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RESEARCH ARTICLE

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LIQUIDITY RISK, CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE: A CASE STUDY OF SELECTED BANKS IN GHANA

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ABSTRACT

This study explores the relationship between liquidity risk, corporate governance, and financial performance in Ghana's banking sector. Using a longitudinal dataset from 2018 to 2022, which includes data from 14 commercial banks, the research investigates the impact of liquidity management practices and governance structures, specifically audit quality and board size on banks' financial performance. The findings indicate that audit fees have a statistically significant negative relationship with return on assets (ROA), while the capital adequacy ratio (CAR) positively correlates with ROA. This study recommends enhancing corporate governance practices to improve financial performance and strengthen the banking sector's stability.

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INTRODUCTION

The banking sector plays a pivotal role in the economic development of nations, serving as a critical intermediary for financial resources (Atuahene & Xusheng, 2024; Bamfo, 2024). In Ghana, the efficiency and stability of banks are essential for fostering economic growth and maintaining financial stability (Emmanuel *et al.*, 2024). However, the industry has faced significant challenges, particularly related to liquidity risk and corporate governance. Liquidity risk arises when banks are unable to meet their short-term financial obligations, which can lead to severe consequences, including insolvency and loss of depositor confidence. Effective liquidity management is crucial not only for the survival of banks but also for the overall health of the financial system. The importance of effective risk management became particularly evident during the global financial crisis of 2007 and 2008. This turmoil revealed serious weaknesses in how individual banks managed liquidity risk (Cardoso and Cardoso, 2024). Over time, the crisis highlighted the necessity for banks to have thorough and robust liquidity management policies to navigate periods of uncertainty effectively (Alkhazaleh, 2017). In the aftermath of the crisis, regulators and policymakers recognized the need for improved liquidity risk management to ensure the performance and stability of the banking sector. As a key response, the Basel Committee on Banking Supervision introduced Basel III, which established various liquidity risk measures, including liquidity coverage ratios and net stable funding ratios. The importance of corporate governance in

banks also increased significantly following the collapse of high-profile institutions such as Enron and WorldCom in the early 2000s (Afriyie *et al.*, 2021; Adams, 2019). In the wake of these crises, the public called for greater transparency and organizational stewardship. This demand led to the establishment of the Sarbanes-Oxley (SOX) Act of 2002 in the United States and the Basel frameworks (currently encompassing Basel I, II, III, and IV), aimed at enhancing corporate accountability and improving risk mitigation, ethical conduct, and legitimate business operations (Agyemang Badu & Appiah, 2017; Fidanoski *et al.*, 2014). In Ghana, corporate governance initiatives began in the early 1980s, driven by calls from investors and the public for transparency, accountability, and improved performance from corporate managers. This movement gained momentum in the early 2000s after the collapse of the Bank for Housing and Construction and the Cooperative Bank of Ghana. Corporate governance encompasses the structures and processes for decision-making in organizations, ensuring that banks operate in a manner that is accountable, transparent, and aligned with the interests of stakeholders. Poor corporate governance has been implicated in financial crises affecting numerous institutions globally, including those in Ghana. The interplay between liquidity risk and corporate governance is critical, as governance practices can significantly influence a bank's ability to manage liquidity effectively. Efficient liquidity management enables banks to meet their obligations, while strong governance structures promote accountability and effective decision-making. Together, they underpin the overall health of the banking sector, influencing its ability to support economic growth

(Thin *et al.*, 2022; Kapur *et al.*, 2022). Recent studies have shown that Ghanaian banks face significant challenges related to liquidity risk and corporate governance. Issues such as inadequate liquidity, governance failures, and regulatory compliance have led to instability in the financial sector, resulting in the closure of numerous financial institutions and raising concerns about the sustainability of banking operations in the country (Bank of Ghana, 2019; Wang *et al.*, 2020). This study aims to investigate the effects of liquidity risk and corporate governance on the financial performance of banks in Ghana. Specifically, it seeks to ascertain the level of liquidity, assess corporate governance practices among banks, evaluate the financial performance of commercial banks, investigate the effects of liquidity risk on bank performance, and explore the relationship between corporate governance and financial performance. By employing a longitudinal dataset from 2018 to 2022, this research will contribute to the existing literature by providing empirical evidence on the relationships between these variables. Furthermore, the findings will offer practical recommendations for banking institutions and policymakers to enhance governance practices and improve liquidity management, ultimately leading to better financial performance. The study can inform the development of regulations and guidelines that promote a stable banking environment. Additionally, the results will support future research efforts aimed at enhancing the resilience and performance of the financial sector (Almaqtari *et al.*, 2020; Moyo & Tursoy, 2020).

