KWAME NKRMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF HUMANITIES AND SOCIAL SCIENCE

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INTERNAL AUDIT AND ENTERPRISE RISK MANAGEMENT IN FINANCIAL INSTITUTIONS IN GHANA.

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DECLARATION

I sincerely declare that this work is my own work for the award of master's degree in accounting and finance. It contains no research or study published by another person or study which has been accepted already for the award of any other degree of the University of other University in the world. All words which are not mine has been dully referenced.

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DEDICATION

I dedicate this work to my wife Mrs Abigail Afua Colerangle and my adorable kids, Marvi Aba Duku Colerangle and Joey Ekow Colerangle and also to my parents Mr. and Mrs. Colerangle

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ABSTRACT

The study’s aim is to assess the impact of internal audit functions on enterprise risk management focusing on financial firms in Ghana, specifically Greater Accra. In this study, 286 questionnaires were distributed by using stratified sampling technique, which entails dividing the banks, insurance companies, and capital market brokerage into distinct strata. After which 260 useable questionnaires were deemed suitable for analysis. Multiple regression analysis was used to test the study's hypothesized relationships. The findings demonstrated a significant enterprise risk management practices within the financial institution in Ghana. The finding implies that ERM is a holistic approach to managing risks across an entire organization. In financial institutions, ERM encompasses the identification, assessment, and mitigation of various risks, aligning risk management strategies with the institution's objectives. The findings showed that internal audit functions is positively and significantly connected to enterprise risk management of financial firms in Ghana. The results implies that internal audit acts as an independent and objective assurance function within an organization. Its primary role is to assess the effectiveness of risk management processes and controls. The study adds to a less researched area of internal audit functions and enterprise risk management practices, by investigating the internal audit and enterprise risk management in financial institution in Ghana. The results of the study highlight the enterprise risk management practices in financial firms, as well as the effect of internal audit functions on enterprise risk management practices in financial firms

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Quantitative analysis of operational data has historically been recognized as an effective method for predicting loan and claim risk in financial and insurance industry activities (e.g., loan disbursement, interest rate and premium setting). Companies in the banking and insurance sectors have long invested in methods and tools to measure and assess risk. Data analysis plays a key role in these procedures, making it possible to better keep tabs on potential dangers and make calculated risks in the commercial world. Despite these expenditures, numerous organizations within the banking industry are widely considered to be frontrunners in risk assessment and management practices have had catastrophic failures in the management of organizational risk. Specifically, the risky banking practices that were widely held to have contributed significantly to the recent economic crisis have come under scrutiny (Callahan and Soileau, 2017). The development of effective Risk Management Practices has become essential for financial services companies to successfully manage common risks including cyber risk, credit risk, operational risk, fraud risk, and compliance risk (Price Waterhouse and Coopers, 2017). By making the best choices, organizational units may boost their performance and return more money to their owners and investors. However, organizational units may be compelled to continually alter their aims to avoid the risks associated with numerous actions due to the rapid changes in the business environment.

This emphasizes the need for top-down and bottom-up management to work together to effectively mitigate risk (Hadi, 2017). People engage in risk management activities to help them recognize threats, evaluate them, and take action to mitigate or prevent them. Threats and opportunities can be both project-specific and systemic, including anything from market risk to political instability (IIA, 2009). The result of a decision is subject to doubt. The goal of effective risk management is to provide the strongest foundation for decision-making. Enhancing the decision-making process should also make it easier to deal with unintended consequences (IIA, 2020). However, managers and executives of firms are sometimes self-centred and make decisions that favour their personal purposes rather than the shareholders. This results in a conflict of interest as suggested by Jensen and Meckling (1976) between managersand the principal. Managers may engage in risky activities or businesses that will benefit their selfish desire such as promotion or honour but may put shareholders' investments at risk which is in disagreement with the aim of the owners. This disagreement in goals leads to agency cost which is very influential in the poor performance of the firm (Bhatt and Bhatt, 2017). These agency expenses may be reduced by efficient monitoring and auditing, which will improve business performance. To do this effectively, corporate boards are expected to restrict the opportunism of managers (Sheikh, Shah and Akbar, 2018)

Enterprise risk management (ERM) is a widely recognized framework that assists companies in locating and addressing potential risks (Anton and Nucu, 2020). Several variables, including the possibility of financial hardship and related expenses, low profits performance, development potential, and board independence, push organizations to engage in the ERM process, as stated by Khan et al. (2016).

Furthermore, competitive advantage may be gained by firms through effective risk management strategies (Blanco-Mesa et al., 2019). Maintaining risk at a manageable level and ensuring the greatest possible balance between risks and opportunities are the two fundamental goals of ERM (IIA, 2020). According to IIA (2020), ERM guarantees that risk exposure is balanced against achieving the organization's goals, that assets are managed appropriately, and that the best information is available to make decisions (IIA, 2020). The Integrated Framework for Enterprise Risk Management (COSO, 2017) is focused on the development of enterprise risk management and the need for businesses to improve their risk-management strategy to meet the demands of a changing business environment. Internal auditing is an impartial and independent process of assurance and advisory, which plays a central role in risk management by evaluating the effectiveness and efficiency of risk management practices, while also fostering ongoing enhancements (IIA, 2020). Assurance, advice, and anticipation are the three pillars that support internal auditing's value (Deloitte, 2018). Internal audit plays a key role in identifying, measuring, and disclosing these risks in order to assist the users of the financial statements in evaluating the effectiveness of the bank in managing and controlling risks that may be exposed in the future to make investment decisions and other decisions. This is because the main factor that controls how financial institutions behave is risk management, not risk avoidance (Tamimi, 2021).

According to Shad and Lai (2019), the adoption of enterprise risk management (ERM) has been on the rise among organizations due to various factors spanning the recent decades,the globalization of the corporate environment, technological developments, breakthroughs in operational processes, and tension from regulatory authorities to control risk completely. A renowned expert in ERM, the Committee of Sponsoring Organizations of the Treadway Commission (COSO), predicts that businesses will continue to confront a volatile, complicated, and unpredictable future and for any business to manage and flourish in these times, ERM will be essential (COSO, 2017). In order to make investment decisions and other decisions,Internal audit plays an integral role in identifying, measuring, and disclosing risks in order to assist individuals analyzing the financial statements in assessing how effectively financial institutions are handling and overseeing risks to which they may be exposed in the future. This is because financial organizations are primarily defined by their capacity to manage risk rather than their desire to avoid it (Tamimi, 2021). A vital element within the financial system of any financial institution is the internal audit (Ofori and Lu, 2018). Therefore, the question of how internal audit functions impact financial firms' ability to manage risks using ERM is not out of place. The internal audit's duties and pursuits are linked to the ERM and its constituent parts (Hadi, 2017). The internal auditor must recognize the risks linked to different occurrences that the organizational unit faces, evaluate these occurrences, and ascertain their impact on the accomplishment of objectives (Teoh et al., 2017). Furthermore, internal audit produces reports about the operations of multiple organizational divisions and grasps the internal setting of the entity (Bogazi & Malika, 2018). The elements of the ERM are tied to all of these operations.

1.2 Statement of Problem

In 2017, the Ghanaian banking sector was hit by a huge crisis which saw the Bank of Ghana take a number of actions in 2017 and 2018 that resulted in the acquisition and considering the supposition involving seven banks, the voluntary shutdown of a single bank, the downsizing of another bank into savings and loans entity, the infusion of capital into five local banks, and the endorsement of three consolidation efforts. These actions cost the government around GHC 16.4 billion, or 5% of GDP, excluding interest on the bonds that were issued (BoG, 2019). One of the causes of this banking sector crisis was poor management of risk (Zhongming, Frimpong and Guoping, 2019). Given this situation, financial establishments are feeling the strain to enumerate all the business risks they face. Boards of organizations demand assurance regarding the robustness of the organization's risk culture and the effective management of risks (Drogalas and Siopi, 2017).

Globally, there is a wealth of literature on internal audit and risk management. Tamimi (2021) looked into how risk managers in the Palestinian banking industry view internal audit's role in risk management. The primary determinant of risk management, according to the report, is the effectiveness of the risk manager, and internal auditing focuses on evaluating the risk management department and ensuring the efficacy of risk management techniques in addressing these risks. He added that the internal audit divisions of the banks with branches in Palestine provide advice, suggestions, and recommendations to the risk management division. The risk management division must be monitored by the board of directors and senior management in banks, and all departments involved in risk management must work together in order to obtain the best outcomes at the banking and economic levels, according to the results.

In addition, the impact of enterprise risk management on institutional performance in Jordanian public shareholding companies was studied by Altanashat, Dubai and Alhety (2019). They discovered that the adoption of ERM has a considerable impact on institutional performance. According to their findings, the enterprise risk management framework contributed to the improvement of the extraction firms' performance in Jordan, and more widespread deployment of the framework will result in improved performance for these businesses.

Odubuasi, Ofor, and Ilechukwu (2022) on the other hand performed a comparative study on enterprise risk management, risk committee and earnings capacity of banks in Ghana, Nigeria and South Africa. They found that Ghanaian banks performed the least among the three countries in using ERM practices to increase their earning capacities. Accordingly, the report advised regulators in African nations to impose tight compliance and make sure that ERM standards are applied to all banks in Africa. Last but not least, men with experience in risk management should be included on company boards. This study based on this background seeks to investigate enterprise risk management in Ghanaian banks.

Other Studies such as Horvey and Ankamah (2020); and Tetteh (2022) are some of the studies that have tried to investigate enterprise risk and internal audit in Ghana. However, none of these studies has studied the impact of internal audits on enterprise risk management in financial firms in Ghana. Also, internal audit functions in financial institutions have been under scrutiny and criticism (Kabuye, Bugambiro, Akugizibwe, Nuwasiima and Naigaga, 2019) due to the recent financial crisis in Ghana. Hence, the present study will examine the impact of internal audit functions in the financial firms in Ghana as well as give the impact of these practices on the enterprise risk management in those firms. The findings will provide insight into the relationship between the two internal audit functions and enterprise risk management as well as provide empirical literature on the topic which will make available implications for practice, academia and policy-making so as to boost investor confidence. The findings will give managers of financial firms, empirical evidence of how significant internal auditing functions are to enterprise risk management which will help them to ensure successful and effective audit functions to boost investor confidence. It will also provide literature on the topic thereby providing a research foundation for future studies.

