Investigating the impact of the combined assurance model in the management of risks in a selected municipality

NTN Rabambi

orcid.org/0000-0002-2862-1664

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Supervisor: Prof N Mouton

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Student number: 28280547

ABSTRACT

The need for corporate boards to disclose on the effectiveness of their risk management and internal control has made combined assurance a common phenomenon that yields better risk management. The effectiveness in risk management is perceived to emanate from the use of internal and external assurance providers to formulate a holistic assurance to the board of directors on all elements of risk management and internal control. The combined assurance model is one such model recommended by the King Codes that ensures adequate and effective risk management by implementing three lines of defence across the internal and external assurance providers. The problem is that while combined assurance is mandatory and regarded effective in South Africa, not many municipalities are realising the effectiveness of using the combined assurance model. Therefore, the need in this study is to investigate the impact of combined assurance models in managing risks by examining the impact of first line of defence, second line of defence and third line of defence on risk management. The aim is to ascertain the effectiveness of the assurance model in safeguarding organisations from risks. Using a case study approach, a single municipality in Ekurhuleni was selected to carry out a quantitative analysis to examine the views on combined assurance activities and functions within the organisation. A questionnaire was administered to all employees of the Ekurhuleni Municipality using the total population purposive sampling technique. It was found that the municipality has all three lines of defence in existence, and these lines of defence all have core and support functions that ensure a coordinated effort towards risk management. In addition, the respondents agreed that the first line of defence acts as process owners of risk management and management assurance. The second line of defence acts as overseers of risk in support of the first line of defence and to monitor and coordinate risk management efforts. The third line of defence is a group of external and internal independent assurance providers who provide assurance services for effective risk management. All three lines of defence were found to have a significant moderate linear relationship with effective risk management. It is recommended that municipalities should make use of assurance mapping, a single enterprise risk planning, alignment of assurance with critical risk exposure, a risk forum, top management support and clear separation of core and support functions of each line of defence.

Keywords: Combined assurance model, risk management, municipalities

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LIST OF ABBREVIATIONS

BIS	Bank for International Settlement
CA	Combined Assurance
CAE	Chief Audit Executive
CAF	Combined Assurance Forum
CAM	Combined Assurance Model
EAF	External Assurance Functions
ERA	Enterprise Risk Assessments
ERM	Enterprise Risk Management
EU	European Union
GDP	Growth Domestic Product
GRC	Governance, Risk and Compliance
IAF	Internal Audit Function
ICAEW	Institute of Chartered Accountants in England and Wales
IIA	Institute of Internal Auditors
IoDSA	Institute of Directors in South Africa
IPPF	International Professional Practice Framework
ISAE	International Standard on Assurance Engagements
ISQC	International Standard on Quality Control
KMO	Kaiser-Meyer-Olkin
NWU	North-West University
PWC	PricewaterhouseCoopers
SCM	Supply Chain Management
SA	South Africa

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Combined assurance is becoming a common concept that yields better risk management (PwC South Africa, 2016). Combined assurance is a relatively new phenomenon, but could well become a significant area of research owing the requirement for boards of directors to comment on the effectiveness of their risk management and internal control systems for all kinds of risks (Shortreed *et al*., 2012). The substantial risk management is believed to emanate from the combination of internal and external assurance providers, assurance realisation in the correct municipal areas, assurance attainment from the right resources and in every conceivable and lucrative way (Zhou, 2019:236). In a nutshell, combined assurance aims to provide holistic assurance to the board on the effectiveness of risk management and internal control systems by coordinating assurance activities from various sources of assurance. Therefore, the King codes recommended that the integrated combined assurance model must primarily assist the board of directors in assessing the adequacy and effectiveness of the internal control environment and assessing the integrity of the information used for reporting and decision-making. However, every organisation has a choice on the level of assurance that guarantees adequate risk appetite (Decaux & Sarens, 2015:59).

This sought to investigate the impact of combined assurance models to the risk management within a municipality context. The background to the study, problem statement and objectives are explained in this chapter.

1.2 BACKGROUND

Globally, organisations have traditionally used a multitude of assurance providers to help their boards fulfil their monitoring duties and apply effective governance practices such as legal departments, quality assurance, compliance, health and safety, corporate social responsibility and internal or external audits, to name but a few. As assurance providers perform assurance activities in isolation, auditees, management and the board can suffer from assurance fatigue and assurance gaps that lead to inefficient reporting to governing bodies (Sarens *et al*., 2012). By receiving multiple opinions, boards are not able to exercise their oversight role appropriately and lack coordination among these various assurance providers. Therefore, this creates the

need to bring many assurance providers together to perform assurance activities permitting for immediate rationalisation and efficiency gains. This led to the release of global standards by the Institute of Internal Auditors (IIA) for guidance and practice advisories on this matter and to ensure coordination of all assurance activities (IIA, 2009).

In reviewing the causes of the 2008 global financial crisis, many have pointed to risk management failures (Paape & Speklé, 2012). Baker (2009) argues that risks were either discovered too late or not adequately mitigated because of identification or assessment inefficiencies. Pirson and Turnbull (2011) explain that boards either lacked access to risk-related information to perform their oversight role properly or were unable to process the available risk-related information. According to Shortreed *et al.* (2012), inadequate functioning is rather explained as inadequacy of controls versus effectiveness of functioning. Numerous recommendations have been moving from the narrow perspective of assuring the effectiveness of internal controls to a broader perspective of assuring the effectiveness of risk management processes (Shortreed *et al*., 2012).

Whereas internal controls are part of risk management, they take an operational side of the business and not the strategic side of business, which is normally embedded in risk management processes. Hence the need for a combined assurance approach on both the effectiveness of risk management and internal control systems to improve governance effectiveness in the wake of the global crisis (Soh & Martinov-Bennie, 2011).

In South Africa, the King reports have been on the forefront of improving corporate governance standards. Combined assurance was introduced in 2009 through the King III code. Formally, the Institute of Directors in South Africa (IoD) defines combined assurance within King III as the process of "integrating and aligning assurance processes in a company to maximize risk and governance oversight and control efficiencies and optimize overall assurance to the audit and risk committee, considering the company's risk appetite" (IoD, 2009:50). The Institute of Directors (2009) specifically state that the King III Report, Principle 3.5, offers the combined assurance model as a practice of governance that helps improve the quality, covers assurance and improved coordination among assurance providers. South Africa's

institutions therefore need to pay attention to approaches of aligning control (assurance) validation, the right levels of comfort and efficiency. This approach is aimed at stakeholder comfort that assurance provided by the organisation can be relied on. South African municipalities, such as referred to in this study, are currently directed to possess a process of risk management and guarantee the proper management of risks.

Stakeholders and investors are also becoming increasingly aware of risks and are therefore demanding information on all the risks an organisation is facing and how those risks are being mitigated down to an appropriate level (ECIIA and FERMA, 2010). Therefore, South Africa's King III requests that organisations place a much stronger focus on risk management activities (IoD, 2009). By recognising that sustainability will become the imperative of the 21st century and that organisations must consider the expectations of a broader range of stakeholders, Principle 4.9 of King III states that boards will need to comment on the adequacy of the internal control system, in consideration of many kinds of risks, and receive assurance on the effectiveness of the risk management process and application of a combined assurance framework (IoD, 2009).

Within the South African public sector, the Public Sector Risk Management Framework for South Africa requires public institutions to adopt a process of risk management (The OAG, 2020). For government departments or agencies, as well as other public organisations such as municipalities to achieve customer objectives, they must detect uncertainties in their main strategic goals. Moloi (2017:308) states that to back the overall realisation of institutional objectives, government departments or agencies, as well as municipalities, must leverage risk control opportunities to deliver additional value. South Africa's current environment of macro-fiscal volatility as well as altering and growing regulatory distinction compel the institutional managers or administrators to enhance and adopt models or frameworks and processes of risk identification, management, measurement, monitoring and mitigation (Moloi, 2017:80).

Soh and Martinov-Bennie (2018:406) state that South Africa's public and private institutions have customarily hired assurance providers to assist their establishments by using and overseeing effective governance practices such as quality assurance, external and internal auditing, corporate social responsibility, safety and health as well

as compliance. Additionally, Dumay *et al.* (2017:480) state that, notwithstanding the practice of hiring assurance providers, the board of directors and management of such institutions, regardless of numerous suggestions and advocacy, stay in positions that never allow them to exercise the role of oversight properly. As such, the King Committee and Deloitte have recommended combined assurance as a governance practice for South Africa. Combined assurance emphasises collaboration between the internal and external assurance providers to ensure significant risk management in the organisation, assurance realisation in the institution's right areas, assurance obtainment from the right resources, and in the most lucrative way possible (Deloitte 2020).

In 2017, the City of Ekurhuleni Municipality adopted the combined assurance model as a strategy for risk mitigation. The municipality of the City of Ekurhuleni Metropolitan is a Category A municipality that covers Germiston to Nigel and Springs (The Local Government Handbook, 2020) and remains one of the most densely populated areas in South Africa with a larger economy and diversity (City of Ekurhuleni 2020). The City of Ekurhuleni Municipality has, for a long time, faced numerous risks, including insufficient funds to resident services, worsening infrastructure as well as a high rate of crime. As such, the management and boards of South African institutions and companies suffer from fatigue, assurance gaps as well as a practice that is resulting in incompetent government reportage when assurance providers undertake assurance activities (Decaux & Sarens, 2015:57).

Researchers such as Maroun (2017:330) maintain that the risk appetite of the institution determines the correct assurance quantities. Therefore, there is a need for South Africa's public institutions to pay attention to the alignment of assurance approaches against organisational efforts, control authentication, drive competence and the correct levels of comfort. This study therefore assesses the capacity of the municipality's combined assurance model to assist the City of Ekurhuleni's governance structures in improving risk management. The study determines whether the City of Ekurhuleni's combined assurance model amounts to a suitable mechanism the municipality's management and governance structures can rely on to lessen the gap in assurance and risk exhaustion, thereby providing an effective and efficient risk management framework.

1.3 PROBLEM STATEMENT

Several public institutions in South Africa have failed to generate risk-based standards that ensure attainment of organisational objectives and goals by consistently dealing with failure control and strategic positioning (Dmitrenko, 2017:90). The vast disparity in regional codes and requirements of governance have failed assurance providers to mitigate institutional risks appropriately. As such, the City of Ekurhuleni Municipality was unable to avoid the irregular outflow of R274 582 270 in the 2017/18 financial year because of contravention of supply chain management (SCM) regulations (Ekurhuleni, 2019:17). Additionally, the municipality lacks a proper records management system, and still faces contradictions in all its audit procedures, reported data, supporting evidence, material omissions and errors (Ekurhuleni, 2019:18). Furthermore, the municipality is failing to employ acceptable risk management measures and internal controls that guarantee credible monetary compliance and reporting with adequate internal control systems on financial compliance and reporting (Ekurhuleni, 2019). The problem is that while combined assurance is mandatory in South Africa, not many municipalities implementing it are realising its benefit. Consequently, the need in this study explores the impact of combined assurance to an entity's risk management.

1.4 THEORETICAL FRAMEWORK

This study is underpinned by the three lines of defence model developed in 2008-10 by the Federation of European Risk Management Associations (FERMA) and the European Confederation of Institutes of Internal Auditing (ECIIA) as a guideline for the 8th EU Directive Art (FERMA, 2010). The model provides the board and the audit committee with a simple guidance that shows together the responsibilities for risk management, internal control and internal audit.

Figures 1 and 2 below explain the three lines of defence and how these functions and activities relate to each other.

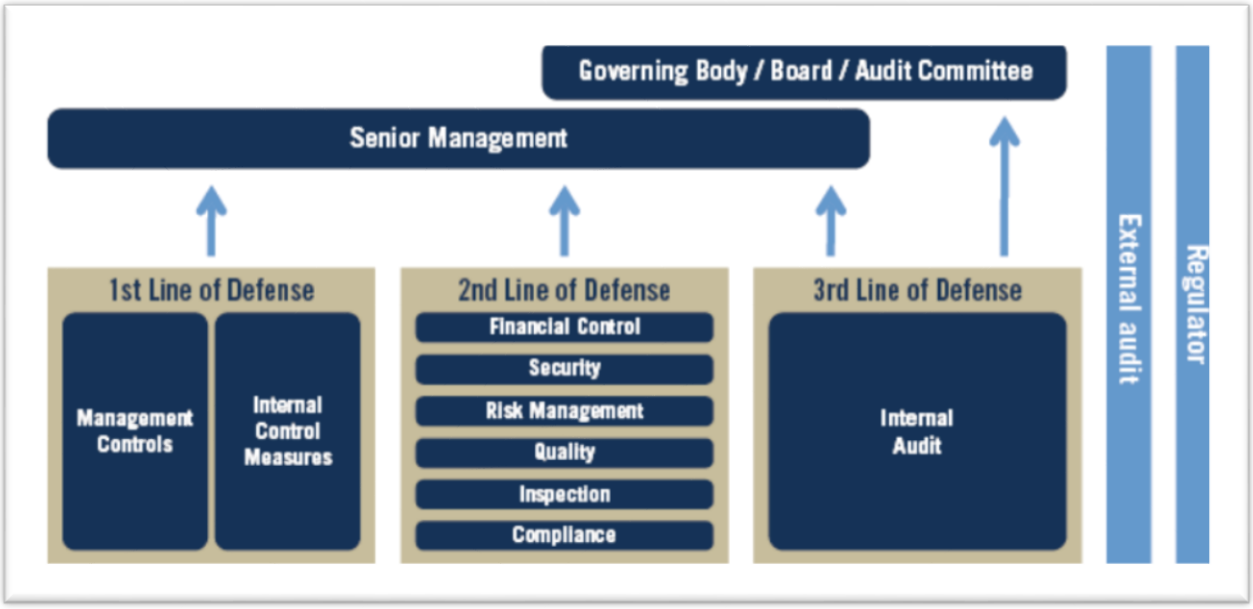

Figure 1: Three lines within a risk management combined assurance environment

Source: EU (2015)

Figure 2: Three lines of defence model

Source: Takuva (2017)

This framework was designed to help organisations clearly identify the roles and responsibilities of the business units; practice ongoing risk management; and sustain risk management activities. When applied properly, the three lines of defence create dialogue and analysis that prevent companies from overlooking risk factors that could ultimately cause financial disaster; as well as allow them to be proactive in how they manage risk within the organisation. (Takuva, 2017)

These risks have typically not benefited from the level of oversight afforded to financial risks such as credit, market, investment, and liquidity following the financial crisis, and are very quickly becoming top-of-mind for these institutions. The oversight will help protect the business in good and in bad times, while giving the board and senior management a clear line of sight into how the institution is managing these risks and which emerging risks are on the horizon. However, there is a need to review the lack of a legacy risk management approach to build upon, the siloed organisational structures or the organisationally entangled nature of risk management, the overarching cost efficiency concerns, the difficulty of ensuring an independent oversight body can add value and generate insights for some specialised risks, and the difficulty to acquire the scarce talent to understand some of these risks. (EU, 2015).

Combined assurance and the *three lines of defence* model of risk management and control functions are frequently described as comprising three lines of defence, each with support and core functions (Daugherty & Anderson, 2012). The IIA (2013:4) states that: in a perfect world, perhaps only one line of defence would be needed to assure effective risk management and internal control systems. In the real world, however, a single line of defence can prove inadequate. Moreover, KPMG (2007:15) argues that “having in place a strong set of defences is crucial, but equally important is the need to coordinate these activities”.

All three lines play a role in the governance framework by helping organisations manage risk. In addition to their respective activities in risk management, the three lines of defence also provide monitoring and assurance activities that give comfort to senior management, boards and boards’ committees that risk and control processes operate as intended. However, the accountability framework must be accurately defined so that each line of defence understands its responsibilities; otherwise, duplication and assurance gaps will persist (Takuva, 2017).

Coordination among the three lines of defence is the ultimate objective of combined assurance, with each line of defence playing a role in ensuring that risks are efficiently and effectively managed and monitored, as required by the board and executives (Sarens *et al*., 2012). Accordingly, the three lines of defence model can serve as the starting point for improving assurance provider coordination (IIA UK & Ireland, 2010).

The first line of defence usually groups together the functions that own and manage risks daily. They are responsible for the identification, assessment and mitigation of risks. As a first line, they also provide management assurance through risk control self-assessments. Ruud (2003:77) describes control risk self-assessment as "one method for providing assurance by putting more emphasis on self-evaluation on the part of managers and employees as process-owners".

The second line of defence comprises all the functions that oversee the risks such as risk management, compliance, health and safety, environmental and/or quality functions, to name but a few. These functions help the first line implement the policies and procedures set by the board after it has defined the organisation's strategic direction and risk appetite by proposing frameworks and guidance. As a matter of fact, the second line of defence provides assurance activities by monitoring the first line of defence and the way it has implemented effective risk management practices. It is essential to note that the first and second lines of defence provide non-audit assurance activities (Takuva, 2017).

Finally, the third line of defence comprises all independent assurance providers required to help the board fulfil its oversight responsibilities. The internal audit function (IAF) is probably the best-known independent assurance provider. Particularly, the IAF provides independent assurance activities that the risk management system is effective, and significant risks are being managed appropriately through an effective internal control system (IIA, 2012). Other assurance providers such as the external auditor, specialist reviews, external credit agencies and/or regulators also belong to the third line. These functions provide independent assurance services to the board if the IAF lacks competence and skills or if the risk area falls beyond the risk-based internal audit plan (IIA, 2010).

Kaplan and Mikes (2012) recognise three risk categories that require different approaches for managing risks: preventable, strategic and external risks. The objective of the risk management system for preventable risks is to avoid and eliminate the occurrence in a cost-effective way (Kaplan & Mikes, 2012). Therefore, assurance activities must demonstrate the effectiveness of the risk management system to avoid and eliminate occurrence cost-effectively. On the other hand, the objective of the risk management system for strategic risks is to reduce likelihood and impact in a cost-effective way; whereas, for external risks, it is to reduce the impact cost-effectively if the risk event occurs (Kaplan & Mikes, 2012). As a result, assurance activities for these two risks must ensure that the risk management system is built adequately for the purpose of reducing likelihood and impact cost-effectively. As a matter of fact, notwithstanding the risk, some assurance activities can be provided by using assurance providers from different lines of defence.

1.5 SIGNIFICANCE OF THE STUDY

For the administrators of the City of Ekurhuleni Municipality and other municipalities, the study assists them in better understanding the combined assurance model and the extent of benefits that can be derived from achieving effective risk management. For both the internal and external assurance providers, the study identifies coordination points and approaches to implementing institutional activities. This study highlights the current position of combined assurance and the implementation of the combined assurance model, and offers justifications for the wide implementing of the model from the learned lessons. It also provides implementable direction on best practices for combined assurance model implementation. For researchers and academics, the study is explorative and adds to general knowledge on the concept of combined assurance, sets out the influential positions on combined assurance model implementation and the effect of the model on risk management.

1.6 RESEARCH OBJECTIVES AND QUESTIONS

This study raises the research objectives and questions below to define the impact of the combined assurance model in the management of risks in an organisation**.**

1.6.1 Research objectives

- To examine the extent of effective risk management activities by first line of defence to combined assurance.

- To assess the extent of effective risk management activities by second line of defence to combined assurance.
- To examine the extent of effective risk management activities by third line of defence to combined assurance.
- To recommend ways of improving combined assurance structures to improve risk management.

1.6.2 Research questions and hypothesis

The main question is: What is the impact of a combined assurance model on a municipality's risk management?

The following hypotheses are used to answer the main research question:

- How does the combined assurance first level of defence influence the level of risk management?
- How does the combined assurance second level of defence influence the level of risk management?
- How does the combined assurance third level of defence influence the level of risk management?
- What are the ways of improving combined assurance structures to achieve more effective risk management?

1.7 RESEARCH METHOD

1.7.1 Literature review

A review of the combined assurance theory and model will be conducted in Chapter 2, to source the theoretical base for the study. The sources consulted include academic journals, internet sources such as Google Scholar and ResearchGate, the wide array of university databases, and relevant textbooks.