REVIEW OF RELATED LITERATURE

Theoretical Framework

Agency Theory: The relationship between liquidity risk, corporate governance, and financial performance is grounded in several theoretical perspectives, with Agency Theory being particularly influential. Agency Theory posits that there is an inherent conflict of interest between managers (agents) and shareholders (principals) due to differing objectives. Agency theory describes the relationship between principals (such as shareholders) and agents (like company executives and managers). Shareholders, as the owners, hire agents to manage the business on their behalf (Abdullah & Valentine, 2009). According to Daily *et al.* (2003), two key factors contribute to the relevance of agency theory: its simplicity, reducing corporate dynamics to the interaction between managers and shareholders, and the assumption that managers may act in their self-interest. In this framework, shareholders expect agents to prioritize their interests when making decisions. However, agents may not always act in alignment with those interests, potentially leading to self-serving behavior and a misalignment of goals between principals and agents (Abdullah & Valentine, 2009; Padilla, 2000). Agency theory is particularly useful for examining the relationship between ownership and management structures. When these roles are separated, the agency model can be applied to align management's objectives with those of the owners. This theory emphasizes the need for a robust governance structure that holds employees accountable for their responsibilities, rather than solely catering to shareholder demands, which can pose challenges to effective governance (Abdullah & Valentine, 2009).

This framework also suggests that effective corporate governance mechanisms are essential in aligning the interests of managers with those of shareholders, thereby enhancing financial performance (Meckling & Jensen, 1976). Moreover, Agency Theory examines the dynamics between a company's owners and its managers, who act as agents for the owners. This theory highlights potential conflicts of interest that arise when ownership and control diverge. In banking, these conflicts can lead to agency problems, especially as ownership becomes more diverse among institutional and individual shareholders. Issues may include management pursuing high-risk investments without owner consent, particularly in the context of government-backed deposit insurance that obscures risk exposure (Tekin & Polat, 2020; Kaaroud *et al.*, 2020).

Stakeholder Theory: This theory posits that organizations should consider the interests of all stakeholders, not just shareholders. A stakeholder can be defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives." According to Wheeler *et al.* (2003), stakeholder theory emerges from a blend of sociological and organizational disciplines. Rather than being a formal, unified theory, it represents a broad research tradition that integrates philosophy, ethics, political theory, economics, law, and organizational science. In the banking context, stakeholders include customers, employees, regulators, and the community. Strong corporate governance can enhance stakeholder trust and satisfaction, which may lead to better liquidity management and improved financial performance, as banks that prioritize stakeholder interests may experience higher customer loyalty and lower risk of default. A stakeholder can be defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives." According to Wheeler *et al.* (2003), stakeholder theory emerges from a blend of sociological and organizational disciplines. Rather than being a formal, unified theory, it represents a broad research tradition that integrates philosophy, ethics, political theory, economics, law, and organizational science. In contrast to agency theory, where managers primarily serve the interests of stakeholders, stakeholder theorists contend that managers have a network of relationships they must address. This network includes suppliers, employees, and business partners. Stakeholder theory emphasizes that these relationships are equally important as the owner-manager-employee dynamic highlighted in agency theory (Abdullah & Valentine, 2009; Freeman, 1999).

Liquidity Risk: Liquidity risk refers to the potential inability of a bank to meet its short-term financial obligations without incurring significant losses (Ahamed, 2021). The importance of maintaining adequate liquidity is underscored by various studies, which highlight that insufficient liquidity can lead to severe financial distress, particularly during economic downturns (Onyekwelu *et al.*, 2018). Liquidity management encompasses strategies that ensure banks can fulfill withdrawal demands and other obligations, thus safeguarding financial stability (Quarshie, 2020).

Corporate Governance: Corporate governance encompasses the structures and processes that ensure the accountability of a bank's management to its stakeholders. Strong corporate governance is linked to improved financial performance, as it fosters transparency, accountability, and risk management (Almaqtari *et al.*, 2020). Previous research has shown that factors such as board size and audit quality play critical roles in determining governance effectiveness. For instance, larger boards may provide diverse perspectives but can also lead to coordination problems (Moyo & Tursoy, 2020). Conversely, high-quality audits are essential for enhancing trust and reducing information asymmetry between stakeholders (Dat *et al.*, 2020).

Financial Performance: Financial performance is often measured through indicators such as Return on Assets (ROA) and Return on Equity (ROE). These metrics provide insights into a bank's efficiency in generating profits relative to its assets and equity. Studies indicate that banks with strong liquidity positions tend to exhibit better financial performance, as they can capitalize on investment opportunities and mitigate potential losses during financial stress (Ebenezer *et al.*, 2019). However, the relationship between liquidity and profitability is complex; some research suggests that excessive liquidity may lead to lower returns due to opportunity costs associated with holding liquid assets (Tram *et al.*, 2021).