1.3 Objective of the Study

The study's aim is to assess the impact of internal audit functions on enterprise risk management focusing on financial firms in Ghana. This goal will be achieved through the specific goals below.

1. To examine the enterprise risk management practices in financial firms in Ghana.
2. To assess the effect of the internal audit functions on enterprise risk management of financial firms in Ghana.

1.4 Research Question

1. How effective are enterprise risk management practices in financial institutions in Ghana?
2. What is the impact of internal audit functions on enterprise risk management in financial firms?

1.5 Significance of the Study

The findings in this research are very significant for a number of reasons. First, there are few studies examining the effect of internal audit functions on enterprise risk management of financial firms in Ghana, despite the fact that many studies have looked into the relationship between internal audit and risk management (e.g.Altanashat, et al., 2019, Kabuye, 2019, and Tetteh, 2022). Since regulators and managers of financial institutions will need to know how internal audit functions affect enterprise risk management in order to ensure successful internal audit functions in the business, this study adds to the body of knowledge by demonstrating this relationship as well assist policymakers to make informed decisions and policies for effective enterprise risk management and improved investor confidence and firm performance. It will also provide literature on the topic thereby providing a research foundation for future studies.

1.6 Scope of the Study

The study's focus is on Ghanaian financial institutions and will be limited to that country's borders. The survey was narrowed to organizations with Accra-based headquarters. Also, it only involve individuals who are involved in risk management in the financial institutions, thus, risk managers, financial officers and internal auditors.

1.7 Summary of Methodology

The quantitative approach is used in the study to gather and analyze data. The design of the study is quantitative, to be specific, descriptive and correlational. The study population involves financial institutions in Ghana which is constructed into banks, market capital brokers and insurance companies. Primary data will be collected using a semi-structured questionnaire. The questionnaire will collect information on the demographics of the respondents such as age, educational level, occupation and years of working experience. It will also gather data on the internal audit functions, enterprise risk management practices in the firms and type of ownership of the firms. Convenience sampling was used to select financial firms in Accra. In order to minimize bias, financial services businesses will be chosen using stratified random sampling, 15 banks, and 10 insurance companies. Purposive sampling will then be used to select the respondents of the questionnaire due to their knowledge, position and experience in the field of study. Three personnel involved in risk management (the Internal Audit Manager, the Chief Finance Officer, and the Risk manager) will be selected from each institution. The questionnaires will be administered online so to allow the respondents enough time to respond to the questions at their own pace due to the nature of their work.

1.8 Limitations of the Study

Convenience sampling is utilized in the study to pick just financial enterprises in Accra so that it could draw a generalization about the entire nation which is not adequate. But the researcher has to make this decision because of the constraints imposed by money and time.

1.9 Organization of the Study

The research is structured into sections, comprising five main chapters. Chapter 1's introduction will encompass the foundational aspects of the study, the problem statement, research objectives, and research questions. This section will also encompass an outline of the research methodology employs, the study's significance and scope, as well as its limitations. Chapter 2 will provide a comprehensive literature review, delving into both theoretical and empirical aspects of the research topic. The discussion will revolve around the literature relevant to the study. Chapter 3 will elucidate the research approach adopted for the study. This chapter will expound upon the research design, sampling strategy, sample size, and data collection methods employed. Furthermore, it will delineate the tools utilized for data gathering and the step-by-step process followed for data analysis. A more intricate examination of the study's findings and their presentation will be found in Chapter 4. This chapter will delve into the results of the research. The fifth and final chapter will encapsulate the core elements of the research. It will offer a summary of the study and present the conclusions drawn from the research findings. Additionally, this chapter will put forth recommendations based on the insights gained from the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter organized the existing research about the subject into several categories: conceptual examination, theoretical exploration, empirical investigation, formulation of hypothesis, and conceptual framework. In the conceptual review, the literature discussed the concepts of "internal audit function" and "enterprise risk management". The theoretical review established the study's foundation as institutional theory. The empirical review incorporated findings from previous studies to construct the study's objectives, leading to the development of the hypothesis.

2.1 Conceptual Literature Review

The section offers definitions for the construct in the study known as internal audit and enterprise risk management and how they were used in the study.

2.1.1 Internal Audit Function

Internal audit functions have a primary focus on assessing and enhancing internal controls (ICs) and risk management (Gamayuni, 2018). The insights offered by internal audits are valuable in identifying areas where internal controls can be strengthened to prevent and detect fraudulent activities (Ta and Doan, 2022; Sofyani, et al., 2021; Salleh and Suryanto, 2019). According to Nurhidayat (2018), internal auditing encompasses both financial and non-financial transaction audits, including compliance with regulations. Incorporating an internal audit can enhance a company's attractiveness to potential investors by improving its investment appeal (Jurakulovna and Bahodirovich, 2021). Moreover, Kotb et al. (2020) emphasize that the implementation of an internal audit system aids in protecting shareholders' and management's interests by uncovering errors, mitigating future risks pinpointing weaknesses, and establishing effective management principles. The presence of internal audits holds significance for business proprietors who entrust management to capable managers (Jurakulovna and Bahodirovich, 2021). The role of the internal audit position is to provide unbiased assurance and consulting services aimed at adding value and enhancing existing products or services (Alhabow and Hamoudi, 2022). By utilizing a structured and disciplined approach, internal audits assist (Hamoudi, 2022). By utilizing a structured and disciplined approach, internal audits assist organizations in achieving their objectives through the evaluation and improvement of risk management, control processes, and governance (Vadasi et al., 2019; Haapamäki and Sihvonen, 2019; Pham and Nguyen, 2021; Singh et al., 2021). An independent audit committee serves the purpose of aiding management and the board in assessing and enhancing the effectiveness of risk management, internal control, and corporate governance within a company.

The Chartered Institute of Internal Auditors (2015) emphasizes that a robust Internal Audit Function (IAF) contributes to effective corporate governance by enhancing internal controls. Baharud-din et al. (2014) state that internal audit departments in businesses ensure efficient internal control operation by reviewing procedures to prevent noncompliance and resource loss. As highlighted in International Standards on Auditing (ISA) 200, audits in organizations allow auditors to express opinions on financial statements prepared following approved financial reporting frameworks. Constructive criticism through internal auditing aims to boost company efficiency and effectiveness (Bello et al., 2018).

The objective of internal audits is to evaluate and enhance risk management, control, and governance processes methodically and systematically (Elshawarby, 2020). Corporate governance's introduction has expanded the range of potential internal control systems, as internal auditing aims to create value and improve performance (Institute of Internal Auditing, 2012). The independent assurance and consulting process examines and evaluates operations within organizations (Magri, et al., 2020). The internal audit role reports on the effectiveness and efficiency of internal control for objective resource utilization.

According to Kamyabi and Salahinejad (2020), risk perception and management influence audit activities in companies, impacting control system enhancement through consultant and assessment services (Zunaedi, et al., 2022). Risk-based auditing fosters stronger accountability systems (Kamyabi and Salahinejad, 2020). Organizations proactively plan and prioritize audits to align with goals and risk tolerance (Larasati and Bernawati, 2020). Assessing control risk is vital in designing audit processes, with high risk necessitating rigorous audit systems (Gamayuni, 2018).

Primary responsibilities of internal auditors, as per Ege (2015), COSO (2017), and Drogalas et al. (2015), include investigating, evaluating, and monitoring the effectiveness of internal control objectives for operations, reporting, and compliance. Internal audits assess a company's internal controls, corporate governance, and accounting procedures (Murra, 2021). These audits ensure adherence to regulations, accurate financial reporting, and data collection, enabling management to enhance operational efficiency by identifying issues before external audits (Murra, 2021).

2.1.2 Enterprise Risk Management

Enterprise risk management involves managing risks within a company's risk appetite to achieve its objectives, as emphasized by COSO (2017). Organizations are increasingly utilizing it to enhance short- and long-term attributes through risk identification, assessment, and management across various contexts (Saeidi et al., 2019). Risk management, as described by Alazzabi et al. (2020), is the process of identifying, evaluating, and controlling risks. Risk management helps companies prioritize risks based on intensity within their risk appetite, enabling them to choose suitable strategies and responses (Abdullah and Said, 2019; COSO, 2017; Span and Zagaria, 2022). Adopting risk management enhances stakeholder confidence and aligns with diverse stakeholders' interests (COSO, 2017). Enterprise risk management involves policies, methods, and activities that develop risk management skills (Norlida and Abdul Aziz, 2019). Competent risk management is vital for a company's survival and capacity to address emerging risks. (Manab and Aziz, 2019). It enables accurate estimation of future danger possibilities. Enterprise risk management is a comprehensive, systematic approach to detecting, resolving, and controlling risks (Haryetti Haryetti, 2021). It's a top-down approach requiring executive-level decision-making.

A comprehensive enterprise risk management framework centralizes and enhances risk disclosure, helping understand key risks, manage them, and implement safeguards (Anton and Nucu, 2020). Enterprise risk management illuminates the risk-value relationship (Saeidi et al., 2019). Bronson's (2022) definition considers it as planning, organizing, directing, and managing activities to mitigate risk's negative impact on capital and profitability. Risk's occurrence and impact vary based on how it's managed

(Williams and O'Connor, 2021). Operational risks pertain to investment prospects and are linked to product marketplaces (Williams and O'Connor, 2021). Financial risks encompass a broader market risk affecting financial performance (Al Breiki and Nobanee, 2019).

Risk management is crucial for banking institutions, aiming to safeguard investments and assets

(Babich and Kouvelis, 2018). Management seeks to avoid poor earnings, product marketplaces (Williams and O'Connor, 2021). Financial risks encompass a broader market risk affecting financial performance (Al Breiki and Nobanee, 2019). Risk management is crucial for banking institutions, aiming to safeguard investments and assets (Babich and Kouvelis, 2018). Management seeks to avoid poor earnings, necessitating consideration of various risks (Williams and O'Connor, 2021).