1.7.2 Research respondents

The respondents consist of critical assurance providers in the Ekurhuleni Metropolitan Municipality as well as the audit committee. Employees of Ekurhuleni Metropolitan Municipality, such as the senior and executive-level managers (referred to as management) are included, because they design control mechanisms for implementation of the combined assurance model. The respondents also include the

specialist function employees (referred to as internal assurance providers) because they analyse the risks and primarily implement the combined assurance model as well as the internal auditors because they are the most independent internal assurances providers reporting to the institution's audit committee. Since the study used quantitative research, it has adopted probability sampling to ensure that the chosen sample is representative of the total population. The study employed the simple random sampling technique because the method guarantees that every member of the total population has an equal chance of forming part of the study sample. As such, questionnaires were sent to all the members of the highlighted risk groups, totalling 150.

1.7.3 Research procedure

This study uses a quantitative approach to measure the impact of CAM on risk management. Data for this study was collected with the use of a self-compiled questionnaire. The respondents responded through email to the researcher. The researcher obtained consent from the municipality's Policy and Research department to contact respondents. After completing and submitting the questionnaires, the information was stored in an encrypted folder that can only be accessed by the researcher. The confidentiality of information provided has been assured to all participants. Data analysis means the process of applying systematically logical and/or statistical techniques to illustrate and describe, evaluate, recap and condense collected data. The study used the SAS computer software for the analysis. Babbie *et al.* (2018:23) state that SAS is a software that offers innovative statistical data analysis, an enormous collection of machine-learning algorithms, open-source extensibility, text analysis, integration with massive data as well as the seamless arrangement into needed applications.

According to Creswell and Poth (2017:34), such software allows the cleaning, coding and entry of data, eases the interpretation of output, as well as the selection of appropriate test data. The study will also use charts, including figures and tables, to present the findings. Upon analysis of the data, the study will draw a summary and offer the general outcome of the study. There will be a performance of quality assessment to reflect the validity and reliability of the research instrument, which is the questionnaire.

1.8 ETHICAL CONSIDERATIONS

To ensure that we keep up with proper ethical standards, the following was be done:

- Written consent obtained from the management of Ekurhuleni Metropolitan Municipality before the study is conducted.
- Confidentiality of all the research data is guaranteed through anonymous questionnaires. Respondents did not enter either their name or that of their business on the questionnaire, thereby rendering the tracking of data back to a specific participant impossible.
- All communication was conducted with sincerity and transparency.
- Scrupulous avoidance of misleading information or biased findings was ensured.
- The appropriate non-offensive and non-discriminating language was used.
- Only voluntary respondents were used.
- Acknowledgement of authors' works were made by means of the Harvard referencing method.
- Objectivity will always be maintained.
- Ensure that there is compliance with COVID-19 protocols at all times.

1.9 KEY CONCEPTS USED IN THIS STUDY

The main concepts used in this study include:

Assurance: The diligent application of mind to evidence, resulting in a statement or declaration concerning an identified subject matter or subject matter information, and that is made to enhance confidence in that subject matter or subject matter information (The Institute of Internal Auditors 2020).

Assurance providers: This group consists of internal auditors, internal forensic fraud examiners and auditors, safety and process assessors, and statutory actuaries. Independent external assurance service providers such as external auditors; other external assurance providers such as sustainability and environmental auditors, external actuaries, external forensic fraud examiners and auditors; and regulatory inspectors (The Institute of Internal Auditors, 2020).

Combined assurance is the process of integrating and aligning assurance processes in a company to maximise risk and governance oversight and control efficiencies and optimise overall assurance to the audit and risk committee, considering the company's risk appetite (Deloitte, 2020).

Corporate governance is the framework of rules and practices by which a board of directors ensures accountability, fairness and transparency in a company's relationship with its stakeholders (financiers, customers, management, employees, government and the community) (Deloitte, 2020).

Risk refers to a probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that can be avoided through pre-emptive actions (The Institute of Internal Auditors, 2020).

Risk assessment evaluates an organisation's exposure to uncertain events that could impact its day-to-day operations and estimates the damage those events could have on an organisation's revenue and reputation (The Institute of Internal Auditors, 2020).

Risk evaluation compares the estimated risks against risk criteria that the organisation has already established. Risk criteria can include associated costs and benefits, socio-economic factors, legal requirements and system malfunctions.

Risk treatment is the implementation of policies and procedures that will help avoid or minimise risks. Risk treatment also extends to risk transfer and risk financing (The Institute of Internal Auditors, 2020).

Risk management is the process of identifying, assessing and controlling threats to an organisation's capital and earnings. These threats, or risks, could stem from a wide variety of sources, including financial uncertainty, legal liabilities, strategic management errors, accidents and natural disasters (The Institute of Internal Auditors, 2020).

1.10 DELIMITATION OF THIS STUDY

The study focused on only South Africa's City of Ekurhuleni Metropolitan Municipality. The events from 2010 to 2020 are considered for the purposes of this study. Any changes to legislation within 2021 were not part of the study.

1.11 STRUCTURE OF THE MINI-DISSERTATION

This dissertation is arranged in five chapters.

Chapter 1: Introduction

The chapter offers an introduction and background on the combined assurance model and its impact on the effectiveness/performance of organisations. This chapter also covers the research questions and objectives as well as the theoretical framework for the study.

Chapter 2: A literature review

This chapter covers current literature on combined assurance and the impact of the combined assurance model on the effectiveness or performance of organisations.

Chapter 3: Research methodology and methods

The chapter covers the methodology of research, the population as well as the methods and instruments of data collection. The chapter also covers the data approach and analysis.

Chapter 4: Research results and discussion of findings

The chapter contains data analysis, results and the discussion of findings on the combined assurance model and its impact on the City of Ekurhuleni Metropolitan Municipality.

Chapter 5: Conclusions and recommendations

This chapter comprises a summary of the findings on the combined assurance model and its impact on the City of Ekurhuleni Metropolitan Municipality. The chapter also consists of research suggestions on the implementation of the combined assurance model and further research.

1.12 CHAPTER SUMMARY

This chapter provided the background, study problem, questions and objectives as well as the significance of the study. The following chapter covers a review of the current literature relevant to the study.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The chapter examines contemporary literature on the impact of the combined assurance model in the management of risks in an organisation. This chapter focuses on the literature on prevailing combined assurance, combined assurance models, risk management, the elimination of duplication of efforts, and improvement of quality information in organisations.

2.2 DEFINITIONS AND CONTEXTUALISATION OF KEY CONCEPTS

2.2.1 Risk management

Hopkin (2018:15) states that risk means the likelihood of loss and/or some not favourable consequence associated with the undertaken or projected action. Whereas "indecision" means not conversant about what will occur in the future, the higher the uncertainty, the higher the danger or risk. According to Hubbard (2020:8), risk management encompasses the optimisation of anticipated revenues subject to the tolerance of risk and involved risks. Almeida *et al.* (2017:4215) state that in the business sector, risk management means the procedure of monitoring, managing and identifying likely risks minimising their adverse effect on the organisation. The leading examples of potential risks are breaches of security, loss of data, cyber-attacks, natural disasters and system failures. Therefore, the process of effective risk management helps identify the risks posing the leading threats to the organisation as well as develop guidelines for risk handling (Cole *et al.,* 2017:1970).

The terms enterprise-wide risk management or enterprise risk management (ERM) refers to the process the board of directors, the personnel, and the management of an organisation employ in their strategy to identify the potential actions that might impact the entity, handle risk within the risk appetite, and also offer reasonable assurances for the success of the entity's objectives (Florio & Leoni, 2017:57). The process of risk management has three main parts: Risk analysis and assessment, risk treatment, as well as risk evaluation (Lyons & Wright, 2017:21).

Concerning assurance, the IIA's International Standards for the Professional Practice of Internal Auditing (Standards), 2120-Risk Management provides that besides contributing to the enhancement of the processes of risk management, the activities of internal audit have to assess effectiveness (Wright, 2018:32). This means that the

firm's internal audit activities must determine whether the processes of risk management are effectively included in the firm's objectives. It also means aligning and supporting the mission of the organisation; identifying and assessing vital risks; selection of fitting risk reactions aligning risk appetite of the organisation with the risks; and capturing and communicating the applicable risk data across the firm in a judicious manner, enabling the management, firm board, and staff to undertake their tasks. When held together, the outcomes of the above engagements provide some appreciation of the effectiveness in the firm's processes of risk management. Monitoring of the processes of risk management is by way of distinct evaluations, ongoing management happenings or both (IIA, 2020).

From the literature above, internal auditors are responsible for determining the establishment and effectiveness of the firm's risk management processes, mainly whether the objectives of the firm align and support the firm's mission.

2.2.2 Combined assurance

2.2.2.1 Nature of combined assurance

According to Azzali and Mazza (2018:84), combined assurance entails that the company's external and internal providers of assurance work closely together to guarantee the assurance accomplishment in the right firm regions, including getting from the right the resources for the needed assurance in the utmost cost-effective way. Risk management remains the foundation for combined assurance processes. The IoDSA (2020) contends that according to South Africa's King III (King Code on Governance) 2009, combined assurance involves alignment and integration of assurance procedures in a firm to control the efficiencies, exploit risk governance and oversight and even optimise overall assurance to the firm's audit and risk committee as well as risk appetite. Kurnia and Yulian (2017:41) contend that combined assurance, therefore, optimises and incorporates assurance functions and services so that, when taken generally, the functions permit a real control setting, back the honesty of data employed for the firm's inside decision-making, and back the outside reports' integrity.

Ahmed Haji and Anifowose (2016:920) stress that combined assurance aims at optimising the coverage of assurance from the firm's providers of internal and external assurance as well as management. The practice of combined assurance ensures

adequate resolution of the firm's vital risks. Both Simnett *et al*. (2016:281) and Zhou *et al.* (2019:238) insist that in combined assurance, the organisation's audit committee or management must communicate their decisions. These decisions must also be based on reliable and reported data, demarcating reliance on both internal and external assurance as well as effectiveness in risk administration, internal processes and controls.

Decaux and Sarens (2015:23) and Masegare (2018:130) therefore indicate six elements for measuring the firm's readiness for combined assurance:

- whether the firm has established a complete framework for risk management;
- whether the firm and staff are combined assurance aware;
- whether the firm identifies the lead;
- whether the firm has developed an assurance plea;
- whether the firm has created a map of assurance providers and assurance doings; and
- whether the firm reports its findings on combined assurance.

According to Deloitte (2018:4), a majority of the combined assurance efforts across the globe are either for rolling up the current assurance reports or focusing on mapping to rationalise and identify each activity of assurance. It is such flaws that are burdensome and time-consuming because they focus on evaluating individual controls, substantial compliance, lack consideration of the bigger picture and the risk management mechanisms. The activities, therefore, generate no awareness of the risks the firm's executive and board of directors want or even the correct assurance levels on the effectiveness of risk management. For this study, this finding indicates that there is a need for firms/organisations to consider a comprehensive assessment of the firm's risks.

Huibers (2015:5) identifies the factors affecting the adoption of combined assurance, including the absence of some globally adopted definition on the combined assurance concept and its implementation. The lack of a mutual definition includes the absence

of diverse and possible approaches to coordinating combining assurance. The requirements and codes of governance vary by nation; no overarching international direction prevails on how the company can guarantee adequate supervision by the firm's supervisory committees and board. In South Africa, King III (2009) adopts the apply-or-explain approach and is not a statutory code founded on practices and principles. Then, in 2016, the King IV report was issued, which required that all organisations would adopt and apply the principle.

Combined assurance (CA) "is the process of internal, and potentially external parties, working together and combine activities to reach the goal of communicating information to management. To implement combined assurance, conformance with the Standards; communication and coordination; reporting; and second line of defence functions" must be evaluated (IIA, 2016). The process provides a holistic assessment to the board of directors of the effectiveness of risk management and internal control systems by coordinating assurance activities from various sources of assurance (Decaux & Sarens, 2015: 57). For example, the internal audit (IAF) function, compliance, risk management or internal control are perform by different functions, which should be coordinated in order to avoid unnecessary duplication of efforts, gaps in risks coverage and to ensure that all significant risks are addressed appropriately. Because regulations of different internal control functions often fail to set clear boundaries for their activities, it can happen that several actors test the same control, or that there are difficulties to test them all. Consequently, the need for the CAM to solve these problems exists. However, implementing CA, particularly combining hierarchical lines of defence, will reduce the independence of each control function (IIA, 2013).

2.3 LEGAL FRAMEWORK

2.3.1 The IIA standards

The standards form part of the International Professional Practices Framework (IPPF) by the Institute of Internal Auditors (IIA 2020). The standards provide internal audit experts with an authoritative, recommended and mandated guideline. The Practice Advisories relating to Standard 2050 offer relevant and additional data on assurance coordination and consultation. Practice Advisory 2050-1 endorses that the CAE to oversee regularly evaluating the internal-external auditor coordination. Practice

Advisory 2050-2 supports the streamlined and all-inclusive interpretation of risk controls and monitoring by assurance coverage mapping against the identified risks. Practice Advisory 2050-3 contends that provided there are established safeguards, internal auditors can depend on and/or employ other providers of external or internal assurance in governance, management of risk, as well as control assurance. The standards, therefore, support the combined assurance philosophy (The Institute of Internal Auditors 2020).

Table 1: The IIA standards related to combined assurance

IIA Standard	Details
Standard 1000 - purpose, authority, and responsibility	There must be a clear and formal definition of authority, purpose and responsibility of internal auditing activities in the firm's internal audit charter in line with the internal auditing standards, code of ethics and definition.
Standard 2050 - coordination	To minimise efforts and duplication, and guarantee proper attention, the organisation's chief audit executive must share data and even coordinate operations with consulting services, external and internal assurance providers.
Standard 2060 - reporting to senior management and the board	The chief audit executive has to report to the board and senior management periodically. The reporting has to include essential control issues and risk exposures, including issues of governance, fraud risks and other concerns the board and senior management request or need.
Standard 2100 - nature of work	The activities of internal auditing have to contribute and evaluate improvements in risk management, control processes and governance using a disciplined and systematic approach.

Source: Huibers (2015:8)

2.3.2 South Africa's King requirements

2.3.2.1 The King III

Moloi (2017b:80) states that King III, Principle 3.5, introduces the concept of combined assurance to South Africa as the recommended governance practice. The recommendation arises out of general considerations on the advancement of assurance coverage and quality through better coordination of assurance providers. South Africa's King IV modifies the concept of combined assurance, indicating that the firm's model of combined assurance has to optimise and incorporate all assurance services and functions. In its entirety, the assurance services and functions permit some functional environment of control and data integrity that the firm's management, committees and board used in making decisions as well as support the integrity of the outside reports (Surty et al. 2018:2).

Although the King IV recommendations do not offer the design of the combined assurance model, the recommendations permit for the governing body of the firm to employ discretion in developing the model's design (The Institute of Directors in Southern Africa 2016). In realising combined assurance, King III requires firms to depend on management's internal and external auditors' expertise and assurances because they are the role-players constituting the lines of defence that solve organisational risks.

2.3.2.2 The King IV (Code on Corporate Governance)

In 2016, King IV (Code on Corporate Governance) replaced King III because of the growth in business in South Africa and the principles of decent commercial governance. King IV introduces more defence lines as an additional measure for protecting the firm from eventual risks and identifying more adverse risks, in consolidating the previous 75 principles of governance into 16 concise outcomes or 17 if institutional investors are considered. In the efforts to disregard the 'box-tick' approach or compliance governance, King IV distinguishes between recommended practices and principles and the ways they can be employed to accomplish sustainable results (Esser & Delport, 2018:382). In forgoing the old-style governance approaches, the major King IV shift is better inclusion of stakeholders in business decision-making by magnifying and broadening the meaning of good business citizenship as part of the corporate model (Deloitte, 2020).

The Institute of Directors in Southern Africa (2016) insists that as part of the matrix of combined assurance, there has to be consideration of firm functions, including:

1) Firm expert functions that facilitate and oversee management and compliance of risk;

2) External assurance providers such as information technology auditors, auditors of sustainability and the environment, external actuaries, forensic con examiners and auditors; and

3) Regulatory agencies, which offer better monitoring and oversight.

PWC South Africa (2019) and Deloitte (2020) state that in its entirety, the King IV combined assurance model integrates and optimises assurance services and functions to permit an operative control environment, back data truthfulness, and external report integrity (Ferguson 2019:179).

2.4 COMBINED ASSURANCE MODELS

In an effort to understand the City of Ekurhuleni Municipality's combined assurance model, it is necessary to understand the significant features and lines of defence in every combined assurance model. Combined assurance models categorise the risk scenery into types of risk with a supposedly positive or negative effect on the capacity of a firm or internal assurance providers to realise the intended approach, protect and/or create value (PWC South Africa 2019). Combined assurance models frame and/or develop sound strategies for risk management and control as well as assurance range. Every combined assurance model has defence lines that assurance providers assess to ascertain the element that needs guarding.

The four lines of defence are:

- controls, systems and people;
- the risk management and compliance function;
- internal auditing function; and
- sovereign external assurances (The Institute of Directors in Southern Africa 2016).

BIS (2016) states that the first defence line groups the functions of everyday risk management; this includes risk assessment, identification and mitigation. This defence line is similarly in charge of offering firm management assurances using self-assessments on control of risk. The second defence line focuses on functions of risk supervision, which, among others, include risk management, risk compliance, environment and safety functions, health and quality. After detailing the firm's risk appetite and strategic direction, through projected frameworks and guidance, it is the functions above that help the first defence line in the procedure and policy implementation. Decaux and Sarens (2015:56) state that the first and second defence lines, therefore, offer the firm non-audit assurance activities.

According to the ICAEW (2020), the third defence line covers all sovereign assurance providers that assist the firm's board in achieving the oversight responsibilities. The IIA (2020) cites the internal audit function (IAF) as a famous international and independent assurance provider that guarantees the effectiveness of a firm's risk management system and establishment of appropriate and essential risk management through functioning internal control systems. The fourth defence line is the other assurance providers, including the professional reviews, outside credit agencies, auditors and/or regulators. It is these functions that provide independent assurance services to the firm board where the sovereign assurance providers lack competences and skills; or where the risk is beyond the internal audit's risk-centred plans (IIA 2020).

Implementing a combined assurance model progressively increases the firm's assurance over the four defence lines. The Institute of Internal Auditors (2020) states that combined assurance has to be centred around risk identification, assurance reportage and achievement by the company board using audit committees. ICAEW (2020) states that because all the defence lines play some part in the company governance framework by assisting the firm's risk management, it is vital for firms to initiate strong collaboration and defence activities in every defence line.

The defence lines also provide the firm with monitoring and assurance activities, comfort to the firm management, committees and board of boards. PwC South Africa (2019) insists that to avoid duplication of assurance gaps or efforts, the chosen combined assurance model must define activities in every defence line accurately.

The eventual intention of combined assurance models is coordination in all the defence lines, with each defence line ensuring effective and efficient risk monitoring and management by the firm's board and executives. The Institute of Chartered Accountants in England and Wales (ICAEW) states that combined assurance models serve as the initial points of refining assurance provider coordination (ICAEW 2020).

2.4.1 Prominent combined assurance models

2.4.1.1 The King III combined assurance model

The King III combined assurance (CA) model below entails identifying the firm's external and internal assurance providers such as line managers, professional managers who have specific assurance tasks, safety and health managers, internal audit managers, risk management, and outside independent assurance providers such as a firm's tax consultants, actuaries and auditors. The model also insists on mapping the defined assurances to the principal risks of the firm. There is an alignment of assurances in the model to the most appropriate parties to eliminate redundant duplication as well as optimise the whole process of assurance. Simultaneously, the firm retains overlaps for extra security where needed.

