



⊗ www.hrmars.com ISSN: 2222-6990

## The Effect of Risk-Based Auditing on Value-Based Financial Performance of Banks in Ghana

Paul Kwasi Apreku-Djan, Francis Ameyaw, Frank Ameko Ahiale, Maxwell Owusu, Isaac Kofi Oppong Apreku

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i5/13326

DOI:10.6007/IJARBSS/v12-i5/13326

Received: 07 March 2022, Revised: 13 April 2022, Accepted: 29 April 2022

Published Online: 12 May 2022

In-Text Citation: (Apreku-Djan et al., 2022)

**To Cite this Article:** Apreku-Djan, P. K., Ameyaw, F., Ahiale, F. A., Owusu, M., & Apreku, I. K. O. (2022). The Effect of Risk-Based Auditing on Value-Based Financial Performance of Banks in Ghana. *International Journal of Academic Research in Business and Social Sciences*, 12(5), 903 – 928.

Copyright: © 2022 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non0-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licences/by/4.0/legalcode

Vol. 12, No. 5, 2022, Pg. 914 – 928

http://hrmars.com/index.php/pages/detail/IJARBSS

**JOURNAL HOMEPAGE** 

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics





⊗ www.hrmars.com ISSN: 2222-6990

### The Effect of Risk-Based Auditing on Value-Based Financial Performance of Banks in Ghana

Paul Kwasi Apreku-Djan<sup>1</sup>, Francis Ameyaw<sup>2</sup>, Frank Ameko Ahiale<sup>3</sup>, Maxwell Owusu<sup>4</sup>, Isaac Kofi Oppong Apreku<sup>5</sup>

<sup>1,2,3,4</sup>Lecturer, Department of Accountancy, Koforidua Technical University, Ghana, <sup>5</sup>Director, Anvil Consult, Accra-Ghana

Correspondence Author Email: paulaprekudjan78@gmail.com

#### **Abstract**

This study analyzes the effect of risk-based auditing on value-based financial performance of banks listed on the Ghana stock exchange. The study utilized a cross-sectional and quantitative research design. The study population encompasses listed banks in Ghana Stock Exchange (GSE) for the study period spanning thirteen years (2008 to 2020) owing to data availability. The study used a judgemental sampling technique to select nine (9) banks out of thirty-five (35) fully licensed and operational commercial banks in Ghana as per the (Bank of Ghana Report, 2021). Forty-eight (48) respondents were purposively selected for this study comprising of Managing Director, Head of Retail Banking, Head of Operations, Head of Risk Management, Head of Conduct and Compliance, Head, Internal Audit, Head, Financial Control and Strategy, Head of Information Technology, Head of Internal Control, and Head of Treasury. Principal Component Analysis (PCA) was used to identify the principal risk-based audit practices that add value to shareholders. Both linear and multiple regression models were employed to test the relationship between risk-based audit practices (RBAP) and value based financial performance of the listed banks in Ghana. The study established that risk management has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange. The study also revealed that annual risk-based planning has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange. The study also confirmed that internal audit capacity has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange. Lastly, the study found that internal auditing standards have a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange. As such the null hypothesis that risk base financial audit has a significant positive effect on value-based financial performance was accepted. The study concluded that there was a significant positive relationship between risk based financial audit and value-based financial performance. it is recommended that a similar study be conducted on all financial and non-financial institutions that trade on Ghana Stock Exchange to facilitate comparison and allow for the generalization of findings on the effect of risk-based audits on shareholder value. The research recommends that other researchers should explore more

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

about the influence of non-financial related factors and their implication on shareholder value in the Ghanaian Banking Sector.

**Keywords:** Risk-Based Audit Practices, Risk Management, Annual Risk-Based Planning, Internal Audit Capacity, Internal Auditing Standards, Value-Based Financial Performance

#### Introduction

Risk management has been an important aspect of sound corporate governance practice in recent years. Organizations are under a lot of pressure to identify and explain how they manage all of the business risks they encounter. The actions involved in risk management are critical in maintaining a good internal control system. Internal audit ensures that risks are properly managed, while management is responsible for identifying and managing risks (IIA, 2015). As a result, the focus of internal audit has shifted dramatically over the years from systems-based to process-based auditing, with the present emphasis on Risk-Based Internal Auditing (IIA, 2009). RBIA (Risk Based Internal Auditing) is a methodology that integrates internal auditing to an organization's entire risk management framework, according to the IIA. Internal audit can reassure the board that risk management mechanisms are effectively managing risks in terms of risk appetite. Risk-based auditing is generally based on models that presume inherent risk (IR) and control risk (CR) are two separate notions, with IR arising from audit environment factors that are wholly unrelated to the amount of controlling risk. However, operationalizing the distinction between IR and CR has proven difficult. There appears to be little agreement on characteristics that may characterize IR, and there is little published research on how IR is viewed by practitioners. Furthermore, it is not yet obvious whether or not attempting to segregate IR from CR in the way needed by standard setters makes good logical sense (De Fond et al., 2000).

RBIA is defined as a methodology that links internal auditing to an organization's overall risk management framework (IIA, 2014). It allows internal audit to assure the board that risk management processes are managing risks effectively, concerning the risk appetite. Prinsloo (2008) in his study of the development and evaluation of risk-based audit (hereafter, RBA) approaches found out that the prominent corporate failures in the United States and Europe (i.e. Enron Ltd and Worldcom Ltd) are indicative of the relevance of efficient and effective audit approach The credibility crisis that followed these failures shows that the auditing profession should continue to develop and evaluate its methods and approaches (Prinsloo, 2008). The only defence auditors have against the frustration of stakeholders in instances of corporate failures is sufficient, appropriate audit evidence that proves their innocence (ibid). This audit evidence will be the result of a well-planned and performed audit.

Several studies about risk-based internal auditing and different scholars have conducted the financial performance. Ayagre (2014) found out that RBA helps organizations to focus on high risks priority areas whereas the main reasons for non-adoption of RBIA were lack of skills and resource constraints. Kasiva (2012), studied the effect of RBA on the financial performance of the banks in Kenya', noted that risk-based auditing through risk assessment, risk management, annual risk-based planning, internal auditing standards and internal auditing capacity should be enhanced. The author argued that this would enable the firm to be able to detect risks on time and concentrate on high-risk areas leading to increased transparency and accountability, hence enhancing financial performance. Lutta (2012), studying the determinants of adoption of RBA in the public sector in Kenya established that risk-based

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

audit enhances transparency, accountability and responsiveness to public expenditure policy priorities; and it virtually covered all aspects of public financial management. From the studies, it is evident that RBA can improve the organization's overall corporate governance and financial performance of which an effective Internal Control System is a means to the achievement of the organization's objectives. Being a control process designed by public sugar firms in providing reasonable assurance on the achievement of objectives in respect of effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws and regulations, it requires functional attention. Nyarombe et al (2015), on the other hand, established that Risk-based Audit Approaches are used in Uasin Gishu County. The results indicated that RBA influence financial performance in the government departments, improves bank reconciliation statements and statement of assets and liabilities, prompt surrender of Imprest, safeguarding departmental and greater adherence to the government financial regulations.

The available information reveals that the Ghanaian Banking Sector still experiences financial regulations' challenges. There is a freeze on licensing of new banks and other financial institutions in a bid to strengthen supervision of the existing financial institutions and ensure efficiency in the banking system (Ghana Banking Survey, 2018). An increase in the minimum capital requirement of existing banks and new entrants from GHS120 million to GHS400 million to develop, strengthen and modernise the financial sector (Ghana Banking Survey, 2018). The licenses of the following banks were revoked due to their inability to improve their capital adequacy and address insolvency challenges: UT Bank Ghana Limited, Capital Bank Limited, UniBank Ghana Limited, The Royal Bank Limited, Beige Bank Limited, Sovereign Bank Limited, and Construction Bank Limited (Ghana Banking Survey, 2018). Ghana capital market experience bearish conditions and banks that struggled to raise the capital needed to meet the regulator's requirements resorted to business combinations (M&As) since they could not inject fresh capital or capitalise on their reserves (Ghana Banking Survey, 2018). Fraud cases recorded in the banking sector were 2,311 and 2,670 and the reported value of fraud were GHS 15.51 million and GHS 1.0 billion in 2019 and 2020 respectively (Banks and SDI Fraud Report (2020). Losses incurred as a result of fraud for 2020 stands at GHS 25.40 million, relative to a loss of GHS 33.44 million in 2019 (Banks and SDI Fraud Report, 2020).