2.1.2.1 Market Risk

Market risk originates from fluctuations in economic factors like equities, commodity prices, interest rates, bond values, and currency exchange rates (Saeudy et al., 2021). Primary drivers of market risk include interest rates, liquidity, and foreign currency rates. If a financial institution struggles to manage deposit recovery, financing increases, or lending portfolio, liquidity risk arises (Rehman et al., 2019). Stankovska et al. (2018) approach liquidity risk from three angles: challenges in fund raising, insufficiency of short-term assets to cover liabilities, and potential bank losses leading to bankruptcy. Effective liquidity risk management requires demonstrating the ability to meet cash flow needs (Osayi et al., 2018). Conversely, interest rate risk, tied to interest rate fluctuations, threatens bank value and profitability (Rehman et al., 2019). Regulatory shifts, interest rate volatility, and complex off-balance-sheet products complicate interest rate risk management (Stankovska et al., 2018). Interest rate risk arises

2.1.2.2 Credit Risk

Credit risk is the inability of borrowers to fulfill loan repayment duties within the stipulated timeframe (Saeudy et al., 2021; Stankovska et al., 2018). Financial institutions face credit risk when payments are delayed or not made at all due to heightened competition in the banking sector (Williams and O'Connor, 2021). Rehman et al. (2019) noted that a decline in a debtor's creditworthiness doesn't always result in market losses but increases required market yield to compensate for heightened risk. Credit risk emerges from borrowers' failure to meet loan obligations (Sabet et al., 2020). Banks assess borrowers' financial status and asset value when evaluating credit risk (Qizi, 2022). Effective management of credit risk necessitates formal policies to classify assets, assess collectability, and allocate reserves for potential credit-related losses (Williams and O'Connor, 2021). In this study, the term "credit risk" refers to the possibility of losses due to borrowers' inability to repay loans or meet commitments (Sabet et al., 2020).

2.1.2.3 Strategic Risk

Strategic risk encompasses external events impacting a company's growth, shareholder value, and alignment with goals (Hong et al., 2021). Murrja et al. (2022) describe it as a risk emerging from pursuing goals and exploiting opportunities. Cheng et al. (2018) view it as factors hindering objective achievement. Adelaide (2019) adds factors like market stagnation, tech shifts, and brand degradation. Managing strategic risk is complex due to its diverse nature (Hong et al., 2021). Godfrey et al. (2020)

stress evaluating benefits and drawbacks. In this study, "strategic risk" follows Cheng et al.'s (2018) definition of internal and external factors challenging goal attainment.

2.1.2.4 Operational Risk

Operational risk is connected to direct or indirect loss as a result of inadequate or ineffective internal systems, processes, people, and outside events (Butt et al., 2022). This type of risk is visible at several levels and includes human, technological, system, and organizational process mistakes. Stankovska, et al. (2018) also pointed out that without effective risk monitoring and reporting, certain crucial hazards can go unreported, delaying the need for corrective action and risking disastrous outcomes. The emergence of variables like technology, the use of structured finance, outsourcing, and e-commerce, however, has shown that financial institutions are able to lessen the causes and effects of the risk (Rehman, et al., 2019). Operational risks are described by Adelaide (2019) as unfavourable uncertainties connected to the organization's investment prospects that are most impacted by the product marketplaces in which the organization works. This will take the definition of operational risk given by Rahim et al., (2019), which indicates that it is the possibility of incurring losses as a result of poor or ineffective procedures, rules, policies, systems, or other occurrences that interfere with corporate operations.

2.1.2.5 Reputation Risk

Reputation risk holds increasing importance in the banking sector, even surpassing market and credit-related concerns (Economist Intelligent Unit, 2005). Lee et al. (2021) emphasize reputation's value in a company's growth and survival. Erosion leads to reputation loss (Williams and O'Connor, 2021). Successful financial organizations' share prices often rely on intangibles like goodwill and brand value (Saeudy et al., 2021). In reputable firms, intangible assets might outweigh tangibles.

Conversely, a company with a negative reputation might have lower value than its tangible assets (Williams and O'Connor, 2021).

Miklaszewska, Kil, and Pawowska (2020) define reputational risk as harm from not meeting stakeholders' expectations. Romano et al. (2021) list risk factors like non-compliance, competition, and employee behavior. Effective communication and strong stakeholder connections mitigate reputational risk. Timely financial reporting, newsletters, and prompt customer service enhance reputation (Adelaide, 2019). In this study, "reputational risk" refers to harm from failing stakeholders' expectations (Miklaszewska, Kil, and Pawowska, 2020).

2.2 Theoretical Review

The section identified and described the institutional theory as the guiding theoretical foundation for the study.

2.2.1 Institutional Theory

Institutional theory, as described by Mihret et al. (2010), highlights how external influences, such as norms, rules, and laws, shape the structures and behaviors of organizations. This theory suggests that factors like government regulations and professional standards impact the way organizations are structured and operate, including internal audit departments (Al-Twaijry et al., 2003). Institutional theory offers a framework to understand the challenges internal audit departments might face in legitimizing and conforming to established processes (Al-Twaijry et al., 2003). It views the social world as a collection of institutions governed by rules and norms, influencing individual behavior (Lawrence and Donsbach, 2008). For businesses with high risk exposure, internal audit departments are often established as part of a risk management strategy to comply with regulations and norms, suggesting a positive link between internal auditing and a company's risk level (Kertali and Tahajuddin, 2018).

This perspective is relevant in both developing and developed countries (Kertali and Tahajuddin, 2018). In your study, you utilize institutional theory to examine how internal auditors follow recommendations related to enterprise risk management procedures, demonstrating its applicability in understanding internal audit practices.

2.3 Empirical Literature Review

This section of the study examines the relationship between internal audit functions and enterprise risk management by reviewing findings from previous related research. Iskandar et al. (2018) focused on the influence of audit committee support on the correlation between ERM adoption and internal audit's competency, independence, and working priority. Their survey of Malaysian listed corporations revealed that internal audit functions significantly enhance corporate risk management. The study suggested future research involve organizations outsourcing internal audit services for more comprehensive results.

Abdurrahman et al. (2020) investigated the connection between corporate risk management and internal audit using data from non-financial firms listed on the Kuala Lumpur Stock Exchange. Internal audit's favorable and substantial impact on corporate risk management was evident, aligning with effective ERM implementation. Jassem (2022) explored how internal auditors' responsibilities impacted enterprise risk management components. Data from Malaysia's transportation sector demonstrated that internal audit activities significantly influenced business risk management Kertali and Tahajuddin (2018) assessed internal auditor compliance with Institute of Internal Auditors (IIA) recommendations regarding ERM participation. Their crosssectional survey of Malaysian Institute of Internal Auditors members revealed that most internal auditors were not involved in the ERM process. Future studies could consider a larger sample, encompassing both IIAM members and non-members. These studies collectively shed light on the connection between internal audit functions and enterprise risk management, contributing to a deeper understanding of their interplay. ElHaddad et al. (2020) explored the role of internal audit in reducing operational risks within Libyan higher education institutions. Their study revealed that internal audit offices in Libyan universities analyze risk management functions and concluded that developing standards, tools, and programs for risk assessment and evaluation is crucial

Chang et al. (2019) examined the relationship between internal audit function efficiency and operational and compliance control flaws. Data from Taiwanese business reports were used, suggesting that larger internal audit teams can enhance performance in both areas. The study suggested potential future research focusing on directly illustrating connections between internal control objectives. Gamayuni (2018) investigated how internal audit function efficacy influences financial reporting quality. Using data from the Indonesian Inspectorate, they found a significant impact on financial reporting quality, suggesting improved policies and procedures for better certified accounting procedures. Al Matari and Mgammal (2019) evaluated the internal audit's ability to identify and report fraud, as well as its moderating effect on the link between corporate governance frameworks and firm performance. Data from Saudi financial institutions suggested the internal audit function moderates this association, suggesting potential future research on internal audit experience and business success. Abdullah et al. (2018) explored the connection between corporate governance and internal audit quality using data from listed Malaysian firms. They found that improved internal audit performance relates to greater recommendations for enhancing corporate governance traits. Eulerich et al. (2019) investigated how heads of internal audit assess senior management and audit committee reliance on internal audit functions. Data from 865 Chief Audit Executives revealed factors important to both groups, suggesting potential future research comparing the opinions of audit committees, management teams, and internal auditors

2.4 Conceptual Framework

The section presents the conceptual framework and underlying presumptions that links the internal audit function and enterprise risk management among financial institutions.

Figure 2. Conceptual Framework

2.5 Hypothesis Formulation

The section described how the constructs relate to each other in the study and how the hypothesis was formed. The variables included internal audit function and enterprise risk management.

2.5.1 Internal Audit Function (IAF) and Enterprise Risk Management (ERM)

The role of internal audit functions is to strongly emphasize risk by providing data to identify, assess, and understand risks, while also generating value. Internal audit evaluates the effectiveness and benefits of Enterprise Risk Management (ERM) and contributes ideas for its enhancement (Tamimi, 2021). Various studies have highlighted the involvement of internal audit in corporate risk management. For instance, Saleem et al. (2019) found a positive association between internal audit effectiveness and ERM adoption. Abdullatif and Kawuq (2015) discovered significant involvement of internal auditors at Jordanian commercial banks in risk management. Similarly, Ul-Hameed et al. (2017) identified a positive link between ERM implementation level and success of internal and external audits. Drogalas and Siopi (2017) suggested that risk management affects the value of an internal audit. Albawwat et al. (2021) investigated the connection between internal auditors' personality traits and the efficiency of the internal audit function. Their study with Jordanian internal auditors found personality qualities had substantial impacts on efficiency, except for extraversion. Al Matari and Mgammal (2019) assessed internal audit's ability to detect and report fraud and its moderation effect on the relationship between corporate governance structures and business success. Data from 188 Saudi financial institutions indicated that the internal audit function moderates this relationship.