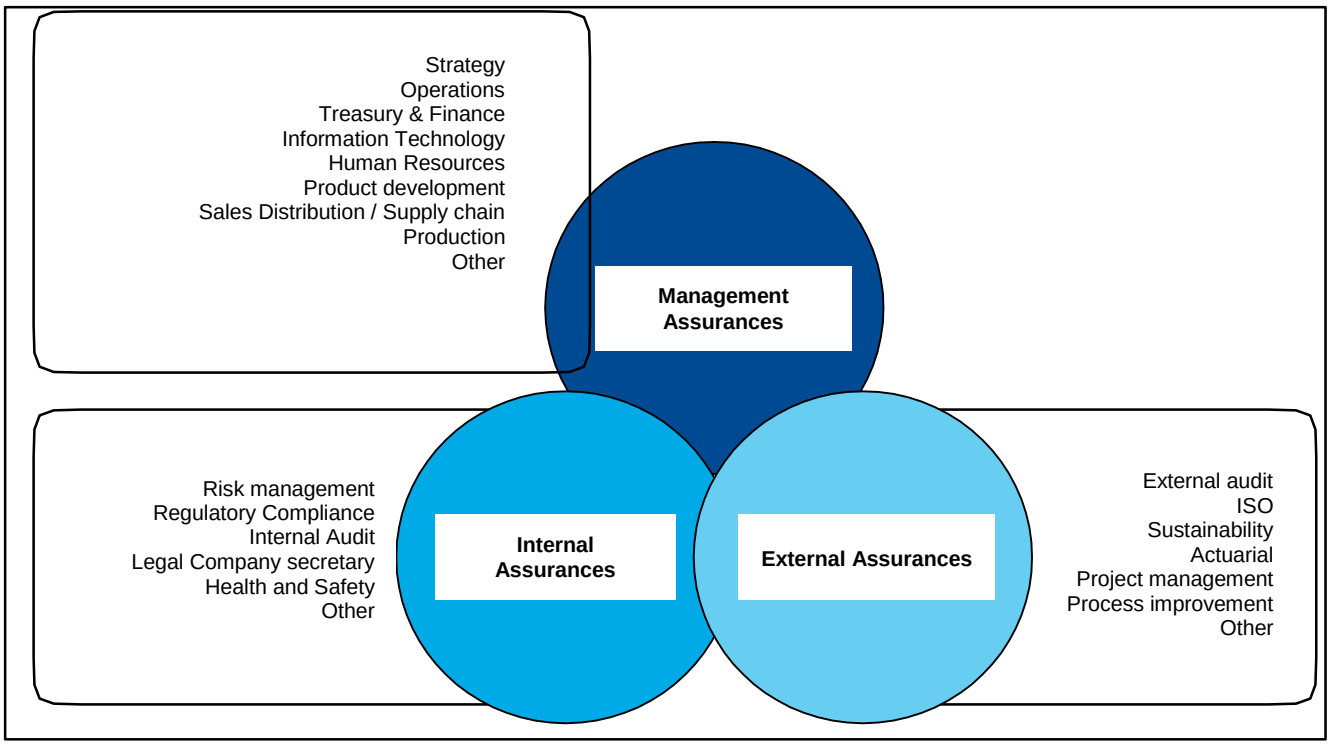

Figure 3: King III combined assurance model

Source: Institute of Directors (2009)

The CA model above helps to highlight the gaps in assurance (blind spots) so that the firm's board may request or plan for additional assurances where fitting. The last step in this CA model is to agree on the standardised measures for application. The intention is to eliminate misunderstandings and confusion by merging several jargon glossaries in the firm to produce a shared language of assurance. For purposes of reference, it is documented in the firm's definitions and policies so that providers of assurance (both internal and external) stay on track, whereas new individuals are brought in fast.

2.4.1.2 The Bank for International Settlement (BIS) combined assurance model

Setters of the international financial institution standards have recently appealed for a robust interaction between organs' functions and supervisors to enhance dialogue with senior management and the board on risk governance, including the advancement of the institution's framework on risk appetite and risk culture assessment (BIS 2016). The four lines of defence model above is intended to address precisely the 'deficiency' above by passing on specific roles to the banking supervisors and external auditors

concerning designing internal control systems. The justification is that although these parties are outside the boundaries of the organisation, they are a vital component of governance and assurance systems (BIS 2016).

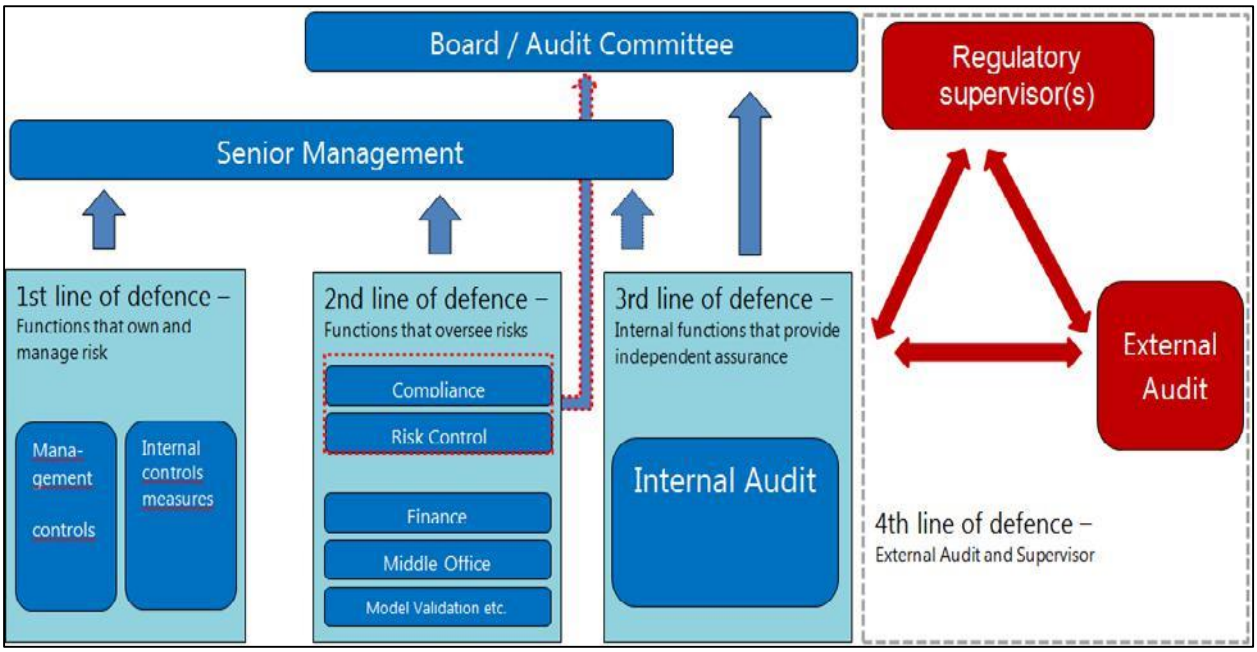

Figure 4: BIS combined assurance model

Source: BIS (2016)

In the model above, communication entails reducing or eliminating asymmetric data in the involved parties, provided data *treatment* is intended to make more effective the risk control systems. In most circumstances, imposing extra disclosure necessities may prove counter-productive where it occasions the parties in the fourth defence line to change conduct in a hostile manner. Such practice aggravates the moral hazard problem to the disadvantage of internal control system effectiveness. Increasing data amount is not good by itself, because it may result in ineffectiveness and inefficient systems of control. To protect confidential information, the instructions set in the CA model must categorise information and indicate the intended recipient, the measures for document and record obtainment as well as the instructions for restricting the issue of confidential and exempt supervisory data (Donnelly 2019:23).

2.4.1.3 The AngloGold Ashanti combined assurance model

The combined assurance model of AngloGold Ashanti is both a bottom-up and top-down approach, rolled out and designed to offer assurance and adequate

management of both business and strategic operational risk. The model uses the coordination of assurance efforts of firm management, as well as external and internal assurance providers. Bottom-up CA entails a twice-a-year review of particular sites following the risk-centred approach. The last part of the review window focuses on the technical features and examines the viable business aspects (AngloGold Ashanti, 2020).

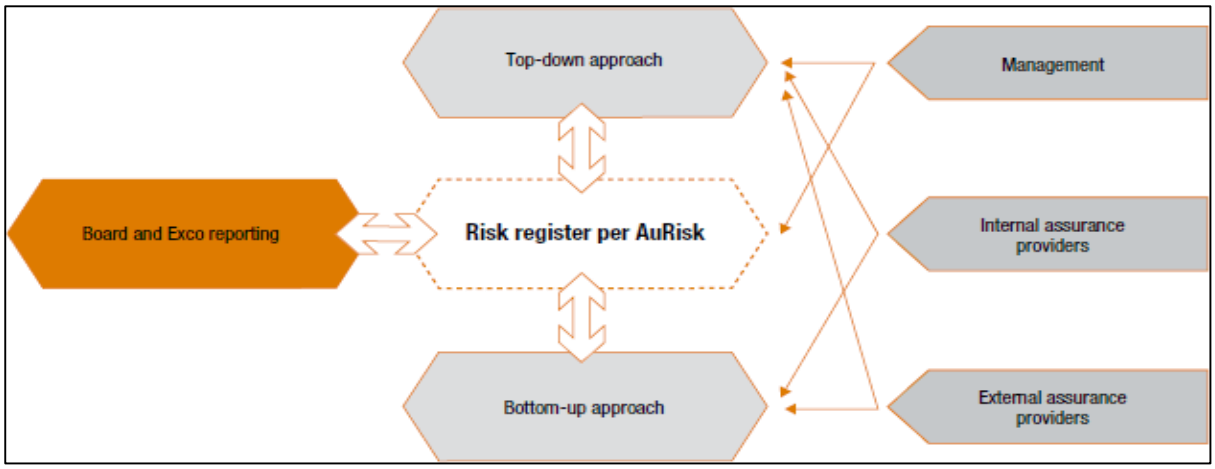

Figure 5: AngloGold Ashanti combined assurance model

Source: AngloGold Ashanti (2020)

The top-down component of AngloGold Ashanti's CA model focuses on group-tactical objectives as well as the risks that impact objective achievement. The component identifies the risk owners, providers of assurance and control strategies within the defence lines. Assurance from the providers of measured assurance is plotted and consolidated against the pertinent risk and connected control strategies to provide the firm management and board with some consolidated opinion on strategic risk management (AngloGold Ashanti 2020). The CA model's bottom-up element strengthens the firm's process of risk management by utilising the audit protocols as well as the skills of the harmonised multi-disciplinary crews to assess the risks of every operation, and validate the risks of every process as recorded in the risk register. Every review examines risk completeness, as well as the effectiveness and accuracy of the process of risk management (AngloGold Ashanti 2020).

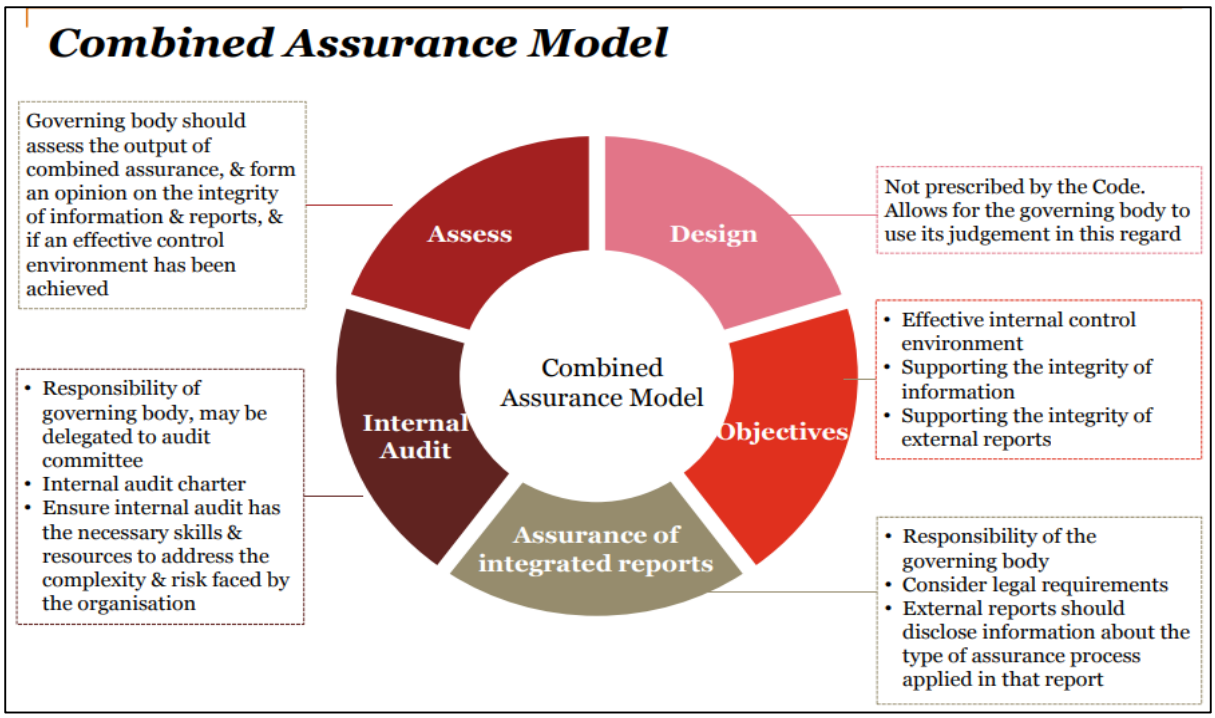

Figure 6: The combined assurance model

Source: PwC South Africa (2019)

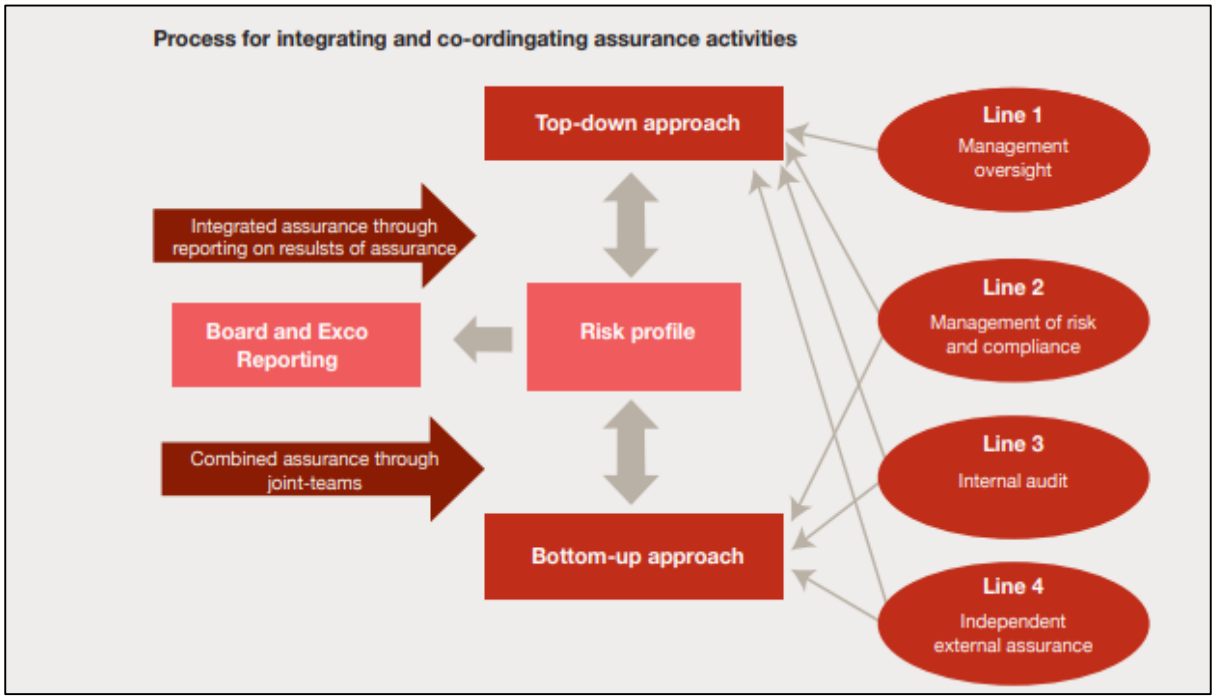

Figure 7: The PwC combined assurance model

Source: PwC South Africa (2015)

For PricewaterhouseCoopers (PwC), combined assurance has to be founded on acknowledged risks as well as the way of achieving and reporting assurance to the board of directors using the firm's audit committee. The audit committee of the firm must guarantee that the application of the combined assurance model is intended to provide collaborative approaches to all activities of assurance. PwC's dynamic and flexible model inspires the firm's board to have a broader perspective on resilience and risk as well as follow the future of the approach in dealing with risk by displaying how they assess the effect of unknown and known risk to the strategy of the company. To expose the opportunities and risks that otherwise could be unknown, it must be part of the board's agendas (PwC South Africa, 2019). PwC's combined assurance model categorises the landscape of risk into risk types with a hypothetically negative or positive impact on the capability of the business to meet its plan or strategy as well as protect and/or generate value. The model then articulates the approach for risk management and the assurance and control continuum.

2.4.1.4 The benefits in adopting a combined assurance model

Deloitte (2018:7) cites the benefits of adopting a CA model to include the following**:**

1) The CA models offer direction to applicable and collaborated assurance efforts towards the main risks;

2) The CA model demonstrates and nurtures firm obligation to control intensification;

3) The CA model advances dashboards offering the integrated and insightful contest, and

4) Assurance activities of CA models result in invaluable integrated data (Ahmed & Anifowose, 2016:948).

CA models cause a decrease in the assurance costs due to eliminating duplication and improved resource allocation. Generally, CA models result in improved reporting, tracking of corrective activities on the acknowledged opportunities or weaknesses as well as risk and audit clarity.

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- The CA model demonstrates and nurtures firm obligation to control intensification;
- The CA model advances dashboards offering the integrated and insightful contest, and assurance activities of CA models result in invaluable integrated data (Ahmed & Anifowose, 2016:948).

2.4.1.5 The duties in the combined assurance (CA) model

According to PWC South Africa (2019), the firm management ensures in the combined assurance model that there is a risk and robust control framework to appropriately and adequately remedy and identify deviations. The providers of internal assurance are in the combined assurance model charged with backing firm management, including risk administrators, internal controllers, second defence line functions, compliance, third defence line, and internal audits. The providers of external assurance are in the CA model charged with independent external assurances, such as external fiscal auditors (ICAEW 2020).

2.4.2 Combined assurance models and the elimination of duplication of efforts

Duplication of efforts means unnecessary and repetitive undertakings (Azzali & Mazza, 2018:85). CA models cause a decrease in the assurance costs due to eliminating duplication and improved resource allocation. Generally, CA models result in improved reporting, tracking of corrective activities on the acknowledged opportunities or weaknesses as well as risk and audit clarity. The other techniques of evading the duplication of efforts are transparency, collaboration as well as openness in the combined assurance. The Institute of Directors in Southern Africa (2016:68) defines collaboration as working with one another to accomplish a shared goal and/or overcome the challenge. The best ways to collaborate are using shareable, centralised data repositories with the capacity to offer actual, protected entree to work progress and results, as well as current issues' identification that offers a sole truth source.

Masite (2017:17) states that the many approaches to combining assurances include dependence on particular requirements as well as the desired amalgamation of firm activities in specific firms. Coordination or collaboration includes:

1) Integrating audits; that is, collaboration through the audit events by joint audit performance;

2) Report and plan integration; that is, collaboration through the processes of reporting and planning;

3) Activity alignment; that is, collaboration through the aligning of separate function activities;

4) Integration of functions; that is, collaboration through classified lines by joining internal functions and audit within the firm functions that back management.

For Barac and Forte (2015:75), duplication of efforts is desirable if every cause in the model exhibits some conflicting influences, thereby displaying a higher risk of duplication or manipulation. Fundamental to this outcome is the notion that, as duplication becomes expected, there is a higher duplication of efforts of the results and low costs. When there is a higher possibility of manipulating proof, there is more volubility of effort duplication because there is a more significant contribution to the reduction of erroneous verdict incidence. Besides, the manager does not offer much to induce effort duplication because an increase in the concealment probability by a provider will increase the stake of another provider to question their evidence. Fewer enticements are therefore necessary to induce manager monitoring. In contrast, the lower likelihood of manipulation means costly duplication of efforts relative to the tempted benefits. As such, only a single investigation of a provider is an effective solution.

Decaux and Sarens (2015:57) state that, instead of offsetting the benefits, duplicating efforts can occasion more. Having contrasting assurance providers, each focusing in the same directions, means mutual control, thereby helping to mitigate data manipulation that emanates from the use of discriminatory providers. The stakeholders' mutual monitoring is preferable to the imposition of penalties for perceived manipulation. Instead of creating biased assurance providers, there are

better approaches to limiting data manipulation. However, when the incomplete functions, the conflict creation is a competent way of guaranteeing assurance monitoring because conflict creation between providers plays a vital part in producing a checks and balances system in the organisation.

2.4.3 Combined assurance models and the improvement of quality information

Independent assurance or audit improves the trustworthiness of the corporate reports as well as reduces asymmetry of the information under the data hypothesis. The independent and external assurance is an apparatus for enhancing the quality in the firm's governance statement, offering some more significant trustworthiness of the business disclosure. Over the years, the assurance statements provide the firm with a minor improvement and uniformity. Combined assurance models inspire the acceptance of universal standards such as the International Standard on Quality Control (ISQC), quality control for businesses that undertake reviews and audits of financial statements, as well as other related and assurance services activities.