The above reflects less than the optimal realization of Risk-Based Internal Audit potential. It is therefore important to determine the extent of compliance with Risk-Based Internal Audit practices. Subsequently, institutions must determine the Audit Risks Level to enable the execution of appropriate audit strategies to reduce Audit Risk Inheritance. Studies have been conducted on risk-based internal auditing on the financial performance of the organization. Ayagre (2014), observed that lack of skills and resource constraints hindered the adoption of RBIA while Kasiva (2012) argued that RBIA would enable the firm to be able to detect risks on time and concentrate on high-risk areas leading to increased transparency and accountability, hence enhancing financial performance. Nyarombe et al (2015) on the other hand, found out that RBA influence financial performance in the government departments by improving bank reconciliation statements and statement of assets and liabilities, prompt surrender of Imprests, safeguarding departmental financial obligations and ensures greater adherence to the government financial regulations. Their study focused on traditional accounting measures such as ROE, ROA instead of value-based financial performance measures such as EVA, MVA and CVA, which are determinants of shareholder value. Their studies lack clarity on how the

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

Risk-Based Auditing Practices affects shareholder value (value-based financial performance) in the Ghanaian banking sector. Therefore, this study analyses the effect of Risk-Based Auditing Practices on the value-based financial performance of banks listed on the Ghana Stock Exchange.

#### **Research Hypothesis**

- 1. **H**<sub>0</sub>: Risk management has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange
- 2. **H**<sub>0</sub>: Annual risk-based planning has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange
- 3. **H**<sub>0</sub>: Internal audit capacity has a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange
- 4. **H**<sub>0</sub>: Internal auditing standards have a significant positive effect on the value-based financial performance of banks listed on the Ghana Stock Exchange

#### **Literature Review**

#### **Theoretical Review**

Various theories have been formulated to explain the pertinent issues influencing financial performance in organizations. This research study was based on three theories namely the agency theory, transaction cost economics (TCE) and auditing theory.

#### **Agency Theory**

The Agency theory is the best known and most used theory in justifying demand and use of internal and external auditing services. According to the agency theory, a company consists of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources (Jensen, 1986). Agency theory assumes that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents. Furthermore, agency theory assumes that principals and agents act rationally to maximize their wealth. A consequence of this assumption may be the "moral hazard" problem (Jensen and Meckling, 1976). Agents may face the dilemma of acting against the interests of their principals. Since principals do not have access to all available information at the time a decision is being made by an agent, they are unable to determine whether the agent's actions are in the best interest of the firm. To reduce the likelihood of this problem, principals and agents engage in contracting to achieve optimality, including the establishment of monitoring processes such as internal auditing (Adams, 1994). Specifically, internal auditing is considered a bonding cost borne by agents to satisfy the principals' demands for accountability (Sherer and Kent, 1983).

Fama (1983) used agency theory to examine the hierarchical relationships in large, multidivision companies. In this context, the company's top management is viewed as the principal who delegates responsibility and authority to subordinate managers (agents) for effective utilization of a portion of the firm's resources, leading to the possibility of moral hazard problems between divisions and top management. Top management tries to mitigate this problem by instituting organizational controls; including internal auditing (Miguel et al., 1977). This argument suggests that there is more need for internal auditing in large multidivisional companies than in smaller ones. It is more difficult for top management in

larger firms to oversee the firm, which creates a greater demand for internal auditing to compensate for the loss of control, (Khalik, 1993). For this reason, the internal auditor should ensure that it adopts an approach that will help improve Internal Control Efficiency.

#### **Transaction Cost Economics Theory (TCE)**

The TCE attempts to bring out the concept of the cost of doing business in a very wide perspective and looks at how to monitor them. One of the ways proposed by this theory for monitoring internal costs of doing business is the use of internal monitoring. The objective of TCE is to explain different forms of organization based on the differences in transaction costs. The firm is seen as a governance structure, rather than as a production function (Williamson, 1996). The firm is not seen as a black box as in neoclassical economics. It is described as an organizational construct in different hierarchies, markets, hybrids, Williamson, 1975). In addition, TCE tries to identify and mitigate contractual hazards (Williamson, 1996) and links the possible hazards to behavioural assumptions. The first assumption relates to bounded rationality (Simon, 1976), the notion that decision makers' capabilities are bounded in terms of formulating and solving problems and processing all information during the decisionmaking process. The second assumption deals with opportunism or possible conflicts because individuals are promoting their self-interest. Opportunism is a variety of self-interest seeking but extends simple self-interest seeking to include self-interest seeking with guile. Not all agents need to be regarded as opportunistic to an identical degree. It suffices that those who are less opportunistic than others are difficult to ascertain and that, even among the less opportunistic, most have their price (Williamson, 1975). These behavioural assumptions lead to incomplete contracting and as a consequence, monitoring of the contract is required to prevent or to handle conflicts. Governance is the economizing response to infuse order and to realize mutual gains, (ibid). Transaction cost economics provides a basis for describing a contractual or transactional relationship between parties, in which each party expects something from the other (Speklé, 2001). This can be a relationship within the organization, but also between organizations. The choice of the mechanism depends on a comparative analysis of the transaction costs characteristics like asset specificity, uncertainty and frequency, (Williamson, 1996). The key characteristic asset relates to opportunity losses due to investments in alternative sources. Asset characteristics may take the form of physical, human, site-specific, dedicated assets or investments and brand name capital. Uncertainty or risk indicates the predictability of the environment and sight on possible disturbances to which transactions are subject. Uncertainty also has a behavioural component, in the sense of potential non-disclosure, manipulation of information. Frequency denotes the recurrence of transactions. Depending on these characteristics, TCE analyses the most economic, value preserving governance structure to infuse order, thereby mitigating conflict and realize the mutual gain, (Williamson, 2002). Within a firm, there is more administrative control to govern transactions than within a market. Also, the disputes about incomplete contracts will first be solved within a firm, while in the market any disputes need to be taken to court. Williamson argues that an internal monitor has an advantage over external monitors, as he has greater freedom of action, a wider scope, understands the language of the firm and can rely on less formal evidence, (Williamson, 1975). With that TCE seems to imply an advantage of the internal auditor over the external auditor.

#### **Auditing Theory**

Auditing theory helps to explain why auditing is needed in organizations. It also reveals certain laws that govern the audit process and its activities. Auditing theory enhances the understanding of the relationships and interrelationships between different parties of an organization. It also enhances the detection of fraud in financial statements (Hayes et al., 2005). A sub-theory of auditing theory is the policeman theory.

#### **Policeman Theory**

According to this theory, the auditor is responsible for searching, discovering and preventing fraud. Recently, the main focus of the auditors has been to provide reasonable assurance and verify the truth and fairness of the financial statements. The detection of fraud is, nevertheless, still a crucial topic in the debate on the auditor's responsibility, and typically after events where financial statement frauds have been revealed, the pressure increases the responsibilities of auditors in detecting fraud (Hayes et al., 2005).

## Risk-Based Audit Practices Risk Management

The separation of ownership and management functions and the presence of information asymmetry introduce the possibility of principal-agent conflicts (Haniffa and Hudaib, 2006). The agency conflicts, agency costs and risks are now managed within the corporate governance framework through accountability mechanisms, such as internal control and audit (Haniffa and Hudaib, 2006). According to Hay and Knechels' 2004, demand for auditing is a function of the set of risks faced by individual stakeholders in an organization and the set of control mechanisms available for mitigating those risks. Therefore, internal auditing risk management orientation has given the audit function increased credibility across the enterprise and greater acceptance by management (Beumer, 2006).