H1. Internal audit functions have a significant influence on enterprise risk management

2.6 Chapter Summary

The literature review was divided into five main components. The first part covered the conceptual review, providing clear definitions of the constructs and their application in the study. The second component involved the theoretical review, outlining the foundational theories relevant to the study. The third part focused on the empirical review, summarizing previous research related to the study's objectives. The fourth stage involved formulating hypotheses based on the relationships between the constructs as supported by literature. Lastly, the fifth component presented the conceptual framework, visually illustrating the connections between the variables. The following chapter will detail the methodology employed in the study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

In this chapter, the research methodology employed in the study is expounded upon. This encompasses the research design, the defined population, and the chosen study sample. The methods employed for data collection, along with an exploration of validity and reliability, are elucidated. The chapter also delves into the data analysis techniques adopted to draw meaningful insights from the gathered information

3.1 Research Strategy and Design

The research is based on an explanatory research design, focusing on hypotheses predicting relationships among study variables, as opposed to descriptive or exploratory designs. The aim is to assess whether effective internal audit functions influence enterprise risk management in financial institutions. Given this design, a quantitative approach is adopted for the study. Savela (2018) underscores that quantitative methods involve measuring and statistically analyzing data collected through surveys, utilizing computer tools. This approach works with numerical data to infer outcomes from large respondent groups, suitable for exploring phenomena like internal audit and enterprise risk management. The quantitative approach aligns with survey methods, as described by Siedlecki (2020), which involve observing, describing, and documenting occurrences within their natural context. Surveys are employed when researchers want to elucidate specific population traits, using impartial samples and tools like questionnaires. This approach is fitting for this study as it intends to paint a comprehensive picture of internal audit and enterprise risk management in Ghana's financial institutions. Surveys enable efficient and thorough data collection, even from large respondent pools, facilitating an understanding of the phenomenon's status. Mishra and Alok (2022) mention certain challenges associated with surveys, such as question clarity, response accuracy, and timely completion. To mitigate these challenges, the researcher's supervisor will review the instrument for clarity and accuracy. Survey methods are chosen for their ability to describe and comprehend internal audit functions and enterprise risk management in financial institutions without manipulation

3.3 Population

In this study, the population will consist of financial institutions in Ghana, focusing on banks, insurance companies, and capital market brokerage firms within the Greater Accra Region. The key participants will be the Internal Audit Manager, Chief Finance Officer, and Risk Manager of the selected firms, forming the unit of analysis. The choice of the Greater Accra Region as the empirical context is justified for several reasons. Firstly, the region serves as Ghana's capital, hosting significant infrastructure and housing the headquarters of numerous firms. This concentration of financial institutions makes it an appropriate setting to study internal audit and enterprise risk management practices. Secondly, the region's prominence in administrative functions and hosting a substantial number of financial institutions makes it a suitable environment for research. The close proximity of financial institutions and administrative hubs can provide insights into how these organizations manage risk through their audit functions. Conducting the study in this context will provide valuable insights into the practices of internal audit and enterprise risk management within the financial sector in Ghana, offering a comprehensive view of risk management strategies employed by these institutions

3.4 Sample and Sampling Procedures

In calculating the sample size for research, there is no single law. However, based on the fact that the total population is unknown to the researcher, the study adopted the assumption of Mascha and Vetter (2018). According to the authors, the unknown population is calculated using the Z-score approach. The Z-score approach will be used to determine the reliable sample size, considering normal derivation set at a 95% confidence level (1.96). The choice or response (10% = 0.10) considers only a few financial firms with the likelihood of lacking staff in relation to auditing activities in Ghana. The confidence interval (0.05=$\pm$5) is calculated using the below formula:

$$n = \frac{Z^2(P)(1-P)}{C^2}$$

Where z= the standard normal deviation set at a 95% confidence level; p = percentage picking a choice or response; and c = confidence interval. Thus,

$$n = \frac{(1.96)^2(0.1)(1-0.1)}{0.05^2}$$

$$n = 286$$

$$n \sim 286$$

In this study, the sample size will be achieved using both convenience and purposive sampling techniques to select participants. A total of 286 participants will be targeted for this research. Purposive sampling involves the selection of participants based on the researcher's judgment of their possession of relevant information. For this study, the purposive sampling technique will be employed to identify key informants within financial institutions in the Greater Accra Region.

These individuals are expected to have insights into the phenomena being investigated.

Purposive sampling will enable the collection of relevant information from employees who possess knowledge about the subject of inquiry. On the other hand, convenience sampling will be employed to administer questionnaires to participants who are readily accessible and willing to take part in the study. This technique is both practical and cost-effective, making it a suitable choice for gathering information in this context. By combining both purposive and convenience sampling techniques, the study aims to ensure that the participants selected possess the required insight while also ensuring the practical feasibility of data collection

3.5 Data Collection Techniques.

In this study, a structured questionnaire will be utilized to gather information from respondents, focusing on primary data collection. The questionnaire will be designed based on two key constructs, with all items sourced from previously validated instruments. It will be divided into two parts: the first containing demographic information and the second consisting of questions related to the study variables. Participants will be asked to rate each statement on a scale of 1 to 5, reflecting their thoughts (see appendix 1). While the items have been validated in prior studies, this research will conduct validity and reliability tests to ensure the data's robustness. Prior to data collection, an introductory letter will be obtained from Kwame Nkrumah University of Science and Technology, Department of Finance and Accounting, to present the study's purpose and benefits to the selected financial institutions. After gaining approval, a team consisting of the researcher and two research assistants will administer the questionnaires. The researcher will obtain consent from respondents by explaining the study's significance and ensuring confidentiality. The questionnaire will be distributed to 145 participants to account for nonresponses. For each selected organization, a key informant with a managerial role will be identified to provide insights into internal and external processes. Executives, top-level managers, and middle-level managers will be targeted, as they possess valuable knowledge about organizational matters and their application across business functions. Variables will be measured using a fivepoint Likert scale, and the questionnaire will be structured to align with the research objectives. Demographic and organizational measures will be included in the preliminary part, while the second section will focus on the research objectives. The data collection phase is set to span one month, from June 2023 to July 2023

3.6 Data Analysis Techniques

Given the explanatory nature of the study, a quantitative approach to data analysis involving statistical tools will be employed. The analysis encompasses two main categories: descriptive analysis and inferential analysis. Descriptive analysis entails the utilization of statistical methods such as frequency (percentages) and means (standard deviations) to generate descriptive results. This analysis will focus on the demographic characteristics of respondents and companies, as well as the internal audit functions and enterprise risk management measures and composite scales present in the sample. Inferential analysis involves correlation and structural equation modeling

(SEM). This phase aims to establish relationships between the constructs under investigation. Correlation analysis will uncover potential associations between variables, while SEM will delve deeper into the relationships among the constructs of interest. To conduct the analysis, IBM SPSS version 26.0 was employed. These tools will facilitate the organization, manipulation, and interpretation of the collected data, ultimately leading to insightful findings about the relationships between internal audit functions and enterprise risk management with financial institution

3.7 Chapter Summary

This chapter serves as a comprehensive guide to understanding the methodology employed in the study. It outlines the research design, the participants, the sampling method, the measurement of variables, the data collection and analysis procedures, and the steps taken to ensure ethical standards are upheld throughout the research process. This section essentially provides readers with a clear and detailed roadmap of how the study was conducted, ensuring transparency and replicability of the research process.

CHAPTER FOUR

RESULTS PRESENTATION

4.0 Introduction

This segment presents an overview of the gathered information, encompassing initial examinations, demographic attributes, descriptive and correlation metrics, linear regression modeling, and an exploration of the findings, all relevant to the research inquiries addressed in the investigation.

4.1 Preliminary Analyses of Data

The section includes information on the response rate, common method bias, non-response bias, respondent's profile, and descriptive and correlation statistics. Sections 4.1.1 - 4.1.5 contain the examination and explanation of the primary analysis of data quality.

4.1.1 Exploratory Factor Analysis

When engaging with multivariate statistics, recognizing latent variables necessitates a profound comprehension of the theoretical foundations and hypothetical frameworks that might elucidate the arrangement and configuration of the observed data (Watkins, 2018). The objective of an Exploratory Factor Analysis (EFA) is to examine data related to internal processes that exhibit high mutual dependence but limited association with external elements. The EFA demonstrates remarkable adaptability, finding utility across diverse and distinct contexts. As recommended by

Watkins (2018), employing a sample size of 10 to 15 participants per independent variable is advised. When analyzing items of differing dimensions, the use of a ratio or interval scale becomes imperative

4.1.1.1 Test for Common Method Bias

Data collection involved distributing surveys to the study participants, employing established methodologies. However, the issue of survey bias remains a consistent source of uncertainty. The study integrated concise explanations and varied survey questions to elucidate findings and enhance comprehension of complex inquiries. The primary aim was to enhance participant engagement with the survey. To evaluate potential common method bias, the study utilized Harman's one-factor test, following Podsakoff et al.'s recommendation (2003). The factor analysis outcomes, as shown in Table 4.1, indicate that eigenvalues equal to or surpassing 1 account for

59.401% of total variance. The initial component explains 33.940% of variation, which is below

50%. Notably, no common method bias is observed in the dataset

Table 4. 1: Test for Common Method Variance (CMV)

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.806	33.940	33.940	7.806	33.940	33.940
2	1.764	7.671	41.611	1.764	7.671	41.611
3	1.622	7.053	48.664	1.622	7.053	48.664
4	1.405	6.110	54.774	1.405	6.110	54.774
5	1.064	4.627	59.401	1.064	4.627	59.401
6	.989	4.300	63.701			
7	.924	4.016	67.717			
8	.865	3.762	71.479			

9	.751	3.264	74.743
10	.667	2.899	77.642
11	.648	2.817	80.459
12	.601	2.611	83.070
13	.548	2.384	85.454
14	.495	2.151	87.605
15	.463	2.012	89.617
16	.393	1.711	91.328
17	.361	1.569	92.897
18	.352	1.529	94.426
19	.303	1.318	95.744
20	.290	1.261	97.005
21	.266	1.159	98.164
22	.234	1.018	99.182
23	.188	.818	100.000

Extraction Method: Principal Component Analysis.