Changes in international standards, such as the ISAE 3000, occasion a rise in data quality. The standard has been updated on several occasions incorporating new requirements (Zhou *et al.,* 2019:240). Auditing firms follow international standards, such as ISAE 3000, to develop their combined assurance processes. Regarding the level of combined assurance, the firms apply a reasonable level. All the assurance statements discuss the scope, include a summary of work performed, and mention the concept of materiality. Concerning the conclusions, all assurors express a general opinion. On the other hand, no combined assurance statements include observations or recommendations. In total, all the combined assurance statements get a high quality, which represents a decent quality level and is constant during the observed period (Simnett *et al*., 2016: 269)

To help the users of the report in data analysis, decision-making, acquisition as well as integrating the non-financial and financial data, integrated reportage in the combined assurance provides value-applicable data in a well-connected and decluttered manner (Seguí-Mas *et al*., 2018:32). When evaluating the firm's future performance, integrated reporting reduces data asymmetry. Barth *et al*. (2017) state that disclosure quality remains associated positively with the liquidity, realised and

expected future flows of cash, and advanced investment competence, backing the dual resolve of better internal verdicts and external data.

Zhou *et al.* (2017) focus on integrated reporting's external data advantage. The authors' state-integrated reports offer more value-relevant data to capital markets. Disclosure quality is, therefore, negatively linked to analysts' capital cost and prediction errors. These findings suggest that integrated reports in CA models benefit the firm's data environment as well as reduce data asymmetry in investors.

2.4.4 Combined assurance models and risk management in organisations

Standard 2120: *Risk Management* states that the activity of internal auditing must evaluate the effectiveness as well as back the perfection of the risk management procedures (Wright 2018:33). Standard 2100: *Nature of Work* stipulates that the activity of internal auditing has to contribute and evaluate governance improvements, risk management, as well as processes of control by way of disciplined and systematic approaches. Besides, the emphasis is placed on the board of directors and the audit committees to better evaluate, monitor and understand systems of risk management. Top firm managers suppose internal auditors to assist them in validating systems of risk management and generating a reasonable awareness level about controls and risks. CAEs must be aware that the activities of internal auditing play some increasing part in governance and the management of risk (Huibers, 2015).

The IIA (2020) states that in risk management, the central internal audit roles include:

1) offering assurances on the process of risk management;

2) offering assurances on correct evaluation of risks;

3) assessing processes of risk management;

4) revising risks management; and

5) assessing risk reportage.

To determine the exposures and risks, which might impact the realisation of the firm objectives and goals, the internal audit plan's preparation includes the steps below:

1) Review and research business documents such as commercial enterprise plans, the strategic tactics, enterprise risk assessments (ERA), annual reports, minutes of board and management meetings, external reports and audit reports as well as other proper sources.

2) Review preceding plans on internal auditing, progress reports, and other works-in-progress.

3) Consult senior firm management and petition data on risk concerns and/or areas.

4) Conduct some risk valuation of issues as well as determine significances for annual audit planning.

Moloi (2017b:90) states that the steps to determining exposures and risks, which may impact the realisation of firm objectives and goals, also comprise:

1) Preparing draft audit plans.

2) Communicating to stakeholders the projected audit plans.

3) Seeking validation and feedback of crucial risk extents for review and finalising the audit plan.

4) Presenting to the board and management for an endorsement, and

5) Regular review, monitoring and re-evaluation of firm plans due to varying circumstances.

Although there is development of broader objectives and rationales for internal audits that are in the early phase of planning, there is a need for quick work and research at the start of auditing to describe the full objectives and scopes as well as develop methodology and criteria (Hopkin, 2018:34).

Deloitte (2018:34) insists on judicious communication of appropriate data for healthier decision-making. Timeliness remains vital within uncertain contexts. Prompt conclusion of the audit matters is viewed often as some definite pointer of the internal audit performances. Relevant data must always be reliable and accurate, including the making of information available to all the people in need of it, evaluating information

by way of valid approaches, and documenting the discoveries based on accurate examination balanced against professional and experienced judgement. There is also the backing of organisational strategy implementation (Huibers 2015). Florio and Leoni (2017:71) state that support is the understanding of the firm strategy to offer more attention to annual audit planning as well as detailed planning of engagement. Alignment with the organisation's values and objectives is a vital pillar to internal audit. Hubbard (2020:45) states that such exercise of alignment is only performable after strong appreciation of corporate issues as well as numerous senior management discussions.

2.5 CHAPTER SUMMARY

This chapter covers contemporary combined assurance models, the elimination of duplication of efforts, improvement of quality information, and risk management in organisations. The literature in this chapter emphasises that the organisation should implement a combined assurance model to improve risk governance. The literature further indicates that the combined assurance model's starting point is understating the organisation's risk management. This shows that there is a fundamental relation between the combined assurance model and risk management. This supports our main research question on whether the combined assurance model improves the effectiveness of risk management. The next chapter will discuss the methodology of research used to collect data on the impact of the combined assurance model in the management of risks in an organisation.

CHAPTER 3: RESEARCH METHODOLOGY AND METHODS

3.1 INTRODUCTION

This chapter comprises the methodology and methods used to answer the research questions. This includes the research paradigm, the design, the population, as well as the methods and instrument of data collection. The chapter also covers the data approach and analysis.

3.2 RESEARCH PARADIGM

According to Moon *et al*. (2019:295), research paradigm means the theoretic belief system with assumptions on methods, ontology, epistemology and methodology. While ontology focuses on the nature of reality, epistemology focuses on the discovery of adequate knowledge. Methodology means process, strategy, action plan or design of conducting research. On the other hand, methods are a specific way of data collection and analysis.

The study used a post-positivism approach to emphasise meanings and sought to explicate social concerns. Furthermore, Ryan (2006:45) describes the characteristics of post-positivism as broad, bringing together theory and practice, allowing acknowledgement and encouragement for the researchers' motivations and commitment to the topic, and recognising that there are several techniques to collecting and analysing data. This approach will suit the research underway, as absolute positivism cannot be guaranteed. Post-positivism does not suggest that positivism is not relevant, but rather indicates that something after positivism exists that is also worth considering. Post-positivism also recognises that dualistic thinking is usually inadequate, and diversity and complexity are the reality of all human experiences. This will result in human beings providing different responses to the same question.

3.3 RESEARCH APPROACH

Woiceshyn and Daellenbach (2018:181) state that research approach means the process with the stages of higher assumption, data collection methods and complete data analysis and interpretation. The leading research approaches are deductive and inductive. Inductive research approaches focus on the creation and use of theory, as well as a search for a dominant pattern using explanations, hypotheses or observations. On the other hand, the deductive research approach concentrates on

scanning existing theories on the research question and directs the study into the collection of data and/or eventually confirms or rejects the research question (Azungah 2018:395).

The study employed the deductive research approach because it starts with a chosen theory, and creates a research hypothesis from the theory before data collection and analysis. The deductive research approach contends that while some contributory connection prevails or is disguised by explicit theory, the link stays true in most cases. Armat *et al*. (2018:219) state that the deductive research approach concentrates on finding whether the relationship between objectives of the study covers the general circumstances.

3.4 RESEARCH METHODOLOGY

Bell, Bryman and Harley (2018:33) define research methodology or strategy as the technique the study employs in analysing, identifying, selecting and processing the expected information on the study topic. The leading research methodologies are mixed-methods, quantitative and qualitative.

This study uses the quantitative research methodology to appreciate the experiences of the study respondents and expose the real meaning in the studied topic. The quantitative research methodology focuses on the generalisation and collection of mathematical proof across the individuals who describe the particular study phenomenon. Quantitative research methodology outcomes remain unbiased, logical and statistical, because the collection of data is by way of structured procedures and operated on more magnificent samples that represent the total population (Levitt *et al*., 2018:26).

3.5 RESEARCH DESIGN

Research design means predetermining conditions of data collection and analysis in a manner joining the study purpose and significance (Walliman 2017:27). Creswell and Creswell (2018:48) state that correlational, descriptive, experimental and causal comparative/quasi-experimental research designs are the leading study designs. The experimental designs of research are underlying research designs, which entail observing the impact of independence on the dependent variables (Fong *et al*., 2016:258).

Correlational designs of research generate a connection between the carefully linked variables. Correlational designs of research do not assume, because there is an application of statistical analysis practices to assess the association between different research variables (Krause, 2018:2691). The technique used the correlation coefficient to accomplish a correlation prevailing between the study variables, with values ranging between -1 and +1. Positive relations prevail where there is a +1 direction of the correlation coefficient. Negative relationships prevail where there is -1 direction of correlation coefficient (Curtis *et al*., 2016:5).

This study employs the descriptive research design, which seeks to define the existing position of the identified variable. Aziz *et al*. (2017:8898) state that in the descriptive research design, the designing of research projects intends to offer systematic data or information on the impact of the combined assurance model in the management of risks in an organisation. Data synthesis and analysis in the descriptive research design also provide a test of the study hypothesis. The systematic data collection requires a careful selection of the studied units and cautious measurement of every study variable (Creswell & Creswell, 2017:48).

3.5.1 Total population

According to Yin (2017:83), total (target) population means the individuals who meet the studied group's standards. For this study, the total (target) population consists of the City of Ekurhuleni Metropolitan Municipality personnel in charge of designing and application of the combined assurance model, including the internal assurance providers and line management (in the study, referred to as management), internal auditors and audit committee members. The total population is one hundred and fifty (150) risk assurance providers and line managers and audit committee members. The total sample size is one hundred and fifty (150) being all the members of all the assurance providers in the City of Ekurhuleni Metropolitan Municipality (this will be management), other internal assurance providers, internal audit function employees, as well as audit committee members and council.

3.5.2 Sampling

Sampling means selecting people from the total population for the study and the generalisation of the target population as the sample outcomes specify (Creswell & Poth, 2017:34). According to Creswell and Creswell (2017:175), the sample is the

representative of the total population for the generalisation of research findings. Sample frame means the basics for choosing the study sample (Creswell & Creswell, 2017:39).

The leading sampling techniques are probability and non-probability sampling. Quantitative studies rely on the methods of probability sampling (Creswell & Creswell, 2017:73). Tyrer and Heyman (2016:61) define non-probability sampling as the study employing personal judgement to the selection of study samples. Etikan *et al.* (2016:3) define probability sampling as characterised by random choice of study respondents who form part of the study sample. Probability sampling guarantees that the employed techniques offer the chosen sample an accurate representation of the study population. The leading probability sampling types are simple-random, stratified, multistage, systematic-random and cluster sampling.

This study used total population purposive sampling to select all 150 members involved in risk processes at Ekurhuleni Municipality. Purposive sampling, which is a form of non-probability sampling, also known as subjective, selective or judgemental sampling, is a sampling in which researchers rely on their own judgement when selecting members of the population to participate in their surveys (Saunders *et al*., 2016:76). According to Creswell (2014:78), total population sampling is a type of purposive sampling where the whole population of interest, such as a group whose members all share a given characteristic, is studied. It is most practical when the total population is of manageable size, such as a well-defined subgroup of a larger population. However, each member of the population has an equal chance or probability of being selected, also making it a probability sampling technique. Therefore, the sample size is 150, which is the same as the population.

3.6 DATA COLLECTION

Data collection means amassing proof on the occurrence of a phenomenon in a recognised and organised way that allows reaction of the sample to the research outcomes and questions (Forrester & Sullivan, 2018:34). This study uses a structured questionnaire as the data collection instrument, because structured questionnaires use less time to attain answers from the study respondents (Oliveri, 2018:259). Creswell and Creswell (2017:22) state that questionnaires gather both objective and subjective data from the larger total population, research sample and statistically

essential outcomes. This study adopted Douglas' (1970) drop-and-pick approach to distribute the structured questionnaires to all personnel of the City of Ekurhuleni Metropolitan Municipality in charge of designing and applying the combined assurance model, mainly the audit committee.

The structured questionnaire consisted of four main sections. Section A covered the demographics of the respondents. Section B covered the application of first-level combined assurance in the Ekurhuleni Municipality. Section C covers second-level assurance, and section D covers third-level combined assurance.

3.7 DATA ANALYSIS

According to Silverman (2016:13), data analysis is inspecting all collected information to get specific implications, suppositions and interpretations. This study used inferential and descriptive statistics to analyse collected data. George and Mallery (2016:135) state that descriptive statistics comprise defining collected information and developing a decisive data summary. This study preferred descriptive statistics since there is the ability to describe information and check the correlation between the variables and causal relationships. Ali and Bhaskar (2016:662) state that descriptive statistics allow the reaching of conclusions on the target population from the research sample.

The study also used SAS for analysis of all information gathered using the questionnaire. Graphical representations of the collected information explain the relations between study questions as well as collected data. The study used graphs, figures and tables to analyse, determine and present themes in respondents' answers before classifying them per study question and objective.

To analyse the collected data, one statistical method, namely the Pearson correlation, measured the strength of association between the two variable of this study (CAM and effective risk management) and the direction of the association. Descriptive analysis is also performed on the main variable of the study using means, percentages and standard deviation of demographic data. The researcher uses Pearson correlation analysis to measure the strength and direction of the correlation relationship between the variables of the study. A Pearson correlation coefficient is to be computed to determine whether there is a correlation between first-level combined assurance and

risk management, second-level combined assurance and risk management, and third-level combined assurance and risk management.

3.8 RELIABILITY AND VALIDITY

3.8.1 Reliability

According to Cypress (2017:258), reliability is the extent to which the study findings are reproducible when there is a repetition of the study research under identical conditions. Reliability entails checking result consistency across the different observers, parts of the study test itself, and time. Its consistency and dependability ascertain the reliability of the instrument of data collection. This study statistically established reliability and internal stability of the data by using factor analysis and the Cronbach alpha coefficient (Field, 2009:675).

3.8.2 Validity

Cypress (2017:257) states that validity means the extent to which the collected results measure the intended objective. Validity is assessed by examining the ways the results indeed correspond to recognised theories as well as measures of a similar concept. The study conducted a pilot test of the questionnaire to test all questions and eliminate biases, checked and resolved for impending discrepancies. This pilot study included seven (7) respondents to guarantee that the questionnaire tested adequately covers the research questions. The study also compared the data from the literature review as well as the study respondents to disregard any uncertainties in the offered responses and guarantee collection of primary and secondary facts. As a result, this study adopted content and face validity; that is, the extent to which a study's measurement covers every aspect of the measured concept.

The full sampled data was also subjected to exploratory factor analysis to determine underlying intelligence within. However, an additional benefit is that exploratory factor analysis also statistically validates the dataset. This process then weeds out any questions that may not be suitable for the study.

3.9 ETHICAL CONSIDERATION

Regarding ethical considerations of the Belmont Report (Pierce *et al*., 2019:35), this study ensured the following:

- The study obtained university permissions to carry out the research. The study presented to all respondents the university's letter of approval and questionnaires to get their informed consent as well as voluntary involvement in the study and all Covid-19 protocols were observed;

- The study guaranteed no harm to the respondents by informing them of their right to know the study objective and aim. The study assured the respondents' anonymity and confidentiality.

- The study adhered to the objectivity principle to avoid bias, any influence on study results and also uphold above ethical concerns. The study used citations and references to credit all literature used. It also observed all sovereign analysis and interpretation of the gathered information to avoid influence on respondents and mislead readers.

3.10 CHAPTER SUMMARY

This chapter covered the research philosophy, strategy and methodology and design used in the study. The quantitative research methodology and questionnaire assisted the respondents to indicate their experiences on the impact of the combined assurance model in the management of risks in an organisation.

CHAPTER 4: PRESENTATION, DISCUSSION AND ANALYSIS OF FINDINGS

4.1 INTRODUCTION

The findings are presented and discussed in this chapter. The demographics, reliability, validity and correlation of the constructs are also discussed in support of the results. The results are presented as guided by the research questions and discussed, linking to literature reviewed.

4.2 DEMOGRAPHICS

The demographics of the participants were as follows:

4.2.1 Gender

The respondents' gender is presented in Figure 8 below.

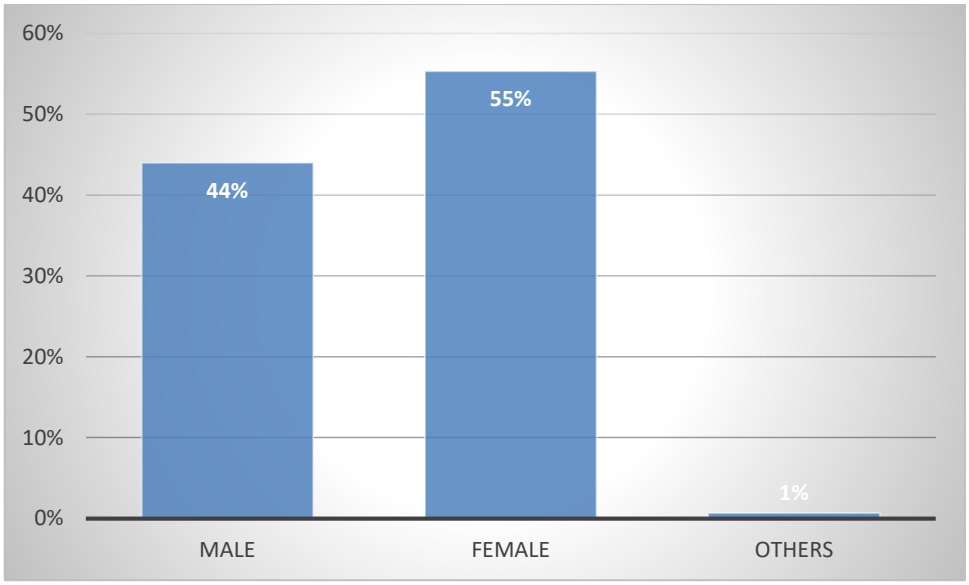

Figure 8: Respondent gender

Fifty-five percent of the respondents were females, 44% were males and 1% were of other genders. Gender is regarded a factor that is not influencing the results.

4.2.2 Age

The respondents' age is presented in Figure 9 below.

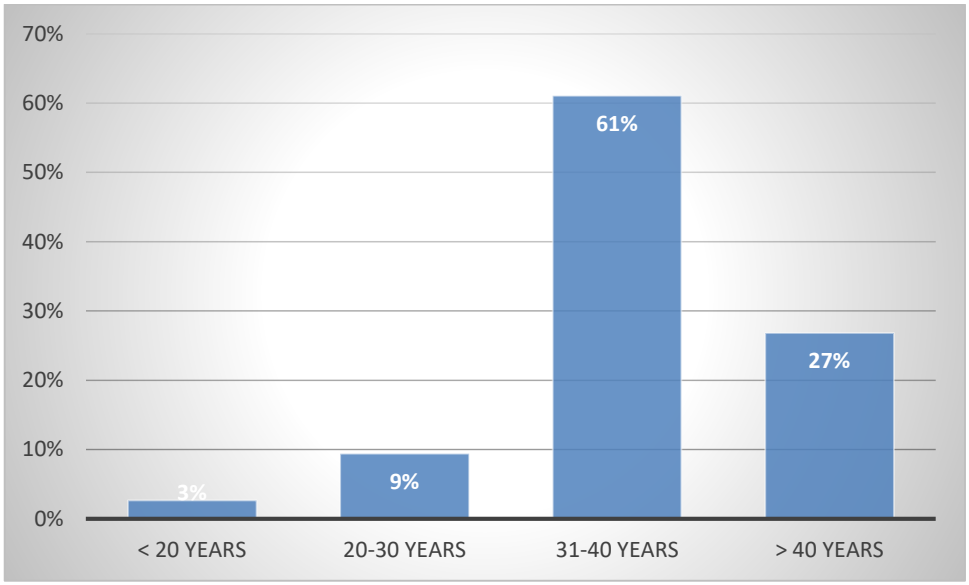

Figure 9: Respondent age

Sixty-one percent of the respondents were aged between 31 and40 years, 27% were aged older than 40 years, 9% were aged 20 to 30 years, and 3% were aged younger than 20 years. Age is also not regarded an important factor that influenced the results.

4.2.3 Education

The respondents' education is shown in Figure 10 below.