Through Risk-based audit, sound risk management strategies that are forward-looking can be implemented helping the organizations improve their business decisions (Fatemi & Glaum, 2006). Sound risk management is not just about avoiding or minimising losses, but about dealing positively with opportunities. It is a powerful tool for public sector managers (Drzik, 2000). Good risk management is based on a well-planned, logical, comprehensive and documented strategy. This strategy provides policy guidance and plans and procedures that can be used as part of the organization's everyday work to manage risk (OECD, 2005).

Many risks will be significant to the organization and the discussion of their controls will involve more senior managers and directors than might be involved in traditional finance-oriented audits (Al-Tamimi, 2002). Audits will involve more discussions with managers about their risks and their responses to them. Major tasks will include; determining processes and their objectives, identifying risks that hinder the processes with management, controls mitigating the risks, reporting where risks are not sufficiently mitigated by controls and assure management that risks are mitigated to an acceptable level. This has been made easy with the adoption of RBA in the public sector (Millichamp, 2002). Through RBA, the audit activity provides useful and relevant information to the organization for managing its risks.

The objective of RBA is to provide independent assurance to the board that there is a sound risk management framework within the organization and risks that may affect the

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

organisation's business objectives and strategies are being identified, managed and reduced to a level that is acceptable to the board (IIA, 2003). One indication of risk management framework is the existence of a separate committee or group, comprised of directors and managers to develop risk management development policy (Goodwin-Stewart & Kent, 2006).

#### **Annual Risk-Based Planning**

Planning is considered a vital audit activity and it includes preparing a strategic plan, annual plans and programs for individual risk-based audit assignments. The operational standard of the internal audit dealing with planning aspects of the internal audit requires the preparation of a strategic plan- usually a five-year plan, a periodic (annual) plan and plans for individual audit assignments. It is an exercise by which the head of an audit ensures the appropriateness of resources by projecting requirements in a timely fashion thus enhancing good governance (Karapetrovic, 1999).

Proper planning enables the accomplishment of a large number of audits in a given period by improving efficiency. In some cases, the numbers of the audit engagement are completed in the budgeted time and the number of actual audits performed in a period is usually less than the number of audits stated in the annual audit plan (Sanda et al., 2005).

In planning the engagement and determining its scope, the external auditor's main objective is to gather evidence to support giving an opinion on the financial statements. According to Davidson et al (2005), an auditor must give a fair and truthful view of a client's set of company's accounts but auditors cannot guarantee that the company accounts are entirely free from errors and irregularities. In their audit planning, auditors must identify and assess the risk that they need to discover. If an item is discovered, auditors must consider the context and presentation of the item and then decide whether it affects the true and fair view of the company's accounts.

#### **Internal Auditing Standards**

Auditing standards are set on principles of good governance, transparency and accountability, fairness and equity, efficiency and effectiveness, respect for the rule of law and high standards of ethical behaviour. For Risk-Based Audit to provide good governance in the public sector International Auditing standards must be embraced to guide audit ethics of work and maintain professional auditing standards (Mutua, 2012).

The Standards delineate the basic principles that represent the practise of internal auditing and provide a framework for performing and promoting value-added internal auditing. The standards also foster improved organizational processes and operations as well as provide a basis for evaluation of internal audit performance (IIA).

#### **Internal Auditing Capacity**

The Foreign Corrupt Practices Act of 1977 mandated public companies to establish and maintain effective risk-based practices/controls to provide reasonable assurance that assets are safeguarded and transactions are properly authorised and recorded. To bring this to reality, many companies established internal audit functions, increased internal audit staffing and strengthened internal audit independence. Beasley et al (2000) show that investments in internal auditing have been effective, as companies with internal audit staff are less prone to

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

financial fraud relative to companies without internal auditing. Organizations with internal audit staff are more likely to detect and self-report occurrences of fraud than those without internal auditing (Coram et al., 2008). The number and magnitude of errors requiring adjustment by the external auditors are substantially lower for the entities that had an internal audit department as opposed to those without an internal audit function department (Wallace & Kruetzfeldt, 1991).

In 1987, a report by the Treadway Commission recommended that public companies establish an internal audit function that is fully supported by top management and have effective reporting relationships. The report urged that the internal audit function be staffed with an adequate number of qualified personnel appropriate to the size and the nature of the company (Treadway Commission, 1987).

According to Norman Marks (2007), emerging request from boards is that internal auditor's review and comment on the organization's governance policies, processes and practices. The IIA recognizes this in its International Standards for the Professional Practice of Internal Auditing (Standards). Standard 2100 states that internal audit activity should evaluate and contribute to the improvement of risk management, control and governance processes using a systematic and disciplined approach. Reliance on internal auditing can avoid unnecessary duplication of audit procedures. It is also beneficial to external auditors because internal auditors generally have more knowledge about the company's procedures, policies, and business environment as opposed to external auditors. Conversely, external auditors must reconcile the advantages of relying on internal auditing with the need to maintain both the appearance and reality of independence as defined for external auditors (Gramling et al., 2004).

According to Ziegenfus (2000), audit quality is a function of the level of staff expertise, the scope of services provided and the extent to which audits are properly planned, executed and communicated. IIA's standard 1210 on the proficiency of the auditor require that the internal auditors possess the knowledge, skills and other competencies needed to perform their responsibilities (IIA, 1999). Since audit work requires knowledge and experience on a wide range of systems and operations, it is imperative to deploy auditors with extensive professional skills and to upgrade their skills through continuing professional training and development.

The audit activity requires professionals with the necessary qualifications and competencies to conduct the full range of audits required by its mandate. To ensure good governance, auditors must comply with minimum continuing education requirements established by their relevant professional organizations and standards. The head of the audit activity must be able to effectively recruit, retain and manage highly skilled staff (Kunkel, 2004).

#### **Value-Based Financial Performance Measurement**

In this study, three commonly applied value-based financial performance measures representing shareholder value (economic value-added, market value-added, and cash value-added) are highlighted. This study focuses on these three measures because it is possible to calculate them based on publicly published financial information. Some of the other value-

based measures require information not available in the public domain, making it impossible to calculate them.

#### An Analysis of Economic Value Added (EVA)

According to Stewart (1991:73),, EVA estimates the economic profit generated by a firm. The difference between an economic and an accounting profit is a capital charge levied on its capital. In the case of an accounting profit, only the cost of debt capital is included. However, EVA considers the costs of all its forms of capital (debt and equity) and compensates all its capital providers accordingly. EVA is the net operating profit above the appropriate charge for the opportunity cost of capital (both debt and equity). The capital charge is the most distinctive aspect of EVA. Under conventional accounting, most of the companies appear profitable. That notwithstanding, many are destroying shareholder value because their cost of capital swallows their profits. EVA corrects this error by explicitly recognizing that when managers employ capital, they must pay for it. By considering all capital costs, including the cost of equity, EVA shows the amount of wealth a business has created or destroyed in each reporting period. Expressed as a formula, EVA for a given period can be written as:

EVA = NOPAT - COST OF CAPITAL EMPLOYED

= NOPAT - (WACC X CE)

Where

NOPAT: Net Operating Profit After Taxes but before financing costs

WACC: Weighted Average Cost of Capital

CE: Capital Employed

#### An Analysis of Market Value Added (MVA)

A company's total market value is equal to the sum of the market value of its equity and the market value of its debt. In theory, this amount is what can be "taken out" of the company at any given time. The MVA is the difference between a firms total market value and the economic capital (Reilly and Brown, 2003). The economic capital is the amount invested in the company and is the fixed assets less the net working capital.