Source: Field Survey (2023)

4.1.1.2 Sampling Adequacy

To gauge the representativeness of the sample, the researcher applied the Bartlett's sphericity test and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The computed KMO score of 0.858 signifies a high level of sample suitability for factor analysis, denoting excellence. Additionally, Bartlett's test yielded a statistically significant outcome, indicating the suitability of the data for factor analysis (χ^2 = 1386.721, df.: 253, $p < 0.05$). The results presented in Table 4.2 provide evidence of the sample's representativeness

Table 4. 2: Bartlett's Test of Sphericity and KMO Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.858
Bartlett's Test of Sphericity	Approx. Chi-Square	1386.721
	df	253
	Sig.	.000

Source: Field Survey (2023)

4.1.1.3 Non-Response Bias

Investigating non-respondent bias held significance in this study. A low response rate tends to introduce non-response tendencies. Such low rates contribute to non-response bias, thereby compromising sample reliability and research generalizability. To counteract this, the study assessed both early and late responders to minimize non-response bias risk. Following

Oppenheim's approach (2001), identical input variables were applied to "early responders" and "late responders" in the model. This highlights the samples' effective representation of the population and absence of non-response bias. Notably, 72 responses arrived later, while 72 arrived earlier than expected. T-tests, as displayed in Table 4.3, were used to analyze non-response bias.

Research findings suggest similarity between numbers for the initial and concluding months

Mean

Internal Audit Function	1	4.8	0.945	0.332	1.687
	2	4.49			1.687
Enterprise Risk Management	1	4.03	1.467	0.227	1.307
	2	3.55			1.307

Source: Field Survey (2023)

Table 4. 3: Independent-Samples t-Test for Non-Response Bias

4.2 Respondent's Profile

This section includes demographic information about survey respondents to give context to the research. Key information supplied by respondents included their

		Levene's Test for Equality of Variances		
	Group	F	Sig.	t

gender, age, job experience, level of education, workplace institution, and type of ownership.

Out of the 144 respondents, 56 (38.9%) were female, and 88 (61.1%) were male. The age bracket of 26 to 35 years encompassed the largest portion of participants, with 82 individuals (56.9%) falling within this range. The age group of 36 to 45 years had the second highest number of respondents, constituting 38.9% of the total with 56 participants. Those aged 18 to 25 years accounted for 2.8% (4 respondents), and the 46 to 60 years group had 1.4% (2 respondents). Regarding working experience, the distribution was as follows: 61 individuals (42.4%) had less than 4 years of experience, 51 individuals (35.4%) had 5 to 10 years of experience, 20 individuals (13.9%) had over 15 years of experience, and 12 individuals (8.3%) had 11 to 15 years of experience. In terms of education, the largest subset, comprising 65 individuals (45.1%), held a Master's degree. A total of 75 individuals (52.1%) had a Bachelor's degree, 3 individuals (2.1%) possessed an ICA GH qualification, and a sole individual (0.7%) was recognized as a Chartered Accountant. Among the respondents, a majority of 123 individuals (85.4%) were employed in the banking sector, while 13 individuals (9.0%) worked in the insurance industry, and 8 individuals (5.6%) were associated with capital market brokerage. Exploring institutional ownership distribution among the employed respondents: private individuals employed 59 individuals

(41.0%) in state-owned institutions, 53 individuals (36.8%) worked in institutions with ownership, 15 individuals (10.4%) were in foreign-owned institutions, 13 individuals (9.0%) held institutional ownership, and 4 individuals (2.8%) were employed in para-statals

4.3 Descriptive and Correlation Analysis

The statistical examination of the research variables is outlined below. As per Field (2009), the standard deviation gauges how effectively mean values depict the data, while mean values provide a concise summary. The outcomes of the descriptive analysis are synthesized in Table 4.6. Table

4.5 illustrates an average mean range of 4.06 to 5.15, and the standard deviation range falls between 0.564 and 0.576. Correlations between the internal audit function (IAF) and enterprise risk management (ERM) prove to be remarkably significant, as evidenced in Table 4.5. In this context, a correlation coefficient of 0.0 implies complete absence of connection, 0.30 suggests a moderate correlation, and a range of 0.70-0.90 denotes a substantial association. The data in Table 4.5 underscores the noteworthy correlations among different factors

4.3.1 Level of Enterprise Risk Management Practices in Financial Firms

This section presents the results of the first objective, which examines the enterprise risk management practices in financial firms in Ghana. A descriptive approach was used in the study to analyses the perceptions of participants on the level of enterprise risk management practices in financial firms in Ghana. Means and standard deviations were employed for the analysis. Table 4.6 displays the findings related to these clarifications. The outcome showed that the average mean of 4.06 with a deviation of 0.564 measures the level of enterprise risk management practiced in financial firms. As can be seen, the statement “Responsibilities related to risk management are clearly defined within our company” with a mean of 4.16 with std. of 0.538 is rated higher (above the average mean) indicating that the participants highly perceived that responsibilities related to risk management are clearly defined within their firms. Also, the statement “We have developed a risk control plan to minimize the impact and likelihood of identified risks” with a mean of 4.13 and std. of 0.505 is rated above the average men. This means that the participants highly perceived that the financial institutions have developed a risk control plan to minimize the impact and likelihood of identified risks. Also, the statement “The entity ensures that there are adequate risk awareness activities and training for employees” recorded a mean of 4.12 with a deviation of 0.585 which is above the average mean, implying that the participants also agreed that the firms ensure that there are adequate risk awareness activities and training for employees. The statement “Our entity provides sufficient information to enable employees to recognize the possible red flags or early warning signs of risk activity” with a mean of 4.11 and deviation of 0.593 was rated high, indicating that is also regarded as an enterprise risk management practice in the institutions. The item “We have disclosure procedures in place for evidence relating to detected risk” was also rated high with a mean of 4.08 and deviation of 0.535, implying that the organisations have disclosure procedures in place for evidence relating to detected risk. Also, the item “There is ongoing monitoring of employees’ activities in high-risk departments” was rated high with a mean of 4.07 and std. of 0.550, suggesting that monitoring of employees' activities in high-risk departments is ongoing in the organizations.

Table 4. 6: Level of Enterprise Risk Management Practices in Financial Firms

Statement	Mean	Std. Deviation
We have issued a risk policy outlining the entity's position on risk.	3.97	0.521
There is ongoing monitoring of employees' activities in high-risk departments.	4.07	0.55
The entity ensures that there are adequate risk awareness activities and training for employees.	4.12	0.585
Responsibilities related to risk management are clearly defined within our company.	4.16	0.538
The entity uses the relevant government investigation standards when conducting investigations.	4.03	0.579
We have established lines of communication with police for further investigations of detected risks in our organisation.	3.99	0.597
We have developed a risk control plan to minimize the impact and likelihood of identified risks.	4.13	0.505
We have disclosure procedures in place for evidence relating to detected risk.	4.08	0.535
Our risk reporting mechanisms are easily accessible by internal and external parties.	3.96	0.602
The entity uses internal audits to actively review its detective control environment.	4.05	0.595
Our entity provides sufficient information to enable employees to recognize the possible red flags or early warning signs of risk activity.	4.11	0.593
Average Mean	4.06	0.564

Source: Field Data, 2023

4.4 Reliability Statistics

Cronbach's Alpha serves as a gauge of internal consistency reliability, revealing the degree of interconnectedness among items within a specific construct. The outcomes indicate that both constructs, the Internal Audit Function and Enterprise Risk Management, exhibit strong to excellent levels of internal consistency, as reflected in the Cronbach's Alpha values of 0.828 and 0.865, respectively. This implies that the items within these constructs are dependable measures, suitable for evaluating the corresponding concepts within the study

Table 4. 7: Reliability Statistics

Construct	Number of Items	Cronbach's Alpha
Internal Audit Function	12	0.828
Enterprise Risk Management	11	0.865

Source: Field Data, 2023

4.5 Regression Analysis

The research investigates the influence of internal audit functions on enterprise risk management in Ghanaian financial firms. The regression analysis reveals that the IAF variable possesses a moderate predictive capacity for ERM, accounting for approximately 46.2% of its variability (Rsquared = 0.462). With an adjusted R-squared value of 0.458, which accounts for model complexity, it's suggested that about 45.8% of ERM variation can be elucidated by the IAF variable. The standard error of the estimate, standing at 4.500, signifies the average disparity between actual and predicted ERM values, gauging the model's precision. The Durbin-Watson statistic of 1.895 suggests a moderate positive autocorrelation present in the model's residuals

Table 4. 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.679a	.462	.458	4.500	1.895

a. Predictors: (Constant), IAF

b. Dependent Variable: ERM

Source: Field Data, 2023

Based on the ANOVA results, it can be inferred that the regression model, which includes the IAF variable as a predictor, effectively accounts for the variation in the ERM variable. A strong relationship between the IAF and ERM is indicated by the F-value of 121.780 and the corresponding p-value of .000. The residual section displays the portion of the ERM variable that cannot be accounted for, while the total section represents the overall amount of variability in
ERM.

Table 4. 9: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2465.588	1	2465.588	121.780	.000b
	Residual	2874.968	142	20.246		
	Total	5340.556	143			

a. Dependent Variable: ERM

b. Predictors: (Constant), IAF

Source: Field Data, 2023

According to the regression coefficients, both the constant and the Independent Audit Function (IAF) variables show statistically significant impacts on the Enterprise Risk Management (ERM) variable. The variable IAF exhibits a significant positive correlation with ERM. The Beta value of
0.633 indicates that as the IAF increases, there is a corresponding increase of 0.633 in ERM. The

F-test indicates that the regression model is statistically significant in explaining the variance in ERM, as evidenced by the low p-value.

Table 4. 10: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7.603	1.506		5.049	.000
	IAF	.633	.057	.679	11.035	.000

a. Dependent Variable: ERM

Source: Field Data, 2023

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter outlines all the significant concerns raised in the research. First, the chapter summarizes the study's principal findings and implications. The study's contributions are then examined, as are its shortcomings. The chapter concludes with practice and future research recommendations.