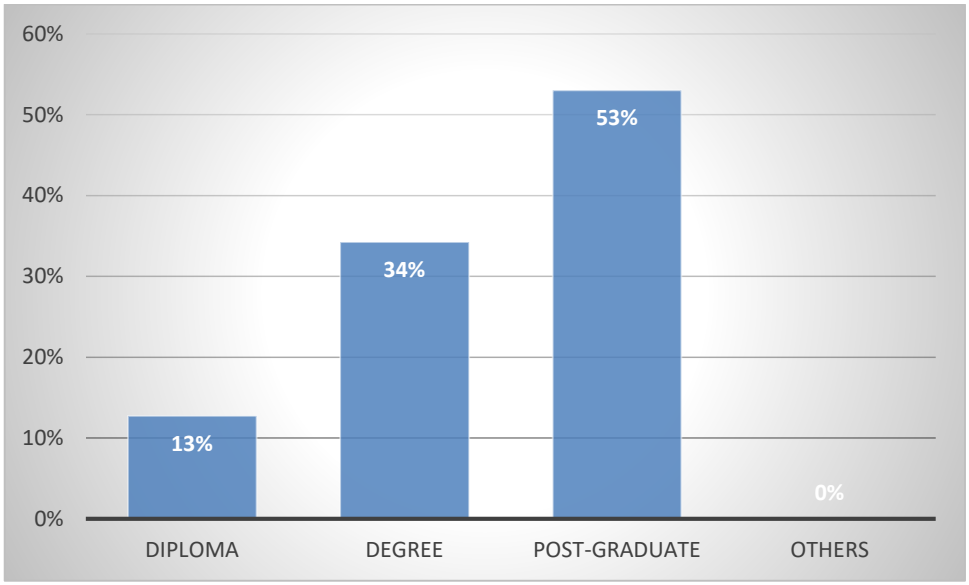

Figure 10: Respondent education

Fifty-three percent of the respondents were post-graduates, 34% were degreed, and 13% had a diploma. This shows a knowledgeable group of respondents able to articulate the research subject under inquiry.

4.2.4 Experience

Respondents' experience is presented in Figure 11 below.

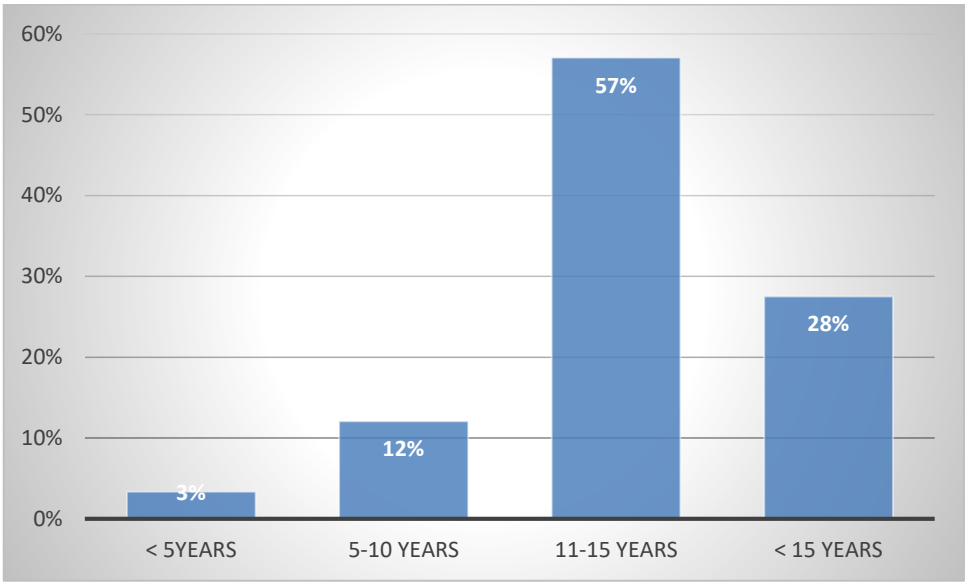

Figure 11: Respondent experience

Fifty-seven percent of the respondents had 11 to 15 years of experience, 28% had more than 15 years' experience, 12% had five to 10 years' experience, and 3% had at least five years' experience. This shows that most of the respondents were well experienced individuals who understand the dynamics of their industry better.

4.3 STUDY FINDINGS AND DISCUSSIONS

The findings and discussions are guided by the main objectives of this study, which were to examine the extent of effective risk management activities by first line of defence to combined assurance, to assess the extent of effective risk management activities by second line of defence to combined assurance, and to examine the extent of effective risk management activities by third line of defence to combined assurance. The findings are presented and discussed simultaneously in the following sections:

4.3.1 Extent of coordinated risk management activities by combined assurance first line of defence

The results on the extent of coordinated risk management by the first line of defence are analysed as follows:

4.3.1.1 First line of defence existence

When the participants were asked if their organisation has a combined assurance first line of defence that coordinates efforts of managers and subordinates acting as process owners to risk management and management assurance, the responses are shown in Figure 12 below.

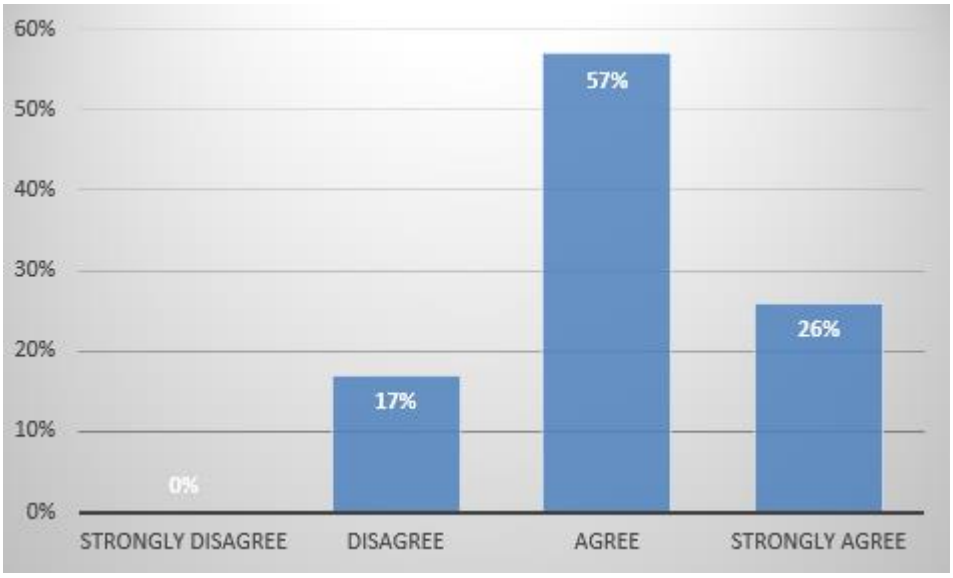

Figure 12: Existence of a first line of defence

Figure 12 shows that 57% agreed and 26% strongly agreed, while 17% disagreed regarding the existence of a first line of defence within the respondents' organisation. BIS (2016) states that the first defence line groups the functions of everyday risk management, which include risk assessment, identification and mitigation. This defence line is similarly in charge of offering firm management assurances using self-assessments on control of risk. Therefore, the importance of a first line of defence in facilitating the coordinated efforts towards effective risk management is noted. The first line of defence is important for effective risk management as they are responsible for and are involved in executing risk management and control activities.

First line of defence core activities

4.3.1.2 Adequate risk monitoring and control

When the participants were asked whether their organisation's combined assurance first line of defence has adequate risk monitoring and control, the responses are shown in Figure 13 below.

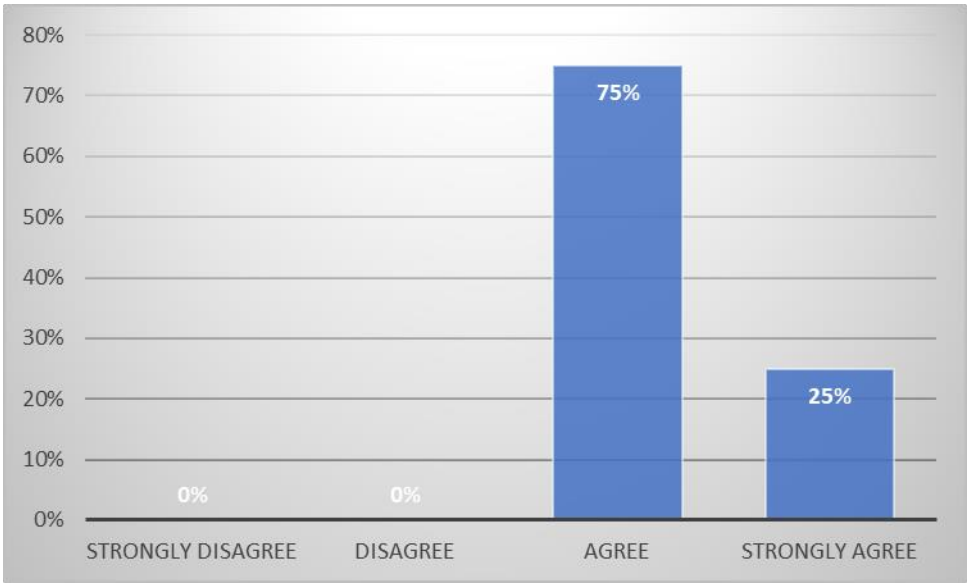

Figure 13: Adequate risk monitoring and control

Figure 13 shows 25% strong agreement, and 75% agreement with the existence of adequate risk monitoring and control by the first line of defence within the respondents' organisation. This is one of the core activities of combined assurance first line of defence. The second line of defence comprises all the functions that oversee the risks, such as risk management, compliance, health and safety, environmental and/or quality functions, to name but a few (Ruud, 2003). These functions help the first line implement the policies and procedures set by the board after it has defined the organisation's strategic direction and risk appetite by proposing frameworks and guidance. The second line of defence provides assurance activities by monitoring the first line of defence and the way it has implemented effective risk management practices (IIA, 2012). It is essential to note that the second lines of defence provide non-audit assurance activities (Takuva, 2017).

4.3.1.3 Adequate risk identification activities

When the participants were asked whether their organisation's combined assurance first line of defence has adequate risk identification activities, the responses are shown in Figure 14 below.

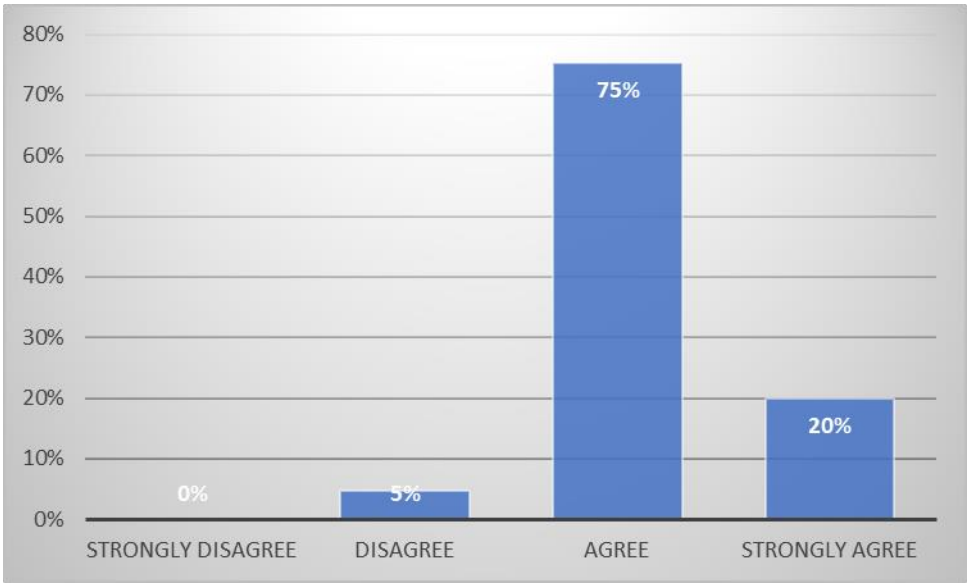

Figure 14: Adequate risk identification activities

Figure 14 shows 20% strong agreement, 75% agreement and 5% disagreement on the existence of adequate risk identification activities by the first line of defence within the respondents' organisation. The first line of defence usually groups together the functions that own and manage risks daily. They are responsible for the identification, assessment and mitigation of risks. As a first line, they also provide management assurance through risk control self-assessments. Ruud (2003:77) describes control risk self-assessment as "one method for providing assurance by putting more emphasis on self-evaluation on the part of managers and employees as process-owners."

4.3.1.4 Combining functions to manage risks

When the participants were asked whether their organisation's combined assurance first line of defence combines functions to manage risks, the responses are shown in Figure 15 below.

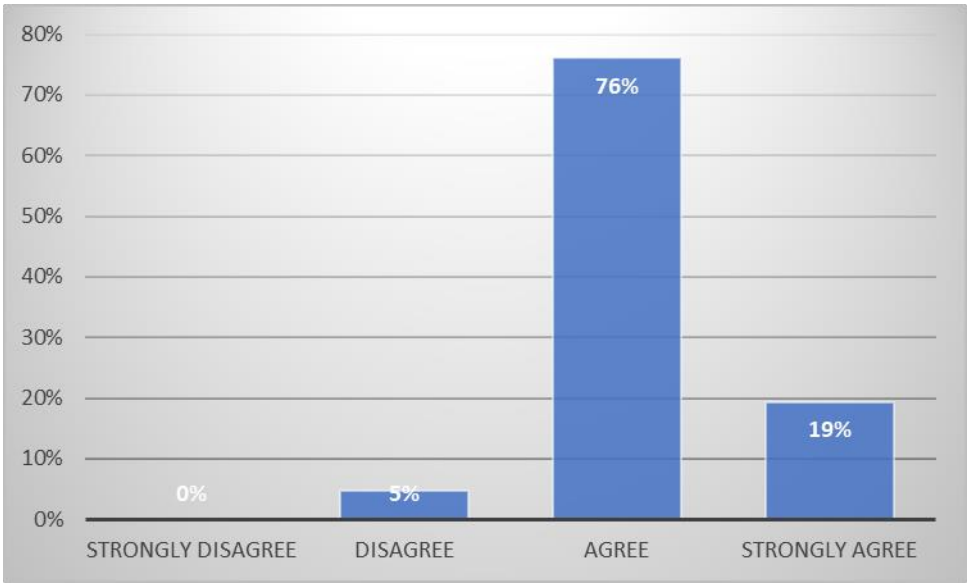

Figure 15: Existence of combining functions to managing risks

Figure 15 reflects 19% strong agreement, 76% agreement and 5% disagreement on the existence of a first line of defence with combining functions to manage risks. This is supported by Masegare (2018:130), who confirms a firm's readiness for combined assurance by the firm and staff's combined risk assurance management and awareness. According to Deloitte (2018:4), most of the combined assurance efforts across the globe are either for rolling up the current assurance reports and/or a focus on mapping to rationalise and identify each activity of assurance. It is when there are flaws in risk management coordination that the process becomes burdensome and time-consuming because of a focus on the evaluation of individual controls, substantial compliance, lack consideration of the bigger picture and the risk management mechanisms.

The activities, therefore, generate no awareness of the risks the firm's executives and board of directors want or even the correct assurance levels on the effectiveness of risk management. However, when the functions are combined to manage risks, the process provides a holistic assessment to the board of directors of the effectiveness of risk management and internal control systems by coordinating assurance activities from various sources of assurance (Decaux & Sarens 2015: 57). Therefore, the internal audit (IAF) function, compliance, risk management or internal control, for example, can be performed by different functions, which should be coordinated using a combined risk model to avoid unnecessary duplication of efforts, gaps in risks

coverage and to ensure that all significant risks are addressed appropriately. Therefore, Masegare (2018:130) contends that regulations of different internal control functions often fail to set clear boundaries for their activities; it can happen that several actors test the same control, or that there are difficulties to test them all.

First line of defence non-core activities

4.3.1.5 Groups own and manage risks

When the participants were asked whether their organisation combined assurance first line of defence groups owning and managing risks, the responses are shown in Figure 16 below.

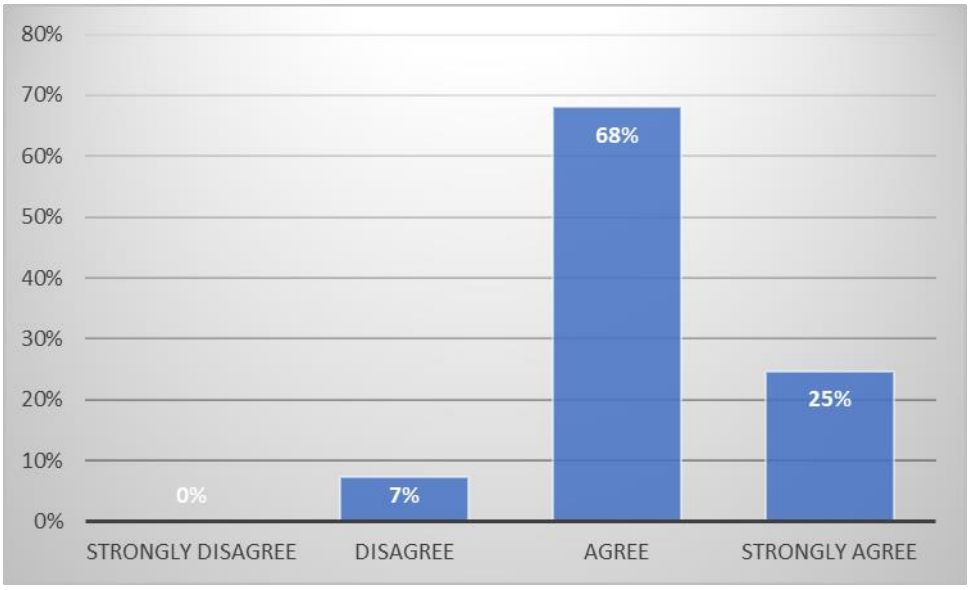

Figure 16: Groups owning and managing risks

Figure 16 shows 25% strong agreement, 68% agreement and 7% disagreement with the existence within first line of defence groups that own and manage risks within the respondents' organisation.

4.3.1.6 Adequate risk reporting

When the participants were asked whether their organisation's combined assurance first line of defence has adequate risk reporting, the responses are shown in Figure 17 below.

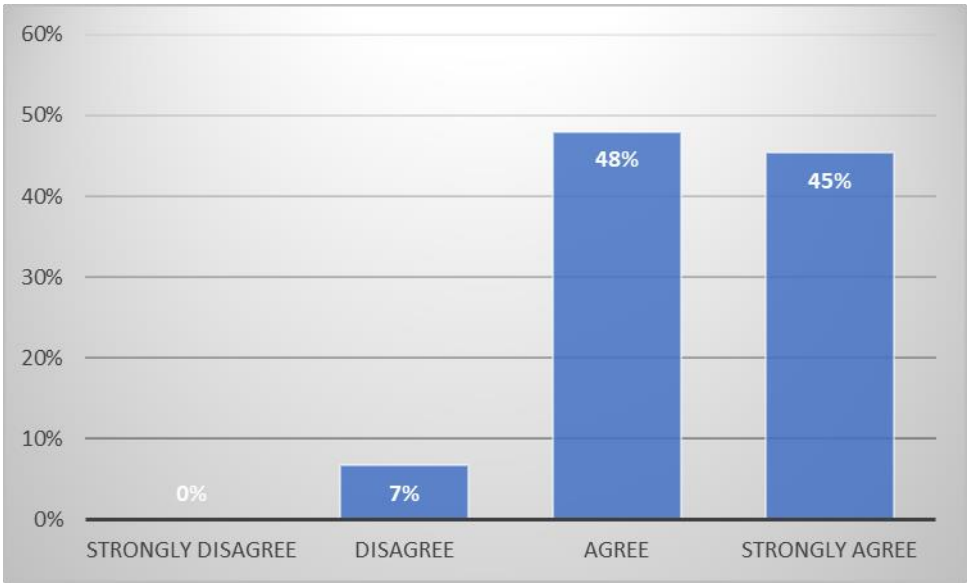

Figure 17: Adequate risk reporting

Figure 17 shows 45% strong agreement, 48% agreement and 7% disagreement on the existence of a first line of defence with adequate risk reporting within the respondents' organisation. This is in line with Decaux and Sarens' (2015:23) argument that a firm's readiness for combined assurance is shown by reporting on combined assurance findings. Generally, these lines within CAM result in improved reporting, tracking of corrective activities on the acknowledged opportunities or weaknesses, as well as risk and audit clarity (Ahmed & Anifowose, 2016:948).

4.3.1.7 Timely risk reporting

When the participants were asked whether their organisation's combined assurance first line of defence reports risks timely, the responses are shown in Figure 18 below.

