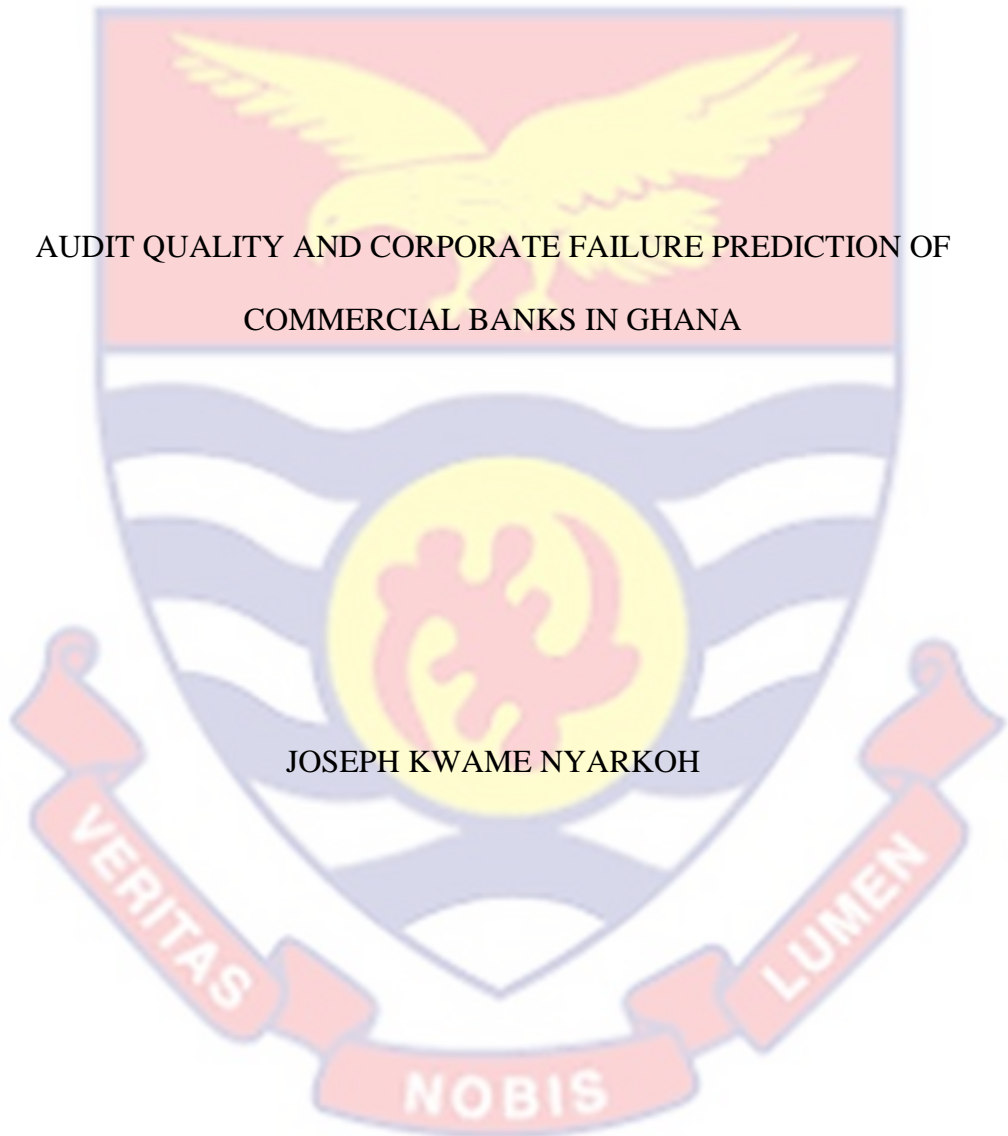


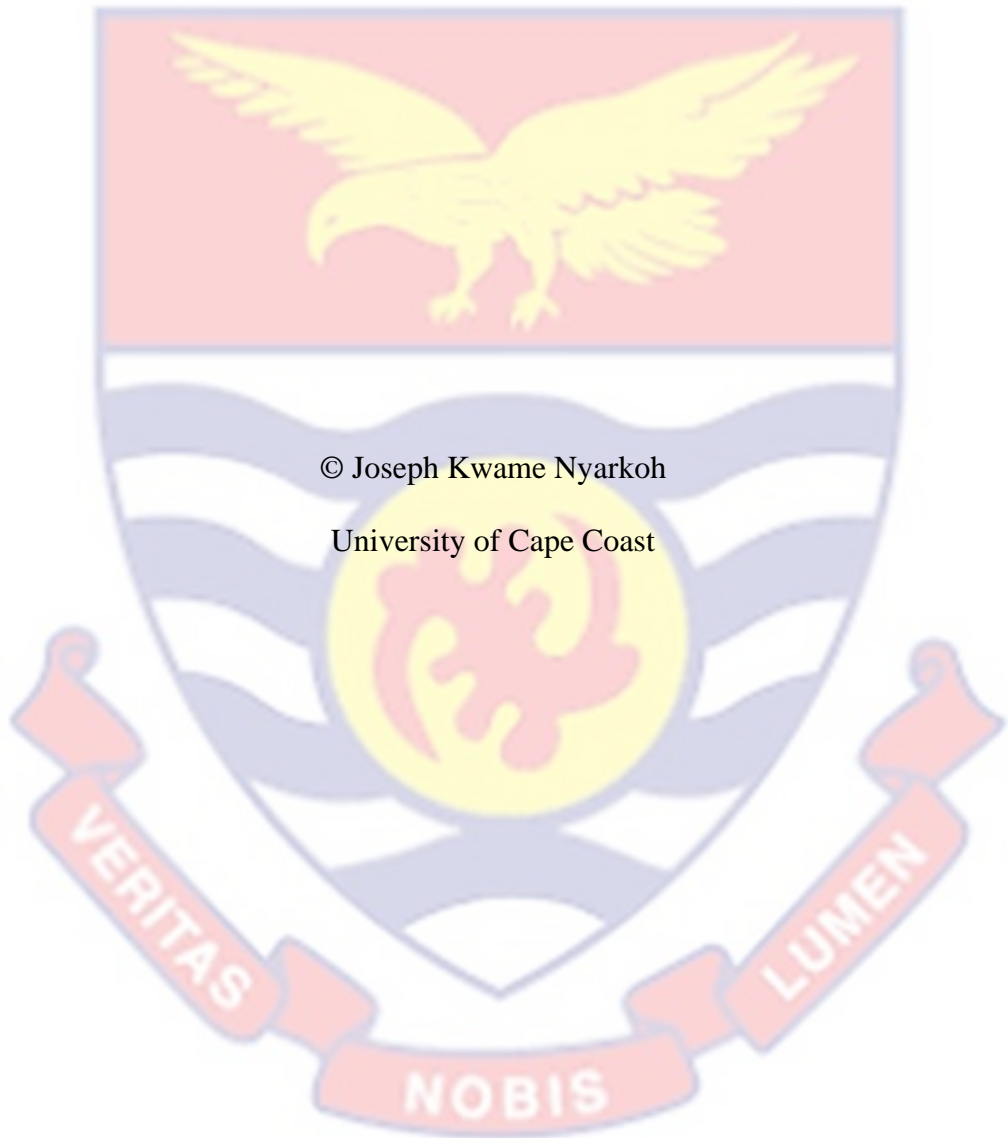
UNIVERSITY OF CAPE COAST

AUDIT QUALITY AND CORPORATE FAILURE PREDICTION OF
COMMERCIAL BANKS IN GHANA

JOSEPH KWAME NYARKOH



2022



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UNIVERSITY OF CAPE COAST

AUDIT QUALITY AND CORPORATE FAILURE PREDICTION OF
COMMERCIAL BANKS IN GHANA

BY

JOSEPH KWAME NYARKOH

This thesis submitted to the Department of Accounting of the School of Business,
College of Humanities and Legal Studies, University of Cape Coast, in partial
fulfilment of the requirements for the award of Master of Commerce degree in
Accounting

SEPTEMBER 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature Date

Name: Joseph Kwame Nyarkoh

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature Date

Name: Mr. Seyram Kawor

ABSTRACT

The recent occurrences of corporate failure in the banking industry have made the activities and role of auditors gained the attention of much debate. The asset quality review exercise undertaken by the Bank of Ghana in 2016 showed that some local banks were beyond financial rehabilitation, this has heightened the need for auditors to enhance transparency and accountability by reporting financial irregularities. Thus, this study examined the effect of audit quality and corporate failure prediction of commercial banks in Ghana using the linear regression estimation technique. Moreover, the study specifically sought to achieve these objectives thus, the effect of audit size; the effect of audit fee and the effect of audit tenure on corporate failure prediction of commercial banks in Ghana (measured by Altman (2000) Z-score model). Criterion sampling technique was adopted to sample 22 commercial banks in Ghana. Secondary data was collected from the commercial banks' annual report from 2010-2019 for the study. The study revealed that audit fee has a positive effect on corporate failure prediction. Also, the findings of the study showed that audit tenure has a positive effect on corporate failure prediction. The study, however, found audit size has a negative effect on corporate failure prediction of commercial banks in Ghana. The study will help accounting firms when conducting corporate failure audit to understand and appreciate the effect of their size, the numbers of years engaged by their clients and the audit fees charged on the outcome of audit assignment.