MVA = Market value of a company – Invested Capital

MVA = Total Market Value - Total Capital

= (MV of Stock + MV of Debt) – Total Capital

Where MV of Stock = Market Capitalization = Shares Outstanding x Stock Price

MV of Debt = Book Value of Debt (as an estimate to the MV)

Total Capital = Total Book Value of Debt and Equity

#### An Analysis of Cash Value Added (CVA)

The measure Cash Value Added (CVA) is associated with the Boston Consulting Group (BCG) and considered a combination of EVA and CFROI (Gupta & MacDonald, 2000: 237). Instead of using economic profit figures, however, CVA calculates the excess cash flows generated over the capital cost. The measure includes all the benefits of EVA while also attempting to improve it using cash flows instead of profit figures (Martin & Petty, 2000: 128).

A firm's CVA is calculated by considering the operating cash flow rather than operating profit (as was the case for EVA) and subtracting a gross capital charge. To convert NOPAT into the operating cash flow, depreciation and amortization are added (Martin & Petty, 2000: 128).

Changes in other long-term liabilities, such as provisions and deferred taxes, are also added to NOPAT to convert it into a cash flow figure (Young & O'Byrne, 2001: 441).

Unlike EVA, the capital charge is based on the invested capital's gross value and not on the net figure (Martin & Petty, 2000: 141). Accumulated depreciation is, therefore, added back to the invested capital.

```
CVA_t = Operating cash flow - gross capital charge
= (NOPAT_t + CVAAdj_{op}) - [c*x(IC_{t-1} + AccDepr)]
```

Where:

CVAAdj<sub>op</sub> = Depreciation, amortization and changes in other long-term liabilities AccDepr = Accumulated depreciation

#### **Empirical Review**

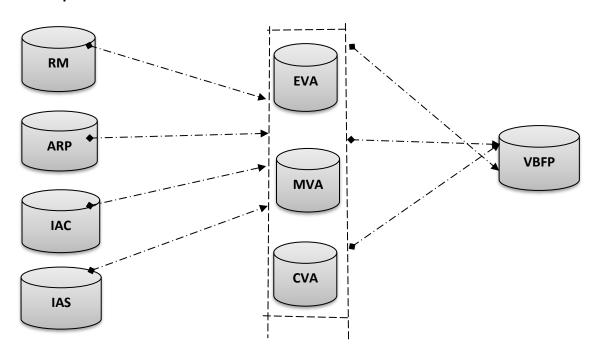
Internal audit functions play an effective role in financial risk management (Kiptoo and Muthoni, 2013). According to Kasava (2012), risk-based audit practices (such as risk assessment, risk management, annual risk-based planning, internal auditing standards and internal auditing staffing) enhance the effective and efficient financial performance of commercial banks in Kenya. Wery and Lambin (2012) carried out a study titled 'enhancing the internal audit function through the internal audit maturity model'. The authors concluded that a mature internal audit function adds value to the organization. According to Mutua (2012), credible audit reports, auditor independence, compliance with accepted audit standards, effective internal audit and independent audit committees influence financial performance in commercial banks in Kenya. Masika (2013) carried out a study titled 'The effect of the quality of risk-based internal auditing (RBIA) on the effectiveness of internal audit in regulatory state corporations (RSCs) in Kenya'. The study established that the quality of RBIA is positively related to the effectiveness of the internal audit. The study showed that the quality of RBIA and management support for internal audit had a huge influence on the effectiveness of internal audit in regulatory state corporations in Kenya.

Bowlin (2009) carried out a study titled 'Risk-based auditing, strategic prompts, and auditor sensitivity to the strategic risk of fraud.' The study concluded that RBA is an intuitive approach that focuses more resources on accounts deemed to be riskier and fewer resources on accounts that seem less risky. Lutta (2012) carried out the study on the determinants of adoption of risk-based audit in the public sector in Kenya. The study focused on five determinants:-Role of Internal Audit Function, Top Management Commitment, Training, Policy Framework and Communication process. Findings showed that risk-based audit enhances transparency, accountability and responsiveness to public expenditure policy priorities. Nyarombe, Musau, Kavai and kipyegon (2015) studied the effect of the Risk-Based Audit Approach on internal control systems in government departments in Uasin Gishu County. The results indicated that RBAA influence internal control systems in the government departments. Hironori et al (2011) carried out a study titled 'Client risk factors and audit resource allocation decisions.' The study found that risk factors are significantly associated with audit planning decisions. Dogui et al (2013) carried out a study titled 'ISO auditing and the construction of trust in auditor independence. The study found that practitioners used a range of sense-making strategies to construct and maintain the belief that ISO audits meet professional requirements of auditor independence. Vinnari and Skaerbaek (2014) carried out a study titled 'the uncertainties of risk management: a field study on risk management

internal audit practices in a Finnish municipality. The study found that risk management, rather than reducing uncertainties, itself created unexpected uncertainties that would otherwise not have emerged. Uncertainties relating to legal aspects of risk management in a particular issue of defining and operationalisation of risk management and also issue on resources available for expanding risk management

There exists a gap in empirical research and in theory as to how RBA affects value-based financial performance (shareholder value) in the Ghanaian banking sector. Most studies evaluate the extent of adoption of RBA or the factors associated with effective internal audit departments. An empirical study on the effects of RBIA (different functions of Audit) on value-based financial performance (shareholder value) in the Ghanaian banking sector is barren in the Ghanaian context. The study, therefore, seeks to determine the effects of RBIA (different functions of Audit) on value-based financial performance (shareholder value) in the Ghanaian banking sector.

#### **Conceptual Framework**



**RM** = Risk Management

**ARP** = Annual Risk-based Planning

IAC = Internal Auditing Capacity

IAS = Internal Audit Standards

EVA = Economic Value Added

MVA = Market Value Added

CVA = Cash Value Added

**SV** = Shareholder Value

#### Methodology

#### **Research Design**

This study utilized a cross-sectional and quantitative research design. The study population encompasses listed banks in Ghana Stock Exchange (GSE) for the study period spanning

thirteen years (2008 to 2020) owing to data availability. The study used a judgemental sampling technique to select nine (9) banks out of thirty-five (35) fully licensed and operational commercial banks in Ghana as per the (Bank of Ghana Report, 2021). Audited annual reports of the nine (9) selected banks forming the sample size were obtained from the Ghana Stock Exchange website.

Efforts were made to acquire thirteen years annual reports for all the banks to fully address the objectives of the study. However, since not all the banks had been listed between 2008 and 2020, some banks do not have published annual reports for some years although the majority had information for all the years under review.

Forty-eight (48) respondents were purposively selected for this study. These respondents include Managing Director, Head of Retail Banking, Head of Operations, Head of Risk Management, Head of Conduct and Compliance, Head, Internal Audit, Head, Financial Control and Strategy, Head of Information Technology, Head of Internal Control, and Head of Treasury. This is because they form part of senior management that own risk management processes in the bank. They are also involved in both audit planning and implementation of audit findings and are in a position to respond effectively and provide relevant information for this study.

#### **Operationalization and Measurement of Variables**

The main study variables were measured on a continuous scale using items developed and tested by previous scholars. These were anchored on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree):

- Risk-Based Audit Practices were measured in terms of the following: Risk Management; Annual Risk-Based Planning; Internal Auditing Standards and Internal Auditing Capacity
- Value-based financial performance (shareholder value) was measured in terms of economic value added; market value-added and cash value-added

#### **Data Analysis**

Principal Component Analysis (PCA) was used to reduce the original variables of the study to a small number; thus allowing the research to focus on underlying themes or patterns. It was used to identify the principal risk-based audit practices that add value to shareholders. Both linear and multiple regression models were employed to test the relationship between risk-based audit practices (RBAP) and shareholder value (SV) of the listed acquirer banks in Ghana. The model treated shareholder value (SV) as the dependent variable while the independent variables were the risk-based audit practices namely; risk management, risk-based audit planning, internal audit standards and internal audit capacity. The independent variables were obtained by a questionnaire that had Likert-scale questions. Prior research has examined the impact of RBA on financial performance in commercial banks (Mutua, 2012)

The study adopted the following model to test whether shareholder value is a function of the independent variable (risk-based audit practices).