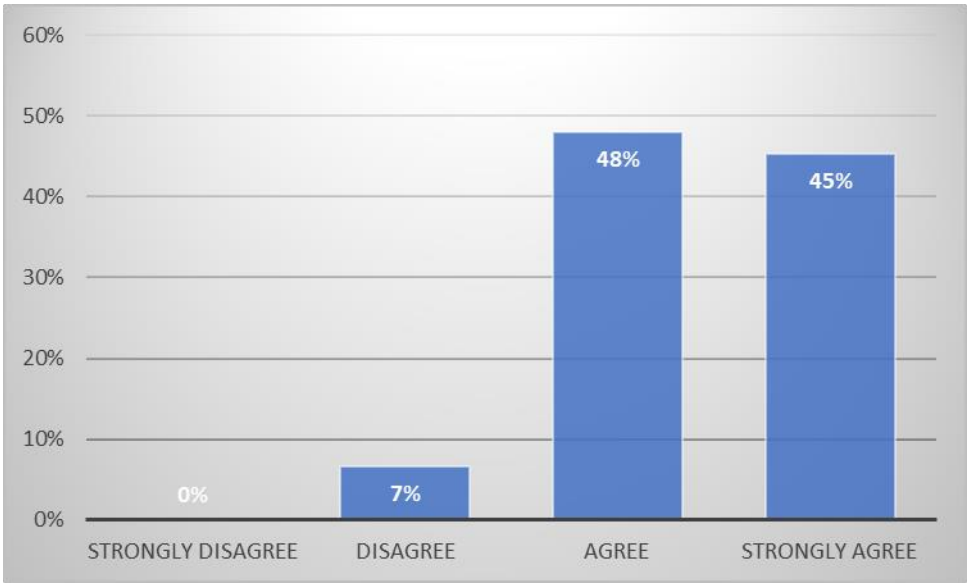

Figure 18: Timely risk reporting

Figure 18 shows 45% strong agreement, 48% agreement and 7% disagreement on the existence of a first line of defence that reports risks timely within the organisation. This is in line with IIA Standard 2060, which stipulates the risk reporting to senior management and the board. The chief audit executive must report to the board and senior management periodically too. According to Decaux and Sarens (2015:24), the reporting must include essential control issues and risk exposures, including issues of governance, fraud risks and other concerns the board and senior management request or need.

4.3.1.8 Documentation of internal control problems

When the participants were asked whether their organisation's combined assurance first line of defence reports risks timely, the responses are shown in Figure 19 below.

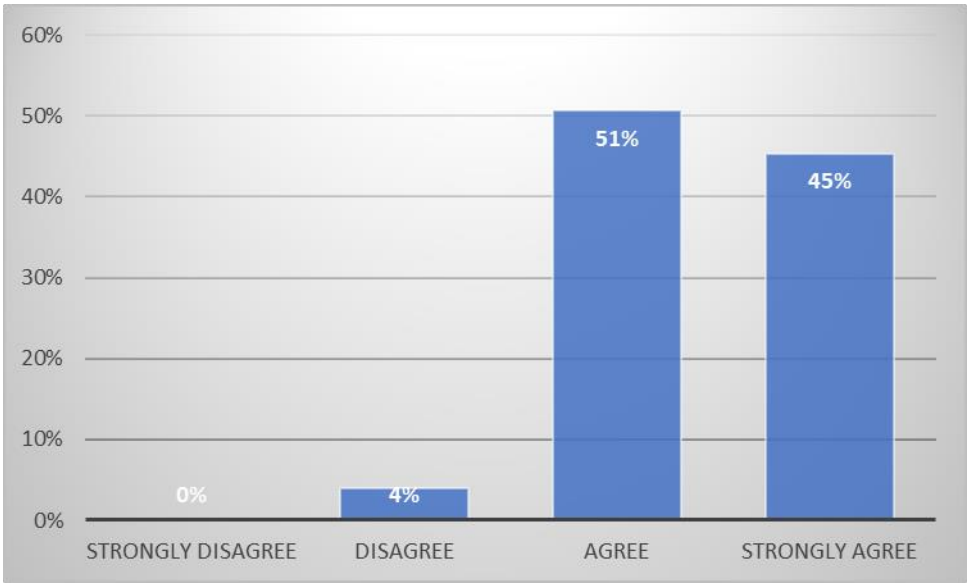

Figure 19: Documentation of Internal Control Problems

Figure 19 shows 45% strong agreement, 51% agreement and 4% disagreement on the existence of a first line of defence that documents internal control problems.

Table 2: One-way simple statistic for first-line defence factors

Rank	First line of defence	N	Mean	SD
6	Adequate risk monitoring	150	3.153	0.4740
7	Adequate risk identification	150	3.147	0.4690
5	Combining functions	150	3.173	0.5403
4	Groups own and manage risks	150	3.295	0.5871
2	Adequate risk reporting	150	3.383	0.6107
1	Timely risk reporting	150	3.409	0.5697
3	Problem documentation	150	3.369	0.5736

The average mean for the responses on first line of defence factors was computed and ranked as shown in Table 2 above. It is concluded that timely risk reporting and adequate risk reporting are the two most important first line of defence non-core functions for effective risk management, and combining functions and adequate risk monitoring are the two most important core functions of the first line of defence as considered by the respondents for their organisation.

4.3.2 Extent of coordinated risk management activities by second line of defence

The findings on the extent of coordinated risk management activities by combined assurance second line of defence are presented as follows:

4.3.2.1 Existence of overseers of risk

The respondents were asked whether their organisation's combined assurance second line of defence existence as overseers of risk exists, and the responses are shown in Figure 20 below.

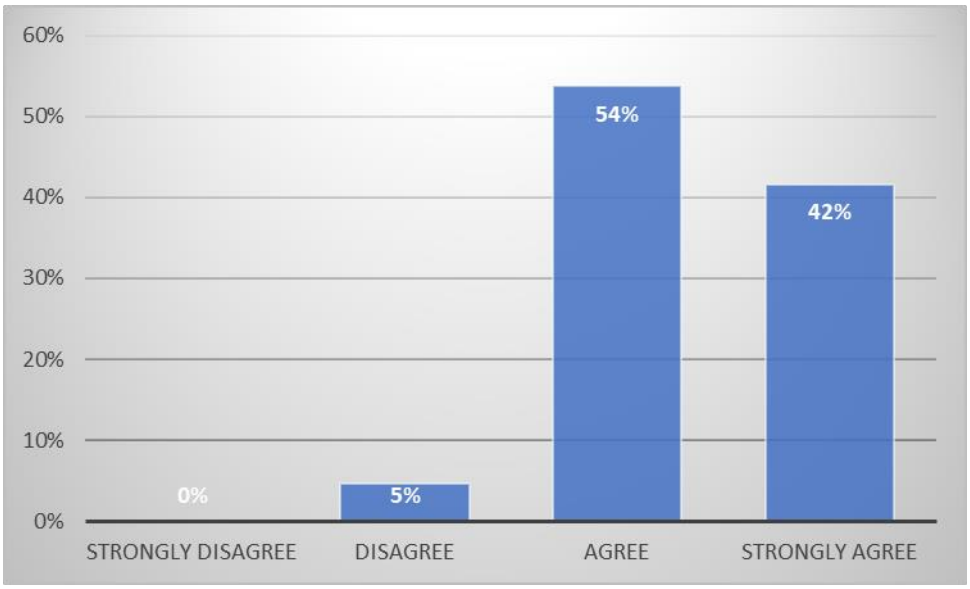

Figure 20: Existence of risk overseers

Figure 20 reflects that 42% strongly agreed, and 54% agreed regarding the existence of a second line of defence existing as overseers of risk within the organisation. However, 5% disagreed with this notion. The combined assurance second line of defence exists to oversee all risk management activities to ensure effective risk management. The Institute of Directors in Southern Africa (2016) insists that the second line of defence is part of the matrix of combined assurance. There must be consideration of firm functions, including the firm expert functions, which facilitate and oversee management and compliance of risk and it is the second defence line that focuses on functions of risk supervision, which, among others, include risk management, risk compliance, environment and safety functions, health and quality (BIS, 2016).

Second line of defence non-core activities

4.3.2.2 Existence of multi-functions to oversee risks

The respondents were asked whether their organisation's combined assurance second line of defence has multi-functions of overseeing risk, and the responses are shown in Figure 21 below.

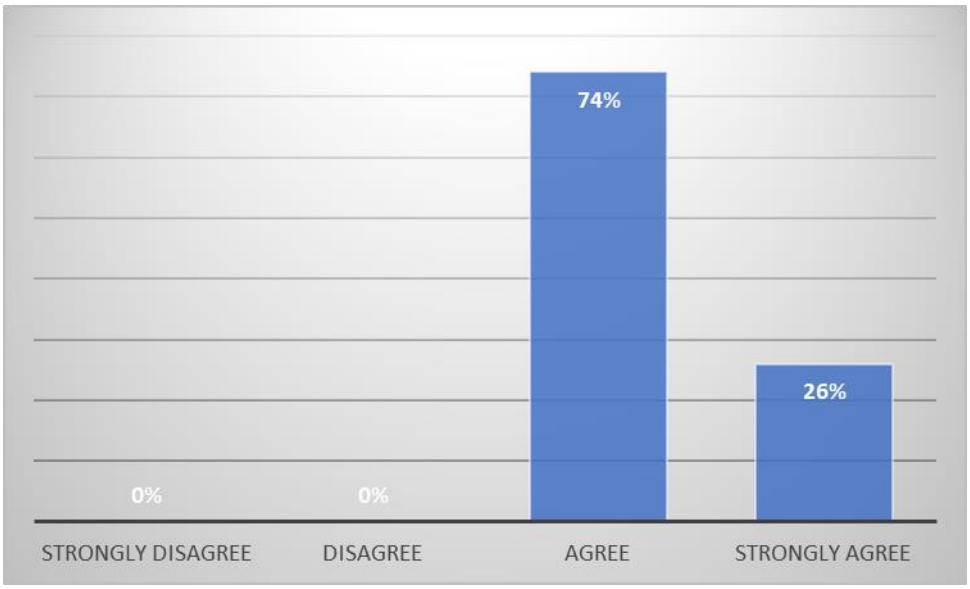

Figure 21: Existence of multi-functions for overseeing risks

Figure 21 shows that 26% strongly agreed, 74% agreed on the existence of multi-functions in the second line of defence to oversee risks within the organisation. This meets South Africa's King IV requirements, which modify the concept of combined assurance, indicating that the firm's model of combined assurance must optimise and incorporate all assurance services and functions such as within the second line of defence. In its entirety, the assurance services and functions permit some functional environment of control and data integrity that the firm's management, committees and board used in making decisions as well as support the integrity of the outside reports (Surty *et al.,* 2018:2).

Furthermore, Deloitte (2018:7) states the advantages of a combined assurance model to offer direction to applicable and collaborated assurance efforts towards the main risks; and to demonstrate and nurture the firm obligation to control intensification. In addition, the defence lines of the CAM advances dashboards offering the integrated and insightful contest of assurance activities, resulting in invaluable integrated data

(Ahmed & Anifowose, 2016:948). The existence of coordinated multifunctional systems within the CAM causes a decrease in the assurance costs due to elimination of duplication and improved resource allocation.

4.3.2.3 Assistance to first-line implementation of risk policy and procedures

The respondents were asked whether their organisation's combined assurance second line of defence gives assistance to first-line defence in implementing risk policies and procedures, and the responses are shown in Figure 22 below.

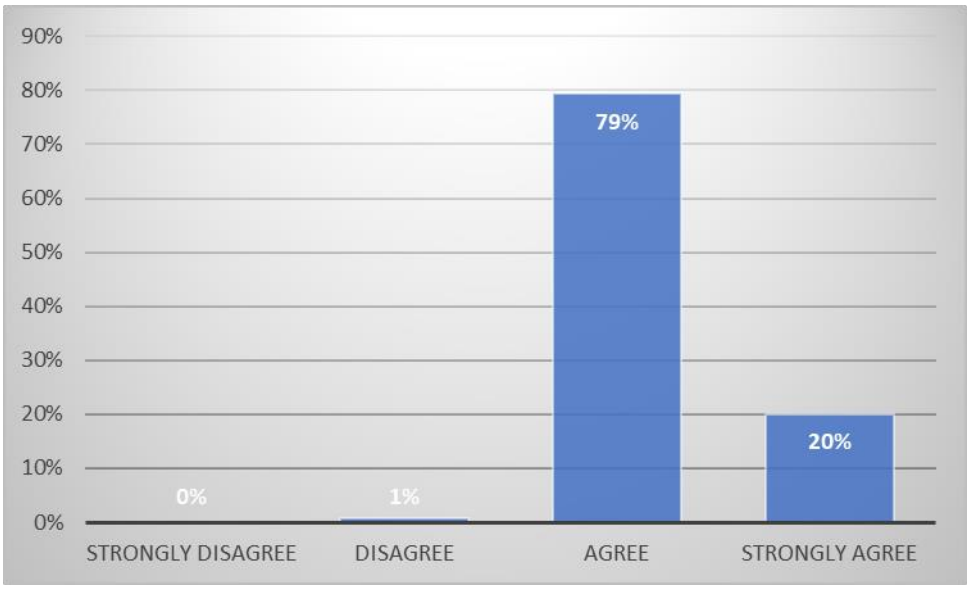

Figure 22: Assistance to first line of defence in risk policy implementation

Figure 22 shows that 20% strongly agreed, and 79% agreed regarding the existence of second line of defence assistance towards the first line of defence to implement risk policies and procedures. Consequently, BIS (2016) contends that it is the functions of second line defence that help the first line of defence in procedures and policy implementation. This occurs after detailing the firm's risk appetite and strategic direction, through projected frameworks and guidance. However, Decaux and Sarens (2015:56) argue that the first and second defence lines, therefore, offer the firm non-audit assurance activities.

4.3.2.4 Adequate compliance activities

The respondents were asked whether their organisation's combined assurance second line of defence conducts adequate compliance activities, and the responses are shown in Figure 23 below.

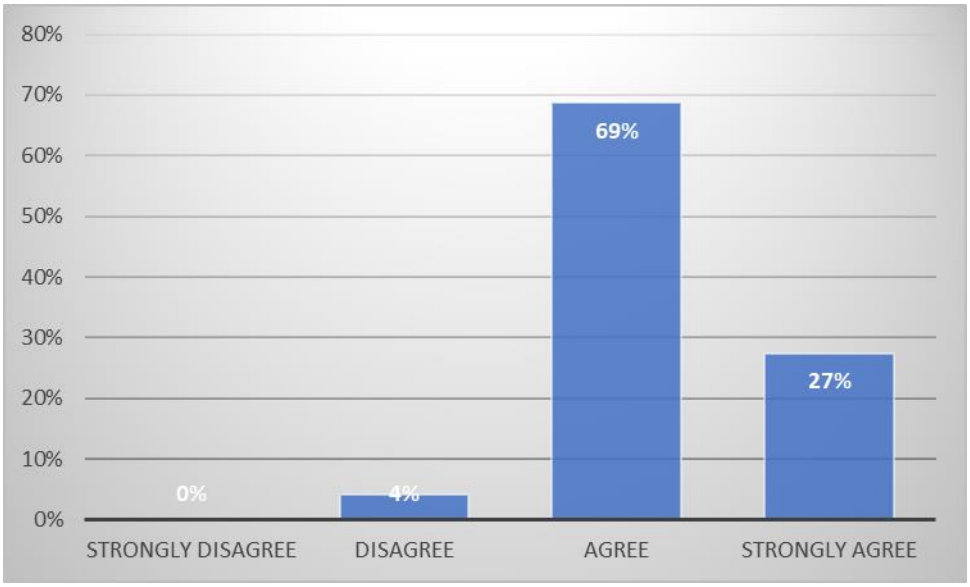

Figure 23: Adequate compliance activities

Figure 23 reflects that 27% strongly agreed, and 69% agreed on the existence of a line of defence within the respondents' organisation. However, 4% disagreed with this notion. The Practice Advisory 2050-2 supports the streamlined and all-inclusive interpretation of risk controls and monitoring by assurance coverage mapping against the identified risks. In addition, the Practice Advisory 2050-3 contends that provided there are established safeguards, internal auditors can depend on and/or employ other providers of external or internal assurance in governance, management of risk, as well as control assurance (IIA, 2020). In this way, compliance activities are maintained adequately.

Second line of defence core activities

4.3.2.5 Well-defined coordination responsibilities

The respondents were asked whether their organisation's combined assurance second line of defence has well-defined coordination responsibilities, and the responses are shown in Figure 24 below.

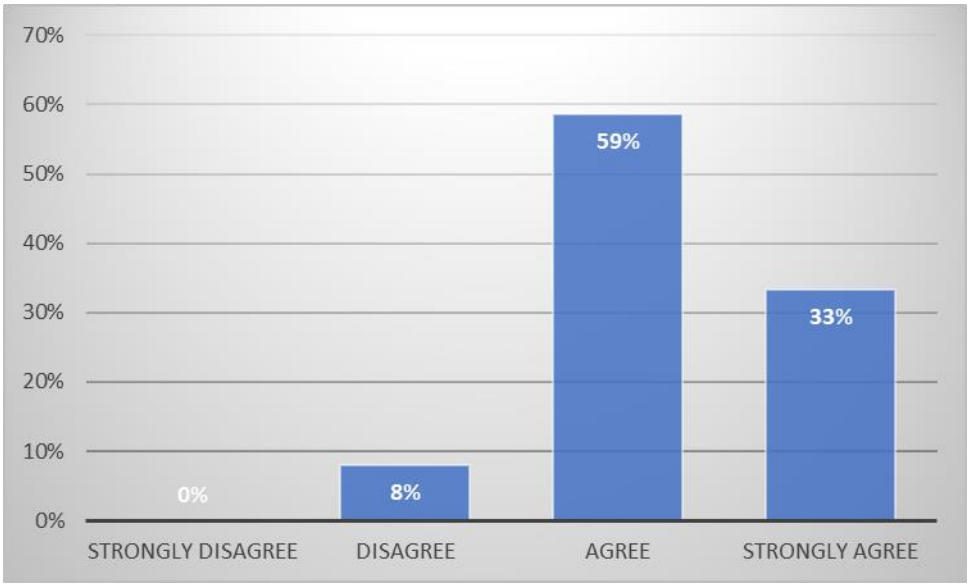

Figure 24: Well-defined coordination responsibilities

Figure 24 reflects that 33% strongly agreed, and 59% agreed with the existence of a second line of defence with well-defined coordination responsibilities. However, 8% disagreed with this notion. The IIA Standard 2050 highlights the importance of coordination to minimise effort duplication and to guarantee proper attention. The organisation's chief audit executive too must share data and even coordinate operations with consulting services, external and internal assurance providers. The King IV combined assurance model also advocates for coordination of the second line activities to integrate and optimise assurance services and functions to permit an operative control environment, back data truthfulness, and external report integrity (Ferguson, 2019:179). Coordination among the three lines of defence is the ultimate objective of combined assurance, with each line of defence playing a role in ensuring that risks are efficiently and effectively managed and monitored, as required by the board and executives (Sarens *et al.*, 2012).

4.3.2.6 Well-formalised control instruments

The respondents were asked whether their organisation's second line of defence operates with well-formalised control instruments, and the responses are shown in Figure 25 below.

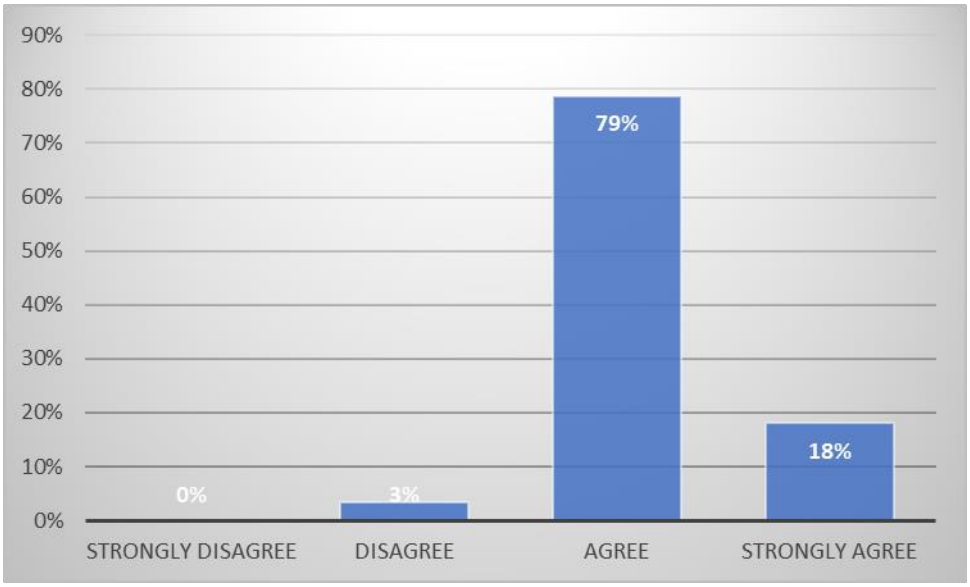

Figure 25: Well-formalised control instruments

Figure 25 shows that 18% strongly agreed, and 79% agreed that the second line of defence has well-formalised control instruments. However, 3% disagreed with this notion.