KEY WORDS

Audit Fee

Audit Quality

Audit Size

Audit Tenure

Corporate Failure Prediction

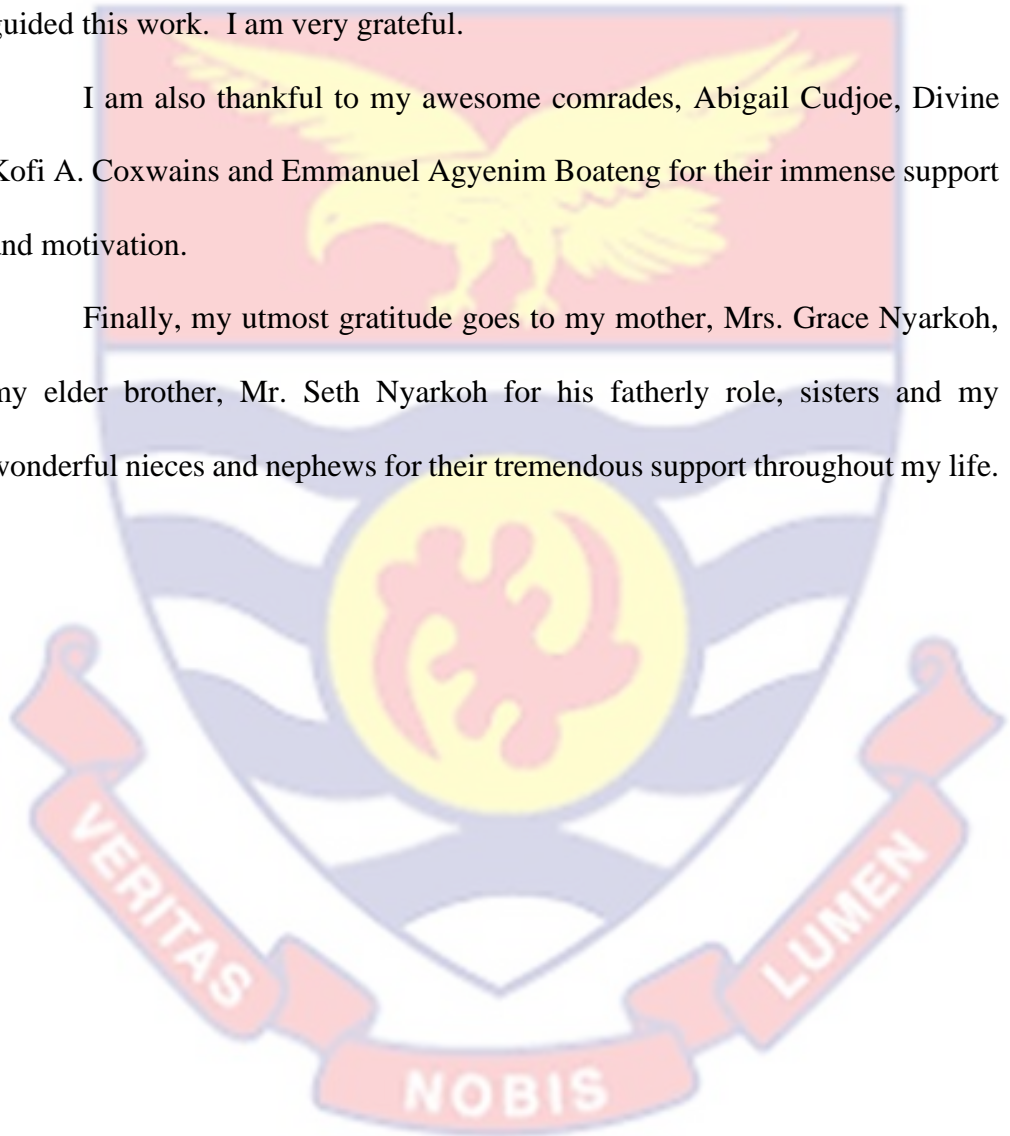


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DEDICATION

In memory of my father, Mr James Kwesi Nyarkoh

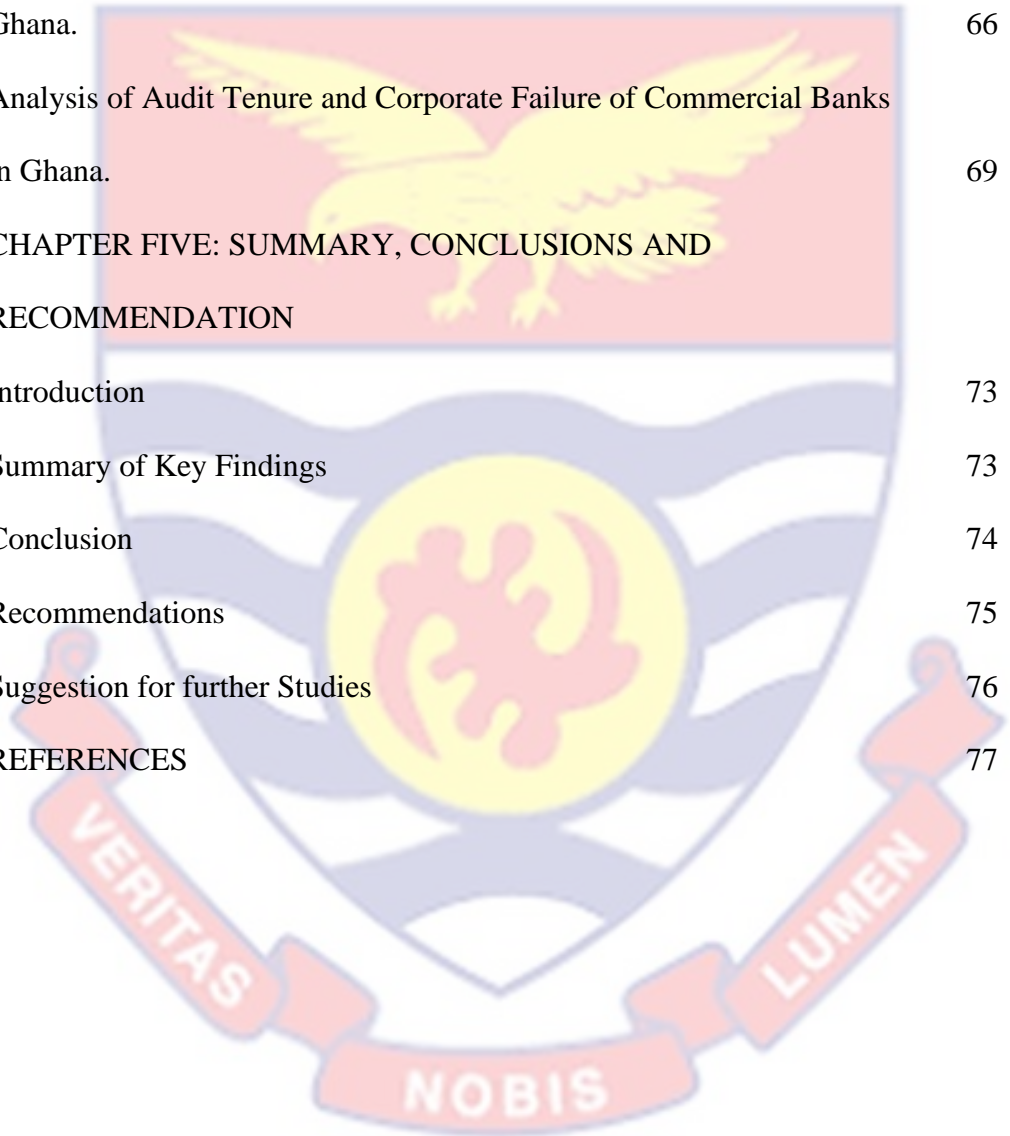


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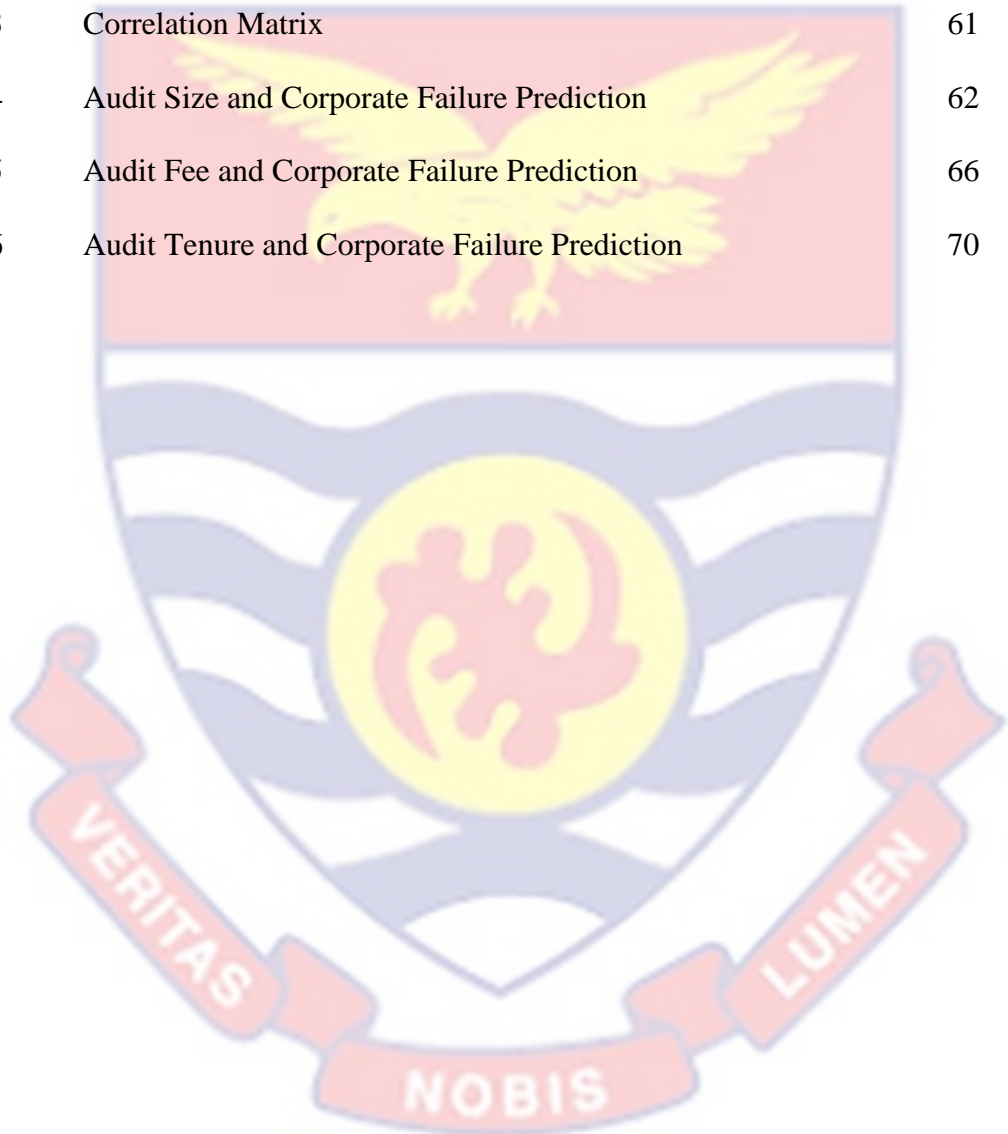
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LIST OF ACRONYMS

BoG	Bank of Ghana
EY	Ernst and Young
ICAG	Institute of Chartered Accountants, Ghana
KPMG	Klyneld Peat Marwick Goerdeler
MDA	Multiple Discriminant Analysis
PwC	Pricewaterhouse Cooper



CHAPTER ONE

INTRODUCTION

This chapter of the study provides the background information, statement of the problem, the study's purpose, research questions, research hypotheses, delimitations, limitations and the study's organisation.

Background to the Study

The role and activities of the banking system of a country cannot be downplayed because every economy relies on banks operations to grow. The recent occurrences of corporate failure in the banking industry have made the activities and role of auditors gained the attention of much debate. The shortfalls of the banking system have contributed largely to the hampered economic development (Sarpong, Winful & Owusu-Mensah, 2014). Banks provides the mechanisms for investors to earn interest while such valuables are passed onto institutions and government, which in turn are used for creating developmental works, resulting in business expansion and economic growth. Many companies are unsure about their future due to the global financial crisis (Appiah, 2011).

Financial institutions going out of operations has become imminent in today's business environment as a result of several corporations ailing from financial turbulence leading to corporate failure. The global occurrences of financial crisis have largely exposed the weakness of financial institutions around the world and have resulted in a great deal of uncertainty, with some financial markets effectively crippled. This is shown by the fact that several of the world's most powerful corporations have gone into bankruptcy, hence corporate failure has become an inevitable phenomenon in the business cycle (Aristi, 2011). In Ghana, there have been several instances of corporate

scandals, businesses being financially unstable, or corporations being declared bankrupt in recent years. In the financial sector, the situation is becoming extremely alarming as it is having a rippling effect on the lives of the people.

Furthermore, several accounting firms have been criticized for conducting audits of low quality that fail to acknowledge key risks posed by a company for appropriate steps to be taken, thus jeopardizing the entity's ability to continue operations (Ndisya, 2015). In tandem with global occurrences, the increased incidence of corporate failures in certain parts of Africa in recent years has led to increasing questions about audit quality (Hay, 2015; Knechel, Krishnan, Pevzner, Shefchik, & Velury, 2013). As a result, auditors have been suspected of enabling themselves to be conned for accepting the company's financial statements report, even to the point of endorsing irregularities and failing to serve as a beacon for bringing sanity and transparency in terms of financial fraud and misappropriation, as the investment public expects (Favere-Marchesi & Emby, 2018; Independent Regulatory Board for Auditors [IRBA], 2016).

Both private, policymakers and stakeholders in the public domain have lost some level of trust in audits as a consequence of auditors failing to meet societal standards and undermining audit quality (Porter, Hgartaigh, & Baskerville, 2012). Auditors' social position should make a positive contribution to its client in terms of financial stability and robust corporate structure by reducing the possibility of material misstatements and ensuring that financial statements are prepared by standards and acceptable procedures (Heil, 2012). Audit quality aims at increasing the trustworthiness of financial statements to the end-users of accounting information by assisting management

in verifying the firms' operations and external dealings (Alzoubi, 2016) and securing clients' interest by mitigating the extent of information asymmetry risk based on being compromised (Fairchild, 2007).

As a result, audit quality has become one of the most contentious topics in auditing, which auditors, lawmakers, the media, regulators, and the general public all debate. Ghana is not an exception to this in recent times. Financial statement audit has been the heart of every organisation's decision-making which aid in creating the avenue for managers to disseminate information relating to the financial issues to other stakeholders and also perform an independent evaluation of the firm's performance hence, making the auditors function highly important under this circumstance.

The main objective of audit is to ensure the preparation and presentation of a financial statement have been fairly interpreted with some level of confidence in accordance with appropriate standards and regulations (Boynton & Johnson 2005). The outcome of an auditor performing a financial statement audit represents the auditor's opinion that is believed to be a sign of public confidence coupled with information transparency in the financial report. In the stability of a business, the auditor is urged to evaluate a business continuity and a company's ability in maintaining the business for a limitless period (Aprilia, 2012). For a firm to be in operations for the foreseeable future, the auditor is empowered to assess the going concern of the business.

In the quest of this, the appropriate inquiry and establishment models to predict corporate failure to save financial institutions from naturally winding up or collapsing before their time is important. Developing economies like Ghana also have a taste of great business falling out of operations thus, the collapse of

Tano Agya Rural Bank, Meridian BIAO Bank, Plant Pool Limited (a subsidiary of Social Security), Bank for Credit Commerce International, National Insurance Trust, Nova Fishing complex, State Construction Corporation and Ghana Airways Limited, Bonte Gold Mines and Divine Sea Foods Limited, Gateway Broadcasting Services, Bank for Housing and Construction, Ghana Cooperative Bank and National Savings, Credit Bank, Juapong Textiles Limited are among the companies that have made up to the collapsed list (Appiah, 2011; Yeboah, 2009).

Moreover, Sovereign Bank, Construction Bank, BEIGE Bank, UniBank, UT Bank and the Royal Bank have been added to the list of corporate failure in the country recently. Base on this that, the study aims to look into the effect of audit quality and corporate failure prediction of commercial banks in Ghana. However, having the capacity to determine corporate failure requires attention, especially for maintaining the connection between financial institutions and businesses (Veganzones & Severin 2019). As argued by Dondo (2019), the researcher stated that early prediction of corporate distress may help corporate managers to institute appropriate measures to avoid potential failure.

Moreover, issues of major companies failing as a result of fraud and financial misappropriation in some parts of Africa and across the globe have increased concerns of how credible the activities and financial reporting systems of listed some firms in the continent (Adeyemi & Fagbemi, 2010). As a result, several technical and regulatory bodies have proposed changes to enhance financial reporting accountability and audit quality. Therefore, this makes audit a crucial role in the operations of every well-established corporate entity.

Statement of the Problem

In recent times some financial institutions in the banking industry have collapsed though their financial statement showed a healthy financial performance after been audited and published. This led to loss of jobs, savings, investments, and livelihoods.

The classical situation of the recent collapse of some local banks from 2016 to 2018 that were performing well before their operations came to an end. For instance, in May 2017 UniBank has expanded its banking activities to fifty-five (55) branches in nine (9) of the ten former regions in the old Ghana before it was later divided into sixteen regions which the expansion of branches indicates growth.

Moreover, in 2015 the bank won four (4) awards at the 14th Ghana Banking Awards ceremony including the best bank in product innovation as well as in 2017 awarded the Corporate Social Responsibility (CSR) Bank of the Year and CSR Initiative/Campaign of the Year at the 7th Ghana CSR Excellence Awards. Upon these achievements, showing strong financial health with such a similar situation to the other banks. Few years after the excellent contributions to the banking sector and the economy of Ghana, these banks failed to survive as a result of the recent banking crisis without any cause of alarm.

Also, the asset quality review exercise undertaken by the Bank of Ghana in 2016 showed that nine local banks were beyond financial rehabilitation. The Institute of Chartered Accountants, Ghana (ICAG), the accounting profession's regulator, fined four auditing firms, Pannell Kerr Forster (PKF) Chartered Accountant, J. Mills Lamptey & Co, Morrison & Associates and Deloitte Touche for a total of GHC2.2 million for non-compliance with auditing

standards and various violations performed when exercising their duties as auditors on the financial statement of these failed banks namely; Construction Bank, Sovereign Bank, BEIGE Bank, UniBank, Royal Bank and UT bank (frimpong & Adombila, 2019). In view of this, auditing been an integral component of a firm's successful operations and cannot be overlooked.

Majority of prior related studies focused on institutions other than universal banks, and were conducted outside Ghana; thus, making comprehensive application of their findings to decision-making in Ghana unrealistic (Arditi, Koksai & Kale, 2000; Davidson & Maguire, 2003; Balcaen & Ooghe, 2006; Wang & Campbell; Ncube, 2014; Cenciarelli et al., 2018). Locally, most of the studies focused on the development of corporate failure prediction models and causes of corporate failure (Appiah, 2011; Samanhyia, et al., 2016; Agyemang et al., 2020). It was, therefore, based on these gaps and the problem highlighted that this study was carried out on audit quality and corporate failure prediction of commercial banks in Ghana.

Purpose of the Study

The aim of this study was to look into the effect of audit quality on corporate failure prediction of commercial banks in Ghana.

Research Objectives

1. Examine the effect of audit size on corporate failure prediction of commercial banks in Ghana.
2. Determine the effect of audit fees on corporate failure prediction of commercial banks in Ghana.
3. Assess the effect of audit tenure on corporate failure prediction of commercial banks in Ghana.

Research Hypotheses

1. H_0 : There is no significant effect of audit size on corporate failure prediction of commercial banks in Ghana.
2. H_0 : There is no significant effect of audit fees on corporate failure prediction of commercial banks in Ghana.
3. H_0 : There is no significant effect of audit tenure and corporate failure prediction of commercial banks in Ghana.

Significance of the Study

Studies on audit quality relating to corporate failure prediction are very limited or rare in our Ghanaian context. The appropriate choice of financial institutions specifically banks by their corporate partners or stakeholders for decision making is very crucial because banks affect the socio-economic and political environment of every nation and individual life. This study's results and recommendations would be extremely beneficial to managers, board of directors, investors and other stakeholders to make a strategic decision about banks operations and selection for investment and other purposes. The Bank of Ghana (BOG), professional bodies like Institute of Chartered Accountants Ghana (ICAG) will benefit from this study for analysis and policy making. The study will aid accounting firms when conducting corporate failure audit to understand and appreciate the effect of their size, the numbers of years engaged by their clients and the audit fees charged on the outcome of their audit assignment. Academically, it would contribute to the literature on audit quality and corporate failure of financial institutions as well as further studies can be based on the findings and recommendations.

Delimitations

The scope of this study was restricted to financial institutions specifically only commercial banks. The study used financial institutions which is commercial banks in Ghana because of the accessibility to data of these banks about their financial characteristics on their websites and annual reports that is appropriate for this research. In addition, for the ten-year period from 2010 to 2019, the research was conducted across Ghana's twenty-two (22) commercial banks without considering the other banking firms such as rural banks and microfinance. This might impair generalising the outcome of the study.

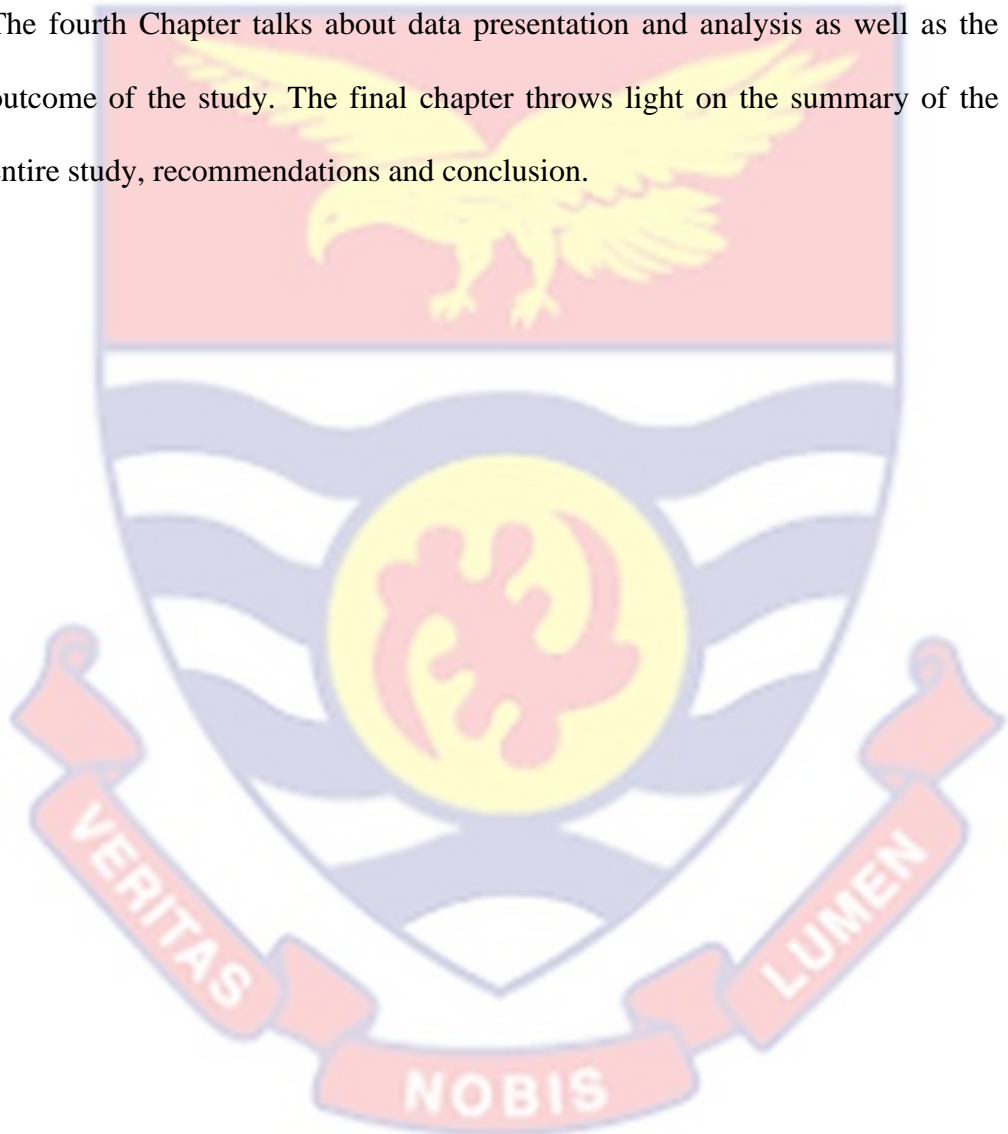
Limitation

The study was practically limited to the accessibility of financial information of the banks that is, the annual report of some of the commercial banks were not complete on their official website base on the period considered for the study. Some annual reports did not contain the necessary information needed for the study such as the statement of comprehensive income and statement of financial position as well as the collapse and consolidation of some banks made its data accessibility difficult which was excluded from this study. The model adopted to measure corporate failure prediction does not include other variables that influence a corporate failure.

Organisation of the Study

The study is grouped into five major sections that are five chapters. The first chapter introduces the study specifically looking at the background, the problem statement which the study was developed, its significance to diverse groups and stakeholders, research objectives and hypotheses as well as the limitation and delimitation of the study. The second chapter which is the heart

of the entire study also digests related issues on the theoretical framework underpinning the study and also reviewing relevant studies concerning the conceptual and empirical review of the study. The third chapter also focused on methods used to analyse the information of the study. It is specifically the research design for the study, data collection procedure and mode of analysis. The fourth Chapter talks about data presentation and analysis as well as the outcome of the study. The final chapter throws light on the summary of the entire study, recommendations and conclusion.