 $Y = \beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4 + \epsilon$ 

Where:

Y = shareholder value is measured by economic value added, market value-added, and cash value-added.

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

 $\beta$ 0 = Constant variables that affect the shareholder value of acquirer banks listed on the Ghana Stock Exchange

ß1, ß2, ß3, and ß4 are the coefficient of the independent variable

X1 = Risk Management (RM)

X2 = Risk-Based Audit Planning (RBAP)

X3 = Internal Audit Standards (IAS)

X4 = Internal Audit Capacity (IAC)

 $\varepsilon$  = Error term

Test of significance was conducted using regression model and was expected to yield coefficient of determination (R-square), f- test, t-test and analysis of variance (ANOVA) at 95% confidence interval. ANOVA was used to determine whether there were any significant differences between the dependent and the independent variables. F- test was used to test the overall significance of the regression model while the t-test was used to test the significance of the independent variables in the model. The purpose of the regression model was to examine the effect of risk-based audit practices (RBAP) on the shareholder value of acquirer banks listed on the Ghana Stock Exchange.

#### Results

As presented in Table 1.1, both latent variables are above the 0.70 thresholds as recommended by (DeVellis, 2012). Hence, the result provides evidence that the variables included in the study have excellent reliability.

**Table 1.1: Reliability Test** 

Variables	Number of Items	Cronbach Alpha	Sig
Risk Management	5	0.929	0.000
Annual Risk-Based Planning	5	0.901	0.004
Internal Audit Standards	5	0.893	0.002
Internal Audit Capacity	5	0.916	0.000

### Research Objective One: The Effect of risk management (RM) on shareholder value of banks listed on the Ghana Stock Exchange

The results of the linear regression in Table 1.2 indicate that R = 0.919 and R<sup>2</sup> = 0.861. The R-value of 0.919 indicates a strong linear relationship between risk management (hereafter RM) and shareholder value - EVA, MVA and CVA (hereafter SV) of listed banks in Ghana. This means that RM has a strong influence on SV. The R<sup>2</sup> indicates that about 86.1% of the SV variations are explained by the model SV =  $\alpha$  +  $\beta$ 1 (RM), and 13.9% is unexplained by the model. According to Zygmont & Smith (2014), in normal terms a healthy variation dependent variable must be at least 60%, thus this model is found to be a good fit as it predicted above 60% of the entire model.

Table 1.2: Model Summary of RM

				Std. Error
			Adjusted	of the
Model	R	R Square	R Square	Estimate
1	.919ª	.861	.859	2.643

a. Predictors: (Constant), RM

ANOVA statistics is used to represent the regression model significance. As in Table 1.3, the significance value for the F statistics is 406.902 and the significance ratio of 0.000 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model VBFP =  $\beta$ 0 +  $\beta$ 1(RM) which is statistically significant.

Table 1.3: ANOVA for RM

				Mean		
М	odel	Sum of Squares	Df	Square	F	Sig.
1	Regression	3288.949	1	3288.949	406.902	.000 <sup>b</sup>
	Residual	444.560	46	8.083		
	Total	3733.509	47			

The results on the beta coefficient show that the coefficient  $\beta$  = 0.879 is significant because its p-value = 0.000  $\leq$  0.05. This confirms a significant positive effect of RM on SV of listed acquirer banks in Ghana. Therefore, the study accepts the first null hypothesis that: "risk management has a significant positive effect on shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange". Thus, the contribution of RM to SV was not by chance. This results in the model: SV = -2.269 + 0.879 (RM) +  $\epsilon$ . The study found that if RM were constant at zero, SV realized was -2.269. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in RM led to 0.879 increases in SV of banks listed on the Ghana Stock Exchange.

Table 1.4: Regression Coefficients of Risk Management (RM)

	rabio 1. ii negi ession ee emerene er man management ()					
		Unstandardized Coefficients		Standardized Coefficients		
		Std.				
М	odel	В	Error	Beta	Т	Sig.
1	(Constant)	-2.269	1.872		-1.212	.231
	Risk Management	.879	.010	.919	20.172	.000

The study employs the principal component analysis model to assess the risk management factor that affect value-based financial performance. The coefficient ( $\beta$ ) and the P-value represent the ranking of the factor and significance level respectively. The following are significant risk management factors that positively influence shareholder value: Implementation of necessary changes to mitigate risk ( $\beta$  = 1.523, p-value = 0.000); consideration of risk assessment in detection of errors ( $\beta$  = 1.412, p-value = 0.000); auditors' understanding of the corporation's risk ( $\beta$  = 1.106, p-value = 0.000); auditors recognition of

work environment in risk assessment ( $\beta$  = 0.974, p-value = 0.000); and auditor's involvement of management in risk evaluation process ( $\beta$  = 0.852, p-value = 0.000).

## Objective Two: Effect of annual risk-based planning on shareholder value of acquirer banks listed on the Ghana Stock Exchange.

The results of the linear regression in Table 1.5 indicate that R = 0.980 and R<sup>2</sup> = 0.942. The R-value of 0.980 indicates a strong linear relationship between annual risk-based planning (hereafter ARP) and shareholder value - EVA, MVA and CVA (hereafter SV) of listed acquirer banks in Ghana. This means that ARP has a strong influence on SV. The R<sup>2</sup> indicates that about 94.2% of the SV variations are explained by the model SV =  $\beta$ 0 +  $\beta$ 1(ARP), and 5.8% is unexplained by the model. According to Zygmont & Smith (2014), in normal terms a healthy variation dependent variable must be at least 60%, thus this model is found to be a good fit as it predicted above 60% of the entire model.

Table 1.5: Model Summary for annual risk-based planning

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.980ª	.942	.940	2.155

a. Predictors: (Constant), annual risk-based planning

ANOVA statistics is used to represent the regression model significance. As in Table 1.6, the significance value for the F statistics is 646.945 and the significance ratio is 0.000 which is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model SV =  $\beta$ 0 +  $\beta$ 1(ARP) which is statistically significant.

Table 1.6: ANOVA for annual risk-based planning

Мо	odel	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3005.472	1	3005.472	646.945	.000 <sup>b</sup>
	Residual	255.510	46	4.646		
	Total	3260.982	47			

- a. Dependent Variable: shareholder value (EVA, MVA and CVA)
- b. Predictors: (Constant), annual risk-based planning

The results on the beta coefficient show that the coefficient  $\beta$  = 0.619 is significant because its p-value = 0.000  $\leq$  0.05. This confirms a significant positive effect of ARP on SV of listed banks in Ghana. Therefore, the study accepts the second hypothesis that: "annual risk-based planning has a significant positive effect on shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange". Thus, the contribution of ARP to SV was not by chance. This results in the model: SV = -13.341 + 0.619 (ARP) +  $\epsilon$ . The study found that if ARP were constant at zero, SV realized was -13.341. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in ARP led to 0.619 increases in SV of banks listed on the Ghana Stock Exchange.

Table 1.7: Coefficients for regression between annual risk-based planning and shareholder value

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	-13.341	1.419		-9.401	.000
Annual risk-based planning	.619	.008	.980	25.435	.000

a. Dependent Variable: shareholder value (EVA, MVA and CVA)

The study employs the principal component analysis model to assess the risk management factor that affects shareholder value. The coefficient ( $\beta$ ) and the P-value represent the ranking of the factor and significance level respectively. According to the results, preparation of annual risk-based plans in consultation with management had  $\beta$  = 0.983, p-value = 0.061) is not significant because the p-value exceeds the 0.05 level of significance. On the other hand, carrying out annual assessment risk had  $\beta$  = 1.483, p-value = 0.000). Additionally, doing annual staffing plans for finance and audit employees in consultation with the human resource department had  $\beta$  = 0.813, p-value = 0.072). At the same time, discussing annual risk factors with management and implementing strategies agreed upon had  $\beta$  = 1.285, p-value = 0.000). Finally, availability of annual procurement planning that the companies follow had  $\beta$  = 0.583, p-value = 0.087). Such findings mean that annual risk-based planning is integral in the shareholder value of the banking sector. It follows that annual risk-based planning contributes favourably to the shareholder value of the banking sector. The finding aligns with the finding of Millichamp (2002) who established that failure to implement financial risk strategies contributed to the underwhelming performance of organizations.