4.3.2.7 Monitoring of managerial implementation effectiveness

The respondents were asked whether their organisation's combined assurance second line of defence monitors managerial implementation effectiveness, and the responses are shown in Figure 26 below.

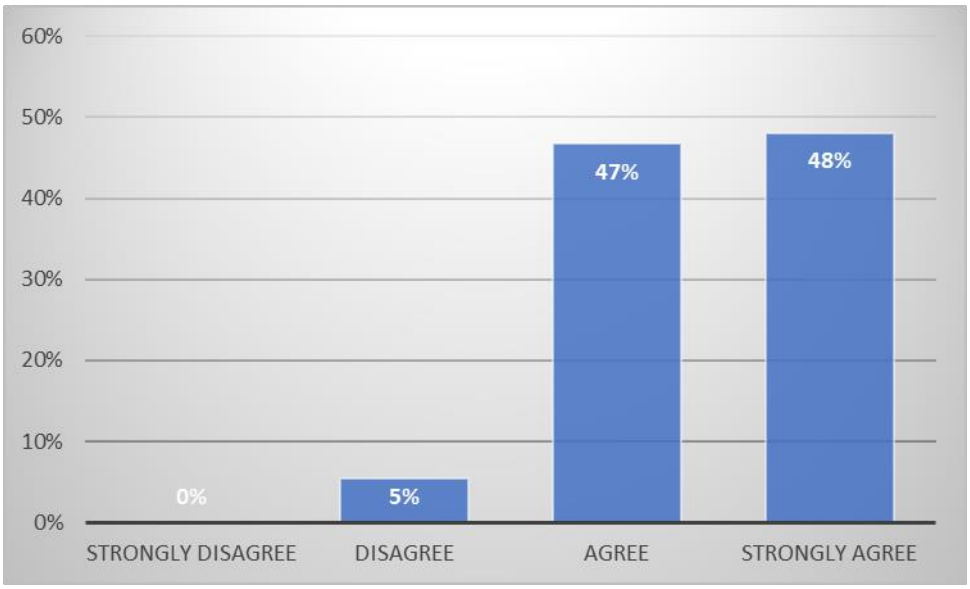

Figure 26: Monitoring of managerial implementation effectiveness

Figure 26 reflects that 48% strongly agreed, and 47% agreed that the second line of defence monitors managerial implementation effectiveness. However, 5% disagreed with this notion.

Table 3: One-way ANOVA simple statistic for second line of defence factors

Rank	Second line of defence	N	Mean	SD
5	Existence of multi-functions	150	3.193	.4128
4	Assistance to 1st line	150	3.233	.5105
3	Adequate compliance activities	150	3.253	.5929
6	Well-defined coordinated responsibilities	150	3.147	.4394
2	Well-formalised control instruments	150	3.427	.5947
1	Monitoring of managerial practises	150	3.460	.6199

The average mean for the responses on the second line of defence factors was computed and ranked as shown in Table 3 above. It is concluded that monitoring of managerial practises and well-formalised control instruments are the two most important second line of defence core functions for combined assurance, and adequate compliance activities and assistance to first-line defence are the most important support activities as considered by the respondents for their organisation.

4.3.3 Extent of coordinated risk management activities by third line of defence

The findings on the extent of coordinated risk management activities by combined assurance third line of defence are presented as follows:

4.3.3.1 Existence of coordinated groups of independent assurance providers

The participants were asked whether their organisation has a third line of defence with a coordinated groups of independent assurance providers, and the responses are shown in Figure 27 below.

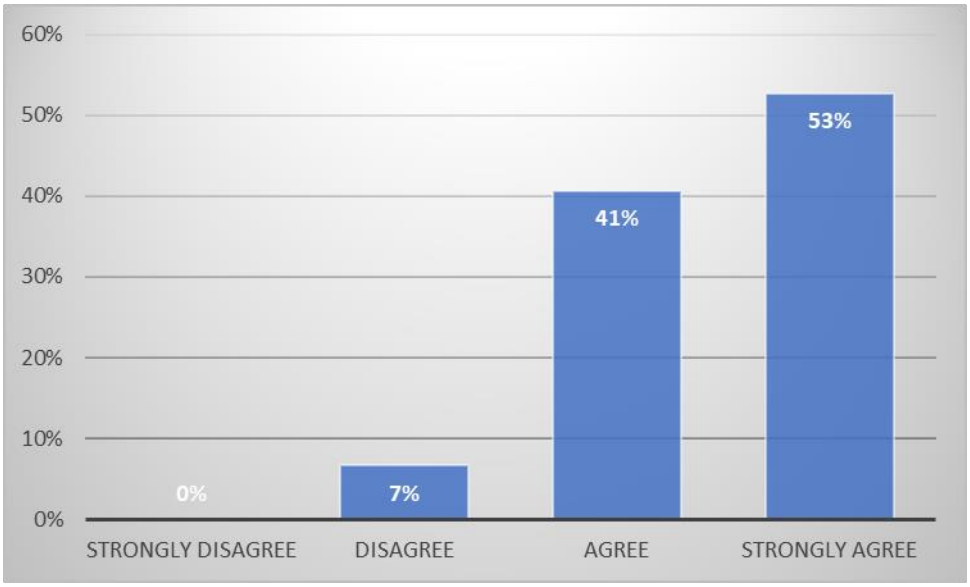

Figure 27: Existence of coordinated groups of independent assurance providers

Figure 27 reflects that 53% strongly agreed, and 41% disagreed regarding the existence third-line defence as coordinated groups of independent assurance providers for the organisation. However, 7% disagreed with this notion.

According to the ICAEW (2020:25), the third defence line is important to combine assurance to cover all sovereign assurance providers that assist the firm's board in achieving the oversight responsibilities. A firm must establish a complete framework for risk management as key to its readiness for effective combined assurance (Masegare, 2018:130). In addition, Moloi (2017b:80) contends the need for better coordination of assurance providers for greater assurance coverage in a company.

IAF core functions on the third line of defence

4.3.3.2 Existence of IAF as an independent assurance provider

The participants were asked whether their organisation has a third line of defence existing with an IAF as an independent assurance provider, and the responses are shown in Figure 28 below.

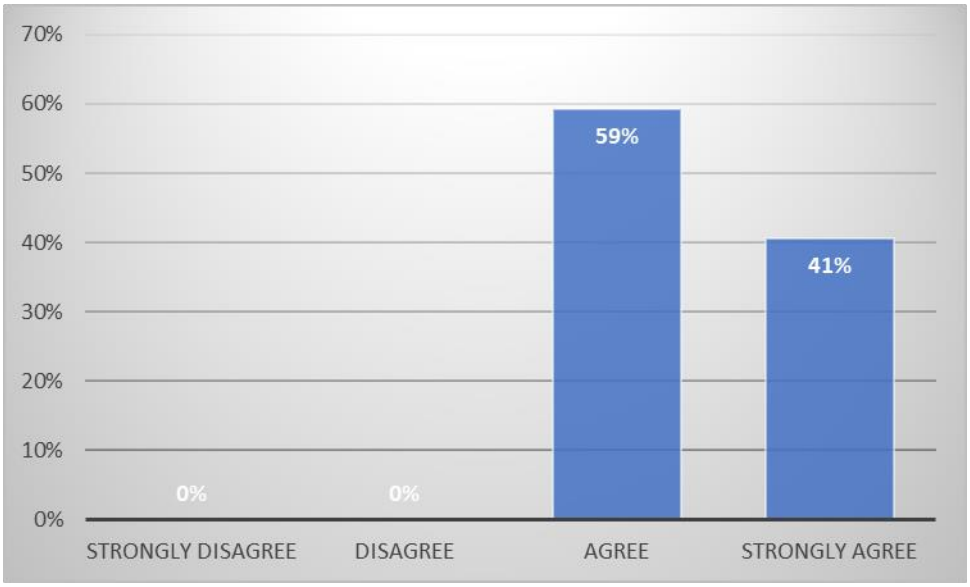

Figure 28: Existence of IAF as an independent assurance provider

Figure 28 reflects that 41% strongly agreed and 59% agreed with the existence of a third line of defence that includes an IAF as part of the independent assurance provider. The IAF provides independent assurance activities that the risk management system is effective and significant risks are being managed appropriately through an effective internal control system (IIA, 2012). The IIA Standard 2100 stipulates that the activities of internal auditing must contribute and evaluate improvements in risk management, control processes and governance using a disciplined and systematic approach (Huiber, 2015). The IIA (2020) also cites the IAF as a famous international and independent assurance provider that guarantees the effectiveness of firm's risk management system and establishment of appropriate and essential risk management through functioning internal control systems.

4.3.3.4 IAF independent assurance towards effective risk management

The participants were asked whether their organisation has a third line of defence existing with an IAF providing independent assurance for effective risk management, and the responses are shown in Figure 25 below.

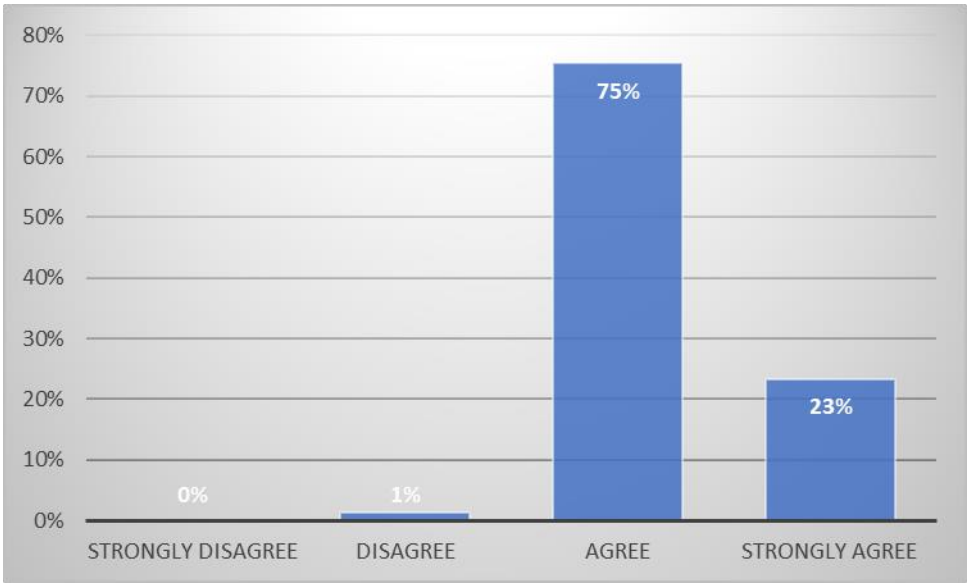

Figure 29: IAF independent assurance towards effective risk management

Figure 29 reflects that 23% strongly agreed, and 75% agreed with the existence of an IAF providing independent assurance towards effective risk management within the third line of defence. However, 1% disagreed with this notion.

4.3.3.5 Effective assurance for effective risk management

The participants were asked whether their organisation has a third line of defence existing with an IAF providing independent assurance for effective risk management, and the responses are shown in Figure 30 below.

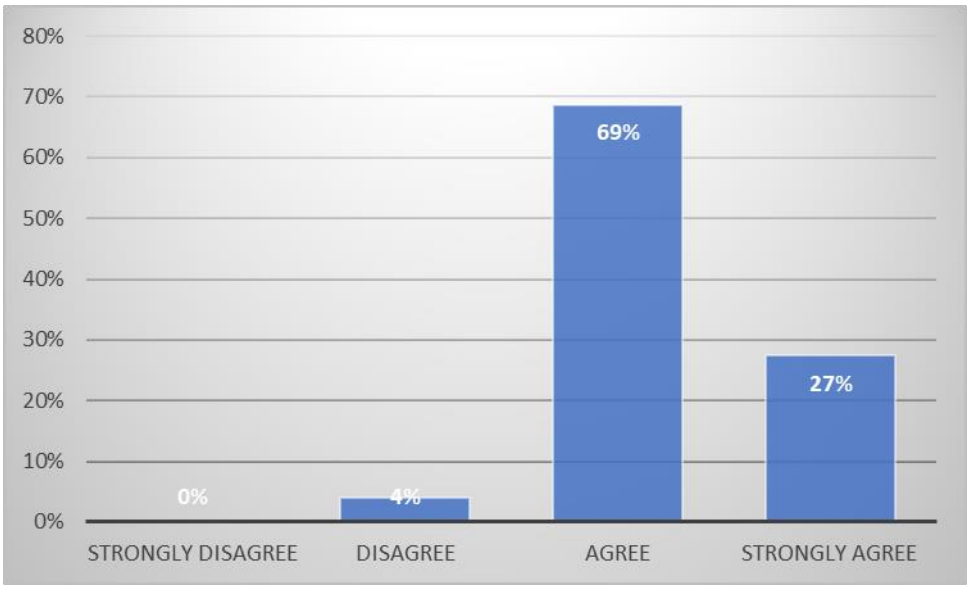

Figure 30: Effective assurance for effective risk management

Figure 30 reflects that 27% strongly agreed and 69% agreed with the existence of an effective assurance for effective risk management within the third line of defence. However, 4% of the participants disagreed with this notion. A firm's readiness for combined assurance is seen with the development of an assurance plea and a map of assurance providers (Decaux & Sarens, 2015:23).

Non-IAF functions of the third line of defence

4.3.3.6 Consulting when competency is lacking

The participants were asked whether their organisation has a third line of defence to provide consulting services when risk management competency is lacking, and the responses are shown in Figure 31 below.

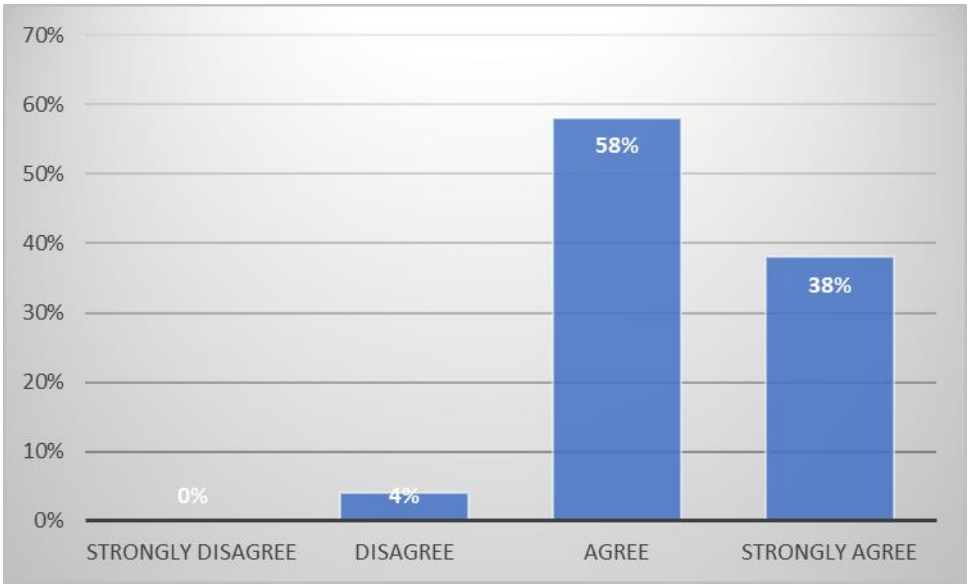

Figure 31: Consulting when competency is lacking

Figure 31 reflects that 38% strongly agreed and 58% agreed with the existence of a third line of defence to provide consulting services to the organisation when risk management competency is lacking. These external assurance providers function to provide independent assurance services to the board if the IAF lacks competence and skills or if the risk area falls beyond the risk-based internal audit plan (IIA, 2010).

4.3.3.7 External independent assurance providers provide objective compliance

The participants were asked whether their organisation has a third line of defence external independent assurance provider to provide objective compliance, and the responses are shown in Figure 32 below.

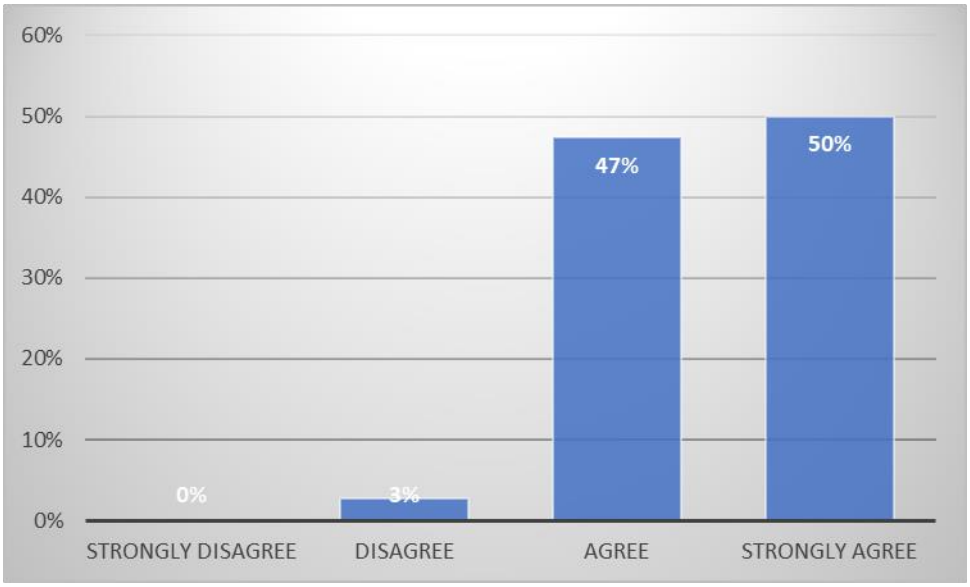

Figure 32: External independent assurance providers provide objective compliance

Figure 32 shows that 50% strongly agreed, 47% agreed and 3% disagreed with the existence of third line of defence assurance providers giving objective compliance. This third line of defence includes the other assurance providers, such as the professional reviews, outside credit agencies, auditors and/or regulators. These functions provide independent assurance services to the firm board where the sovereign assurance providers lack competence and skills; or where the risk is beyond the internal audit's risk-centred plans (IIA, 2020). The Institute of Directors in Southern Africa (2016) also insists that as part of the matrix of combined assurance, there must be consideration of firm functions including external assurance providers such as information technology auditors, auditors of sustainability and the environment, external actuaries, forensic con examiners and auditors, and regulatory agencies, which offer better monitoring and oversight. These functions provide independent assurance services to the board if the IAF lacks competence and skills or if the risk area falls beyond the risk-based internal audit plan (IIA, 2010).

4.3.3.8 Existence of an independent risk committee

The participants were asked whether their organisation has a third line of defence with an independent risk committee in existence, and the responses are shown in Figure 33 below.