CHAPTER TWO

LITERATURE REVIEW

Introduction

The second chapter of this study throws more light on the theoretical basis that underpins this study and reviews relevant empirical literature that is in line with the study. It highlights the overview and concepts of audit quality and corporate failure prediction of banks. It presented a critical review of literature and issues raised in previous empirical studies. The study's review was motivated by providing knowledge in the context of the research and also assessing relevant previous studies on the subject matter, as well as acknowledging ways of presentation and discussions on the outcome of the research. Stakeholder theory and agency theory were discussed as theories for the study. Empirical and conceptual issues relevant to the study were reviewed from studies across the globe on audit quality and corporate failure.

Stakeholder theory

Stakeholder theory underpins the corporate structure of banks in Ghana. The argument of the theory suggests that, for a firm to be successful in its operation it will largely depend on the firm's capability to establish corporate policy or plan that is achievable, effective and appropriately manages stakeholders' relationships (Brammer, Pavelin & Porter, 2006). Freeman (1984) defined a stakeholder in an organisation as a group of people or individuals who can be in the position to be affected or affect the organisation by the accomplishment of the firm's goal. Further, the stakeholder theory propounded by Freeman explains that managers whom shareholders have appointed to stair the affairs of the organisation have a wider pool of relationship networks to

serve in their interest such as creditors, shareholders, government, investors and employees. For corporates entities to be existence for the foreseeable future without failing, the firm's resources are entrusted in the care of managers, employees and board of directors to effectively manage these resources by parties who have an interest and invested in the firm for the benefit of all stakeholders who are directly and indirectly affect and affected by the existence and operations of the firm.

The aforementioned stand to reason that banks are a social construct therefore, their activities affect society, people and vice versa. The recent collapsed of the seven indigenous banks greatly affected a varying number of stakeholders such as professional bodies, investors, auditors, managers, individuals, government agencies and the economy at large because the collective interest all stakeholders were not satisfied but only a few interests were met in the course of achieving the organisational goal and strategy. Since stakeholders contribute to the going concern or survival of the organization, audit quality presents a clear picture of how best the interest of the various stakeholders has been served as presented in the financial statement for decision making.

The responsibility of people charged with governance thus the directors or managers to ensure the going concern assumption is satisfied hence limiting the likelihood of corporate failure by putting appropriate mechanism in place such as audit. Managing business relations and organisational activities effectively by people charged with governance (stakeholders) reduces business risk to be found by the audit work. This reduces the likelihood of corporate failure of the organisation. Therefore, stakeholder theory shows a direct relation

between audit quality and corporate failure prediction.

Agency Theory

The theory is aimed at describing the relationship that exists between the principal and an agent of an organisation. The agent is said to perform duties or roles on behalf of the owner of the organisation who is the principal (Jensen & Meckling, 1976). The problem of agency arises when the interest of the agent and principal are not aligned with the organisation's goals or objectives (Panda, Brahmadev & Leepsa, 2017). In an organisational context, the management is the agent and the owners are the principal.

The bond between the agents and principals often leads to information asymmetry where the agent employed by the principal uses aggregate information to his or her benefit at the expense of the principal. The issue of agency comes to bear in firms because outmost ownership and management of resources are separated from shareholders which call for the need for audit service since the operational activities of the firm are within the powers of the agent whose value of ownership in the firm may be either significant or not but major contributors of resources for the firm's survival is by the shareholders or owners (Abdul-Raman, Benjamin & Olayinka, 2017).

Supporting the earlier claims, shareholders need a decision leading to high returns or the increase in investment worth, whereas the management ascribes to sufficient revenue compensation for the work done by employees but due to the differences in the agents and principals' interest, an autonomous party which is the auditor is needed as a mediator who is considered to bridge the principals and agents' interest in overseeing the affairs of the organisation (Simamora & Hendarjatno, 2019). As a result of the self-seeking interest

relationship that characterised the principal and agent, an information asymmetry gap is created where the principal echoes the agent may use the information asymmetry gap to their benefit.

Further, as postulated by Jensen and Meckling (1976), the advantage of agents having aggregate information of the organisation than principals thus, information asymmetry, adversely impacts the principal ability to effectively supervise the activities of the agent that is geared towards serving their interest. To bring a solution to this issue, principals set up structures and systems to direct the diverging interests of both the principal and agent towards the ultimate objective of the firm to mitigate the issue of information asymmetry on the side of one party and opportunistic attitude of the agent (Jensen & Meckling, 1976; Watts & Zimmerman, 1978). The services of an audit are required as the monitoring mechanism to supervise the operations of management over the information presented by the financial statement as well as ensuring the perpetuity of the firm's activity (Jones, 1991; Matoke & Omwenga, 2016).

The audit quality is assessed as the likelihood that the auditor obtains sufficient evidence about the financial reporting system of its client and reports whether or not there is a breach in the financial statement report (Gaynor, Kelton, Mercer & Yohn, 2016). The auditor is held responsible for rendering audit service in a manner of evaluating the credibility of the financial report prepared by the agents of the firm (Salehi, 2011). The audit opinion formed by the auditors provides the opportunity for the principals to assess the performance of the agents for carrying the operational activities of the business (Simamora & Hendarjatno, 2019). As a result of the entertaining relationship

between principals and agents and the asymmetries of information, principals are concerned that agents may use them for their satisfaction.

Therefore, audit firms such as KPMG, Deloitte and other accounting firms providing audit services after the collapse of the indigenous banks in Ghana as part of Bank of Ghana financial sector cleaning in 2019 can be linked to agency problems among stakeholders. This has made audit quality a central core to the survival of corporate institutions as the modern business environment may demand.

The occurrences of many corporate failures can be attributed to audit quality as in the case of the Enron scandal which is not different from the recent corporate failure of the indigenous banks in Ghana. The role of audit serves as an intermediary thus, agent between owners and managers to provide reasonable assurance to the owners about the activities of the managers. For an audit task to serve its purpose between owners and principal effectively these elements; audit size, audit fee and audit tenure are key factors for auditors to serve as expected. Therefore, audit quality and corporate failure prediction is directly linked with agency theory.

Conceptual Review

Audit Quality

DeAngelo (1981) delivered a theoretical picture to understand audit quality. The researcher posited that audit quality is the likelihood that sufficient evidence will be obtained to identify and report material misstatement by an auditor of its client's financial statement. The auditor's capability, experience and the client's industry specialisation reflect the ability of the auditor to identify and report material misstatement. DeAngelo (1981) further hinted audit

quality can be seen as a system of dual processes that is, auditing can be either successful or not identifying material misstatements.

However, the idea of audit quality has gotten a lot of attention, but describing exactly what it means, what it looks like and how to evaluate it is difficult which cannot be narrowed to a simple meaning (Financial Reporting Council 2006; Bonner 2008; Deloitte, 2017; Knechel et al., 2013). The quality of audit is obtained through the delivery of an appropriate report on how the client has conformed to the recognised financial reporting standards and regulations. Audit failure happens if the auditor's independence is not guaranteed or an auditor is said to be independent but deliberately issues audit opinion of a client as true and fair representation but otherwise because of its inability to obtain sufficient information as expected of auditing standards (Francis, 2011).

DeFond and Zhang (2014) emphasized that audit quality is a process that is a continuous system of which an auditor sees not only if the client financial reporting practices are by acceptable accounting standards and regulation but how truly the firm's financial statement depict the economic operations of the firm. Audit quality encompasses the importance of the financial reporting chain which improves a consistent performance of quality audit (International Federation of Accountants [IFAC], 2014). Moreover, audit quality is described by Arens, Best, Shailer and Fiedler (2013) as to how appropriately material misstatements are discovered and reported through an audit which such action is indicated as a reflection of the auditor's capability, ethics or integrity.

Salehi and Azary (2008), audit quality is an auditor's ability to defend the interests of financial statement users by detecting and reporting major misstatements to aid in the elimination of information asymmetry that exists among financial statement users and management. The information asymmetry of the audit report by the client resulted in the establishment of an audit (audit quality) to assist in bridging the gap connected with the agency relationship. Moreover, when the financial statement is authenticated to be devoid of information asymmetry, audit quality is said to be constituted. Audits are anticipated to be light to maximise the value of the information presented in the financial statement. Audit quality is determined by an auditor's demonstration of professional competence, dedication, and due diligence during the audit process, which can lead to a true and fair depiction of the financial statement (Arrunada, 2000).

Primarily, audit quality is associated with auditors' competence and independence, as a result of their ability to detect material misstatements and their willingness to submit appropriate audit reports that represent their findings (Elifsen & Willeken, 2008). Palmrose (1988) contends that actual quality and perceived quality are critical problems in explaining audit quality. While actual quality is viewed as the possibility of lowering the associated risk of reporting a substantial misstatement in financial statements, perceived quality is what financial statement consumers feel about the auditor's ability to reduce substantial misstatements.

Audit quality, according to (Institute of Chartered Accountants in England and Wales [ICAEW], 2002), is offering an acceptable professional opinion supported by the relevant evidence and objective assessments. One of

the ways in making the concept a reality is establishing specific objectives of what auditors must do to offer a suitable expert assessment on a specific set of financial statements. Kabiru and Rufai (2014), audit quality is utilized when users of accounting information are concerned about the reliability of audited financial statements within the framework in which the audit report has been presented. Audit quality, on the other hand, is a phenomenon that extends further than the integrity of financial statements to ensure the reliability and validity of the audit process. Duff (2009) asserts organisations must employ the services of individuals with the requisite technical expertise and professionalism for audit quality processes and reports. In another sense, audit quality is obtained through a process of conducting audit risk assessment and managing the activities required to accomplish the quality goals of audit work.

However, from a behavioural standpoint and in terms of auditor quality, audit quality is not primarily concerned with auditing standards only, but rather with the calibre of the people, training, and ethical levels (Kabiru & Rufai, 2014). In this context, audit quality is bent on the auditor's traits such as abilities and competence, as well as assuring the credibility of the client's financial statements by gathering adequate evidence to back an audit assessment.

Audit Size

Arens, Elder and Mark (2012) describe audit firm size as the classification base on the revenue, market share, number of associates, offices and staff. Audit firm size can be also referred to as the Big 4 accounting firms and the non-big 4 accounting. Audit firm size can be characterised and grouped in different ways, for instance, the number of partners, asset size, market share, international standing and the specialised area in the industry is engaged

(Kaawaase, Assad, Kitinddi & Nkundabanyanga, 2016). In modern literature, the Big 4 named audit firms are PwC, EY, KPMG, Deloitte. Generally, audit quality is probably to be linked to the big 4 audit firms compared to an audit conducted by the non-big accounting firms (Lawrence, Minutti-Meza, & Zhang, 2011). The larger accounting firms are linked with auditors with experience, competence and greater professionalism than the small accounting firms (Francis & Yu, 2009).

DeAngelo (1981) explained that in terms of audit size, accounting firms with smaller market sizes are greatly dependent on some clients as opposed to the larger accounting firms. Researchers have argued that larger accounting firms are committed to being independent because of client visibility and protection of reputation (Reynolds & Francis, 2000; Larcker & Richardsin, 2004; Barton, 2005). Auditors' drives to conduct a high-quality audit are stronger for large customers because auditors face greater reputation loss and legal risk if they fail to do their jobs properly (Leuz, Nanda & Wysocki, 2003).

Therefore, as the reputation of the accounting firm is not built on a silver platter, larger audit firms have commitment to delivering quality audit service than smaller audit firms. Auditors at large audit firms have higher levels of competence because they have more auditing and industry expertise, better training programs, and huge resources channelled in the advanced technologies and the capability to obtain information about client-specific in the audit process becomes quicker (Brooks, 2011). Scholars have established evidence to back the claim that the big 4 accounting firms can provide better audit service than the non-Big 4 accounting firms (Khurana & Raman, 2004; Behn, Choi & Kang, 2008).

Furthermore, the notion was reinforced that larger audit companies deliver higher-quality audit services than smaller accounting firms (Lawrence et al., 2011; Rezaei & Shabani, 2014). This is because auditors of larger accounting firms have a low probability of relying on the financial resources of a single client to impair the auditor's independence (Rezaei & Shabani, 2014). That is, they are less likely than small audit companies to agree to customer pressure for reporting errors (Choi, Kim, Kim & Zang, 2010). This suggests that larger accounting firms have a low chance to succumb to the pressure of their client to lower the standards of audit and reporting material misstatements compared to small accounting firms.

Firms that employ the services of reputable accounting firms have a greater likelihood of better audit service (Afza & Nasir, 2014). The report of the audit process tends to attract potential investors and clients to the organisation which can result in better performance hence placing the firm in a better position than experiencing corporate failure, therefore institutions tend to employ the service of big audit firms (Muoz-Izquierdo, Camacho-Miano & Pascual-Ezama 2019). Furthermore, because of their greater technical skill and resources, large audit companies have a larger incentive to provide high-quality services to safeguard their brand name and image (Rezaei & Shabani, 2014; Lawrence et al., 2011; Francis & Yu, 2009).

Smaller audit firms, on the other hand, may report material misstatements to deliver better audits than the larger accounting companies because they want to develop a solid reputation and compete for client share in the sector (Barton, 2005). Ndisya (2015) hinted the Big 4 firms provide a better audit service since their scope allows for more comprehensive training

programs, standardized audit procedures, and more alternatives for acceptable second partner evaluations. Larger audit companies have a stronger potential to reduce agency expenses (Krishnan & Schauer, 2000). Thus, corporate failure is less common among Big 4 audit firms.

Scholars, on the other side, have contended that big accounting firms may not always deliver higher-quality audit services than smaller accounting firms (Salehi, Mahmoudi & Gah, 2019; Khurana & Raman, 2004). Evidence of corporate audit failures in developed economies, such as Arthur Anderson as a former colleague of the world's leading audit companies, supports the idea that Big 4 audit firms do not necessarily give higher quality audits than non-Big 4 audit firms. Some audit failures can be linked to the big audit firms in the world (Rezaee, 2005).

Audit Fee

The amount charged by the auditor for any audit task to be performed has been defined as audit fee (Abdul-Rahman et al., 2017). Suharli, Michell and Nurlaelah (2008) describe audit fee as the price charged by an accounting firm for rendering financial audit services to a client. According to the Ghana Companies Act (2019), the term "auditor fee" refers to the amount of money paid by a company to cover an auditor's charges. Audit fees paid by the auditor might vary depending on the complexity of the services, the audit firm's assignment risk and cost structure, the needed level of skill, and other professional considerations (Lyon & Maher, 2005; Abdul-Rahman et al., 2017).

Again, Hoitash, Markelevich and Barragato (2007) opined that the total amount of audit charges constitutes all costs incurred by the auditor. Audit fees are payments made to auditors that represent the expense of the audit firm's

effort as well as the risk of liability (Choi, Huang, Liao & Xie, 2009). Therefore, this implies that audit fees are the consideration for an auditor's commitment to undertaking an audit service for a client. When it comes to the overall costs that must be paid to auditors, there is a widespread belief that auditors who get more money from their clients may lose their independence and objectivity (Zeff, 2003). Thus, when compared to smaller audit firms, larger audit companies demand more money to provide audits and related auditing services (Ireland & Lennox, 2002). This indicates that clients should offer auditors higher enumeration to cover their cost of service (Cohen, Krishnamoorthy & Wright, 2004).

The effort of auditors is also a reflection of the audit fees charged by the accounting firms (Srinidhi & Gul 2006). Researchers have discovered that unusual audit fees, or audit fees that are significantly higher than the average, can indicate financial reporting issues within a company (Hribar, Kravet & Wilson, 2014). Choi et al., (2010) purported that accounting firms that deliver audit service of higher standards turn to charge audit fees much greater than those accounting firms whose audit service is of low standard since the total expenses of offering better audit services are higher. High audit fees paid to accounting firms boost auditor's effort to deliver audit service of quality standard (Rani, Ariel, Charles & Barragato, 2007; Wooten, 2003).

Cenciarelli, Greco and Allegrini (2018) hinted that the likelihood of corporate failure has a positive association with audit fees thus, firms with higher audit fees are more likely to be associated with failure. Geiger and Rama (2003) asserted that financially distressed companies pay higher audit fees. Higher audit fees paid by clients to auditors, on the other hand, may pose a

danger of reducing audit independence during the client's firm's audit process. Audit fees are also linked to the selection of competent auditors since much cost is associated with the training of members (Hay & Davis, 2004). Despite the higher audit fees, some clients prefer to work with big named auditing companies. The audit fees, which reflects the auditor's labour, serves as a monitoring mechanism to improve the firm's activities and lower the risk of business failure.

Audit Tenure

Johnson, Khurana and Reynolds (2002) described audit tenure as the number of years an accounting firm has engaged an organisation as its auditors. Three years or less is considered a short auditor term, whereas nine years or more is considered a long auditor tenure (Ndisya, 2015). The period of the audit-firm-client engagement during the accounting period of the firm covered by the audited financial statements is referred to as audit-firm tenure (Adeyemi, Okpala & Dabor, 2012). Affirming the earlier definition by the above scholars, the audit tenure is the length of time that the auditor and the client have agreed to work together (Hartadi, 2009; Nagy, 2005). On the other hand, audit tenure can be referred to as the period a client engages an audit firm for audit services.

The question of whether audit firm tenure has an impact on auditor engagement service has long been a contentious issue in auditing regulations, with some believing that long tenure erodes auditor integrity, as well as others, believing that long tenure enhances auditor knowledge and skills (Enofe, Mgbame, Aderin & Ehi-Oshio, 2013). The benefits of audit firm tenure arise from increased audit independence, which enhances audit quality (Shafie, Wan-Hussin, Yusof & Md-Hussain, 2009). Longer audit tenure, according to Mansi,

Maxwell and Miller (2004) lessen information asymmetry amongst auditors and clients allows for a better audit. Therefore, this presumes that long audit tenure enhances audit by limiting the likelihood of firms failing. Long-tenured auditors, as further contended by Mansi et al., can offer early warnings to organizations that are at risk of collapsing due to lesser information asymmetry and a deeper knowledge of the firm.