## Objective Three: The effect of internal auditing standards on shareholder value of listed acquirer banks in Ghana

The results of the linear regression in Table 1.8 indicate that R = 0.794 and R<sup>2</sup> = 0.699. The R-value of 0.794 indicates a strong linear relationship between internal auditing standards (hereafter IAS) and shareholder value - EVA, MVA and CVA (hereafter SV) of listed acquirer banks in Ghana. This means that IAS has a strong influence on SV. The R<sup>2</sup> indicates that about 69.9% of the SV variations are explained by the model SV =  $\beta$ 0 +  $\beta$ 1 (IAS), and 30.1% is unexplained by the model. According to Zygmont & Smith (2014), in normal terms a healthy variation dependent variable must be at least 60%, thus this model is found to be a good fit as it predicted above 60% of the entire model.

Table 1.8: Model Summary for IAS – SV

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794ª	.699	.695	3.747

a. Predictors: (Constant), IAS

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

ANOVA statistics is used to represent the regression model significance. As in Table 1.9, the significance value for the F statistics is 218.091 and the significance ratio of 0.000 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model SV =  $\beta$ 0 +  $\beta$ 1(IAS) which is statistically significant.

Table 1.9: ANOVA for IAS - SV

M	odel	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3062.512	1	3062.512	218.091	.000 <sup>b</sup>
	Residual	772.330	46	14.042		
	Total	3834.842	47			

a. Dependent Variable: SV

b. Predictors: (Constant), IAS

The results on the beta coefficient show that the coefficient  $\beta$  = 0.524 is significant because its p-value = 0.000  $\leq$  0.05. This confirms a significant positive effect of IAS on SV of listed acquirer banks in Ghana. Therefore, the study accepts the third hypothesis that: "internal auditing standards have a significant positive effect on shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange". Thus, the contribution of IAS to SV was not by chance. This results in the model: SV = -10.640 + 0.524 (IAS) +  $\epsilon$ . The study found that if IAS were constant at zero, SV realized was -10.640. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in IAS led to 0.534 increases in SV of banks listed on the Ghana Stock Exchange.

Table 1.10: Coefficients for Regression between IAS and SV

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
1 (Constant)	-10.640	2.467		-4.312	.000
Internal Auditing Standards	.524	.014	.794	14.768	.000

a. Dependent Variable: Shareholder Value (EVA, MVA and CVA)

The study findings reveals that; disclosures about financial risk and risk management ( $\beta$  = 1.312, p-value = 0.000), disclosures about compliance risk and risk management ( $\beta$  = 1.217, p-value = 0.000) and disclosures about internal process risk and risk management ( $\beta$  = 0.951, p-value = 0.000) influenced the shareholder value of the acquirer banks largely. The study further indicated that; disclosures about environmental and safety risk and risk management influenced the shareholder value of the listed banks in Ghana to a moderate extent ( $\beta$  = 0.732, p-value = 0.059). Also, disclosures about technology risk and risk management influenced the shareholder value of the listed acquirer banks in Ghana to a little extent ( $\beta$  = 0.629, p-value = 0.064)

## Research Objective Four: Effect of internal auditing capacity on shareholder value of acquirer banks listed on the Ghana Stock Exchange

The results of the linear regression in Table 1.11 indicate that R = 0.961 and R² = 0.934. The R-value of 0.961 indicates a strong linear relationship between internal auditing capacity (hereafter IAC) and shareholder value - EVA, MVA and CVA (hereafter SV) of listed banks in Ghana. This means that IAC has a strong influence on SV. The R² indicates that about 93.4% of the SV variations are explained by the model SV =  $\beta$ 0 +  $\beta$ 1 (IAC), and 6.6% is unexplained by the model. According to Zygmont & Smith (2014), in normal terms a healthy variation dependent variable must be at least 60%, thus this model is found to be a good fit as it predicted above 60% of the entire model.

Table 1.11: Model Summary for IAC and SV

				Std.	Error	of	the
Model	R	R Square	Adjusted R Square	Estim	ate		
1	.961ª	.934	.933	5.519	17		

a. Predictors: (Constant), IAC

ANOVA statistics is used to represent the regression model significance. As in Table 1.12, the significance value for the F statistics is 921.176 and the significance ratio of 0.000 is less than 0.05, which concludes that the regression model is statistically significant (Hair et al., 2010). This is depicted by linear regression model SV =  $\beta$ 0 +  $\beta$ 1(IAC) which is statistically significant.

Table 1.12: ANOVA for Internal Auditing Capability (IAC)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28060.108	1	28060.108	921.176	.000 <sup>b</sup>
	Residual	1675.366	46	30.461		
	Total	29735.474	47			

a. Dependent Variable: SV

The results on the beta coefficient show that the coefficient  $\beta$  = 0.718 is significant because its p-value = 0.000  $\leq$  0.05. This confirms a significant positive effect of IAC on SV of listed banks in Ghana. Therefore, the study accepts the fourth hypothesis that: " Internal Auditing Capability has a significant positive effect on the shareholder value of banks listed on the Ghana Stock Exchange". Thus, the contribution of IAC to VBFP was not by chance. This results in the model: SV = -26.249 + 0.718 (IAC) +  $\epsilon$ . The study found that if IAC were constant at zero, SV realized was -26.249. The analyzed data findings also showed that taking other independent variables at zero, a unit increase in IAC led to 0.618 increases in SV of banks listed on the Ghana Stock Exchange.

b. Predictors: (Constant), IAC

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

Table 1.13: Regression Coefficients for Internal Auditing Capability

	Unstandardized Coefficients		Standardized Coefficients			
Model		В	Std. Error	Beta	Т	Sig.
1	(Constant)	-26.249	3.634		-7.223	.000
	IAC	.718	.020	.961	30.351	.000

a. Dependent Variable: SV

The results reveal that possession of technical and professional skills by auditors  $\beta$  = 1.867, p-value = 0.000) while readiness to embrace change that improves capacity by auditors had  $\beta$  = 1.952, p-value = 0.000). Simultaneously, preparation of quality audit reports by auditors had a  $\beta$  = 1.658, p-value = 0.000) in the list of findings. Additionally, availability of criteria to measure internal audit performance is not a significant factor ( $\beta$  = 0.642, p-value = 0.061). Finally, compliance with accepted audit standards by auditors had  $\beta$  = 0.987, p-value = 0.001). This was a clear indication that the acquirer listed banks had internal audit capacity for risk-based financial audit. It concludes that internal audit capacity reduces related financial risks and positively influences value-based financial performance. The findings compare favourably with the findings of Fatemi and Glaum (2000) who established that robust internal audit capacity contributed to the performance of German firms.

#### Discussion

The findings of the study imply that the listed banks have robust risk management in place that contributes to the mitigation of the banks' financial loss and improves the wealth of shareholders. It concludes that risk management contributes to financial performance. The study lends credence to the study conducted by Memba (2015) who established that proper risk management strategies contributed to overall organization performance.

The findings further reveal that annual risk-based planning is integral in the shareholder value of listed acquirer banks in Ghana. It follows that annual risk-based planning contributes favourably to the shareholder value of listed acquirer banks in Ghana. The finding aligns with the finding of Millichamp (2002) who established that failure to implement financial risk strategies contributed to the underwhelming performance of organizations.