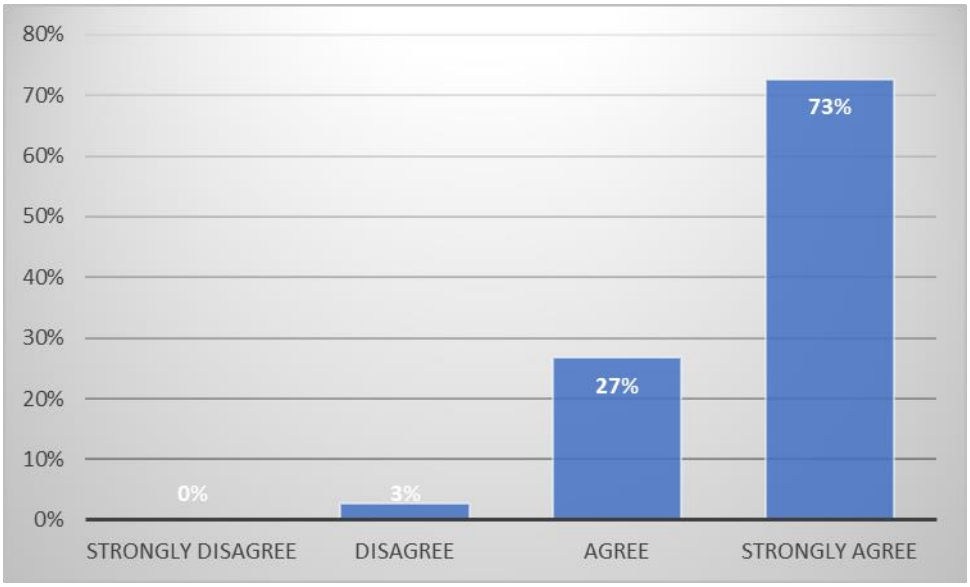

Figure 33: Existence of an independent risk committee

Figure 33 shows that 73% strongly agreed, 27% agreed and 3% disagreed with the existence of an independent risk committee within the organisation's third line of defence. According to Takura (2017), the oversight by a risk committee will help protect the business in good and in bad times, while giving the board and senior management a clear line of sight into how the institution is managing these risks and which emerging risks are on the horizon.

Table 4: One-way ANOVA simple statistic for third line of defence factors

Rank	Third line of defence	N	Mean	SD
6	Existence of IAF as an independent assurance provider	150	3.220	0.4468
5	IAF independent assurance towards effective risk management	150	3.233	0.5105
4	Effective assurance for effective risk management	150	3.340	0.5536
2	Consulting when competency is lacking	150	3.473	0.5520
3	External independent assurance providers provide objective compliance	150	3.460	0.5511
1	Existence of an independent risk committee	150	3.720	0.4652

The average mean for the responses on the third line of defence factors for combined assurance was computed and ranked as shown in Table 4 above. It is concluded that the existence of an independent risk committee, consultation when competency is

lacking, and provision of objective compliance services by external assurance providers were the most important non-IAF functions of the third line of defence factors for combined assurance as considered by the respondents for their organisation. IAF's most important factor is its assurance towards effective risk management.

4.3.4 Correlation between the constructs

To determine whether linear relationships exist, Pearson correlation coefficients were computed. Guidelines for practical interpretation of the strength of correlation coefficients, r, according to Cohen (1988), are as follows:

- r = |0.1| (small effect);
- r = |0.3| (medium effect, noticeable with the naked eye); and
- r ≥ |0.5| (large effect and practically significant).

In this section, the correlation questions are answered.

Table 5: Correlation of constructs

CONSTRUCT	N	Effective risk management
		Correlation coefficient
First line of defence combined assurance	150	0.3126
Second line of defence combined assurance	150	0.3374
Third line of defence combined assurance	150	0.3990

As shown in Table 5, the correlation coefficient, r, between line of defence and effective risk management is 0.3126 to 0.3990, meaning that there is a practical moderate significant correlation (linear relationship) between these variables.

4.3.5 Validity and reliability

4.3.5.1 Factor analysis

Factor analysis was done separately on sections B, C and D of the questionnaire. The factor analysis was performed as a data reduction method as well as to assure construct validity of the constructs. Results of factor analyses on sections B, C and D are as follows:

Table 6: Questionnaire section B: Factor analysis

Items of section B	N	MSA	Number of factors retained	% variance explained	Cumulative range
Q7,8,9, Q10,11,12,13	150	0.63	2	0.33-0.86	0.6886

The table above, the factor analysis on section B, yields two factors. Considering the MSA of 0.63, construct validity was assured on the two constructs. The factors are named as follows:

Table 7: Questionnaire section B: Main factors

Items of section B	Construct	Theoretical or nominal definitions
Q7,8,9	First line of defence core activities	This factor explains the first line of defence core duties of providing quality assurance service.
Q10,11,12,13	First line of defence support activities	This factor explains the first line of defence support activities it provides for the second line of defence

The above table refers. Factor analysis on section B yields two factors. The construct (Q7-Q13) is named functionality, as it measures the first line of defence support duties to second line of defence, and the first line defence core duties of quality combined assurance provisions.

Table 8: Questionnaire section C: Factor analysis

Items of section C	N	MSA	Number of factors retained	% variance explained	Cumulative range
Q15,16,17, Q18, 19,20	150	0.69	2	0.33 -0.86	0.6287

The table above, the factor analysis on section C, yields two factors. Considering the MSA of 0.75, construct validity was assured on the two constructs. The factors are named as follows:

Table 9: Questionnaire section C: Main factors

Items of section C	Construct	Theoretical or nominal definitions
Q15,16,17	Second line of defence support duty	The second line of defence supervision and support of first line of defence.
Q18, 19,20	Second line of defence core duty	This factor explains the core duty of the second line of defence

The above table refers. Factor analysis on section C yields two factor. The construct (Q15-Q20) is named functionality, as it measures the second line of defence support duties of the first line of defence, and the second line defence core duties of combined assurance.

Table 10: Questionnaire section D: Factor analysis

Items of section D	N	MSA	Number of factors retained	% variance explained	Cumulative range
Q22,23 Q24,25,26,27	150	0.68	2	0.32 -0.79	0.6768

The table above, the factor analysis on section D, yields two factors. Considering the MSA of 0.68, construct validity was assured on the two constructs. The factors are named as follows:

Table 11: Questionnaire section D: Main factors

Items of section D	Construct	Theoretical or nominal definitions
Q22,23	Third line of defence IAF function	This factor explains the third line of defence's IAF function as part of independent assurance providers.
Q24,25,26,27	Third line of defence non IAF function	This factor explains the third line of defence's other external independent assurance providers.

The above table refers. Factor analysis on section D yields two factors. The construct (Q22-Q27) is named functionality, as it measures the third line of defence IAF function and other non-IAF functions or other external independent assurance providers.

The summary of the factor analysis is shown in Table 12 below.

Table 12: Factor analysis summary

Sec B-D constructs	N	MSA	Retained	Explained	Vary between
B7-B9 **B10-B13**	7	0.63	2	68.86	0.33 and 0.86
C15-C17 **C18-C20**	6	0.69	2	62.90	0.59 and 0.73
D22-D23 **D24-D27**	6	0.68	2	67.68	0.32 and 0.79

4.3.5.2 Reliability

Cronbach alpha values to assure reliability are reported in the table.

Table 13: Cronbach alpha test

CONSTRUCT	ITEMS	C-ALPHA
First line of defence core function	3	0.7213
First line of defence support function	4	0.7333
Second line of defence support function	3	0.7671
Second line of defence core function	3	0.7022
Third line of defence IAF function	2	0.7203
Third line of defence non-IAF function	4	0.7644
Average Cronbach alpha		**0.7348**

Cronbach's alpha > 0.7 (α = 0.735, N = 19); scale is reliable

Table 13 reflects that the questionnaire comprised 19 items, with a level of measurement at an ordinal and nominal level. The Cronbach's alpha test computed to 0.735, which shows good reliability (α = 0,735 N = 19), more than 0.6. This is in line with Field (2014), who held that a Cronbach alpha value higher than 0.6 is an indication that all constructs are reliable. In addition, the constructs also have face validity having been revised in consideration of input from risk managers, academics and a pilot study undertaken.

4.3.6 Discussion and analysis

The results above have shown that combined assurance models impact effective risk management at all levels of the organisation. All the combined assurance lines of defence are effectively involved in core and support risk management functions and activities in the organisation. The Institute of Internal Auditors (2020) states that combined assurance must be centred around risk identification, assurance reportage and achievement by the company board using audit committees. ICAEW (2020) states that because all the defence lines play some part in the company governance framework by assisting the firm's risk management, it is vital for firms to initiate strong collaboration and defence activities in every defence line.

The defence lines also provide the firm monitoring and assurance activities, comfort to the firm management, committees and board of boards. PwC South Africa (2019) insists that to avoid duplication of assurance gaps or efforts, the chosen combined assurance model must define activities in every defence line accurately. Therefore, in this study, the three line of defence have well-coordinated and intertwined risk management functions that make them work in unison. The eventual intention of combined assurance models is coordination in all the defence lines, with each defence line ensuring effective and efficient risk monitoring and management by the firm's board and executives. Therefore, the Institute of Chartered Accountants in England and Wales (ICAEW) states that combined assurance models serve as the initial points of refining assurance provider coordination (ICAEW 2020).

The model also insists on mapping the defined assurances to the principal risks of the firm. It is shown in the results in this study that an alignment of assurances in the model to the most appropriate parties to eliminate redundant duplication as well as optimise the whole process of assurance exists. Simultaneously, the firm retains overlaps for extra security where needed with leeway to engage external independent assurance providers should there be deficiencies within the organisation. The CA model also helps to highlight the gaps in assurance (blind spots) so that the firm's board may request or plan for additional assurances where fitting.

The coordination of activities allows both external and internal providers of assurance work closely together to guarantee the assurance accomplishment in the right firm regions, including getting from the right resources the needed assurance in the utmost

cost-effective way. This is in line with IoDSA's (2020) contention that combined assurance involves alignment and integration of assurance procedures in a firm to control the efficiencies, exploit risk governance and oversight and even optimise overall assurance to the firm's audit and risk committee as well as risk appetite. Kurnia and Yulian (2017:41) also argue that combined assurance, therefore, optimises and incorporates assurance functions and services so that, when taken generally, the functions permit a real control setting, back the honesty of data employed for the firm's inside decision-making, and back the outside reports' integrity.

Ahmed Haji and Anifowose (2016:920) stress that combined assurance aims at optimising the coverage of assurance from the firm's providers of internal and external assurance as well as management. The practice of combined assurance ensures adequate resolution of the firm's vital risks. Both Simnett *et al.* (2016:281) and Zhou *et al*. (2019:238) insist that in combined assurance, the organisation's audit committee or management must communicate their decisions. These decisions must also be based on reliable and reported data, demarcating reliance on both internal and external assurance as well as effectiveness in risk administration, internal processes and controls.

4.3.6 Conclusion

In this chapter, the findings, discussions and analyses were done to assist in answering the research questions. The demographics, validity and reliability support the results. The descriptive and correlation of the constructs were presented to show how the combined assurance lines of defence influence effective risk management in a firm. The next chapter presents the conclusions, recommendations and areas of further study.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

In this chapter, the conclusions are derived from the main findings. This leads to the presentation of recommendations for the management of the municipality on how to make use of the combined assurance model to manage risks effectively. Included in this chapter are the conclusions showing whether the objectives of this study have been met. The chapter ends with an explanation of the recommendations and areas of further studies.

5.2 CONCLUSION AND ACHIEVEMENT OF OBJECTIVES

The purpose of this study was to examine the impact of the combined assurance model on risk management effectiveness, by analysing the three levels of defence using the following objectives:

- To examine the extent of effective risk management activities by first line of defence to combined assurance.
- To assess the extent of effective risk management activities by second line of defence to combined assurance.
- To examine the extent of effective risk management activities by third line of defence to combined assurance.

It was found that the existence of the first line of defence, second line of defence and third line of defence presents a coordinated risk management effort in the organisation. The first line of defence acts as process owners of risk management and management assurance. The second line of defence acts as overseers of risk in support of first line of defence and to monitor and coordinate risk management efforts. The third line of defence is a group of external and internal independent assurance providers who provide assurance services for effective risk management. The system is effective in eliminating duplications and identifying areas of deficiency to permit the engagement of external independent assurance providers. All levels of the combined assurance model achieve risk management effectiveness through both core and support activities and functions. In addition, a significant moderate linear correlation was found between each combined assurance line of defence and risk management effectiveness.

It is therefore concluded that the combined assurance model is an effective tool for effective risk management at the Ekurhuleni Municipality, which can ensure coordinated assurance activities through the use of lines of defence and both external and internal assurance providers with both support and core functions. The three lines of defence create dialogue and analysis that prevent companies from overlooking risk factors that could ultimately cause financial disaster, as well as allow them to be proactive in how they manage risk within the organisation.

5.3 RECOMMENDATIONS

It is recommended that municipalities' management can improve the following in their combined risk structures:

5.3.1 Assurance mapping

To enhance the effectiveness of combined assurance, organisations must ensure that assurance mapping is in existence that streamlines risk processes with regard to who is doing what, what has been done to date, and ensuring full accountability and responsibility by everyone involved in risk processes. Any gaps are therefore covered within the risk management processes and stakeholders can have comfort that all risks are being managed and reported on. Municipalities need to consider assurance maps in their combined assurance models to detect possible openings for assurance failure, redundancy or fatigue.

5.3.2 Assurance alignment to critical risk exposures

This can be facilitated with an ongoing assurance action plan to ensure identified critical risk exposures have a corresponding assurance plan. In their combined assurance models, South Africa's municipalities and organisations must prioritise and comprehend approaches for testing and tracking helpful actions on the identified opportunities for improvement, as well as controlling the weaknesses and/or innate risk mitigation.

5.3.3 Use of single enterprise risk planning (ERP)

A single ERP for all combined assurance individuals helps to achieve a shared or common technology support for all processes, thereby reinforcing the coordination of combined assurance activities. Enterprise resource planning (ERP) "consists of technologies and systems companies use to manage and integrate their core business

processes" (De Clegg & Cheff, 2011:2). Having an ERP system to support combined assurance activities is advantageous, since communication is enhanced and greater efficiency is achieved in processing, retrieving, controlling and storing data.

5.3.4 Formation of risk forums

A combined assurance risk forum should be considered to embed and implement the CAM principles as approved by the audit committee to increase the coordination efforts. The forum should engage with the accounting officer to ascertain the desired level of assurance required in each section of the organisation. Knowledge sharing is achieved effectively with these risk forums.

Municipalities' management and employees, through risk forums, can communicate, and interaction across the model's defence lines for the municipalities to have quick efforts and resolutions is established. The institutions' optimal coordination and appropriate assurance energies become concentrated on the main risk experiences and can assess whether their organisation can successfully execute developed strategies and realise their objectives. The institutions can then effectively use the devoted assurance by supporting external assurance providers and giving thoughts on the status of residual risks, preventing any assurance exhaustion, minimising overlaps between the combined assurance model's lines of defence, and preventing likely blind spots.

5.3.5 Top level management support

Strong support from top-level management and the audit committee is essential. Consequently, strong communication with this group will increase buy-in. South Africa's municipalities need to build top management and the board of directors' confidence in the effectiveness of control and risk processes, governance, and the reliability and quality of management reportage. The municipality should involve top management and the board of directors in the improvement of reporting reliability and quality on opportunities and risks.

5.3.6 Clear separation of core and support functions for each line of defence

The municipality must ensure that the core and support functions of each line of defence are clearly defined to ensure more coordinated and effective risk management. According to Daugherty and Anderson (2012), combined assurance

and the ‘three lines of defence’ model of risk management and control functions are more effective when comprising all three lines of defence, each with support and core functions.

5.4 LIMITATIONS

The study population was limited to 150 individuals directly involved in risk processes at Ekurhuleni due to time and financial constraints. Due to COVID19, only respondents who were available on email were sent questionnaires, i.e. municipal workers based at head office. Future studies can be done to include employees who work in remote areas.

5.5 AREAS FOR FURTHER STUDIES

Further studies can be done to test the hypothesis further with a large population using a longitudinal approach instead of the cross-sectional approach used in this study. Within municipalities, there is a need to review the lack of a legacy risk management approach to build upon. The siloed organisational structures or the organisationally entangled nature of risk management, the overarching cost efficiency concerns, and the difficulty of ensuring an independent oversight body can add value and generate insights for some specialised risks, and the difficulty to acquire the scarce talent to understand some of these risks.

5.6 SUMMARY

The results show the existence of the three lines of defence for the combined model. The lines of defence have core and support risk management functions that ensure coordination and effective functionality. Having in place a strong set of defences is crucial, but equally important is the need to coordinate these activities. It was found that CAM has a moderate linear correlation with risk management. The objectives of the study were therefore met and it is recommended that if an organisation wishes to improve its assurance structure, it should consider risk mapping, formation of a risk forum, use of an assurance ERP, working with top management support and aligning assurance with critical risk exposure.

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APPENDIX 1: CONSENT AND QUESTIONNAIRE

Dear Participant

RESEARCH ON THE IMPACT OF THE COMBINED ASSURANCE MODEL IN THE MANAGEMENT OF RISKS

You are herewith invited to complete a questionnaire as part of my MBA research project at the North-West University (NWU). In this research, we are interested in your experiences in risk management and the combined assurance practices in the Ekurhuleni Metropolitan Municipality. It will take you approximately 15 to 20 minutes to complete the survey. We can assure you that all the information we receive will remain confidential. Please note that the responses from each individual will not be identified, but rather the results of the group as a whole will be used in this study.

Please answer all questions as accurately and honestly as possible. Once you have completed the questionnaire, the researchers will analyse the data, and the summary findings will be presented to participating institutions. We will work with them on how to respond to the results. In this way, your contribution to the research could benefit you and your municipality in the future.

You must understand that it will not be to your disadvantage if you choose not to participate. Participating is entirely voluntary, and you can withdraw from the study at any time. If you are comfortable with the content and meaning, and you have no objections, please complete the attached questionnaire. *By completing this questionnaire, you give consent that this information may be used for research purposes.*

If you have any queries that we have not addressed and would like to discuss these with us, please do not hesitate to contact us.

Yours faithfully

Mr NTN Rabambi
Primary researcher
North-West University
076 512 1082
nrabambi@yahoo.co.za

Prof N Mouton
Study supervisor
North-West University
Nelda.Mouton@nwu.ac.za

QUESTIONNAIRE

SECTION A: DEMOGRAPHICS

1. Gender: Male ☐ Female ☐ Others ☐
2. Age: < 20 years ☐ 20-30 years ☐ 31-40 years ☐ > 40 years ☐
3. Education: Diploma ☐ Degree ☐ Postgraduate ☐ Others:…… ☐
4. Experience: < 5 years ☐ 5-10 years ☐ 11-15 years ☐ > 15 years ☐
5. Level of assurance: 1st line ☐ 2nd line ☐ 3rd line ☐

SECTION B: FIRST LINE OF DEFENCE ASSURANCE

6. My organisation has a first line of defence that coordinates efforts of managers and subordinates acting as process owners to risk management and management assurance:
   Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. My organisation's first line of defence provides adequate risk monitoring and control activities	☐	☐	☐	☐	☐
8. My organisation's first line of defence provides adequate risk identification activities	☐	☐	☐	☐	☐
9. My organisation's first line of defence combines functions to manage risks daily	☐	☐	☐	☐	☐
10. My organisation's first line of defence combines functions into groups that own risks daily	☐	☐	☐	☐	☐
11. My first line of defence provides management with adequate risk management reports	☐	☐	☐	☐	☐
12. My first line of defence provides management timely risk management reports	☐	☐	☐	☐	☐

13. My first line of defence adequately documents problems within the internal control system	☐	☐	☐	☐	☐

SECTION C: SECOND LINE OF DEFENCE ASSURANCE

14. My organisation has a second line of defence that act as overseers of risk comprising different departments:
    Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. My organisation's second line of defence has multi functions to oversee risks	☐	☐	☐	☐	☐
16. My organisation's second line of defence helps the first line to implement policy and procedure	☐	☐	☐	☐	☐
17. My organisation's second line of defence has adequate compliance activities that support first-line risk efforts	☐	☐	☐	☐	☐
18. My organisation's second line of defence's coordinated responsibilities are well defined	☐	☐	☐	☐	☐
19. My organisation's second line risk control instruments are well formalised	☐	☐	☐	☐	☐
20. My organisation's second line of defence monitors the first line's effective implementation of risk management practices	☐	☐	☐	☐	☐

SECTION D: THIRD LINE OF DEFENCE ASSURANCE

21. My organisation engages coordinated groups of independent assurance providers to assist the board to fulfil its risk management mandate:

Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree ☐

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
22. My organisation has an IAF acting as an independent assurance provider	☐	☐	☐	☐	☐
23. My organisation's IAF provides independent assurance activities on risk management system effectiveness	☐	☐	☐	☐	☐
24. My organisation's IAF provides independent assurance to ensure effective and significant risk management	☐	☐	☐	☐	☐
25. My organisation consults other independent assurance providers where IAF lacks competence and skills to fulfil effectiveness	☐	☐	☐	☐	☐
26. My organisation's other independent assurance providers provide objective assurance	☐	☐	☐	☐	☐
27. My organisation has an independent risk committee in place to assess all internal control systems	☐	☐	☐	☐	☐