Investors believe that a longer audit tenure will result in higher-quality auditing (Ghosh & Moon, 2005). Some studies have supported the argument that audit tenure enhances the tendency of a client to receive better audit service (Myers, Myers & Omer, 2003; Johnson et al. 2002). Johnson et al. (2002) pointed out that audit quality of the financial statement declines in the early years of the auditor engagement that is from two to three years as compared to four to eight years which the audit quality turned to be better. Revocation of employment of auditor who has worked as an auditor for the bank or specialized deposit-taking institution for the past six years and more is deemed long tenure, according to the (Banks and Specialized Deposit-Taking Institutions 930 Act, 2016).

Evidence from some studies indicated low standard of audit quality is largely to be associated with shorter audit tenure than a longer period of engagement between the auditor and client (Geiger & Raghunanda, 2002; Johnson et al. 2002; Ghosh & Moon, 2005). Gul, Fung and Jaggi (2009) emphasized that the prospective auditor needs significant time to understand the nature of the client operations and associated industry knowledge. Ghosh and Moon (2003) indicated the quality of audit services improves as audit tenure increases. This indicates that the new auditor may lack information and

experience about the client and its industry, whereas the prior auditor has an extensive understanding of the client and its business, which might assist the new auditor in comprehending the financial report that needs to be audited.

On the other hand, these scholars provided a different perspective of audit firm tenure and audit quality (Davis, Soo & Trompeter, 2002; Casterella, Knechel, & Walker, 2002; Francis, LaFond, Olsson & Schipper, 2004). The researchers discovered that the discretionary accruals increase with audit firm tenure, implying that a longer audit firm tenure can result in a decline in audit quality thus, in the case of the Enron scandal led to corporate failure. This explains that audit quality may suffer in the later years of the audit-client engagement because longer audit tenure may limit the objectivity and independence of auditors. Further, Indah (2010) found that as the length of the auditor-client relationship grows, the degree of audit quality may decline, because a longer period of auditor and client engagement compromises the auditor's independence.

However, Reynolds and Francis (2002) stipulated that long audit firm tenure aids auditors to have a greater understanding of their client's internal control and accounting system, making it easier for them to combat earnings management behaviour and other anomalies in the client's financial reporting process. In the early years of an auditing engagement, auditors turn to be less independent (Ruiz-Barbadillo, Gómez-Aguilar, Fuentes-Barberá & García-Benau, 2004). Nashwa (2004) noted that the risk of auditor independence increases in the early years of the auditor-client interaction and decreases over time as the engagement lengthens. The probable association that exists between audit quality and audit firm tenure suggests that the early period of engagement,

the audit has the likelihood to be independent and brings a new dimension to the audit and create the opportunity for the prospective auditor to acquire and develop skill and competence but Carey and Simnett (2006) asserted, there might be a possible risk that the new auditor may fail to discover and report material misstatement.

These arguments by the various scholars suggest that as audit tenure increases, it serves as an opportunity for the auditor to familiarize and learn about the client's business environment resulting in higher audit quality. However, longer audit firm tenure leads to familiarity issues which may weaken the auditor's independence resulting in corporate failure. The long period of engagement of the Enron and Anderson relationship is a prime example that contributed to the collapse of these firms (Arel, Brody & Pany, 2005). Moreover, a long audit period of engagement often results in the accounting firm aligning their interest to their client which leads to compromise of the audit firm independence (Geiger & Raghunandan, 2002).

Mandatory audit tenure, according to Chi, Kim, Liu and Simunic (2009), promotes auditor independence. Also, studies by these scholars have proved that a longer audit engagement period has a positive association with audit quality (Nashwa, 2004; Ghosh & Moon's, 2005; Arel et al., 2005; Knechel & Vanstraelen, 2007; Jackson, Moldrich, & Roebuck, 2008). Using various proxies for audit quality, the majority of prior studies have provided evidence that short tenure decreases audit quality and long tenure increases audit quality. However, Brooks (2011) contended that longer auditor- and client engagement thus, long audit tenure impair the independence of auditor as well as negatively impact quality.

Concept of Corporate Failure Prediction

Investors in global economies have been wary of risks, particularly the danger of corporate failure, following the downfall of big corporations such as WorldCom and Enron (Aziz & Dar, 2006). Organisations failing are devastating occurrences that not only jeopardize the economy and the development of the society, but also sweeps the advantages of a widespread of stakeholders, including shareholders, lenders, labour unions, government agencies, and regulatory authorities, as well as clients. Corporate failure refers to a company's decision to cease operations due to a lack of profitability (Ahn, Cho, & Kim, 2000).

Furthermore, firms failing might manifest as insolvency or bankruptcy. Corporate failure is a condition in which a company is unable to satisfy its current commitments as they become due; this occurs when current liabilities exceed current assets whereas, bankruptcy is described simply as a condition in which the debt ratio outweigh the fair market value of assets. Bankruptcy prediction, firm failure prediction, and financial distress prediction are all terms used to describe the field of corporate failure prediction. As the name implies, corporate failure prediction entails creating models that seek to anticipate a company experiencing financial failure before it occurs (Gepp & Kumar 2012).

Poor managerial skills, poor marketing strategy, and a lack of capacity to compete with other companies in the field can all contribute to a company's demise (Wu, 2010). As a result, various ways have been proposed to explain corporate failure. A wide definition of corporate failure is the circumstance in which a company are unable to satisfy its obligation with customers, shareholders, or lenders or the company is legally bankrupt (Ahn et al., 2000;

Dimitras, Zanakis, & Zopounidis, 1996). The result of a firm's inability to forecast failure before it occurs invariably results in enormous financial losses for investors and other stakeholders, as well as a large social and economic cost to a nation (Shuai and Li, 2005; Salehi & Abedini, 2009).

However, as corporate failure registers a considerable financial burden on the various stakeholders, other parties including lending houses that provide debt finance services, shareholders, regulatory bodies, clients and auditors turn to be interested in a firm's financial health because corporate failure results in a negative consequence for all of these stakeholders (Gepp & Kumar, 2012). Various models of corporate failure prediction have been proposed in an attempt to avert corporate failure and the resulting harm. According to He and Kamath (2006), numerous approaches have been made to the creation and enhancement of business failure estimation techniques since the early works of (Beaver, 1966; Altman, 1968).

Corporate failure prediction models are divided into three categories by Aziz and Dar (2006): classic statistical models, artificially intelligent system models, and theoretical models. These corporate failure prediction models are significant and useful for the following reasons (Wu 2010; Bee & Abdollahi, 2011); firstly, corporate executives can use failure prediction methodologies to create early warning systems for impending company failures and then take necessary steps to avoid them. Secondly, corporate financiers and investment firms may use business failure prediction models to help them make more informed decisions about which companies to work with. Thirdly, models for corporate failure prediction can be used by investors to identify companies of

better financial position to invest and finally, when looking for a stable company to work with, prospective workers might use business failure prediction tools.

Several diagnosis strategies have been proposed, including statistical techniques, data mining approaches, and so forth, in the process of looking for a more acceptable predictive model for business failure prediction (Telmoudi, Ghourabi & Limam 2011). Beaver (1966) presented univariate analysis, which was a ground-breaking contribution to the field of business failure prediction. Altman (1968) created multivariate discriminant analysis, which laid the groundwork for subsequent estimations of corporate failure prediction models.

Corporate Failure in Ghana Recently

Several studies have hinted the stability of banking industries in every nation is a driver for sustainable economic development and financial growth (Levine, 2005). However, the occurrences of corporate failure in most developing countries in the past few years can be attributed to many factors including effective credit management strategy, poor risk management, weak corporate governance code, inefficient regulatory enforcement and lack of capital adequacy (Moyo, Nandwa, Council, Oduor & Simpasa, 2014). Ghana has not been an exception to corporate failure in the banking sector as the country has also witnessed the collapse of some giant indigenous banks in recent years. These corporate failures can be attributed to corporate governance, non-performing loan and regulation. The discussion below throws more insights into the factors of corporate failure in Ghana recently.

Corporate governance is represented by a variety of systems that enable management to administer effective corporate strategies to benefit all stakeholders of an organisation (Morck, & Steir, 2007). McGee (2009) posited

that corporate governance refers to the framework of relationships and duties among a core group of shareholders, board members, and management that is designed to best nurture the competitive performance necessary to accomplish the primary goal of the firm. Wilson (2006) further contended that corporate governance is concerned with how businesses are directed, managed, and held accountable for the resources they utilize. Since organisations obtained funds from the public, firms commit to operate in the public interest and produce complete and fair public disclosure of company information, including financial outcomes, because it serves as the foundation for corporate governance (Inyang, 2009).

In terms of corporate governance, an organisation's board of directors are in charge of developing structures that stem to the advantage of investors, employees, and regulatory authorities (Mensah, Aboagye, Addo, & Buatsi, 2003). In addition to strategic, tactical, operational, and financial risk, the board of directors considers compliance and marketable exposure. The role of the board in corporate governance matters in an organisation is to provide advisory services to the management on strategic approaches that are in line with the firm's core mandate and vision which motivate management to implement policies that are in compliance with regulations and ethical standards (Banahene, 2018).

In the case of Ghana leading to the collapsed of some indigenous banks can be pointed to a poor supervisory role on the part of the board of directors and lack of integrity in the bank's operations and the corporate reporting mechanism including auditors not exhibiting professionalism and due care, poor management of interparty transactions and weak credit risk evaluation system

(Afolabi, 2018). The researcher further contended the chief internal auditors' level of independence was compromised, absence of confidentiality, and lack of integrity and confidence was the imminent issues peculiar to the most of the indigenous bank that collapsed because it impeded the development and successful operations of these banks.

However, this explains that failure on the part of the board of directors to ensure effective evaluation and monitoring mechanism over the operations of the banks and also poor information disclosures led to the demise of these indigenous banks. Ensuring the efficacy of corporate governance structure, internal control systems should be accompanied by effective supervision, independence of auditors and the legal atmosphere appropriately to guide the activities of these firms (Mati & Papac, 2014). Kearney (2012), indicated that emerging markets function efficiently if a well-developed and robust financial structure and institutions such as regulatory bodies, financial institutions, and exchanges commissions whereas these facilitators or processes are severely missing in developing countries.

Some of the difficulties faced by developing economies include political instability, weak legislation, risk and uncertainty, low level of protection for investors and high levels of government intervention necessitates the instalment of effective structures of corporate governance. Singh and Zammit (2006) purported that a nepotism economy that is based on intimate ties between corporate persons or firms and governmental agents, which create partiality in the issuance of legal permits, government subsidies, special tax advantages, or other types of government support systems hinders effective corporate governance systems. This was the situation for the collapse of the local banks

thus, funds were transferred to board members for private business use without proper authorization and authentication which resulted in an improper way of giving credit facilities to related parties.

The problem of corporate governance in Ghana is concentrated on investors' viewpoints, in which the company focuses on individuals who seem to have monetary shares in the firm, therefore improving the economic worth and optimizing the shareholders' return on investment (Boateng, 2013). Structural and management of the country's business ownership skew corporate governance equilibrium in the interest of investors in institutions with majority stakes (Mensah, & Abor, 2014). The role of the owners and investors in an organisation is to supervise and direct the affairs of managers who aggravate the situation by having conflicting of interest in who the board appoint to be a key member of the organisation which this action often leads to firm failing (Banahene, 2018). Banks having effective internal control measures enhance the banks' capability to discover, supervise and manage risk (Cheserek, 2007).

In addition, regulation was one of the key contributing factors to the collapse of some local banks in the country. The key function of banks has made it essential to guarantee that banking operations are controlled so that the widespread and disruptive impact of bank crises on the broad economic system may be managed (Soile-Balogun, 2017). Like all other central banks, Ghana's central bank is the banking system regulator in Ghana and is entirely responsible for protecting the banking sector credibility, confidentiality and integrity. They preserve depositors' trust through measures that increase depositors' worth and promote financial integration and intermediation. The banking industry and its

credit structure should be effectively regulated, monitored, and managed as well as ensuring the banking industry operates smoothly.

The regulatory body of the banks in the country thus the Central Bank also faces enormous problems (Afolabi, 2018). The central bank has claimed numerous reasons to construct those banks since the Bank of Ghana combined Unibank, Sovereign Bank, Royal Bank, Beige Bank Ltd and Construction Bank into Consolidated Bank. Despite the consolidation problem, there has been no comprehensive and calibrated strategy developed by the central bank for the effective management of banking sector activities (Banahene, 2018). The Banking Act 673 (2004) fully described the licensing procedure for Ghana's banks. The present statute sets out specific recommendations for the Central Bank as to how banks' operations should be regulated and law-enforced. If the rules in the Act is not observed, the financial system might cause chaos and hurdles for bank customers (Bawumia, & Owusu-Danso, 2008).

It is not obvious why the Central Bank of Ghana did not comply with the above legislation, as there are sufficient rules to enable them to regulate the financial system's operations (Adams, Debrah, Williams & Mmieh, 2015). Systemic changes due to the political structure of the country make rules and regulations inadequate, hence calls for the need for rules to be strengthened to address any structural weaknesses as a result of the banking system dynamics (Owusu, & Odhiambo, 2012).

The Central Bank considers how several banks collapsed as a result of the defective licensing procedure, poor supervisory services and lack of competence on the part of the Bank of Ghana (Abugri, Osah, & Andoh, 2016). The unstable growing economy of the country needs a strong, sustainable, and

dependable banking industry that attracts private sector investment outside (Koto, 2015). The Central Bank must therefore guarantee a strong and stable financial system, protecting the interest of account holders by supervising banks' illegal and other activities of these institutions (Alhassan & Biekpe, 2016).

Finally, because loans form an important part of a bank's long-term viability, several banks have been forced to exit out of operation prematurely due to their management. One of the key operations of all financial institutions is the provision of credit. Adusie (2018) asserted that, across many countries, high and growing levels of non-performing loans (NPLs) persistently tend to impose significant pressure on the financial statements of the banks, potentially affecting lending operations. NPLs, as described by Alton and Hazen (2001), are liabilities that are 90 days or gone beyond the due period or interest is no longer accruing from the loan.

Amuakwa-Mensah and Boakye-Adjei (2015) further described non-performing loans as revenue that is not earned and the full recovery of the principal and interest is not expected, or the interest incurred is 90 days or beyond, or that the maturity period has elapsed, and the entire payment has not been done. This suggests, NPLs are credit facilities whose due period for payment has elapsed and the customers have failed to deliver their part of the agreement or contract. NPLs are challenging and could be a silent poison to the progress of a bank (Bexley & Nenninger, 2012). As the percentage of non-performing loans (NPLs) in Ghana increased, a significant number of these banking firms in the country have become troubled (Asiama & Amoah 2019).

NPL problems as indicated by Asiama and Amoah as a key reason in the Ghana Commercial Bank's acquisition of Capital and UT Banks. In the early quarter of 2018 when most of the indigenous banks were dissolved, KPMG was also made to takeover over Unibank at a point in time. Moreover, for the various reasons which some has been outlined in this study for the consolidation of five financial institutions by the Bank of Ghana as a result of corporate failure. Afolabi (2018) also purported non-performing loans played a major role in the collapse of these banks. Therefore, this explains that NPLs affect bank performance by; reducing banks profitability and reducing the bank's capacity to lend.

Empirical Review

The empirical review was carried out around the independent and dependent variables that is audit quality and the concept of corporate failure prediction respectively. Also, the empirical review focused on the objectives of the study and categorised under the subsections namely; audit fee and corporate failure prediction, audit tenure and corporate failure prediction and audit size and corporate failure prediction.

Audit Tenure and Corporate Failure Prediction

Cenciarelli, Greco, and Allegrini (2018) explored the association between external auditor qualities and the likelihood of bankruptcy. The data in this study were analysed using logistic regression. The study's findings revealed that audit tenure has a negative association with corporate failure. Ohlson's corporate failure model used for the study does not use traditional financial ratios and does not have the advantage of not discriminating among failed and non-failed firms. The study used an old model for predicting corporate failure.

Also, the study used different industry firms as well as the study was conducted outside the Ghanaian business environment.

Trisnadevy and Satyawan (2020) study aimed to examine the effect of corporate failure, audit tenure, and age of the company on timeliness publication of audited financial statement. The sample in this study were mining companies for the period 2014-2017. The analysis technique used in this study is logistic regression analysis using IBM SPSS Statistic program 23. The result of the study show that audit tenure has a negative effect on firms failing.

Saad and Abdillah (2019) study aimed to analyse the effect of firm size, leverage, audit tenure, and financial distress on companies listed on the Indonesia Stock Exchange. Data of the study used was from the 2014-2017 period. By using the purposive sampling method, the total observation in this study was 142. Data analysis was performed using multiple linear regression which was processed using software e-views 9. The results showed that audit tenure has negative and significant effect on corporate failure prediction.

Jibrin, Blessing and Danjuma (2014) study was to understand the role of audit quality and practice in Nigerian banking industry and how practicable has this opinion helps banking sector with all these incessant distress in the industry, The paper relied primarily on archival records which include press reports, regulator and government reports on the banking crisis, annual reports, evidence of falsification of accounts and evidence on the role of auditors. The result of the study show that audit tenure has a positive effect on corporate failure prediction.

Audit Fee and corporate failure prediction

Agyemang, Bardai, and Ntoah (2020) study aimed at establishing the role of external auditors in the banking sector's corporate failure. The study employed descriptive and explanatory designs and a quantitative approach to achieve its stated objectives. The study adopted purposive sampling technique. A questionnaire was used to collect primary data for the study. The findings of the study revealed that remuneration of external auditors was the factor influencing the effectiveness of external auditors, thus audit fee is significant and negatively associated with corporate failure. The primary source of information used for the study can generate some data biases as well as using Kumasi metropolis for the scope of the study may impair the generalisation of the study.