The finding of the study is a clear indication that the listed acquirer banks had internal audit capacity for risk-based financial audit. It concludes that internal audit capacity reduces related financial risks and shareholder value of listed acquirer banks in Ghana. The findings compare favourably with the findings of Fatemi and Glaum (2000) who established that robust internal audit capacity contributed to the performance of German firms.

Therefore, the study accepts the entire null hypothesis that there is a significant positive relationship between risks-based audit practices (risk management, annual risk-based planning, internal auditing standards and internal auditing capacity) and shareholder value of listed banks in Ghana. The findings conform to the study findings conducted by Al-Tamim (2002); Kabare (2014); Geke (2017), who established that risk-based audit practices contributed to organizational financial performance.

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

#### Summary, Conclusion and Recommendations Summary of Major Findings

The study accepts the entire null hypothesis that risk-based audit practices have a significant positive effect on the shareholder value of banks listed on the Ghana Stock Exchange since p < 0.05 as indicated in Table 1.15.

From the regression analysis, the study established the existence of a significant positive relationship between risk-based audit factors and shareholder value of acquirer banks listed on the Ghana Stock Exchange. In addition, the study established that the most significant risk-based audit factor is risk management followed by internal auditing capacity; annual risk-based planning; and internal auditing standards, respectively.

Auditors' understanding of the corporation's risk; consideration of risk assessment in the detection of errors; auditors recognition of work environment in risk assessment; auditor's involvement of management in the risk evaluation process; implementation of necessary changes to mitigate risk were key elements of risk management that contribute significantly to shareholder value (EVA, MVA and CVA) of acquirer banks listed on the Ghana Stock Exchange.

The study showed that carrying out annual assessment risk; discussing annual risk factors with management and implementing strategies agreed upon are the annual risk-based planning factors that contribute significantly to shareholder value (EVA, MVA and CVA) of acquirer banks listed on the Ghana Stock Exchange

The study showed that disclosures about financial risk and risk management; disclosures about compliance risk and risk management; and disclosures about internal process risk and risk management are internal auditing standards that significantly influenced the shareholder value (EVA, MVA and CVA) of the banks.

The study showed that auditor's technical and professional skills, quality audit reports and auditors readiness to embrace change is internal auditing capability factors that significantly affected the shareholder value (EVA, MVA and CVA) of the banks listed on the Ghana Stock Exchange. Effective auditing standards influence auditor's behaviour and improve the quality and effectiveness of audits by substantially adjusting audit practice.

**Table 1.15: Hypotheses Testing Results** 

Hypotheses	Coefficient (?)	Significant (P < 0.05)	Decision	Interpretation
HI: Risk management has a significant positive effect on the shareholder value of banks listed on the Ghana Stock Exchange	0.879	0.000 Significant as the p-value is less than 0.05.	Accepted	The beta coefficient of 0.879 indicates that a unit increase in RM led to 0.879 increases in VBFF
HE:Internal audit capacity has a significant positive effect on the shareholder value of banks listed on the Ghana Stock Exchange)		0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.718 indicates that a unit increase in IAC led to 0.718 increases in VBFF
HB: Annual risk-based planning has a significant positive effect on the shareholder value of banks listed on the Ghana Stock Exchange	0.619	0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.619 indicates that a unit increase in ARM led to 0.619 increases in SV
H4: Internal auditing standards have a sig nificant positive  leffect on the shareholder value of banks listed on the Ghana Stock Exchange	0.524	0.000 Significant as the p-value is less than 0.05	Accepted	The beta coefficient of 0.524 indicates that a unit increase in IAS led to 0.524 increases in SV

#### Conclusion

The study concluded that effective risk management should enable the management to assess the risks and recommended corrective measures for the bank's improvement. In addition, the study concluded that auditors' understanding of the corporation's risk; consideration of risk assessment in the detection of errors; auditors recognition of work environment in risk assessment; auditor's involvement of management in the risk evaluation process; and auditor's identification of changes that influence performance were key elements of risk management which influenced the shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange.

The study concluded that the management of the listed acquirer banks in Ghana should be able to adopt a proper annual risk-based planning to improve efficiency, accuracy, completeness, timeliness, convenience and clarity. Proper annual risk-based planning leads to transparency and accountability in the banking sector, thereby influencing their shareholder value.

The study also concluded that for risk-based audits to improve the shareholder value of the banking sector in Ghana, the auditors must embrace the International Auditing Standards (ISAs) that guide the internal audit code of conduct and maintain professional auditing standards. Adherence to the ISAs would enhance the independence, confidentiality, integrity and technical skills/competence of the internal auditors that would have a positive effect on shareholder value.

The study concluded that various internal auditing capacity initiatives such as the existence of active and independent audit committee, effective internal audit department, proficiency of the internal auditor and management's ownership interest had a significant positive influence on shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange.

The study concluded that there exists a positive relationship between risk-based audit practices and shareholder value (EVA, MVA and CVA) of banks listed on the Ghana Stock Exchange. The study further concluded that the most significant risk-based audit factor is risk

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

management followed by internal auditing capacity, annual risk-based planning and internal auditing standards, respectively.

#### **Future Research**

Since the study explored the effect of risk-based audit practices on the shareholder value of banks listed on the Ghana Stock Exchange, it is recommended that a similar study be conducted on all financial and non-financial institutions that trade on Ghana Stock Exchange. This will facilitate comparison and allow for the generalization of findings on the effect of risk-based audits on shareholder value.

For a better understanding of the quality of shareholder value and their role in evaluating shareholders' wealth, more surveys are recommended on the other value-based measures of performance like Economic Profit (EP), Cash Flow Return on Investment (CFROI), Shareholder Value Added (SVA) in Ghana Stock Exchange and other stock markets in the world. That single research cannot cover every scope of the subject matter is universally conceded. As such, the research recommends that other researchers should explore more about the influence of non-financial related factors and their implication on shareholder value in the Ghanaian Banking Sector.

#### Reference

Abdel-Khalik, A. R. (1993). Why Do Private Companies Demand Auditing? A Case for Organizational Loss of Control. Accessed: https://doi.org/10.1177%2F0148558X9300800103

Date: 18/10/2021

Adams, M., and Mehran, J. (2003). Dominant Issue in the Nigeria Local Government System: A Contemporary focus. Lagos: Imprint Services, pp.5-6, 195.

Al-Tamimi, J. (2002). Risk Management Practices: An Empirical Analysis of the UAE Commercial Microfinance Institutions. *Finance India* (pp.16).

Ayagre, P., Appiah-Gyamerah, I., Nartey, J. (2014), Effectiveness of Internal Control Systems of Ghanaian Banks.

Banks and SDI Fraud Report (2020).

Beasley, M. S., Carcello, J. V., Hermanson, D. R., and Lapides, P. D. (2000). Fraudulent Financial Reporting: Consideration of Industry Traits and Corporate Governance Mechanisms. Accounting Horizons (2000) 14 (4): 441–454.

Beumer, Hans. (2006). A risk-oriented approach: auditors at a Swiss textile firm demonstrate the value of focusing on risk management. Internal Auditor(Vol. 63, Issue 1). Publisher: Institute of Internal Auditors, Inc.

Bowlin, Kendall. (2011). Risk-Based Auditing, Strategic Prompts, and Auditor Sensitivity to the Strategic Risk of Fraud. The Accounting Review (2011) 86 (4): 1231–1253.

Coram, P., Ferguson, C., and Moroney, R. (2008). "Internal Audit, Alternative Internal Audit Tructures and The Level of Misappropriation of Assets Fraud". Accounting and Finance, 48 (4), 543-559.

Davidson, R., Goodwin-Stewart, J., and Kent, P. (2005), "Internal governance structures and earnings management", Accounting and Finance, Vol. 45 No. 2, pp. 241-67.

DeFond, M. L., Francis, J. R., and Wong, T. J. (2000). Auditor Industry Specialization and Market Segmentation: Evidence from Hong Kong. A Journal of Practice & Theory (2000) 19 (1): 49–66.