Concepts of Corporate Governance (CG): Corporate governance (CG) has existed since the dawn of social organization and continues to evolve. Berber *et al.* (2019) define CG as the system through which stakeholders influence management to protect their interests. Chijoke-Mgbame *et al.* (2020) describe it as a framework that oversees various market participants, including managers, employees, customers, shareholders, suppliers, and the board of directors. According to Njekang and Afuge (2017), CG provides guidance for a

company's board to fulfill its responsibilities in a way that satisfies shareholders and addresses moral hazard concerns. CG encompasses several key themes, including transparency and fiduciary duty, which help ensure ethical behavior and protect shareholders. Another important aspect is economic efficiency, where CG structures aim to optimize output while prioritizing shareholder welfare. Additionally, the stakeholder perspective emphasizes accountability to various parties, including employees and the environment (Scherer & Voegtlin, 2020). This study will focus on board size and audit quality as proxies for corporate governance.

Board Size: The board of directors is responsible for strategic decisions that affect a company's financial performance. Board size refers to the number of members, with some studies suggesting that larger boards can enhance decision-making due to diverse perspectives. Conversely, others argue that smaller boards may be more efficient as they can act more quickly (Al-Ahdal *et al.*, 2020). Ongsakul *et al.* (2021) challenge the assumption that larger boards perform worse, suggesting that effectiveness may decrease if boards become overwhelmed by agency issues, with some directors contributing less actively. Maintaining a board size of fewer than nine members may enhance effectiveness, as larger boards can struggle with consensus and productive debate (Yan *et al.*, 2021). Furthermore, larger boards may take on a more symbolic role rather than serving as extensions of management (Altass, 2022). However, larger boards can also benefit from greater diversity in expertise and perspectives (Al-Ahdal *et al.*, 2020), while smaller boards may focus more on decision-making, leaving less time for oversight (Altass, 2022).

Audit Quality: The concept of audit quality traces back to DeAngelo (1981), who defined it as the likelihood that an auditor will identify and disclose violations in a client's accounting system. Auditor experience is correlated with the ability to detect violations, emphasizing the importance of auditor independence. Auditing involves verifying financial reports for clients, aiming to assess fairness rather than detect errors or fraud (Al-Ahdal & Hashim, 2022). Elewa and El-Haddad (2019) describe auditing as an impartial examination of financial statements and supporting documents to provide a reliable opinion on whether a company's financial position aligns with accepted accounting standards. The Public Sector Government Accountability Office (1986) defines audit quality as the completion of audit services in accordance with professional standards and specific criteria (Rana *et al.*, 2022). Higher audit quality is believed to enhance the reliability of financial reporting (Cordery & Hay, 2022). This study will use audit fees as a proxy for audit quality.

Liquidity Risk and Corporate Governance (CG): Aslam and Haron (2021) examined the relationship between corporate governance and risk-taking in Islamic banks, focusing on credit, liquidity, and operational risks. Their study, which utilized panel data from 129 Islamic institutions across 29 countries from 2008 to 2017, found that board size and the presence of a Sharia board positively influenced credit and liquidity risk. Conversely, board independence and CEO authority were negatively correlated with these risks, indicating a complex relationship between audit committee dynamics and bank risk. Coffee (1991) argued that liquid stock markets discourage institutional blockholders from engaging in corporate governance, as selling shares is cheaper than addressing governance issues. Maug (1998) countered this by stating that liquidity allows blockholders to enhance their holdings, thus promoting better governance. Supporting this, Norli *et al.* (2015) showed that increased liquidity raises the likelihood of shareholder activism, while Helling *et al.* (2020) found that large institutional shareholders have a more significant impact on R&D investments in liquid US companies. John *et al.* (2019) noted that reforms improving liquidity in the Chinese stock market led to enhanced governance rather than share sales. These findings suggest a bidirectional relationship between CG and liquidity risk.

Board Size and Financial Performance: Olokoyo *et al.* (2019) studied the corporate governance and performance of Nigerian banks,

finding a delayed negative correlation between board size and bank performance. Their analysis indicated that larger boards do not necessarily improve performance. Orozco *et al.* (2018) found that while larger boards correlated with better corporate reputation (according to resource dependence theory), they were linked to lower financial performance, supporting agency theory. Thus, they hypothesized that board size significantly influences financial performance.

Audit Quality and Financial Performance: Alsmady (2022) investigated the effects of financial reporting quality, audit quality, and earnings power on company performance in six GCC countries, concluding that higher audit quality positively affects performance. Similarly, Phan *et al.* (2020) found a positive relationship between audit quality and profitability in Vietnam. Tarmidi *et al.* (2019) reported that investors reacted negatively to audit quality in Indonesian manufacturing firms, emphasizing the need to understand audit quality's influence on performance. Mahendri and Irwandi (2018) found no significant effect of audit quality on financial reporting in Indonesian firms, while Hazaea *et al.* (2020) confirmed a positive effect on performance in Yemen. Consequently, the hypothesis emerged that audit quality significantly affects financial performance.