Afeshu (2015) explored the determinants of audit fees and ex-ante audit quality based on variables unique to the Ethiopian banking industry. The research also looked into whether auditors value factors of the regulatory bank is considered relevant. From 2004 to 2012, panel data for eight commercial banks were used in the study. The data for the research was analysed using panel fixed effect regression. Banking variables used for the study were bank size, banks profitability, liquidity risks, operating risks, capital risks and audit fees were proxied as the natural log of audit fees. The results of the study result did not show any auditor independence impairment for the sake of securing higher audits fees. The model adopted in the study was developed in the context of developed countries as well as the variables for the study was specific to the Ethiopian banking industry.

Cenciarelli, Greco and Allegrini (2018) explored the association between external auditor qualities and the likelihood of bankruptcy. Ohlson's (1980) bankruptcy prediction model was used for the study. The data in this study were analysed using logistic regression. The study's findings revealed that audit fee has a positive association with corporate failure. Ohlson's (1980) corporate failure model was used for the study do not use traditional financial ratios and do not have the advantage of not discriminating among failed and non-failed firms.

Fenn, Ginting and Simorangkir (2022) This study was conducted to determine the influence of Management Change, Audit Opinion, and Audit Fee on Auditor Switching with Financial Distress as a moderating variable. Companies listed on the Indonesia Stock Exchange from 2019-2021 and Structural Equation Modelling (SEM) with Partial Least Square (PLS) approach was used for the study. The outcome of the study showed that audit fee has a positive influence in corporate failure prediction.

Gul, Khedmati, Lim and Navissi (2018) study examined whether the relationship between managerial ability and audit fees is conditional on corporate failure. Corporate failure prediction measured using the Ohlson (1980) bankruptcy probability model. 50,058 firm-year observations spanning 2000–2012 was used for the study. The results showed that audit fee has positive and significant effect on corporate failure prediction.

Lu and Ma (2016) study examined the association between audit quality and financial distress listed firms in China. The study used a secondary source of data available from the China Stock Market Accounting Research database (CSMAR). The study used all firms listed on the Shanghai Stock Exchange and

Shenzhen Stock Exchange in China. Sampled 3828 firm-year observations for the study. The findings of the study showed a significant and negative relationship between audit fees and financial distress. The laws that regulate the Chinese firms may be different from that of Ghana, as well as both studies, have different business and economic environments.

Emami, Lashgari and Mogheri (2022) study examined the relationship between management capability and audit fee, taking into account the financial distress of firms. Statistical tests were conducted through linear regression and E-views, and SPSS software were used to test hypotheses and information related listed firms on the stock exchange in 2009 - 2018. Multivariate regression method was used. The results indicated audit fee has negative effect on corporate failure prediction.

Enekwe, Nwoha, and Udeh (2020) investigated the impact of audit quality on corporate failure of listed manufacturing companies in Nigeria. The study explicitly evaluated the impact of auditor independence, audit committee, and audit fee on the return on assets of publicly traded manufacturing companies. The study employed an ex-post facto research design. Audit fees were estimated using the natural logarithm of audit fees. The data was analysed using the Ordinary Least Squares regression. The findings revealed that audit fees have a negative and statistically significant impact on corporate failure. The study used non-financial firms and the robustness of the model used for the study was not tested.

Audit Size and Corporate Failure Prediction

Jin, Kanagaretnam and Lobo (2011) investigated the ability of selected accounting and audit quality variables evaluated before the financial crisis to

predict banks that went bankrupt during the crisis. Secondary data was employed for the study. The sample size of the study involved 25428 bank-quarter observations, representing 6437 banks used for the study. The study also employed both univariate and multivariate analysis. The findings of the study showed a significant and negative association between audit size and bank failure during corporate crisis. This research was conducted in an advanced economy that is not similar to Ghana's.

Buallay and Al-Ajmi, (2019) looked at credit and financial analysts' perceptions of the relationship between the effectiveness of the audit committee, the size of the auditing firm, and audit quality in the context of Bahrain. The study administered 300 questionnaires to both credit and financial analysts. The study's final sample size was 164 which represented a 54.7 per cent response rate. The findings of the study provided evidence to support that audit firm size improves the quality of a firm's audit, thus the big-4 provide better audits than the non-big 4 audit firms. The study was conducted in a context that might have a business environment different from Ghana.

Lu and Ma (2016) study examined the association between audit quality and financial distress listed firms in China. The study used a secondary source of data available from the China Stock Market Accounting Research database (CSMAR). The study used all firms listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange in China. A sample of 3828 firm-year observations for the study. Audit quality was measured as audit firm size, audit opinion and audit fee. A dummy variable was proxied for audit firm size that is, firm audited by the Big was coded 1 and otherwise 0. Altman (1983) Z-score model was used to measure financial distress. Regression analysis was employed for the study

to examine the relationship between financial distress and audit quality. The findings of the study showed no significant relationship between audit size and financial distress. The laws that regulate the Chinese firms may be different from that of Ghana, as well as both studies, have different business and economic environments.

Lennox and Pittman (2008) looked at the relationship between Big Five audit firms and the number of accounting fraud allegedly perpetrated by public firms in the United States between 1981 and 2001. The study used a secondary source of data. The study obtained data on fraud from the Accounting and Auditing Enforcement Releases from the Security and Exchange Commission of the United State website and Lexis-Nexis. The study employed multivariate analysis to examine the possibility of big firms committing accounting fraud. The result of the study showed a significant and negative effect of audit size and fraud. The study was conducted in a context that might have a business environment different from Ghana.

Matoke and Omwenga (2016) investigated the link between audit quality and financial performance of Nairobi Securities Exchange-listed firms. The study used a mixed method approach. Questionnaires were used to obtain quantitative and qualitative data. Primary data was gathered using open-ended and closed-ended semi-structured questionnaires. A simple random technique was used to choose 89 certified public accountants working for 9 listed state-owned firms. Secondary data was gathered through an examination of available sources and the annual reports of the chosen State Corporations. The findings seek to propose that, since firm performance affect the stability of companies' existence, hence audit size also influence corporate failure.

Rahimi and Amini (2015) investigated the relationship between audit quality and profitability in firms listed on the Tehran Stock Exchange. Auditor size and audit tenure were used to measure audit quality. From 2008 to 2013, the study sampled 52 firms listed in Tehran's securities exchange market. The research design adopted for the study was exploratory-surveying of correlation type. Secondary data were acquired from the firms' financial statements. SPSS and Excel software were used for data analysis. A linear regression model was used to analyse the variables of the study. The study's results revealed that there is a positive and weak relationship between auditor size and profitability ratios. The findings of the study seek to propose that, since firms' profitability affects the stability of companies' existence, audit size influences corporate failure. The Tehran business environment might vary from Ghana.

Corporate Failure Prediction using Altman Z-Score

Anisom-Yaansah, Oware, and Samanhyia (2016) study aimed at predicting financial distress and bankruptcy on selected listed banks on Ghana's stock exchange. Data used for the study spanned from 2008 to 2014. The study sampled five (5) listed firms on the Ghana Stock Exchange. A descriptive research design was adopted for the study. Altman Z-score model was used to assess the bankruptcy of the listed firms. The study found that four of the selected firms had a Z-Score between 1.1 to 2.6 classified as grey zone and one bank had its average below 1.1 and therefore classified as distressed. The findings of the study further indicated 80 per cent of the listed firms sampled for the study were in-between safe and distress zone. From the findings, it can be concluded that the Altman Z-score model effectively predicted the bankruptcy of the listed banks.

Wang and Campbell (2010) evaluated the predictive accuracy of Altman's Z-score model in Chinese firms. The study examined data from Chinese publicly traded firms from September 2000 to September 2008. Prediction accuracy was evaluated for three Z-score variations: Altman's original model, a re-estimated model in which the Altman's model coefficients were recalculated, and a revised model with alternative variables. All three models were discovered to be highly predictive. The re-estimated model was more accurate in forecasting non-failed companies. Altman's model was more accurate in predicting failed companies. In comparison to both the re-estimated model and Altman's original model, the updated Z-score model had a better prediction accuracy. According to the study, the Z-score model is a useful tool for predicting the failure of a publicly-traded company in China.

Permata and Purwanto (2018) used the CAMEL, Z-Score, and Bankometer models to assess the soundness of banks listed on the Indonesia Stock Exchange (IDX) from 2012 to 2015. Using a sample of 23 businesses, the study sought to identify differences and acceptable analytical methods for assessing the health of banks in Indonesia. The findings revealed that the application of each analytical model produced different outcomes. From 2012 to 2015, the CAMEL model revealed a wide range of banking firm soundness and health. The banks were identified in a grey region on the Z-score models, using the same period, and several banks showed a significant risk for failure. Finally, the Bankometer model revealed that all banks were in good health from 2012 to 2015. The study indicated that the CAMEL model was the best tool for predicting bank failure in Indonesia, while Z-Score analysis and Bankometer were alternatives for supplementing the results of the CAMEL analysis.

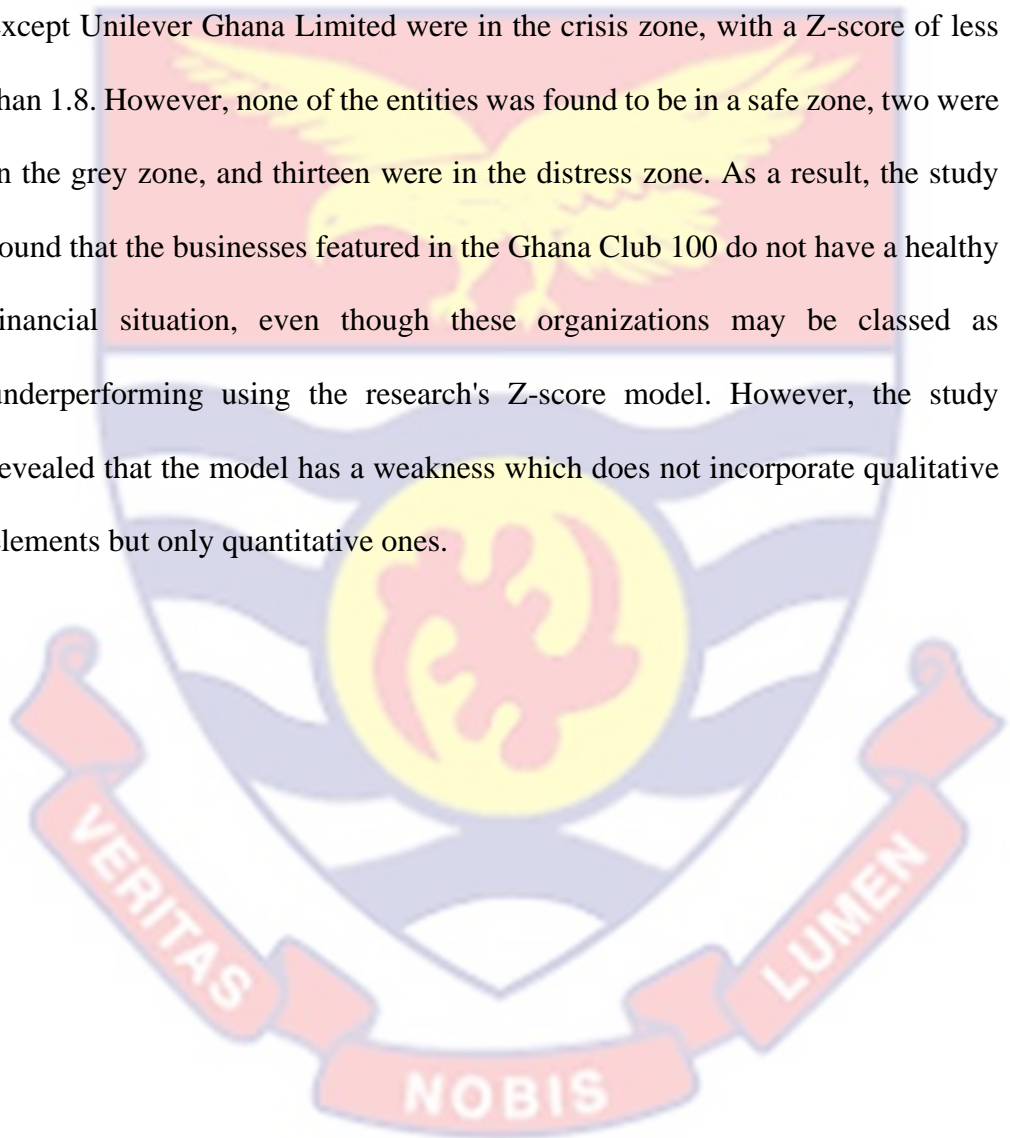
Ncube (2014) looked at financial institutions listed on the Zimbabwe Stock Exchange from 2011 to 2013 using Altman's Z-score for non-manufacturing companies. The data for the study was gathered from a sample of six listed companies in banking and financial services. A non-probabilistic sampling approach was used to determine the sample size. The findings revealed that 83.33 per cent of financial firms were in the distress region, 16.67 per cent were in the grey region, and none were in the safe zone. The study concluded, despite its flaws, Altman's Z-score may be used to forecast corporate failure in both the public and private sectors, in both manufacturing and non-manufacturing industries.

Appiah (2011) researched to predict corporate failure of listed firms in Ghana. Altman's Z-score model was used to investigate the phenomena of bankruptcy prediction from the perspective of a developing economy. A sample of 15 non-failed and failed companies listed on the Ghana Stock Exchange for the study. Altman (1968) model was assessed via a cross-section of different firms with a dataset from 2004 and 2005. The findings of the study indicated depending on the kind and size of the firm, Altman's Z-score can be used to forecast bankruptcy in Ghana.

Kittur (2019) examined the usefulness of Altman's Z-Score model in the Indian banking industry, utilizing non-performing assets (NPA) as a stability indicator. The author performed a two-fold study to see if the Z-score models represented the financial distress of banks caused by NPAs, that is advance through prediction and during the crisis period. The findings showed that the Z-scores only slightly capture the distress caused by NPAs at times of distress,

which was consistent with Almamy et al., (2016) findings that the model's predictive accuracy decreases during times of crisis.

Using Altman's Z-score models, Agyemang and Agalega (2014) looked into the stability of entities of the Ghana Club 100 which are listed on the Ghana Stock Exchange. According to the findings, the majority of the examined firms, except Unilever Ghana Limited were in the crisis zone, with a Z-score of less than 1.8. However, none of the entities was found to be in a safe zone, two were in the grey zone, and thirteen were in the distress zone. As a result, the study found that the businesses featured in the Ghana Club 100 do not have a healthy financial situation, even though these organizations may be classed as underperforming using the research's Z-score model. However, the study revealed that the model has a weakness which does not incorporate qualitative elements but only quantitative ones.



