
10. Do you think the internal audit department has an impact on the performance of the university as a whole and in terms of the following:
 - Financial reporting
 - Operational efficiency
 - Teaching and Learning
 - Research and Innovation
 - Industrialisation?
11. Are there any areas that you feel you have restricted access to, and that might add value if the IAU was allowed access?
12. What is the position of the CIA on the organogram of the university, and how has that affected the independence of CIA?
13. What is the salary grade of the CIA, and is it commensurate with the value contributed by the CIA to the organisation? To what extent does the remuneration structure act as a motivator to the IAF?
14. How has your relationship or role played by the audit committee influenced the independence of the IAF?
15. Please explain the reporting structure that you follow.
16. Kindly send me the following by email;
 - a) Audit Committee Chairperson's name and email address
 - b) Internal Audit Charter
 - c) Internal Audit Plan
 - d) Internal Audit Department structure
17. How does the lack of political independence of state universities affect your independence as a department? Are you affected in any way by the fact that the President of the country who is politically elected is also the Chancellor of all state universities?

Thank you for your cooperation.