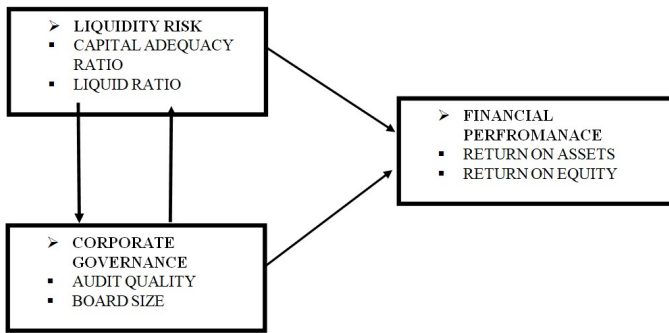
Liquid Ratio and Financial Performance: Ichsan *et al.* (2021) analyzed the financial performance of Islamic banks during the Covid-19 pandemic, finding that the liquidity ratio positively influenced return on assets (ROA). Almaqtari *et al.* (2019) reported that various factors, including the liquidity ratio, significantly affected return on equity (ROE) in Indian commercial banks. Thus, it is hypothesized that there is a significant relationship between the liquidity ratio and financial performance.

Capital Adequacy and Financial Performance: Mbaeri *et al.* (2021) explored the impact of the capital adequacy ratio on Nigerian banks, finding a positive effect on return on capital employed. Syafrizale *et al.* (2023) found that capital adequacy partially did not affect ROA in Aceh Bank. Isayas (2022) indicated that factors like liquidity ratio and capital adequacy positively influenced bank performance in Ethiopia. Bhattarai (2021) confirmed that capital adequacy ratios positively impact ROA and ROE. Therefore, the hypothesis is that capital adequacy has a positive relationship with financial performance.

Existing Research and Gaps in the Literature: Previous studies have explored the relationships between liquidity risk, corporate governance, and financial performance. Research indicates that effective corporate governance, particularly elements like board size and audit quality, significantly influences liquidity management and overall financial performance (Aslam & Haron, 2021; Olokoyo *et al.*, 2019). However, findings are inconsistent; some studies show a positive correlation between liquidity and profitability, while others suggest that higher liquidity can lead to lower returns due to opportunity costs (Ichsan *et al.*, 2021; Edem, 2017). Also, other related studies have produced mixed results regarding the interplay between liquidity risk, corporate governance, and financial performance. Some scholars argue that effective governance structures positively influence a bank's ability to manage liquidity risk, ultimately enhancing financial performance (Kumar *et al.*, 2022). In contrast, other studies have found no significant correlation between liquidity risk and financial performance, suggesting that various contextual factors may moderate these relationships (Igan & Mirzaei, 2020). This inconsistency highlights the need for further investigation, particularly in developing economies like Ghana. Despite this growing interest, there remains a paucity of research focused specifically on the Ghanaian banking sector. Recent banking crises in Ghana highlight the urgency of examining these dynamics within this context. Moreover, gaps exist regarding the specific impacts of liquidity ratios and capital adequacy on financial performance in different banking environments, particularly in developing economies like Ghana. This study aims to address these gaps by providing empirical evidence on how liquidity risk and

corporate governance affect the financial performance of banks in Ghana.

Conceptual Framework



Hypothesis:

- H_0 : There is no significant relationship between Board size and financial performance.
- H_1 : There is a significant relationship between Board size and financial performance.
- H_0 : There is no significant relationship between Audit Quality and financial performance.
- H_1 : There is a significant relationship between Board size and financial performance.
- H_0 : There is no significant relationship between liquid ratio and financial performance.
- H_1 : There is a significant relationship between liquid ratio and financial performance.
- H_0 : There is no significant relationship between Capital Adequacy ratio and financial performance
- H_1 : There is a significant relationship between Capital Adequacy ratio and financial performance

METHODS

This study employs a longitudinal research design to analyze the effects of liquidity risk and corporate governance on the financial performance of banks in Ghana over a five-year period, from 2018 to 2022. A longitudinal approach allows for the examination of trends and changes in the variables of interest over time, providing a comprehensive understanding of their relationships. The research design serves as a roadmap for the study, detailing the procedures for data collection and analysis. This study adopts a descriptive panel research design, which combines cross-sectional and time-series features, allowing for observation of sample units over time (Chen *et al.*, 2023; Salter, 2023). A quantitative research approach was utilized, focusing on numerical data collection and analysis to identify patterns and relationships among variables. This method employed statistical tools to evaluate hypotheses and make predictions based on empirical evidence, making it suitable for assessing the relationships in this study (Franz, 2023). The study population comprised twenty banks that were members of the Ghana Association of Bankers (GAB), selected for their adherence to established codes of conduct and their credibility within the Ghanaian banking sector. A convenience sampling method was used to select 14 out of the 20 member banks based on data availability, allowing for practical data collection from accessible institutions (Engel *et al.*, 2023; Campbell *et al.*, 2020).