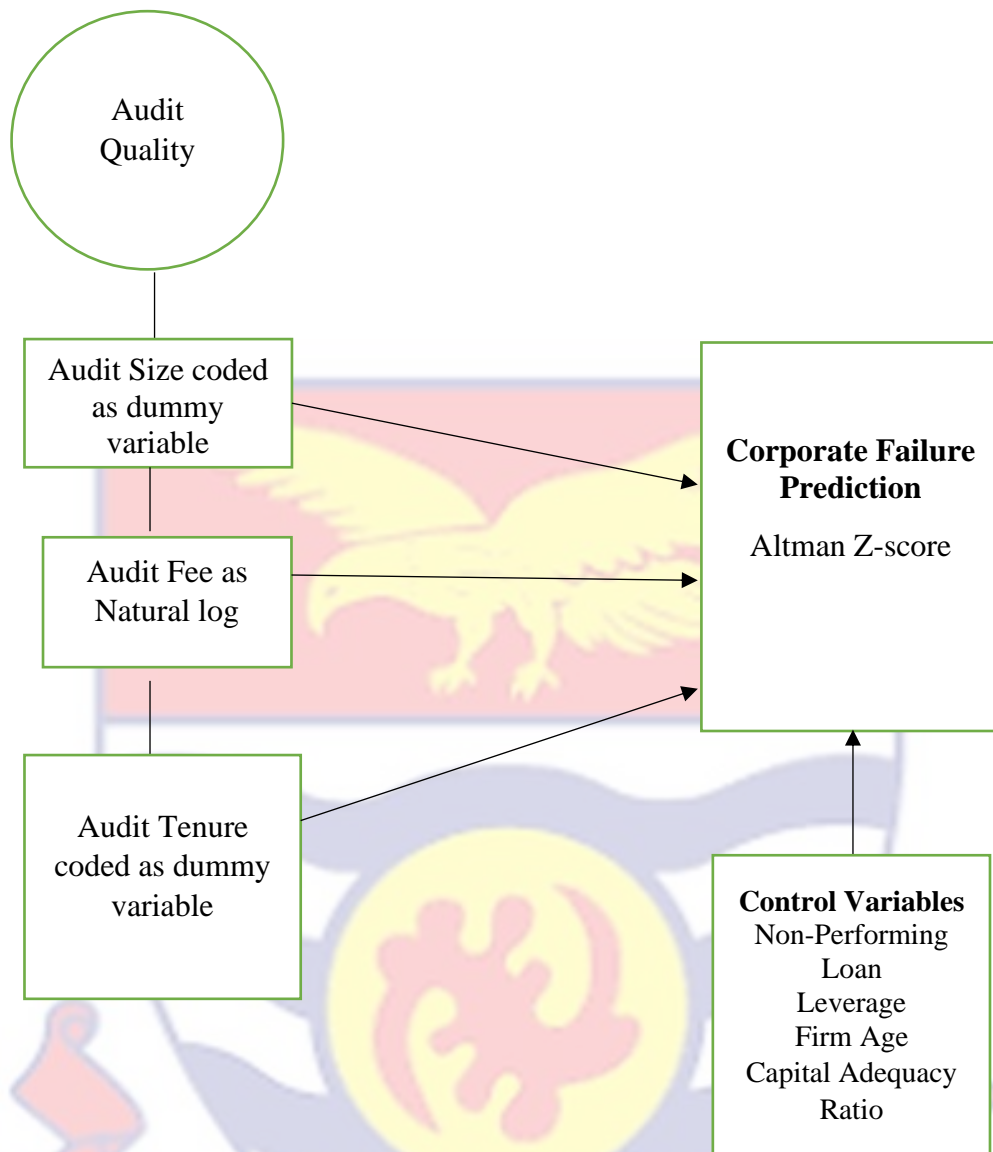


Figure 1: Conceptual Framework

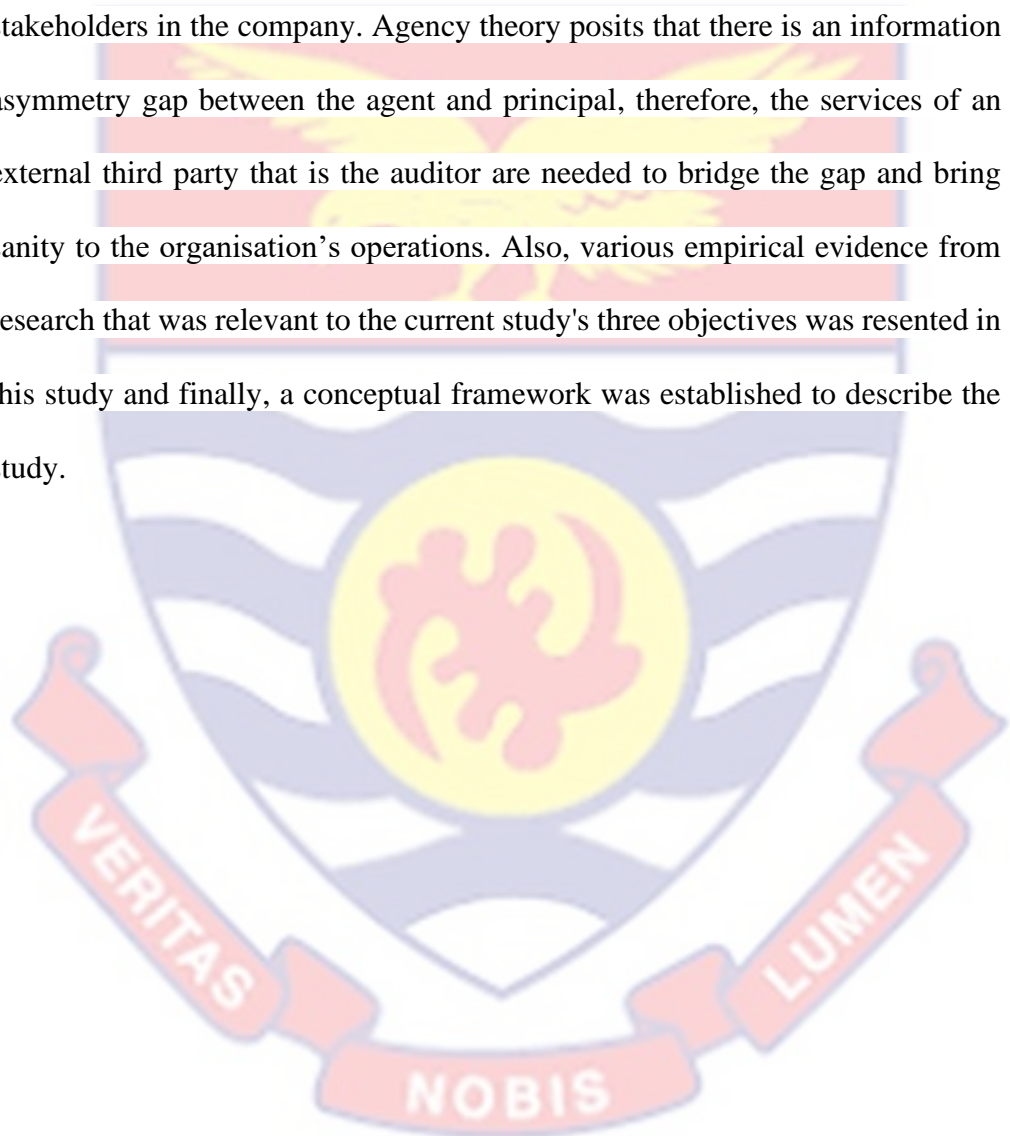
Source: Author's Construct (2022)

Figure 1 depicts the author's pictorial depiction of the study's objectives. The conceptual framework for this study provides a broad view of the effect of audit quality and corporate failure prediction. Audit quality is measured by audit size, audit tenure and audit fee as the independent variable. The independent variable which is audit quality is then measured against corporate failure prediction using Altman Z-score as corporate failure prediction model.

Non-performing loan, leverage, firm age and capital adequacy ratio are also the variables that were controlled in the study.

Chapter Summary

This chapter expands the theories underpinning this study. According to the stakeholder theory, companies are responsible for the interests of many stakeholders in the company. Agency theory posits that there is an information asymmetry gap between the agent and principal, therefore, the services of an external third party that is the auditor are needed to bridge the gap and bring sanity to the organisation's operations. Also, various empirical evidence from research that was relevant to the current study's three objectives was resented in this study and finally, a conceptual framework was established to describe the study.



CHAPTER THREE

RESEARCH METHODS

Introduction

The methodological framework within which the research is conducted is presented in this chapter. It presents a discussion on research design, methodologies and instruments of analysis utilized, empirical specification of the model, description of variables used in the model, and estimation procedure.

Research Approach

An explanatory research design was employed for this study. Saunders et. al., (2016) posited explanatory research focuses on studies that establish the cause and effect of a phenomenon. The adaptation of the explanatory research design for the study was to respond to the objectives of the study by examining the effect of audit quality using audit size, audit fee and audit tenure on corporate failure prediction (Altman Z-score model). There are three main ways of conducting research that is quantitative, qualitative and mixed method (Creswell & Tashakkori, 2007).

Taking into account the specific objective of the study, the nature of the relationship between these variables, as well as the need to test the hypotheses, a quantitative approach was considered the most appropriate and therefore adopted. This made it easier to make inferences and draw conclusions regarding the relationship between the variables in question.

However, Saunders, Lewis and Thornhill (2012) asserted there are two approaches to research that is deductive and inductive approaches. The deductive method, often known as deductive reasoning, was used in this study. Wilson (2014) noted that the deductive approach is the development of a

hypothesis (or hypotheses) based on existing theory, and then develop a research strategy to test the hypothesis. The deductive procedure involves reasoning from the specific to the general. This type of reasoning includes the deduction of conclusions from premises or assertions. The deductive technique is advantageous since the study began with a pattern intended to be verified against data. The goal of this study is to determine the relationship between audit quality and corporate failure prediction of commercial banks in Ghana.

Population

The present study considered all banks in the country as the population. These are the banks according to Bank of Ghana; Access Bank (Ghana) Plc, Agricultural Development Bank Limited, Bank of Africa Ghana Limited, Barclays Bank of Ghana Limited (now Absa Bank Ghana Limited), CAL Bank Limited, Consolidated Bank Ghana Limited, Ecobank Ghana Limited, FBNBank (Ghana) Limited, Fidelity Bank Ghana Limited, Fidelity Bank Ghana Limited, GCB Bank Limited, Guaranty Trust Bank (Ghana) Limited, National Investment Bank Limited, OmniBSIC Bank Ghana Limited, Prudential Bank Limited, Republic Bank (Ghana) Limited, Société General (Ghana) Limited, Stanbic Bank Ghana Limited, Standard Chartered Bank (Ghana) Limited, Zenith Bank (Ghana) Limited, United Bank for Africa (Ghana) Limited, and Universal Merchant Bank Limited. The banking industry, along with other financial institutions, has experienced many crises over the past four years, as a result of the clean-up of the banking sector.

Sampling Methods

A criterion sampling procedure was employed to collect secondary data on audit quality and corporate failure prediction of commercial banks in Ghana.

A criterion sampling involves selecting cases that meet some predetermined criterion of importance (Patton, 2001). Twenty-two (22) commercial banks in Ghana were sampled for this study because their data was readily available on their companies' websites and annual reports except Consolidated Bank Ghana (CBG). This is because, after the banking sector reforms, the five banks collapsed to form CBG were not having available data for the study from 2010-2017 to aid analysis, therefore excluded from this study.

Data Collection Procedures

The study employed secondary data sourced from twenty-two (22) commercial banks in Ghana from 2010 to 2019. The period for the study was selected due to the availability of data about the financial statements of commercial banks in Ghana. All of the study's variables were derived from the available annual reports and financial statements of the commercial banks from 2010 to 2019 specially audit fee, audit size, audit tenure, non-performing loans, leverage, firm age and Z-score variables. The precise financial statements from which information was gathered include a comprehensive income, the financial statement, cash flow statement and account notes.

Data Processing and Analysis

The effect of the independent variables on the dependent variable was investigated using a linear regression model for analysis. The weakness in the regression model is about its reliability of predicting corporate failure because other factors may influence the dependent variable which was not considered by the model as well as the time lag of the variables. Controls variables were added to the model to enhance its robustness to meet the purpose of this study.

Descriptive statistics such as tables, standard deviation, mean, and inferential statistics were used to assist the data analysis.

The Pearson Correlation Method was specifically utilized to investigate the relationship between audit tenure and corporate failure prediction of commercial banks in Ghana. Linear regression was used to examine the effect of audit fee, the effect of audit tenure and the effect of audit size variables on the corporate failure prediction of commercial banks in Ghana. The Altman (2000) Z-score statistical approach of multivariate discriminant analysis (MDA) was adopted to assess corporate failure prediction of commercial banks in Ghana. Excel 2019 was used to estimate the Altman Z-score model as well as computation of individual data drawn from the variables for the study. For processing and analysis, a statistical package known as SPSS version 22 was used.

Model Specification

Model 1 to model 3 shows the regression equation for the objectives. The baseline model was adapted from Farouk and Hassan (2014). The models for the study are presented below.

Model 1: Audit Size and Corporate Failure Prediction of Commercial Banks in Ghana

The estimation of the first model describes the regression technique for the current study's objectives by examining the effect of audit size, audit fee and audit tenure on corporate failure prediction commercial banks in Ghana.

$$\text{CORP}_{it} = \beta_0 + \beta_1(\text{AUDSIZE}_{it}) + \beta_2(\text{LEV}_{it}) + \beta_3(\text{CAR}_{it}) + \beta_4(\text{FMAG}_{it}) + \beta_5(\text{NPL}_{it}) + \eta_i + \varepsilon_{it} \dots\dots (1)$$

Where;

CORP_{it} is corporate failure prediction made of the Z-score of the firm i at time t;

AUDSIZE_{it} represent Audit Size of the firm i at time t;

LEV_{it} represents Leverage Ratio of the firm i at time t;

CAR_{it} represents Capital Adequacy Ratio of the firm i at time t;

FMAG_{it} represents Firm Age of the firm i at time t;

NPL_{it} represent Non-Performing Loan of the firm i at time t;

β represents the coefficients;

η_i represents the unobservable individual firm effects; and

ε is the error term.

β₀ is constant

Model 2: Audit Fee and Corporate Failure Prediction of Commercial Banks in Ghana

$$CORP_{it} = \beta_0 + \beta_1(AUDFEE_{it}) + \beta_2(LEV_{it}) + \beta_3(CAR_{it}) + \beta_4(FMAG_{it}) + \beta_5(NPL_{it}) + \eta_i + \varepsilon_{it} \dots\dots\dots (2)$$

Where;

CORP_{it} is corporate failure prediction made of the Z-score of the firm i at time t;

AUDFEE_{it} represent Audit Fee of the firm i at time t;

LEV_{it} represents Leverage Ratio of the firm i at time t;

CAR_{it} represents Capital Adequacy Ratio of the firm i at time t;

FMAG_{it} represents Firm Age of the firm i at time t;

NPL_{it} represent Non-Performing Loan of the firm i at time t;

β represents the coefficients;

η_i represents the unobservable individual firm effects; and

ε is the error term.

β_0 is constant

Model 3: Audit Tenure and Corporate Failure Prediction of Commercial Banks in Ghana

$$CORP_{it} = \beta_0 + \beta_1(AUDTEN_{it}) + \beta_2(LEV_{it}) + \beta_3(CAR_{it}) + \beta_4(FMAG_{it}) + \beta_5(NPL_{it}) + \eta_i + \varepsilon_{it} \dots\dots (3)$$

Where;

$CORP_{it}$ is corporate failure prediction made of the Z-score of the firm i at time t ;

$AUDTEN_{it}$ represent Audit Tenure of the firm i at time t ;

LEV_{it} represents Leverage Ratio of the firm i at time t ;

CAR_{it} represents Capital Adequacy Ratio of the firm i at time t ;

$FMAG_{it}$ represents Firm Age of the firm i at time t ;

NPL_{it} represent Non-Performing Loan of the firm i at time t ;

β represents the coefficients;

η_i represents the unobservable individual firm effects; and

ε is the error term.

β_0 is constant

Model 4: Corporate Failure Prediction using Altman Z-score Model

Univariate Model

The main purpose of the univariate model, an approach to evaluate the predictive ability of each variable before the bankruptcy (Beaver, 1966). Univariate models use a single financial ratio at a moment in predicting corporate distress or failure. Beaver championed corporate failure prediction by employing financial ratios with a univariate method. He used a univariate

model, in which the classification model is run separately for each relation, and the optimal cut-off point is determined, which is the percentage of misclassification (failed or not), had been minimized. The implementation of the univariate modelling approach is relatively easy and does not require any statistical skills (Balcaen & Ooghe, 2006).

Furthermore, a single financial ratio is used as an individual predictor of failure in univariate analysis, which often leads to the inconsistency problem (Dondo 2019). This model can produce conflicting and confusing results for the categorization of the different ratios for the same company (Altman, 1968). However, later studies considered univariate analysis unsuitable for complex financial situations as single ratios yielded inconsistent results. On the other hand, univariate analysis is based on the simple assumption of a linear relationship between the measured indicators, and the failure status. changing corporate environment.

Multivariate Model

The multivariate model combines two or more financial ratios to predict distress or risk of failure (Dondo 2019). Altman (1968) expanded on Beaver's univariate technique of analysis by adding a multiple discriminant approach to solve the difficulties caused by the univariate method. Altman (1968) propounded the well-known Z-score model, which uses financial information, based on the multiple discriminant analysis (MDA). The MDA model is a linear collection of variables that offers the best differentiation between failing and non-failing companies (Balcaen & Ooghe, 2006). The goal of multivariate linear discriminant analysis (MDA) is to identify a linear combination of

variables that distinguish failed from non-failed businesses while reducing variation within failed and non-failed businesses.

Deakin (1972) research indicated statistical models like discriminant analysis may be employed to forecast company failure using accounting data. Corporate failure may be anticipated with a high degree of accuracy up to three years ahead of time using the Z-score model (Rama 2012).

The fourth model is used to predict corporate failure of firms and serves to identify the independent variable in the study. Altman (2000) modified the original Z-score model for predicting corporate failure to present a model suitable for non-manufacturing firms. Angsoyiri and Ativor (2021) adopted the revised Altman Z-score model to predict bank failure in Ghana. The revised Altman Z-score model was adopted for the study. The model is presented as:

Model 4:

$$Z = 6.56 (X1) + 3.26 (X2) + 6.72 (X3) + 1.05 (X4)$$

Where;

X1 = working capital/total assets;

X2 = retained earnings/total assets;

X3 = earnings before interest and taxes/total assets;

X4 = market value of equity/ total liabilities; and

Z = overall index.

Discriminant zone

$Z > 2.6$ = Safe Zone

$1.1 < Z < 2.6$ = Gray Zone

$Z < 1.1$ = Distress zone

The modified Altman Z-score model necessitated an adjustment in meanings. In the Altman Z- score model, the cut-off point is also amended, with businesses having Z- scores of at least 2.6 being considered to be safe. Companies that scored less than 1.1 are predicted to be bankrupt while scores ranging between 1.1 and 2.6 represent the grey area, where no clear prediction can be made on the financial situation of the firm.

Measurement of Variables

The literature's widespread use of measurement for all variables impacted their use in this study. The Altman Z-score model was used to assess corporate failure prediction, which was the study's dependent variable. Working capital/total assets, retained profits to total assets, earnings before interest and tax to total assets, and market value of equity to total liabilities are combined to estimate the dependent variable of the study. Audit fee, audit size, and audit tenure are the independent variables. Audit Fee is the amount paid to the external auditors of banks. It was measured using natural logarithms of audit fees.

The Big 4 vs. Non-Big 4 accounting firms was used as a proxy for audit size. If the issued financial statements were audited by a Big 4 audit firm, audit size is coded 1, otherwise, it is coded 0. The Big 4 audit firms in Ghana are; Deloitte, PricewaterhouseCoopers (PwC), Ernst and Young, and Klynveld Peat Marwick Goerdeler (KPMG). The audit period is based on the number of years spent as an auditor of the sample banks. If it is more than 3years, assign 1, otherwise 0.