- Dogui, K., Boiral, O., Heras-Saizarbitoria, I. (2014) Audit fees and auditor independence: The case of ISO 14001 certification. Int J Audit 18:14–26
- Drzik, J. (2005), "New Directions in Risk Management", Journal of Financial Econometrics, Vol.1, pp. 26-38.
- Fama, E. F., and Jensen, M. C. (1983). "Agency Problems and Residual Claims." J. Law and Econ. 26: 327-49. (a)
- Fatemi, A., and Glaum, M. (2000). Risk managemnt practices in German firms, Managerial Finance
- Geke, Abel. Manas. (2017). Effect of risk based audit practices on financial performance in selected public owned Sugar companies in Kenya Accessed: https://repository.maseno.ac.ke/handle/123456789/1252

Date: 11/10/2021

Ghana Banking Survey, 2018

- Goodwin-Stewart, J., and Kent, P. (2006). The use of internal audit by Australian companies. Managerial Auditing Journal. ISSN: 0268-6902
- Gramling, A. A., Maletta, M. J., Schneider, A., and Church, B. K. (2004), 'The role of the internal auditfunction in corporate governance: A synthesis of theextant internal auditing literature and directions for future research', Journal of Accounting Literature, Vol.23, pp. 194–244.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2010). Multivariate Data Analysis. 7th ed. Prentice Hall.
- Haniffa, R., and Hudaib, M (2006). Corporate Governance Structure and Performance of Malaysian Listed Companies. J. Bus. Finan. Account. 33(7-8): 1034-1062.
- Hay, D., and Knechel, W. R. (2004). Evidence on the Association among Elements of Control and External Assurance. Working Paper (University of Auckland).
- Hayes, R., Dassen, R., Schilder, A., Wallage, P. (2005), Principles of Auditing, An Introduction of International Standards on Auditing, second edition. Pearson Education Limited. Harlow. England
- Hironori, F., Theodore, M., & Arnold, W. (2011). Client risk factors and audit resource allocation decisions. *International journal on accounting, auditing and accountability.* 47, 85-108. Abacus

The Institute of Internal Auditors (IIA 2003)

The Institute of Internal Auditors (IIA, 1999)

The Institute of Internal Auditors (IIA, 2009)

The Institute of Internal Auditors (IIA, 2014)

The Institute of Internal Auditors (IIA, 2015)

- Investopedia (2019). Per Capita Income (PCI). Investopedia, LLC. Date Accessed: 28/05/2019, from https://www.investopedia.com/
- Jensen, M. (1986): "The Agency Cost of Free-Cash Flow: Corporate Finance and Takeovers," American Economic Review, 76, 323-330.
- Kabare, M. M. (2014). The effect of risk based auditing on financial performance in commercial state corporations in Kenya. Accessed: erepository.uonbi.ac.ke Date: 13/11/2021
- Karapetrovic, O. (1999). Internal Audit Problems and possible Solutions CMD Workshop on Auditing in Private and Public Sector Organizations . (N. M. review, Ed.) Nigeria.
- Kasiva, M. V. (2012). The Impaxt of Risk Based Audit on Financial Performance in Commercial Banks in Kenya. MBA Project, University of Nairobi, School of Business, Nairobi.

- Kiptoo and Muthoni. (2013). a study to evaluate the internal audit functions' role in financial reporting in Eldoret municipal council in 2012. The study was published in the Journal of Emerging Trends in Economics and Management Services.
- Kunkel, J. (2004). The changing role of internal audit. Chain Store Age 3 pp-4-5
- Le Houerou, P., and Taliercio, R. (2002) Medium Term Expenditure Frameworks: From Concept to Practice. Preliminary Lessons from Africa. Washington: World Bank
- Lutta, S. E. (2012). Determinants of adoption of risk based audit in public sector in Kenya. Unpublished MBA Project, University of Nairobi.
- Marks, Norman. (2007). Internal audits of governance: assessing organizational governance can be complicated and may involve political risk, but it should still be given strong consideration in the audit plan. Internal Auditor (Vol. 64, Issue 6). Institute of Internal Auditors, Inc.
- Martin, J. D., and Petty, J. W. (2000). Value Based Management. Harvard Business School Press
- Masika, P. M. (2012). The effect of the quality of risk-based internal auditing on the effectiveness of internal audit in regulatory state corporations in Kenya. Unpublished MBA Project, University of Nairobi.
- Memba, M. A. (2015). *Risk Based Internal Auditing:* An Introduction, Accessed: www.internalaudit.biz. Date: 12/11/2021
- Millichamp, W. (2002). "Embracing risk based auditing in Internal corporate governance". *Finance Review*, (pp.17-20).
- Mutua, V. K. (2012). The impact of risk based audit on financial performance in commercial banks in Kenya. Unpublished MBA Project, University of Nairobi
- Nyarombe F., Musau, E. G., Kavai, I., and Kipyego, K. (2015). The effect of risk based audit approaches on implementation of internal control systems; a case of Uasin Gishu County. International Journal of Business and Management Invention, 4(1), 12-32.
- Obrycki, D. J., and Resendes, R. (2000), —Economic margin: The link between EVA and CFROI||, in F.J. Fabozzi, and J.L. Grant, (eds.), Value-based metrics: Foundations
- OECD Principles of Corporate Governance (1999 updated in 2004).
- Peterson, P. P., and Peterson, D. R. (1996), Company performance and measures of value added. The Research Foundation of The Institute of Chartered Financial Analysts, Charlottesville
- Prinsloo, J. (2008). The Development and Evaluation of Risk Based Audit Approaches. Magister in Accounting, University of the Free State, Faculty of economic and management science (centre for Accounting).
- Reilly, F. K., and Brown, K. C. (2003). Investment analysis portfolio management, 7th edition, Thomson-South Western, Cincinnati
- Sanda, A., Aminu, S. M., and Garba, T. (2005). Corporate Governance Mechanisms and Firm Financial Performance in Nigeria. AERC Research Paper 149, African Economic Research Consortium, Nairobi
- Sherer, M., & Kent, D. (1983). Auditing and Accountability. London: Pitman.
- Speklé, Roland. F. (2001). Explaining management control structure variety: a transaction cost economics perspective. Accounting, Organizations and Society. Volume 26, Issues 4–5
- Stewart, G.B. III (1991). The quest for value. New York: Harper-Collins
- Vinnari, E., and Skaerbaek, P. (2014). The uncertainties of risk management: A field study on risk management internal audit practices in a Finnish municipality. Accounting, Auditing & Accountability Journal. ISSN: 0951-3574

Vol. 12, No. 5, 2022, E-ISSN: 2222-6990 © 2022 HRMARS

- Wallace, W. A. and Kruetzfeldt, R. W. (1991). Distinctive characteristics of entities with an internal audit department and the association of the quality of such departments with errors. https://doi.org/10.1111/j.1911-3846.1991.tb00826.x Date: 23/11/2021
- Wery and Lambin. (2012). A study tithed 'enhancing the internal audit function through the internal audit maturity model'.
- Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. The journal of Law and Economics, 22(2), 233-261.
- Williamson, O. E. (1996). The Mechanisms of Governance. New York: Oxford University Press.
- Williamson, O. E. (2002). The Theory of the Firm as Governance Structure: From Choice to Contract. Journal of Economic Perspectives, 16(3): 171-195
- Williamson, O. E. (2002). The Theory of the Firm as Governance Structure: From Choice to Contract. Journal of Economic Perspectives, 16(3): 171-195
- Young, S., and O'byrne, S. F. (2001). EVA and value-based management: a practical guide to implementation, 2.
- Ziegenfus, M. (2000). COSO Based Auditing (pp 40-56)
- Zygmont, C., & Smith, M. R. (2014). Robust factor analysis in the presence of normality violations, missing data, and outliers: Empirical questions and possible solutions. The Quantitative Methods for Psychology, 10 (1), 40-55.