Measurement of variables Measuring Financial Performance: To measure financial performance, the researcher adopted Return on assets (ROA) and Return on equity (ROE) as proxies for financial performance because a higher ROA indicates greater asset efficiency and ROE indicates whether management is increasing the company's value at an acceptable rate.

Independent Variables

Data Analysis Estimation Techniques: This thesis employed two estimation techniques: Fixed Effects (FE) and Random Effects (RE)

models. Both models were used in econometrics to analyze panel data, focusing on the relationship between bank-specific factors and financial performance.

Fixed Effects Model (FE): The FE model assumed that there was a correlation between unobserved, time-invariant characteristics of banks and the explanatory variables. This meant that individual bank traits remained constant over time, and the model controlled for these unique effects to avoid bias in estimations. By eliminating time-invariant effects, the FE model helped address endogeneity issues.

Random Effects Model (RE): In contrast, the RE model assumed that the unobserved bank-specific effects were independent of the explanatory variables. In this case, the assumption was that these effects did not influence the regression results, allowing for the inclusion of both time-variant and time-invariant variables. To determine which model was more appropriate for the study, the Hausman test was used to compare the RE and FE models.

$$\text{Model with fixed effects } i = (0 + i) + \alpha + i + \dots \dots \dots (1)$$

$$\text{Model of random effects } i = 0 + i + (i + i) \dots \dots \dots (2)$$

In the analysis, the constant component (denoted as 0) represents fixed or random effects specific to individuals or time, which are not included in the regression. The model assumes that errors are independent and identically distributed (IID) with a mean of zero and constant variance (denoted as σ^2). The study employed both the Fixed Effects Model (FE) and the Random Effects Model (RE) to analyze the relationship between liquidity risk, corporate governance, and financial performance in Ghana's banking sector. By using the FE model, the research captured variations in intercepts across individual banks, allowing for the examination of how time-invariant characteristics influenced financial outcomes. This model highlighted the impact of specific governance practices on financial performance while controlling for unobserved individual effects. In contrast, the RE model facilitated the exploration of the independence of individual-specific effects from explanatory variables, providing insights into how these factors interacted over time. The use of the Hausman test proved crucial in determining the most appropriate model for this analysis, ensuring that the findings were robust and reliable.

RESULTS

Descriptive Statistics: Table 1 provides a comprehensive overview of the descriptive statistics for Ghanaian commercial banks during the period 2018–2022, highlighting various financial metrics that reflect the sector's performance and stability. The table depicted the descriptive statistics for the key variables included in the study. The average liquidity ratio across the 14 banks was ascertained indicating a generally healthy liquidity position. The results of the average board size, suggesting a trend towards more collaborative governance structures. In terms of financial performance, the average Return on Assets (ROA) and the average Return on Equity (ROE) stood reflected an overall strong profitability within the sector. The correlation matrix is essential for understanding the relationships between the model's variables, helping to identify potential issues like multicollinearity and biased estimates. It also reveals the degree of correlation between dependent and independent variables. This section examines the relationship between bank liquidity risk, corporate governance, and financial performance. For clarity of the presentation, the banks that had no significant influence on ROA were removed from the table. The full regression results can be seen in Appendix B. The results of the panel least squares analysis between the dependent and independent variables are displayed in Table 4. Table 5 presents the outcomes of the random effect analysis conducted to examine the relationship between the dependent and independent variables. The adjusted R-squared value of 54.7 percent suggests that the independent variables included in the model explain about 54.7 percent of the variation seen in the dependent variable. Additionally, a Durbin

Watson test value of approximately 1.50 suggests that the model does not exhibit auto correlation. The findings of the random effects model suggest that there is a negative relationship between audit quality and return on assets (ROA).

The Hausman test was employed to decide between fixed and random effects models. The null hypothesis for the houseman test is that random effect model is the most appropriate model for the analysis while the alternative hypothesis states that fixed effects model is more

Table 1. Descriptive Statistics of variables

Statistics	Audit Fee ('000)	Board Size	Liquid Ratio	CAR	ROA	ROE
Mean	720470.1	10.17143	87.52543	21.62886	3.207	20.73857
Standard Error	63151.9	0.265295	5.673885	1.365778	0.295173	2.464259
Standard Deviation	528366.7	2.219619	47.47113	11.42691	2.469591	20.61747
Sample Variance	2.79E+11	4.926708	2253.508	130.5744	6.098882	425.0801
Kurtosis	8.776314	0.630117	1.19636	4.23478	3.172543	23.94215
Skewness	2.501854	0.735103	0.698464	0.535818	1.409935	3.778306
Range	3187000	10	231.8	82.02	13.8	177.4
Minimum	108000	6	1.5	-19.18	-2.8	-25
Maximum	3295000	16	233.3	62.84	11	152.4
Sum	5043290	712	6126.78	1514.02	224.49	1451.7
Count	70	70	70	70	70	70