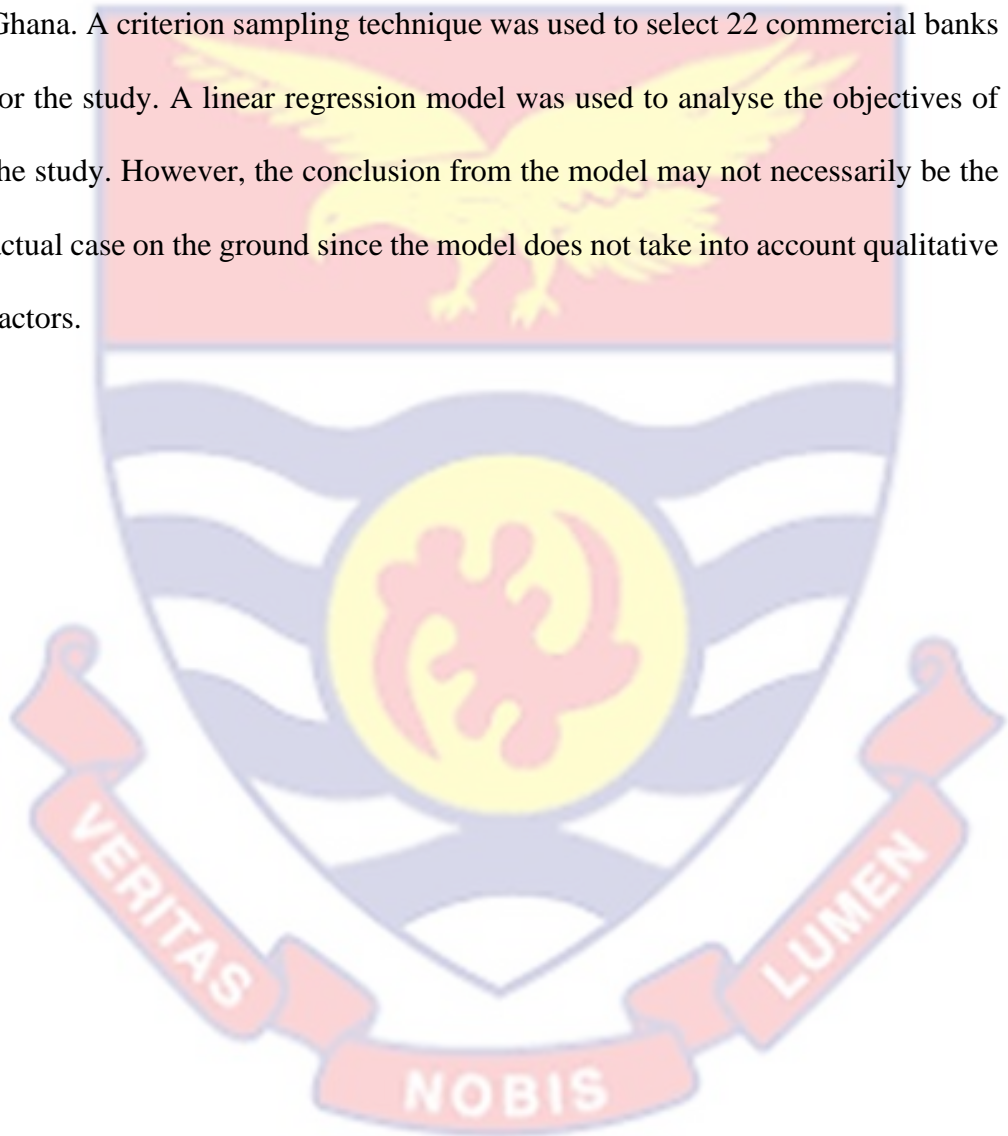
Table 1: Description of Variables, Operation Definition, Measurement, Source of Data and Empirical Justification

Variable	Definition of Operational Terms	Measurement	Data Source	Empirical Justification
Audit size	This refers to the 4 big named auditors or larger audit firms and non 4 big named audit firms.	Audit Size is coded 1 if the audit of the issued financial statements was performed by a Big 4 audit firm, otherwise, Audit Size is coded 0.	Financial Statements of Commercial Banks, 2010-2019	Amahalu (2017); Pham et., (2017); Sumiadji and Subiyantoro (2019); Amahalu, Okeke and Chinyere (2018); Hussein and MohdHanefah (2013)
Audit Fee	Refers to the amount charged by a public accountant to the client for the financial audit services.	Measured using natural logarithms of audit fees of the banks	Financial Statements of Commercial Banks, 2010-2019	Amahalu (2017); Abdul-Rahman, Benjamin and Olayinka (2017); Amahalu Okeke and Chinyere (2018); Pham et., (2017).
Audit Tenure	Refers as the number of successive years that the audit firm has audited the client	Audit Tenure is measured in terms of number of years spent as auditor for sample banks. If greater than 3, we assign 1, else 0	Financial Statements of Commercial Banks, 2010-2019	Mgbame, Eragbhe and Osazuwa (2012); Abdul-Rahman, Benjamin and Olayinka (2017); Hussein and MohdHanefah (2013); Amahalu, Okeke and Chinyere (2018)

Source: Field Data (2022)

Chapter Summary

This chapter presented the methodology employed in this study. The positivism research philosophy was adopted for this study and quantitative research approach. The explanatory research design was used to assess the effect of audit quality and corporate failure prediction of commercial banks in Ghana. A criterion sampling technique was used to select 22 commercial banks for the study. A linear regression model was used to analyse the objectives of the study. However, the conclusion from the model may not necessarily be the actual case on the ground since the model does not take into account qualitative factors.



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter discusses the empirical results and findings generated from the study. The first segment offers the descriptive statistics of the variables used in the study. The next section presents and discusses the empirical results from the estimation of the regression model on the objectives of this study.

Descriptive Statistics

Table 2: Descriptive statistics for variables on raw data

Statistic	Mean	Maximum	Minimum	Std. Dev	Obs (N)
AUDFEE	12.4748	14.1598	9.9035	0.8027	220
AUDSIZE	0.46	1	0	0.499	220
AUDTEN	0.53	1	0	0.5	220
CORP	5.777	7.1258	3.7467	0.8058	220
LEV	0.354	0.589	0.117	0.078	220
NPL	0.566	0.819	0.2169	0.715	220
CAR	0.223	0.674	0.0582	0.2187	220
FMAG	45.879	123	2	26.411	220

Source: Field Data (2022)

AUDFEE connote Audit Fee. It is measured as natural logarithms of audit fees of the banks. *AUDSIZE* signify Audit Size which is measured as Big 4 versus non-Big 4 audit firms. Audit Size is coded 1 if the audit of the issued financial statements was performed by a Big 4 audit firm, otherwise, audit size is coded 0. *AUDTEN* represent Audit Tenure, measured in terms of the number of years spent as an auditor for the sampled banks. If greater than 3, we assign 1, else 0. Z-Score measured corporate failure Prediction (*CORP*). Std. Dev denotes Standard Deviation, Obs (N) denotes the number of observations.

From Table 2, The number of observations collected is 220 spanning the period 2010 to 2019. Thus, the panel data employed in the study contain 220 observations of the data set as illustrated by Obs (N). From Table 2, it was observed that the audit fee recorded an average of 12.4748 which signifies that on average given the period under consideration the commercial banks in Ghana gives auditors an average audit fee of 12.4748. The standard deviation of .8027 indicates that Audit Fees departed from the mean of 12.4748 by .8027 whereas the lowest Audit Fee is 9.9035 and the highest was 14.1598 evident from the minimum and maximum values respectively given the period under consideration from 2010 to 2019.

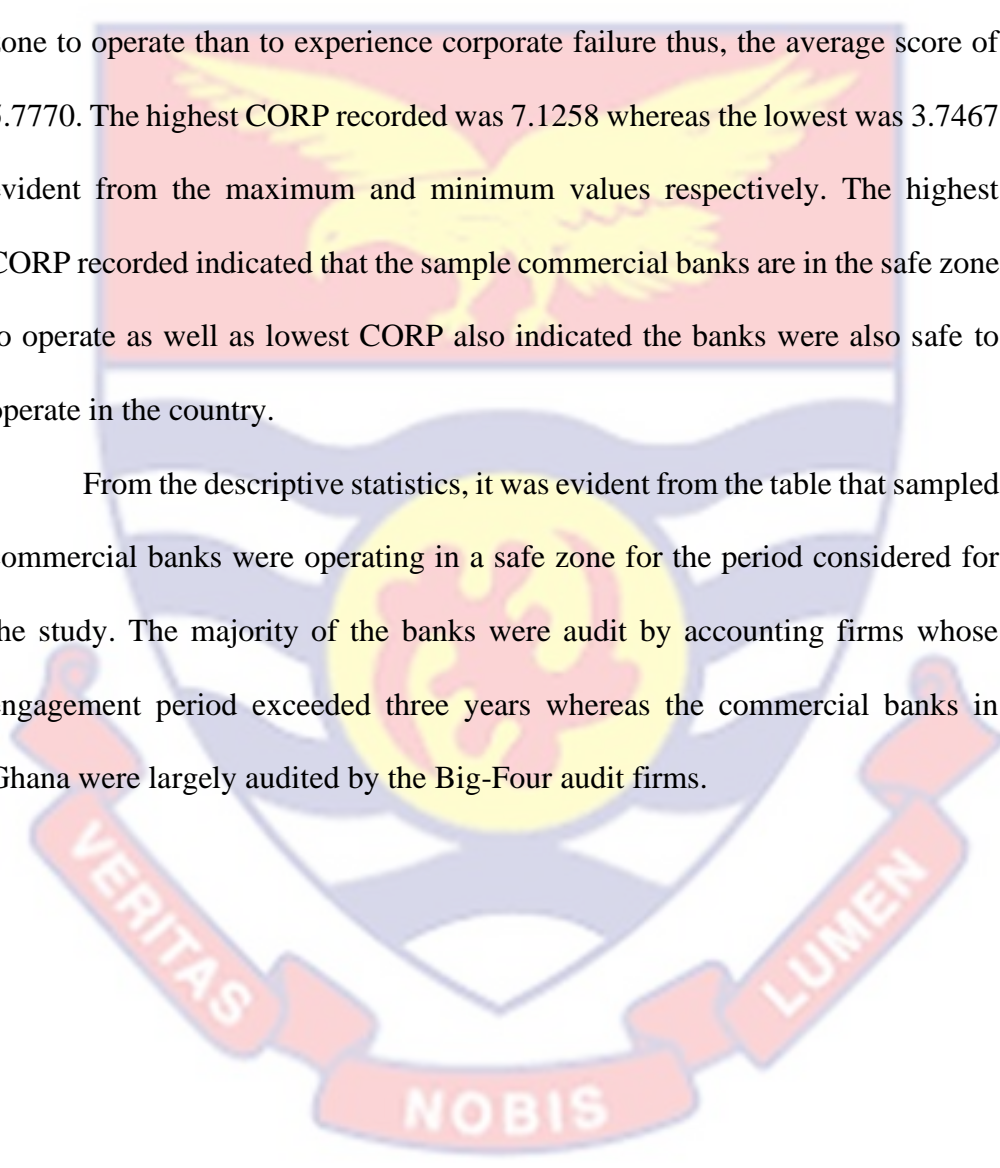
Audit Size has a mean of 0.46. This indicates that on average 46 per cent of the commercial banks are audited by the non-Big 4 audit firms in Ghana and the data deviate from the mean by .499. The highest Audit Size recorded was 1 whereas the lowest was 0 evident from the maximum and minimum values respectively. Which the highest Audit Size signify that the sampled commercial banks were audited by the Big-4 accounting firms and the lowest indicate the commercial banks were audit by the non-Big 4 accounting firms in Ghana given the period under consideration from 2010 to 2019.

Audit tenure was averagely recorded as .53 with a standard deviation of .500 which signify that 53 per cent of the sampled commercial banks for this study were audited by accounting firms whose period of engagement was more than three years. The highest audit tenure recorded was 1 whereas the lowest was 0 evident from the maximum and minimum values respectively. The highest audit tenure recorded signify that the sampled commercial banks were audited by the accounting firms whose level of engagement exceeded three

years, whereas the lowest indicate the commercial banks were audited by accounting firms whose period of engagement was three years or less.

CORP represent Altman (2000) Z-scores used as a proxy for corporate failure prediction recorded a mean of 5.7770 with a standard deviation of 0.8058. This shows that on average the sampled banks for the study are in a safe zone to operate than to experience corporate failure thus, the average score of 5.7770. The highest CORP recorded was 7.1258 whereas the lowest was 3.7467 evident from the maximum and minimum values respectively. The highest CORP recorded indicated that the sample commercial banks are in the safe zone to operate as well as lowest CORP also indicated the banks were also safe to operate in the country.

From the descriptive statistics, it was evident from the table that sampled commercial banks were operating in a safe zone for the period considered for the study. The majority of the banks were audit by accounting firms whose engagement period exceeded three years whereas the commercial banks in Ghana were largely audited by the Big-Four audit firms.



Correlation Analysis

Table 3: Correlation Matrix

	AUDFEE	AUDTEN	AUDSIZE	CORP	LEV	NPL	CAR	FMAG
AUDFEE	1							
AUDTEN	-0.036	1						
AUDSIZE	0.014	-0.836**	1					
CORP	0.180**	0.295**	-0.300**	1				
LEV	0.355**	0.611**	0.744**	0.0254	1			
NPL	0.004	0.451**	0.102*	0.0785	0.0436	1		
CAR	0.612**	0.355**	0.0135	-0.174	0.397**	0.254**	1	
FMAG	0.147*	0.745**	0.545**	0.567*	0.211*	0.031	0.011	1

Source: Field Data (2022)

AUDFEE is Audit Fee, AUDTEN is Audit Tenure, AUDSIZE represents Audit Size,

LEV is Leverage, NPL is Non-Performing Loan, FMAG is Firm Age, CAR is Capital Adequacy Ratio and CORP used Z-score as a measure of corporate failure prediction of sampled commercial banks of the study,

Table 3 presents the Pearson correlation matrix for the variables used in the empirical analysis. A close look at the correlation matrix shows that there is no issue of multicollinearity in the empirical specification because the independent variables employed do not show correlation coefficients of more than 0.90 as posited by O'Brien (2017).

Analysis of Audit Size and Corporate Failure of Commercial Banks in Ghana

This part of the study sought to provide answers to the effect of audit size on corporate failure prediction of commercial banks in Ghana. Linear regression analysis was employed to achieve this objective. Audit size was used as a proxy for audit quality. Audit size was coded 1 if the audit of the issued financial statements was performed by a Big 4 audit firm, otherwise coded 0. The results of the regression were presented and discussed according to the research objective one of this study.

Table 4: Audit Size and Corporate Failure Prediction

Variable	Coeff.	Std. Err	t. Stat	P-Values
(Constant)	2.834	.452	6.266	.000
AUDSIZE	-.231	.085	-2.719	.007
LEV	-.635	.379	-1.675	.095
NPL	.620	.054	11.529	.000
CAR	-.040	.098	-.411	.681
FMAG	.307	.060	5.083	.000
N	220			
F. Stat	26.786			
R Square	.430			
Adjusted R Square	.414			

Dependent Variable: Corporate Failure Prediction

Source: Field Data (2022)

The outcome of Table 4 represents the diagnostic tests from the computed regression model. The vital values of concern for this study from the summary of the model are coefficient of determination (R-square), Adjusted R-square, and F. Statistics. The regression models showed an R-Square value of .430. The Adjusted R-square presented a value of .414 which indicates that only 41.4 per cent variation in corporate failure prediction of commercial banks in Ghana can be explained by the size of the audit firm. The other variation in corporate failure which is not explained by the independent variable can be contributed by the factors not considered by the model. From the table, the overall model was fit ($F(220)=26.786$; $p<0.05$). From the table, it can be observed the independent variable significantly predict corporate failure prediction of commercial banks in Ghana.

The first objective is to examine the effect of audit size on corporate failure prediction of commercial banks in Ghana. The coefficient of audit size is negative and statistically significant at a .05 significance level. Coefficient of -.231 indicating that there is a negative relationship between audit size and corporate failure prediction of commercial banks in Ghana. Holding all other things constant a unit increase in audit size will result in a corresponding decrease in corporate failure of commercial banks in Ghana by -.231 units. This can be explained that as the size of audit firms increases the likelihood of corporate failure diminishes.

The study conducted by Jin, Kanagaretnam and Lobo (2011) found a negative effect at a 5 percent level significant level between audit size and bank failure during corporate crisis which the researchers' findings are in line with the current study outcome. This indicates that audit size which is the Big-4 audit

firm has the propensity to mitigate the chances of corporate failure of commercial banks in Ghana as a result of delivering quality audit service. The consistency in the findings may be due to some resemblance in the corporate environment thus, both studies using the banking industry as the scope for the studies. Moreover, Ndisya (2015) study outcome supports this finding, purporting that the Big-4 audit firms can provide a superior audit service as their size would be able to support more complete training programs, standardized audit methodologies and more options for appropriate second partner reviews. This study also sided with (Sundgren, 2009; Cenciarelli et al., 2018) who concluded that corporate failure is less common among Big 4 audit firms.

Lu and Ma (2016) looked at audit quality and financial distress: evidence from China. The outcome of the study indicated no significant association between audit size and corporate failure which deviate from the current study findings. This indicates that the big-4 audit firm does not influence corporate failure, thus contributing to or reducing the likelihood of corporate failure prediction. The findings also depart from the study of Rezaei and Shabani (2014) who posited that big audit firms have higher motivation to deliver high-quality audit services to protect their brand name and reputation due to their higher technical competence and greater resources. The variation in the findings of Lu and Ma (2016) and this study can be the differences in the Chinese and Ghana business environments as well as the different industries used for both studies

Lennox and Pittman (2008) study showed a negative effect and significant at 5 per cent level between audit size and fraud leading to corporate failure which is consistent with the findings of this current study. This outcome

confirms that big accounting firms have a low likelihood to engage in fraud that will result in a corporate crisis for their client. The big-4 audit firms compared to the non-big N audit firms is often seemed to have the potential to ensure greater independence because they have advanced resources and their ability to offer a variety of services to a wider scope of clients which may result in reducing their dependence on certain clients to identify and report material misstatement (Rezaei & Shabani, 2014). Consistent with Cenciarelli et al., (2018) indicates that corporate failure is less common among the larger accounting firms.