5.1 Overview of findings

5.1.1 To examine the enterprise risk management practices in financial firms in Ghana. The first goal of the research was to examine the enterprise risk management practices in financial firms in Ghana. Specifically Greater Accra Region. The study anticipated a positive enterprise risk management practices within the financial institution Ghana. The findings demonstrated a significant enterprise risk management practices within the financial institution in Ghana. The finding implies that ERM is a holistic approach to managing risks across an entire organization. In financial institutions, ERM encompasses the identification, assessment, and mitigation of various risks, aligning risk management strategies with the institution's objectives. The findings further implies that ERM enhances financial stability. Through comprehensive risk assessment, financial firms are better equipped to predict and prepare for potential economic downturns or market fluctuations, reducing the likelihood of financial crises. The findings indicated that ERM practices ensure that financial firms in Ghana adhere to these rules, thus averting costly penalties and safeguarding their reputation. ERM supports regulatory compliance. In an industry marked by stringent regulations, ERM practices ensure that financial firms adhere to these rules, thus averting costly penalties and safeguarding their reputation. Furthermore, ERM encourages prudent risktaking. By offering a structured framework for evaluating risk-reward trade-offs, it empowers firms to make informed decisions that align with their strategic goals.

5.1.2 To assess the effect of the internal audit functions on enterprise risk management of financial firms in Ghana

The study's second goal was to examine the effect of the internal audit functions on enterprise risk management of financial firms in Ghana. The research hypothesized that the internal audit functions on enterprise risk management is significant and positive. The findings showed that internal audit functions is positively and significantly connected to enterprise risk management of financial firms in Ghana. The findings of this research support the proposed hypothesis between the variables. The results implies that internal audit acts as an independent and objective assurance function within an organization. Its primary role is to assess the effectiveness of risk management processes and controls. By conducting regular audits, internal audit teams provide valuable insights into the institution's risk landscape. They identify emerging risks, assess the adequacy of risk mitigation measures, and help the organization stay proactive in addressing potential vulnerabilities. The finding further implies that internal audit serves as a bridge between the board of directors, senior management, and the rest of the organization. It facilitates communication and collaboration in addressing risks and implementing risk mitigation strategies. This alignment ensures that the institution's ERM efforts are consistent with its strategic goals.

5.2 Implications of the Findings

The findings of the study have significant implications to research, practice and policy especially in the area of internal audit functions and enterprise risk management. To research, the study adds to a less researched area of internal audit functions and enterprise risk management practices, by investigating the internal audit and enterprise risk management in financial institution in Ghana. The results of the study highlight the enterprise risk management practices in financial firms, as well as the effect of internal audit functions on enterprise risk management practices in financial firms. The findings point to the fact that ERM is a holistic approach to managing risks across an entire organization. The study also finds that ERM enhances financial stability. Through comprehensive risk assessment, financial firms are better equipped to predict and prepare for potential economic downturns or market fluctuations, reducing the likelihood of financial crises. The study further finds that ERM practices ensure that financial firms in Ghana adhere to these rules, thus averting costly penalties and safeguarding their reputation. On the effect of internal audit functions on enterprise risk management, the study finds that internal audit acts as an independent and objective assurance function within an organization. Its primary role is to assess the effectiveness of risk management processes and controls. It further find that by conducting regular audits, internal audit teams provide valuable insights into the institution's risk landscape.

They identify emerging risks, assess the adequacy of risk mitigation measures, and help the organization stay proactive in addressing potential vulnerabilities also internal audit's systematic approach to risk assessment leads to a more comprehensive understanding of potential risks. Researchers can test the relevance of internal audit functions in other jurisdictions to examine its strength in explaining enterprise risk management practices.

5.3 Limitations of your research.

There are a number of limitations that should be borne in mind when interpreting the experimental results reported in the study. First, we did not undertake a controlled experiment as it was not practical to get internal auditors together in a single location. Hence, the loss of control resulting from the use of a mail questionnaire may threaten the internal validity of the study. Second, there are external validity threats associated with the sampling procedure, which limit the generalizability of results. All participants were members of the IIA, holding a Certified Internal Auditor qualification. Previous research has indicated that IIA membership itself can promote objectivity. Hence, it is possible that the participants in this study have higher standards of objectivity than the general internal audit population. The sample was also drawn only from Greater Accra Region internal auditors and hence the results may not hold in other jurisdictions within and outside the country.

5.4 Recommendations for Future Research.

Future research on Internal Audit and Enterprise Risk Management (ERM) in financial institutions should focus on addressing evolving challenges and emerging trends in the financial industry. Further study should investigate how advancements in technology, such as artificial intelligence, machine learning, and big data analytics, are transforming internal audit and ERM practices in financial institutions. Explore the effectiveness and limitations of these technologies in risk identification, assessment, and mitigation. Further study should also examine the role of human behavior, cognitive biases, and organizational culture in risk management within financial institutions. Explore how psychological factors influence decision-making and risk-taking behaviors. Again further studies can investigate the complexities of risk management in global financial institutions operating in multiple jurisdictions. Thus explore how internal audit and ERM practices can be harmonized and standardized across borders to address diverse regulatory environments.

REFERENCES

Abdullah, R., Ismail, Z. and Smith, M., 2018. Audit committees' involvement and the effects of quality in the internal audit function on corporate governance. International Journal of Auditing, 22(3), pp.385-403.

Abdullah, W. N., & Said, R. 2019. Audit and risk committee in financial crime prevention. Journal of Financial Crime, 26(1), 223–234. https://doi.org/10.1108/JFC-11-2017-0116

Abdullatif, M. and Kawuq, S., 2015. The role of internal auditing in risk management: evidence from banks in Jordan. Journal of Economic and Administrative Sciences.

Abdurrahman, A.P., Mohamad, S., Garrett, K.W.C. and Ehsanullah, S., 2020. Internal audit and enterprise risk management. International Journal of Advanced Science and Technology, 29, pp.401-9.

Abor, P.A. and Abor, J.Y., 2021. Towards improving risk management in healthcare organisations in Africa: A review. International Journal of Development and Management Review, 16(1), pp.39-58.

Ajemunigbohun, S.S., Isimoya, O.A. and Elegunde, A.F., 2020. Risk Attitude, Insurance

Patronage and SMEs Performance: Empirical Evidence from Lagos, Nigeria. Annals of the University Dunarea de Jos of Galati: Fascicle: I, Economics & Applied Informatics, 26(2).

Al Breiki, M. and Nobanee, H., 2019. The role of financial management in promoting sustainable business practices and development. Available at SSRN 3472404

Al Matari, E.M. and Mgammal, M.H., 2019. The moderating effect of internal audit on the relationship between corporate governance mechanisms and corporate performance among

Saudi Arabia listed companies. Contaduría y administración, 64(4), p.9.

Alazzabi, W.Y.E., Mustafa, H. and Karage, A.I., 2020. Risk management, top management support, internal audit activities and fraud mitigation. Journal of Financial Crime.

Albawwat, I.E., Al-Hajaia, M.E. and Al Frijat, Y.S., 2021. The Relationship Between Internal

Auditors' Personality Traits, Internal Audit Effectiveness, and Financial Reporting Quality:

Empirical Evidence from Jordan. The Journal of Asian Finance, Economics and Business, 8(4), pp.797-808.

Alhabow, A.H. and Hamoudi, K.M., 2022. Evaluation of the internal audit function according to the International Internal Audit Standards (IIA) in the Directorate of Municipalities of

Nineveh Governorate. AL-Anbar University journal of Economic and Administration Sciences, 14(1).

Al-Twaijry, A.A., Brierley, J.A. and Gwilliam, D.R., 2003. The development of internal audit in Saudi Arabia: an institutional theory perspective. Critical Perspectives on Accounting, 14(5), pp.507-531.

Alzahrani, A. and Shaddady, A., 2021. Influences of Financial and Non-Financial Compensation on Employees' Turnover Intention in the Energy Sector: The Case of Aramco IPO. International Business Research, 14(6), pp.108-108.

Anton, S.G. and Nucu, A.E.A., 2020. Enterprise risk management: A literature review and agenda for future research. Journal of Risk and Financial Management, 13(11), p.281.

Apuke, O.D., 2017. Quantitative research methods: A synopsis approach. Kuwait Chapter of

Arabian Journal of Business and Management Review, 33(5471), pp.1-8.

Babatope, T.I. and Adewunmi, A.V., 2019. Evaluation of Internal Audit Operations and the

Efficiency of Educational Performance in Nigerian Universities (A Case Study of Ekiti State University, Nigeria). Business and Management Studies, 5(4), pp.49-61.

Babbie, E., 2004. Laud Humphreys and research ethics. International journal of sociology and social policy.

Babich, V. and Kouvelis, P., 2018. Introduction to the special issue on research at the interface of finance, operations, and risk management (iFORM): Recent contributions and future directions. Manufacturing & Service Operations Management, 20(1), pp.1-18.

Baharud-din, Z., Shokiyah, A. and Ibrahim, M.S., 2014. Factors that contribute to the effectiveness of internal audit in public sector. International Proceedings of Economics Development and Research, 70, p.126.

Barclay, M.J., Smith, C.W. and Watts, R.L., 1995. The determinants of corporate leverage and dividend policies. Journal of applied corporate finance, 7(4), pp.4-19.

Bello, S.M., Ahmad, A.C. and Yusof, N.Z.M., 2018. Internal audit quality dimensions and organizational performance in Nigerian federal universities: the role of top management support. Journal of Business and Retail Management Research, 13(1).

Bhat, S.A. and Darzi, M.A., 2016. Customer relationship management: An approach to competitive advantage in the banking sector by exploring the mediational role of loyalty. International Journal of Bank Marketing.

Bhattacherjee, A., 2012. Social science research: Principles, methods, and practices.

Bortieh-Borquaye, W., 2019. Effect of reward on retention intentions of employees of Ghana

Revenue Authority, Customs Division, Tema (Doctoral dissertation, University of Cape Coast).

Bougie, R. and Sekaran, U., 2019. Research methods for business: A skill building approach. John

Wiley & Sons.