(Source: Authors Computation, 2025)

Table 2. Correlation matrix

	Audit Fee	Board Size	Liquid Ratio	CAR	ROA	ROE
Audit Fee	1.00	0.05	-0.21	-0.10	-0.23	-0.20
BoardSize	0.05	1.00	0.35	-0.30	-0.26	-0.13
LiquidRatio	-0.21	0.35	1.00	-0.04	-0.04	-0.01
CAR	-0.10	-0.30	-0.04	1.00	0.57	-0.15
ROA	-0.23	-0.26	-0.04	0.57	1.00	-0.71
ROE	-0.20	-0.13	-0.01	0.15	0.71	1.00

(Source: Authors Computation, 2025)

Table 3. Probability values (Entries above the diagonal are adjusted for multiple tests)

	Audit Fee	Board Size	Liquid Ratio	CAR	ROA	ROE
Audit Fee	0.00	0.66	0.08	0.41	0.06	0.10
BoardSize	0.66	0.00	0.00	0.01	0.03	0.28
LiquidRatio	0.08	0.00	0.00	0.75	0.73	0.96
CAR	0.41	0.01	0.75	0.00	0.00	0.22
ROA	0.06	0.03	0.73	0.00	0.00	0.00
ROE	0.10	0.28	0.96	0.22	0.00	0.00

(Source: Authors Computation, 2025)

Fixed and Random Effects Estimations for ROA

Table 4. Fixed effects estimation

Dependent Variable: ROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDIT_FEE	-2.94E-06	8.06E-07	-3.642060	0.0007
BOARD_SIZE	0.029346	0.153683	0.190953	0.8494
CAPITAL_ADEQUACY	0.030545	0.034095	0.895880	0.3748
LIQUID_RATIO	-0.002238	0.009094	-0.246065	0.8067
ECOBANK	4.003008	1.302867	3.072462	0.0035
GCBANK	3.168055	1.513211	2.093599	0.0416
GTBANK	5.987899	1.579466	3.791090	0.0004
SCBANK	2.763584	1.152227	2.398472	0.0204
YR_2019	0.468015	0.630970	0.741738	0.4619
YR_2020	0.545670	0.641547	0.850553	0.3992
YR_2021	0.565192	0.688578	0.820810	0.4158
YR_2022	1.346429	0.740370	1.818589	0.0752
C	2.617709	1.937322	1.351200	0.1830
R-squared	0.704362	Mean dependent var		3.207000
Adjusted R-squared	0.575021	S.D. dependent var		2.469591
S.E. of regression	1.609938	Akaike info criterion		4.041545
Sum squared resid	124.4111	Schwarz criterion		4.748215
Log likelihood	-119.4541	Hannan-Quinn criter.		4.322243
F-statistic	5.445754	Durbin-Watson stat		1.737482
Prob(F-statistic)	0.000001			

(Source: Authors Computation, 2025)

Table 5. Random effect estimation

Dependent Variable: ROA
 Periods included: 5
 Cross-sections included: 14
 Total panel (balanced) observations: 70
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDIT_FEE	-1.48E-06	5.07E-07	-2.917702	0.0015
BOARD_SIZE	-0.070271	0.123683	-0.568155	0.5243
CAPITAL_ADEQUACY	0.073143	0.023764	3.077891	0.0031
LIQUID_RATIO	-0.002270	0.006288	-0.361070	0.7192
C	3.603858	1.486952	2.423654	0.0182

Weighted Statistics			
R-squared	0.635776	Mean dependent var	3.217246
Adjusted R-squared	0.517516	S.D. dependent var	2.486185
S.E. of regression	1.707675	Sum squared resid	151.5500
F-statistic	7.471126	Durbin-Watson stat	1.499751
Prob(F-statistic)	0.002972		

(Source: Authors Computation, 2025)

Table 6. Hausman Test Results

Correlated Random Effects - Hausman Test
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.033380	4	0.0111

(Source: Authors Computation, 2025)

Fixed and Random Effect Estimations for ROE

Table 7. Fixedeffects for ROE

Dependent Variable: ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDIT_FEE	-3.39E-05	8.87E-06	-3.819843	0.0004
BOARD_SIZE	0.556971	1.690194	0.329531	0.7432
CAPITAL_ADEQUACY	0.010576	0.374975	0.028206	0.9776
LIQUID_RATIO	-0.074669	0.100015	-0.746578	0.4590
CALBANK	24.17786	12.92129	1.871165	0.0674
ECOBANK	35.71719	14.32884	2.492679	0.0162
GCEBANK	31.15808	16.64218	1.872235	0.0673
UMB	-19.01767	10.98547	-1.731166	0.0898
YR_2019	0.501401	6.939368	0.072255	0.9427
YR_2020	3.356241	7.055692	0.475678	0.6365
YR_2021	5.383266	7.572934	0.710856	0.4806
YR_2022	23.73320	8.142538	2.914718	0.0054
C	33.58798	21.30653	1.576417	0.1215