Buallay and Al-Ajmi (2019) finding is in part, agree with the current study that audit firm size has a positive effect on audit quality. Therefore, it can be inferred that audit size limit the probability of corporate failure since it improves the audit of firms failing. Further, the study of Al-Aimi indicated that Big-4 audit firms offer better audit services than the non-big 4 audit service.

The negative association between audit size and corporate failure indicate auditors play a crucial role in the survival of every organisation. The agency theory explains the relationship between the principal and an agent of which the agent performs duties on the behalf of the principal (Jensen & Meckling, 1976). To bring a solution to the agency issue, principals set up mechanisms to align the interests of the agents with that of the principals to mitigate the level of information asymmetry and the opportunistic behaviour of the agent (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). Since larger audit firms are mainly attributed to better audit service create the avenue to reduce the likelihood of corporate failure. Freeman (1984) stakeholder theory suggest that managers in organisations have a network of relationships to serve

which include suppliers, employees, lenders and other business partners. The stakeholder theory seeks to suggest that the activity of the commercial banks affect society. Therefore, for these relationships to be properly managed to ensure the success of the commercial banks' activities, the services of the external auditor are crucial to such development.

Analysis of Audit Fee and Corporate Failure of Commercial Banks in Ghana.

This part of the study sought to provide answers to the effect of audit fees on corporate failure prediction of commercial banks in Ghana. Linear regression analysis was employed to achieve this objective. Audit fee was used as a proxy for audit quality by using a natural log of audit fees paid by commercial banks in Ghana to its auditors for their accounting services. The results of the regression were presented and discussed according to the research objective two of this study.

Table 5: Audit Fee and Corporate Failure Prediction

Variable	Coeff.	Std. Err	t. Stat	P-Values
(Constant)	1.774	.743	2.389	.018
AUDFEE	.180	.067	2.696	.008
LEV	-.194	.059	-3.289	.001
NPL	.630	.055	11.560	.000
CAR	-.024	.100	-.240	.810
FMAG	.386	.075	5.131	.000
N	220			
F. Stat	29.166			
R Square	.405			
Adjusted R Square	.391			

Dependent Variable: Corporate Failure Prediction

Source: Field Data (2022)

The outcome of table 5 represents the diagnostic tests from the computed regression model. The vital values of concern for this study from the summary of the model are coefficient of determination (R-square), Adjusted R-square, and F. Statistics. The regression models showed an R-Square value of .405. The output presented an Adjusted R-square of .391 which seek to explain that about 39.1 per cent variation in corporate failure prediction of commercial banks in Ghana can be accounted for by audit fees. The other variation in corporate failure which is not explained by the independent variable can be contributed by the factors not considered by the model. From the table, the overall model was fit ($F(220)=29.166$; $p<0.05$). This implies that the model is significant and together explain the variations. From the table, it can be observed the independent variable significantly predict corporate failure of commercial banks in Ghana.

The second objective is to determine the effect of audit fees on corporate failure prediction of commercial banks in Ghana. The coefficient value represents the degree of impact of the independent variable on the dependent variable. The coefficient of audit fee is positive and statistically significant at a .05 significance level with a coefficient of .180 indicating that there is a positive relationship between audit fee and corporate failure prediction of commercial banks in Ghana. Holding all other things constant a unit increase in audit fee will result in a corresponding increase in corporate failure of commercial banks in Ghana by .180 units. This can be explained that higher audit fees paid by the commercial banks in Ghana can be associated with the likelihood of corporate failure.

Cenciarelli, Greco and Allegrini (2018) also found a significant positive relationship between audit fee and corporate failure which is consistent with the findings of the current study. This implies, higher audit fees can be associated with corporate failure, thus as the audit risk of firms failing increases, auditor effort also increases resulting in audit firms demanding higher audit fees-

Gul, Khedmati, Lim and Navissi (2018) found a positive and significant association between audit fees and corporate failure prediction. The finding is in line with the current study. Audit fees charged by audit firms increase in distressed firms and audit fees decrease in non-distressed firms. Increase in audit fees in distressed firms is almost two times greater than the decrease in audit fees in non-distressed firms (Krishnan & Wang, 2015). To compensate the cost and effort of the audit firm, higher audit fees are charged. Hence, audit firm demand higher audit fees for auditing distressed firms.

Agyemang et al., (2020): Fenn et al., (2022): Emami et al., (2022) findings contradict with the current study outcome. The findings of these studies found a negative effect of audit fee on corporate failure prediction. This imply that lower audit fee is associated with non-distressed firms because of lower business risk will require less audit effort (Enekwe et al., 2020). The study of Agyemang et al., (2020) used primary data and a rural bank as a case study in which the corporate environment and regulation for rural banks and the commercial bank vary thus, account for the differences in the results as well as other factors for the other studies.

Higher audit fee indicates an increase in the effort of the audit firm (time, staff, resources, audit scope, degree of risk and technology) of firms failing. Organisations employ the services of auditors to serve as a monitoring

mechanism to breach the information asymmetry between the agent and the principal. For managers to resolve the issue of conflict of interest that sprung between principal and agent, external party that is the services of audit firm is crucial. Agency theory explains the relationship between the principal and an agent of which the agent performs duties on the behalf of the principal (Jensen & Meckling, 1976). To bring a solution to this issue, principals set up mechanisms to align the interests of the agents with that of the principals to mitigate the level of information asymmetry and the opportunistic behaviour of the agent (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). Therefore, the services of auditors are paramount to align the interest of all stakeholders of an organisation towards achieving the firm's objectives by evaluating its activities by acceptable audit standards and regulations.

Analysis of Audit Tenure and Corporate Failure of Commercial Banks in Ghana.

This part of the study sought to provide answers to the effect of audit tenure on corporate failure prediction of commercial banks in Ghana. Linear regression analysis was employed to achieve this objective. Audit tenure was used as proxy for audit quality by coding a dummy variable 1 if the commercial bank has engaged an audit firm over three years as auditor or 0 if otherwise. The results of the regression were presented and discussed according to the research objective three of this study.

Table 6: Audit Tenure and Corporate Failure Prediction

Variable	Coeff.	Std. Err	t. Stat	P-Values
(Constant)	2.595	.445	5.836	.000
AUDTEN	.217	.088	2.474	.014
LEV	-.784	.134	-5.838	.000
NPL	.606	.055	10.967	.000
CAR	-.028	.099	-.285	.776
FMAG	.307	.060	5.083	.000
N	220			
F. Stat	30.623			
R Square	.417			
Adjusted R Square	.403			

Dependent Variable: Corporate Failure Prediction

Source: Field Data (2022)

Table 6 represents the diagnostic tests from the computed regression model. The value of R-Square, Adjusted R-Square and F-statistics are summary of the regression model. The output gives an R-square of .417. The Adjusted R-square presented a value of .403 which indicates that only 40.3 per cent variation in corporate failure of commercial banks in Ghana can be explained by the years that banks engage accounting firms in Ghana thus, audit tenure. The other variation in corporate failure prediction which is not explained by the independent variable can be contributed by the factors not considered by the model. From the table, the overall model was fit ($F(220)=30.623; p<0.05$). From the table, it can be observed the independent variable significantly predict corporate failure of commercial banks in Ghana. This can be inferred that the specified regression model presented above is a good fit for the computation of the objective of this study.

As the third objective is to assess the effect of audit tenure on corporate failure prediction of commercial banks in Ghana, it is deemed necessary to explain the coefficient since it represents the degree of impact of the independent variable on the dependent variable. The coefficient of audit tenure is positive and statistically significant at .05 significance level with a coefficient of .217 indicating that there is a positive relationship between audit tenure and corporate failure prediction of commercial banks in Ghana. Holding all other things constant a unit increase in audit tenure will result in a corresponding increase in corporate failure of commercial banks in Ghana by .217 units. This can be explained that as the commercial banks in the country keeps engaging their clients as auditors for a successive number of years the likelihood of corporate failure increasing.

Jibrin, Blessing and Danjuma (2014) study found a positive and significant effect of audit tenure on the in the recent Nigerian Banking Crisis. The finding which is in line with this study. This implies that audit quality is impaired as the audit firm engage the client for a long term. Thus, longer audit tenure increases the likelihood of corporate failure among banks

Saad and Abdillah (2019) findings showed negative and significant effect of audit tenure on corporate failure prediction. However, the findings contradict with the outcome of this study. Also, the outcome of the study by Trisnadevy and Satyawati (2020) indicated that the number of years the audit firm engages the client does not impair audit quality therefore, not increasing the likelihood of corporate failure prediction. The corporate laws and business environment in which the study of Saad and Abdillah (2019) was conducted may vary from Ghana therefore, account for the differences in the findings.

The findings of Cenciarelli, Greco and Allegrini (2018) contradict the current study outcome. Whereas the outcome of this study rather showed a positive significant relationship, Cenciarelli et al., (2018) found a negative effect of audit firm tenure on corporate failure. The findings of the researchers suggested that companies that engage audit firms for a longer duration are less likely to experience corporate failure. Cenciarelli et al., (2018) study conducted in a developed economy like America using public companies for the study may have a varying socio-economic business environment as well as a different legal framework for their firms to operate which might be different from Ghana's banking industry.

One of the principles business organisations is established is to be in operation for the foreseeable future therefore no business organisation take pride in going bankrupt or experiencing corporate failure. For firms to survive in the business environment, relationships with all stakeholders should be properly managed. The stakeholder theory argues that a firm's corporate success is dependent on its ability to formulate and execute a corporate strategy that manages its relationships with stakeholders effectively (Brammer, Pavelin & Porter, 2006). Freeman (1984) stakeholder theory suggest that managers in organisations have a network of relationships to serve which include suppliers, employees, lenders and other business partners. For firms to manage their relationships with other stakeholders' auditors plays a major role.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Introduction

The motive of this final chapter is to provide a summary, conclusions and recommendations as well as suggestions for further research. The summary highlights include a brief synopsis of the research problem, research objectives, research methods and findings; the conclusion contains the overall outcome taking cognisance of the results and findings which stems from the research questions. Recommendations also present specific remedies and context-based solutions to be executed by specific bodies.

Summary of Key Findings

The findings that emerged from the study provided notable and significant results that will contribute to the development of Ghana's economy. The focus of this study was mainly built on three objectives. The first objective was to examine the effect of audit size on corporate failure prediction of commercial banks in Ghana. The hypothesis tested was, there is no significant effect of audit size on corporate failure prediction of commercial banks in Ghana. The null hypothesis of the first object was rejected at a 5 per cent level of significance. The major outcome of the first objective showed a negative and significant effect of audit fees on corporate failure prediction.

The second objective was to determine the effect of audit fees on corporate failure prediction of commercial banks in Ghana. The hypothesis tested was, there is no significant effect of audit fee on corporate failure prediction of commercial banks in Ghana. The null hypothesis was rejected at a

5 per cent level of significance. The finding of the second objective showed a positive and significant effect of audit fees on corporate failure prediction.

Finally, the third objective was to assess the effect of audit tenure on corporate failure prediction of commercial banks in Ghana. The hypothesis tested was, there is no significant effect of audit tenure on corporate failure prediction of commercial banks in Ghana. The null hypothesis was rejected at a 5 per cent level of significance. The outcome of the third objective showed a positive and significant effect of audit tenure on corporate failure prediction of commercial banks in Ghana.

Conclusion

The study examined the effect of audit quality and corporate failure prediction of commercial banks in Ghana. The explanatory research design was used to examine the effect of audit quality and corporate failure prediction of commercial bank. The study was guided by three research questions and three hypotheses. With the use of criterion sampling techniques, the study covered 220 observations using secondary data. The data collected was analysed using descriptive statistics, multiple linear regression and multivariate analysis.

On the basis of the results presented, it is concluded that on the first objective commercial banks audited by bigger accounting firms are less likely to experience corporate failure because their size would be able to support more human resources, complete training programs and standardized audit methodologies. On the second objective, it can be concluded that audit fee increases when the likelihood of corporate failure is high because of the associated risk assessments, broader audit scope, human resources and consideration of time factor to complete the audit task.

Finally, the study concludes that the longer the audit engagement period with client the likelihood of familiarity threat increases which impairs the independence of the audit firm reviewing management assertion on the financial statement. From the descriptive analysis the results indicated that on average 46 per cent of the commercial banks are audited by the non-Big 4 audit firms in Ghana and audit fee with average of 12.4748 which signifies that on given the period under consideration the commercial banks in Ghana gives auditors an average audit fee of 12.4748. Also, with regards to audit tenure 53 per cent of the sampled commercial banks for this study were audited by accounting firms whose period of engagement was more than three years.

Recommendations

With regards to objective one, commercial banks audited by bigger accounting firms are less likely to experience corporate failure because their size would be able to support more human resources, complete training programs and standardized audit methodologies. Therefore, commercial banks are encouraged to employ the services of Big N audit firms.

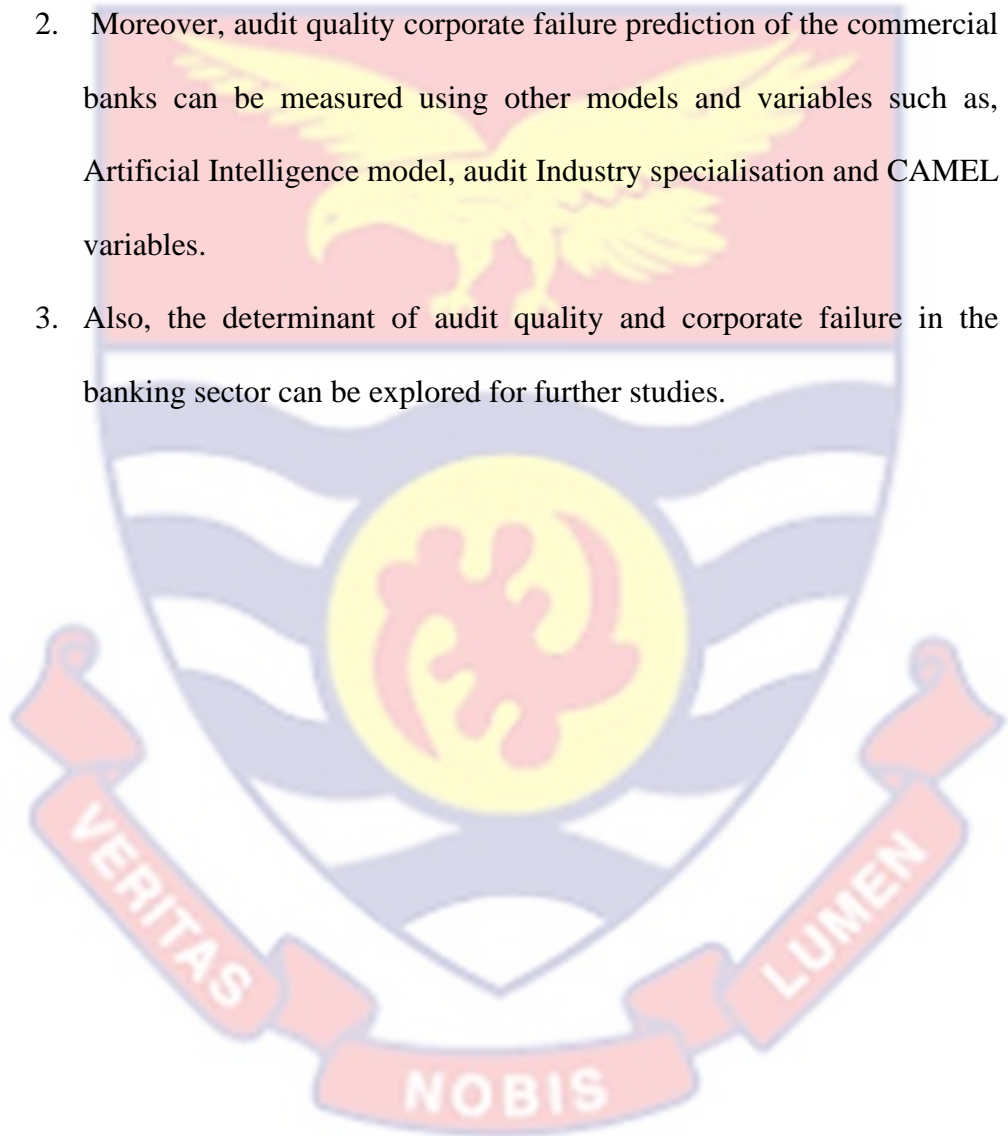
On the second objective, commercial banks should not pay audit fee that will impair the independence of the firm. However, audit firms should charge audit fees that will complement their effort (associated risk assessments, audit scope, human resources and time consideration) to complete the task as expected.

Finally, on the third objectives the commercial banks should periodically review their engagement policy to ensure that audit firms are not engaged beyond six years. The audit firm should also rotate its partners (staffs)

regularly throughout the audit engagement period by the client to protect the independence of the audit firm and its partners.

Suggestion for further Studies

1. Further studies can use corporate governance as a moderating variable for audit quality and corporate failure prediction.
2. Moreover, audit quality corporate failure prediction of the commercial banks can be measured using other models and variables such as, Artificial Intelligence model, audit Industry specialisation and CAMEL variables.
3. Also, the determinant of audit quality and corporate failure in the banking sector can be explored for further studies.



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