Bronson, H.E., 2022. Five Common Shortcomings of Third-Party Management Programs in Financial Organizations and Recommended Risk Management Strategies (Doctoral

dissertation, Utica University).

Bryman, A.B. and Bell, E., E.(2015). Business research methods.

Butt, M.A., Ayub, H., Latif, B., Asif, F., Shabbir, M.S. and Raja, A.A., 2022. Financial risks and performance of conventional and Islamic banks: Do reputational risk matters?. Journal of Islamic Accounting and Business Research.

Chang, Y.T., Chen, H., Cheng, R.K. and Chi, W., 2019. The impact of internal audit attributes on the effectiveness of internal control over operations and compliance. Journal of Contemporary Accounting & Economics, 15(1), pp.1-19.

Chin, W.W., 1998. The partial least squares approach to structural equation modeling. Modern methods for business research, 295(2), pp.295-336.

Creswell, J.W., 2012. Educational research: Planning, conducting, and evaluating

quantitative (Vol. 7). Prentice Hall Upper Saddle River, NJ.

Creswell, J.W., 2014. Qualitative, quantitative and mixed methods approaches.

Cronbach, L.J., 1951. Coefficient alpha and the internal structure of tests. psychometrika, 16(3), pp.297-334.

Cunningham, J.B. and McCrum-Gardner, E., 2007. Power, effect and sample size using GPower:

practical issues for researchers and members of research ethics committees. EvidenceBased Midwifery, 5(4), pp.132-137.

Das, A., 2018. Application of Digital Marketing for Life Success in Business. BPB Publications.

Donsbach, W. and Donsbach, W., 2008. The international encyclopedia of communication. Wiley

Publishing.

Drogalas, G. and Siopi, S., 2017. Risk management and internal audit: Evidence from Greece. Risk

Governance and Control: Financial Markets & Institutions, 7(3), pp.104-110.

Drogalas, G., Karagiorgos, T. and Arampatzis, K., 2015. Factors associated with internal audit effectiveness: Evidence from Greece. Journal of Accounting and Taxation, 7(7), pp.113122.

Ege, M.S., 2015. Does internal audit function quality deter management misconduct?. The

Accounting Review, 90(2), pp.495-527.

ElHaddad, A.A., ElHaddad, N.R. and Alfadhli, M.I., 2020. Internal Audit and its Role in Risk

Management Evidence: The Libyan Universities. Social Sciences, 10(1), pp.361-377.

Elshawarby, M., 2020. The Role of Accounting Dimensions of Corporate Governance in Improving the Tax Return in Egypt. Journal of Modern Accounting and Auditing, 16(10), pp.446-459.

Esser, F. and Donsbach, W., 2008. History of media effects.

Eulerich, M., Kremin, J. and Wood, D.A., 2019. Factors that influence the perceived use of the internal audit function's work by executive management and audit committee. Advances in Accounting, 45, p.100410.

Feldmann-Jensen, S., Jensen, S. and Smith, S.M., 2019. The Next Generation Core Competencies: Building a workforce with the knowledge, creativity, and policy expertise for disaster risk management.

Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument. Journal of Operations management, 11(4), 339-366.

Fornell, C. and Larcker, D.F., 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Gamayuni, R.R., 2018. The effect of internal audit function effectiveness and implementation of accrual based government accounting standard on financial reporting quality. Review of Integrative Business and Economics Research, 7(1), pp.46-58.

Gamayuni, R.R., 2018. The effect of internal auditor competence and objectivity, and management support on effectiveness of internal audit function and financial reporting quality implications at local government. Int. J. Economic Policy in Emerging Economies, 11(3), pp.248-261.

Gamayuni, R.R., 2018. The effect of internal auditor competence and objectivity, and management support on effectiveness of internal audit function and financial reporting quality implications at local government. Int. J. Economic Policy in Emerging Economies, 11(3), pp.248-261.

Ghauri, P.G. and Gronhaug, K., 2005. Research methods in business studies: A practical guide. Essex: Pearson education limited.

Godfrey, P.C., Lauria, E., Bugalla, J. and Narvaez, K., 2020. Strategic Risk Management: New Tools for Competitive Advantage in an Uncertain Age. Berrett-Koehler Publishers.

Haapamäki, E. and Sihvonen, J., 2019. Cybersecurity in accounting research. Managerial Auditing

Journal, 34(7), pp.808-834.

Hair Jr, J.F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V.G., 2014. Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business

research. European business review.

Hair Jr, J.F., Sarstedt, M., Matthews, L.M. and Ringle, C.M., 2016. Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I–method. European Business Review.

Hair Jr, J.F., Sarstedt, M., Ringle, C.M. and Gudergan, S.P., 2018. Advanced issues in partial least squares structural equation modeling. saGe publications.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L., 2009. Análise multivariada de dados. Bookman editora.

Hair, J.F., Celsi, M., Ortinau, D.J. and Bush, R.P., 2010. Essentials of marketing research (Vol. 2). New York, NY: McGraw-Hill/Irwin.

Haryetti Haryetti, A.R., 2021. Does Good Corporate Governance Mediate Risk Management

Implementation and Financial Performance of Indonesian Commercial Banks?. Journal of Southwest Jiaotong University, 56(3).

Hassan, M.F. and Yazid, A.S., 2019. The Mediating Effect of Top Management Support on the Relationship between Organizational Culture and Enterprise Risk Management Effectiveness among Malaysian Public Listed Companies: A Conceptual

Framework. Research Journal of Finance and Accounting, 10(2), pp.103-111.

Henseler, J., Ringle, C.M. and Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the academy of marketing science, 43(1), pp.115-135.

Henseler, J., Ringle, C.M. and Sinkovics, R.R., 2009. The use of partial least squares path modeling in international marketing. In New challenges to international marketing. Emerald Group Publishing Limited.

Hong, H.T.S., Bello, K.B. and bin Mohamad, S., 2021. Executing Strategic Risks Mitigation Plan

Amidst VUCA Situation: A Lesson from COVID-19. Asia Proceedings of Social Sciences, 8(1), pp.55-59.

Huntington-Klein, N., 2021. The effect: An introduction to research design and causality. Chapman and Hall/CRC.

Iskandar, T.M., Jamil, A., Yatim, P. and Sanusi, Z.M., 2018. The role of internal audit and audit committee in the implementation of enterprise risk management. International Journal of Business and Globalisation, 21(2), pp.239-260.

Jassem, S., 2022. Influence of internal audit functions on enterprise risk management: evidence from Malaysian transportation industry. International Journal of Business Excellence, 26(2), pp.196-223.

Jurakulovna, J.G. and Bahodirovich, R.U., 2021. Improving the Theoretical Framework of Internal Audit in the Corporate Governance System. Middle European Scientific Bulletin, 19, pp.345-348.

Kamyabi, Y. and Salahinejad, M., 2020. Using data envelopment analysis to examine operational auditing efficiency in audited firms. International Journal of Advanced Studies in

Humanities and Social Science, 9(1), pp.50-62.

Kertali, M. and Tahajuddin, S.B., 2018. The Effect of Internal Auditors' Involvement in Enterprise Risk Management on Internal Audit Objectivity: Evidence from Malaysia. Asian Journal of Economics, Business and Accounting, 6(3), pp.1-11.

Kotb, A., Elbardan, H. and Halabi, H., 2020. Mapping of internal audit research: a post-Enron structured literature review. Accounting, Auditing & Accountability Journal.

Koutmos, D., 2020. Market risk and Bitcoin returns. Annals of Operations Research, 294(1), pp.453-477.

Kumekpor, T.K., 2002. Research methods and techniques of social research. SonLife Press &

Services.

Lane, K. and Rosewall, T., 2015. Firms' investment decisions and interest rates. RBA Bulletin, pp.1-7.

LARASATI, D.A. and BERNAWATI, Y., 2020. Risk Based Approach Dan Tren Mendatang

Dalam Internal Audit Tools & Techniques. Jurnal Bisnis dan Akuntansi, 22(1), pp.73-82.

Lee, S.N., Weng, T.C. and Peng, Y.L., 2021. A Comparison Of Hospital Risk Management Strategies Under Sars And Covid-19. Global Journal of Business Research, 15(1), pp.99109.

Magri, T.D., Leary, A.V., De Leon, A.N., Flori, J.N., Crisafulli, M.J., Dunn, M.E. and Dvorak, R.D., 2020. Organization and activation of alcohol expectancies across empirically derived profiles of college student drinkers. Experimental and clinical psychopharmacology, 28(6), p.622.

Malhotra, N. and Birks, D., 2007. Instructor's Manual.

Malhotra, N.K., 2010. Marketing Research An Applied Orientation 4th Ed.

Manab, N. and Aziz, N., 2019. Integrating knowledge management in sustainability risk management practices for company survival. Management Science Letters, 9(4), pp.585594.

Manual, O., 2005. The measurement of scientific and technological activities. Proposed Guidelines for Collecting an Interpreting Technological Innovation Data, 30, pp.1-162.

Marc, M., Sprčić, D.M. and Žagar, M.M., 2018. Is enterprise risk management a value added

activity?.

McShane, M., 2018. Enterprise risk management: history and a design science proposal. The

Journal of Risk Finance.

Melnikova, J., Grünwald, N., Ahrens, A., Pfaffenberger, K. and Zaščerinska, J., 2018. The Search For An Approach To Develop Educators'digital Teaching Competence. Andragogy, 8, pp.34-45.

Mihret, D.G., James, K. and Mula, J.M., 2010. Antecedents and organisational performance implications of internal audit effectiveness: some propositions and research agenda. Pacific Accounting Review.

Mohajan, H.K., 2017. Two criteria for good measurements in research: Validity and reliability. Annals of Spiru Haret University. Economic Series, 17(4), pp.59-82.

Murray, Z.M., 2021. Honors Project.

Murrja, A.A., Ndregjoni, P.A., Prendi, P.L. and Maloku, A.S., 2022. Aggressiveness of market risk events and their management in intensive chicken breeding farms in Kosovo.

Specialusis Ugdymas, 2(43), pp.386-402.