R-squared	0.586948	Mean dependent var	23.73857
Adjusted R-squared	0.362488	S.D. dependent var	21.61747
S.E. of regression	17.70598	Akaike info criterion	8.836959
Sum squared resid	15048.09	Schwarz criterion	9.543629
Log likelihood	-287.2936	Hannan-Quinn criter.	9.117657
F-statistic	4.169418	Durbin-Watson stat	1.643503
Prob(F-statistic)	0.013563		

(Source: Authors Computation, 2025)

Table 8. Random effects estimation for ROE

Dependent Variable: ROE
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDIT_FEE	-1.60E-05	5.71E-06	-2.797120	0.0069
BOARD_SIZE	-0.056896	1.280025	-0.044449	0.9647
CAPITAL_ADEQUACY	0.215796	0.249084	0.866360	0.3897
LIQUID_RATIO	-0.034692	0.064027	-0.541831	0.5899
YR_2019	-0.260762	6.755213	-0.038602	0.9693
YR_2020	1.056200	6.816212	0.154954	0.8774
YR_2021	-0.862268	7.097151	-0.121495	0.9037
YR_2022	16.18855	7.292447	2.219907	0.0302
C	27.97440	15.44930	1.810722	0.0751

Weighted Statistics			
R-squared	0.163124	Mean dependent var	14.11802
Adjusted R-squared	0.053370	S.D. dependent var	19.00574
S.E. of regression	18.49162	Sum squared resid	20858.34
F-statistic	5.486268	Durbin-Watson stat	1.462510
Prob(F-statistic)	0.018097		

(Source: Authors Computation, 2025)

appropriate. The decision rule is that at a p-value of less than 5%, one must reject the null hypothesis and choose the alternative of fixed effects model. With a p-value of 0.0111, the Hausman test for this study indicates that the fixed effects model is the appropriate model for the model where ROA is the measure of financial performance.

Table 9. Random effects estimation for ROE

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.286665	8	0.2455

(Source: Authors Computation, 2025)

DISCUSSIONS

The discussion highlights significant findings regarding the financial performance of Ghanaian banks, focusing on audit fees, corporate governance, liquidity ratios, and capital adequacy. Audit fees varied widely, suggesting that factors like bank size and complexity influence costs. The average board size of 10 members aligns with regulatory recommendations, potentially enhancing decision-making and risk management. The liquidity ratio averaged 87%, exceeding regulatory requirements, but some banks faced challenges with a minimum ratio of 1.5%. The average Capital Adequacy Ratio (CAR) was 21.62%, well above the minimum standards, indicating a robust capital base, although some banks exhibited vulnerabilities with a minimum CAR of -19%. Profitability metrics revealed that Return on Assets (ROA) averaged 3.20%, below the desired minimum, while Return on Equity (ROE) averaged 20.7%, suggesting reliance on debt financing. Correlation analysis indicated negative relationships between audit fees and board size with ROA and ROE, although these correlations were weak. The liquidity ratio showed no significant correlation with financial performance, while CAR had a strong positive correlation with ROA, suggesting that improved capital adequacy could enhance profitability. The study found that audit quality negatively impacted ROA, potentially due to conservative accounting practices and increased disclosures that could erode investor confidence. This finding contrasts with previous studies that suggested higher audit quality improves financial performance (Alsmady, 2022; Ugwu *et al.*, 2020). The results also indicated that board size, liquidity ratios, and CAR did not significantly affect ROA, while certain banks like Ecobank and GT Bank demonstrated positive effects on ROA due to effective management practices. The random effects analysis confirmed a significant positive relationship between CAR and ROA, emphasizing the importance of maintaining adequate capital levels for financial stability. Despite a reported increase in ROE for 2022, liquidity risk did not significantly influence ROA or ROE, suggesting that Ghanaian banks managed their liquidity effectively during the study period. The negative correlation between audit quality and financial performance raises questions about the effectiveness of governance structures, indicating that factors beyond audit quality, such as board dynamics, may play a more critical role in influencing performance. Overall, the findings underscore the complexity of the banking sector's financial landscape and the need for a multifaceted approach to governance and performance management.

CONCLUSION

In conclusion, this study highlights the intricate dynamics between liquidity risk, corporate governance, and financial performance in Ghana's banking sector. While liquidity levels appear adequate, their lack of impact on profitability underscores the necessity for a broader approach to financial management. Enhancing corporate governance practices, particularly regarding audit quality, could lead to improved financial outcomes and contribute to the overall stability of the banking sector.

Implications for Practice: These findings have several implications for banking practitioners and policymakers in Ghana. First, it is essential for banks to focus not only on maintaining liquidity but also on integrating strategic management practices that enhance profitability. Additionally, the results call for a reevaluation of governance structures, particularly concerning audit processes. Banks should consider adopting more comprehensive governance frameworks that foster better decision-making and oversight.

Limitations and Future Research: While this study contributes valuable insights, it has limitations that should be acknowledged. The reliance on secondary data may introduce biases, and the focus on a specific geographic context may limit the generalizability of the findings. Future research could explore longitudinal studies across different regions or banking sectors to validate these results further and investigate other governance mechanisms that may impact financial performance.

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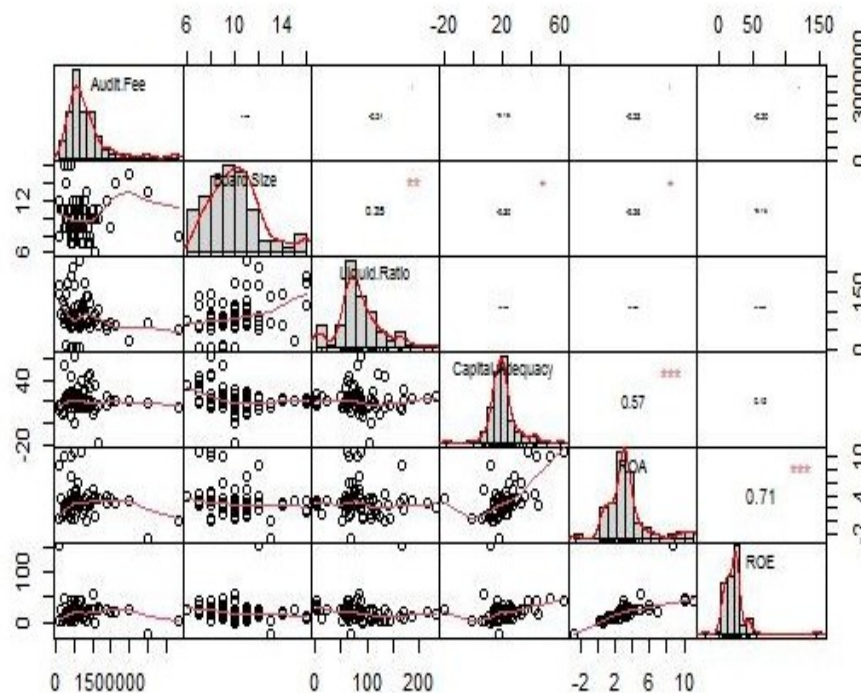
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APPENDIX

Appendix A: Pairwise Correlation Chart



Appendix B: Full Fixed Effects Regression Analysis

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 08/20/23 Time: 03:06
 Sample: 2018 2022
 Periods included: 5
 Cross-sections included: 14
 Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AUDIT_FEE	-2.94E-06	8.06E-07	-3.642060	0.0007
BOARD_SIZE	0.029346	0.153683	0.190953	0.8494
CAPITAL_ADEQUACY	0.030545	0.034095	0.895880	0.3748
LIQUID_RATIO	-0.002238	0.009094	-0.246065	0.8067
CALBANK	1.117448	1.174883	0.951114	0.3463
ECOBANK	4.003008	1.302867	3.072462	0.0035
FIDELITYBANK	0.205495	1.447550	0.197226	0.0445
FIRSTATLANTIC	-0.298165	1.143390	-0.260773	0.7954
GCEBANK	3.168055	1.513211	2.093599	0.0416
GTBANK	5.987899	1.579466	3.791090	0.0004
PRUDENTIALBANK	-0.779290	1.202837	-0.647876	0.5202
SBBANK	0.920614	1.066764	0.862997	0.3924
SCBANK	2.763584	1.152227	2.398472	0.0204
SCBANK	-0.020168	0.941314	-0.021426	0.9830
UBA	1.664509	1.059701	1.570734	0.1228
UMB	-1.632236	0.998867	-1.634087	0.1088
ZENITHBANK	1.822577	1.359425	1.340697	0.1863
YR_2	0.468015	0.630970	0.741738	0.4619
YR_3	0.545670	0.641547	0.850553	0.3992
YR_4	0.565192	0.688578	0.820810	0.4158
YR_5	1.346429	0.740370	1.818589	0.0752
C	2.617709	1.937322	1.351200	0.1830
R-squared	0.704362	Mean dependent var	3.207000	
Adjusted R-squared	0.575021	S.D. dependent var	2.469591	
S.E. of regression	1.609938	Akaike info criterion	4.041545	
Sum squared resid	124.4111	Schwarz criterion	4.748215	
Log likelihood	-119.4541	Hannan-Quinn criter.	4.322243	
F-statistic	5.445754	Durbin-Watson stat	1.737482	
Prob(F-statistic)	0.000001			