Neuman, W.L., 1997. Qualitative research design. Social research methods: Qualitative and quantitative approaches, pp.333-335.

Nurhidayat, S.A., 2018. The Influence of COSO Organizational Framework Implementation on the Quality of Internal Control in Group of Companies Dani Prisma Mitra

(DPM). International Journal of Business Studies, 2(1), pp.16-24.

O'Shea, R. J., Sharkey, A. R., Cook, G. J., & Goh, V., 2021. Systematic review of research design and reporting of imaging studies applying convolutional neural networks for radiological cancer diagnosis. European radiology, 31(10), 7969-7983.

Olakunke, A.O., 2003. Research methods in social sciences. E-Book press, Norway.

Osayi, V.I., Ezuem, H.S. and Daniel, M., 2019. Risk Management Approach and Banks' Portfolio Investment Performance in Nigeria. Risk Management, 10(6), pp.126-154.

Osei, A., Yunfei, S., Appienti, W.A. and Forkuoh, S.K., 2016. Product innovation and SMEs performance in the manufacturing sector of Ghana. British Journal of Economics, Management & Trade, 15(3), pp.1-14.

Pham, D.C. and Nguyen, T.T., 2021. Factors affecting the internal audit effectiveness of steel enterprises in Vietnam. The Journal of Asian Finance, Economics and Business, 8(1), pp.271-283.

Qizi, I.N.B., 2022, May. RISK MANAGEMENT IN BANKS. In Next Scientists Conferences (pp.

28-39).

Qizi, I.N.B., 2022, May. RISK MANAGEMENT IN BANKS. In Next Scientists Conferences (pp.

28-39).

Rehman, Z.U., Muhammad, N., Sarwar, B. and Raz, M.A., 2019. Impact of risk management strategies on the credit risk faced by commercial banks of Balochistan. Financial Innovation, 5(1), pp.1-13.

Sabet Aghlidi, P., Cheraghi, M., Lorestani, B., Sobhanardakani, S. and Merrikhpour, H., 2020. Analysis, spatial distribution and ecological risk assessment of arsenic and some heavy metals of agricultural soils, case study: South of Iran. Journal of Environmental Health Science and Engineering, 18(2), pp.665-676.

Saeudy, M., Atkins, J. and Barone, E.A., 2021. Interpreting banks' sustainability initiatives as reputational risk management and mechanisms for coping, re-embedding and rebuilding societal trust. Qualitative Research in Financial Markets, 14(1), pp.169-188.

Saleem, K.S.A., Zraqat, O.M. and Okour, S.M., 2019. The Effect of Internal Audit Quality (IAQ) on Enterprise Risk Management (ERM) in Accordance to COSO Framework. European Journal of Scientific Research, 152(2), pp.177-188.

Salleh, M.F.M. and Suryanto, T., 2019. Fraud Detection on Banking Industry in South Sumatera:

A Study on the Role of Internal Auditors'. International Journal of Shari'ah and Corporate Governance Research, 2(2), pp.62-67.

Sasmita, J. and Suki, N.M., 2015. Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. International journal of retail & distribution management.

Saunders, M., Lewis, P. and Thornhill, A., 2009. Research methods for business students. Pearson education.

Saunders, M., Lewis, P., Thornhill, A., Booij, M. and Verckens, J.P., 2011. Methoden en technieken van onderzoek. Pearson Education.

Sekaran, U., 2003. Determining sample size. Sekaran. Uma (4th Eds.), Research methods for business: A skill building approach, pp.263-298.

Seo, E.J. and Park, J.W., 2018. A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. Journal of Air Transport Management, 66, pp.36-41.

Singh, K.S.D., Ravindran, S., Ganesan, Y., Abbasi, G.A. and Haron, H., 2021. Antecedents and Internal Audit Quality Implications of Internal Audit Effectiveness. International Journal of Business Science & Applied Management, 16(2).

Smith, S.M. and Albaum, G.S., 2005. Fundamentals of marketing research. Sage.

Sofyani, H., Saleh, Z. and Hasan, H.A., 2021. Investigation on key factors promoting internal control implementation effectiveness in higher education institution: The case of Indonesia. Jurnal Reviu Akuntansi dan Keuangan, 11(3), pp.483-495.

Soper, D.S., 2015. A-priori sample size calculator for multiple regression [Software]. Avaliable from http://www. danielsoper. com/statcalc (26/02/2018).

Spanò, R. and Zagaria, C., 2022. Integrating Performance Management and Enterprise Risk

Management Systems. In Integrating Performance Management and Enterprise Risk Management Systems. Emerald Publishing Limited.

Stankovska, A., Dimitrieska, S. and Stamevska, E., 2018. Risk management in banking industry.

Entrepreneurship, 7(2), pp.229-236.

Stankovska, A., Dimitrieska, S. and Stamevska, E., 2018. Risk management in banking industry.

Entrepreneurship, 7(2), pp.229-236.

Ta, T.T. and Doan, T.N., 2022. Factors Affecting Internal Audit Effectiveness: Empirical Evidence from Vietnam. International Journal of Financial Studies, 10(2), p.37.

Tamimi, O., 2021. The role of internal audit in risk management from the perspective of risk managers in the banking sector. Australasian Accounting, Business and Finance Journal, 15(2), pp.114-129.

Vadasi, C., Bekiaris, M. and Andrikopoulos, A., 2019. Corporate governance and internal audit:

an institutional theory perspective. Corporate Governance: The International Journal of Business in Society.

Waseem-Ul-Hameed, F.H., Ali, M. and Arif, M., 2017. Enterprise risk management (ERM) system: Implementation problem and role of audit effectiveness in Malaysian firms. Asian Journal of Multidisciplinary Studies, 5(11), pp.34-39.

Williams, A. and O'Connor, M., 2021. Making researchers' lives easier and managing risk at the University of Adelaide: The research data project. In Technology, Change and the Academic Library (pp. 151-160). Chandos Publishing.

Wu, H.C. and Cheng, C.C., 2018. Relationships between technology attachment, experiential relationship quality, experiential risk and experiential sharing intentions in a smart hotel. Journal of Hospitality and Tourism Management, 37, pp.42-58.

Zikmund, W.G., 2010. Business Research Methods, published by Thompson South Western

Publication, 9th edition.

Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin, M., 2013. Business research methods. Cengage

Learning.

Zunaedi, B.N.F., Annisa, H.R. and Dewi, M., 2022. Fungsi Internal Audit dan Manajemen Risiko

Perusahaan: Sebuah Tinjauan Literatur. Jurnal Bisnis Dan Akuntansi, 24(1), pp.59-70.

APPENDIX

INSTITUTIONS”

I am a student of the Kwame Nkrumah University for Science and Technology. This research effort is undertaken to evaluate “internal audit and enterprise risk management in financial institutions” as part of the institution's requirement for master's degree fulfillment.

I want to express my deep gratitude to each and every one of you for agreeing to assist me by providing honest and fair answers to the questions. I further guarantee that any data collected via this questionnaire will be used solely for academic purposes and will be handled with the utmost confidentially.

PART 1: DEMOGRAPHICS

1. Gender of respondent

   Female [ ]

   Male [ ]

2. Age of respondent

   18yrs – 25 years [ ]

   26yrs – 35yrs [ ]

   36yrs – 45yrs [ ]

   46yrs – 60 yrs [ ]

3. Number of years working experience in the banking sector.

   A. Less than 4 years [ ]

   B. B. 5-10 years [ ]

C. 11-15 years [ ]

D. D. Above 15 years [ ]

4. Educational Level

A. Bachelor's [ ]

B. Master's [ ]

C. Doctorate [ ]

D. Other, Please specify ……………………………

5. Institution of work

A. Bank [ ]

B. Insurance [ ]

C. Capital Market Brokerage [ ]

6. Ownership type of Institution of work

A. State ownership [ ]

B. Para- statal [ ]

C. Private individual(s) ownership [ ]

D. Institutional ownership [ ]

E. Foreign Ownership [ ]

SECTION A: To examine the internal audit functions of the financial firms

Kindly indicate your level of agreement or disagreement with the following statements, where 1= strongly agree, 2= agree, 3= neither agree nor disagree, 4 = disagree and 5 = strongly disagree as they pertain to the internal audit functions in your firm of work.

#	***Internal Audit Functions***	1	2	3	4	5
1.	Internal audit reviews the management of key risks					
2.	Internal audit evaluates the risk management processes					
3.	Internal audit coordinates the enterprise risk management framework activities					
4.	Internal audit administratively reports to executive management					
5.	Internal audit has an independent budget approved by audit committee					
6.	Internal audit functionally reports directly to the audit committee					
7.	The internal audit complies with the approved audit plans					
8.	Internal auditors are trained to acquire the necessary skills to perform their duties					
9.	Internal audit has full knowledge of the transaction systems of the entity					
10.	Internal audit maintains an unbiased mindset with regard to all audit engagements					
11.	Internal auditors have the ability to analyze complex information to discover risks					
12.	Internal audit staff assignments are rotated periodically whenever it is practicable.					

SECTION B: To examine Enterprise Risk Management Practices.
Kindly indicate your level of agreement or disagreement with the following statements, where 1= strongly agree, 2= agree, 3= neither agree nor disagree, 4 = disagree and 5 = strongly disagree as they pertain to Enterprise Risk Management Practices in your institution.

#	***Enterprise Risk Management Practices***	1	2	3	4	5
1	We have issued a risk policy outlining the entity's position on risk					
2	There is ongoing monitoring of employees activities in high risk departments					
3	The entity ensures that there is adequate risk awareness activities and training for employees					
4	Responsibilities related to risk management are clearly defined within our company					
5	The entity uses the relevant government investigation standards when conducting investigations					
6	We have established lines of communication with police for further investigations of detected risks in our organization					
7	We have developed a risk control plan to minimize the impact and likelihood of identified risks					
8	We have disclosure procedures in place for evidence relating to detected risk.					
9	Our risk reporting mechanisms are easily accessible by internal and external parties					
10	The entity uses internal audit to actively review its detective control environment					
11	Our entity provides sufficient information to enable employees recognize the possible red flags or early warning signs of risk activity					