1   **Governance Deficits and Financial Fragility: An Analysis of Bank Failures in Ghana**

2   Emmanuel Osei-Dwomoh[1], Joseph Kofi Nkuah[2] and Gabriel Osei Forkuo[3],*

3   [1] Controller and Accountant General's Department, Kumasi, Ghana; https://orcid.org/0009-0001-3886-
4   3958

5   [2] Department of Management and General Studies, School of Business, Christian Service University, Post
6   Office Box 3110, Kumasi Angel Group, Kumasi Ghana

7   [3] Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Faculty
8   of Silviculture and Forest Engineering, Transilvania University of Brasov, Brasov, Romania;
9   https://orcid.org/0000-0001-8478-8066

10   **Corresponding author:** gabriel.forkuo@unitbv.ro; +40759761731

11

12   **Abstract**

13   This study explored the critical relationship between corporate governance practices and the incidence of
14   bank failures in Ghana, a key issue for the nation's financial stability and economic resilience. While
15   Ghana's banking sector has undergone significant modernization, recent high-profile bank failures have
16   cast doubt on the effectiveness of existing governance and regulatory frameworks. This research
17   quantitatively investigates how core governance factors—specifically board composition, risk
18   management, and regulatory compliance—influence bank stability. Analyzing data from 30 banks, the
19   study employs descriptive, correlation, and regression analyses to assess governance practices and their
20   linkage to financial distress indicators. The findings reveal a significant relationship between board
21   independence, robust risk management, regulatory compliance, and a reduced likelihood of bank failure.
22   Notably, a higher proportion of independent directors and stronger adherence to regulatory and corporate
23   governance codes are associated with lower non-performing loan ratios and fewer regulatory interventions.
24   These results highlight persistent gaps in governance that contribute to financial distress and underscore the
25   necessity of strengthening Ghana's banking oversight. The study provides valuable, evidence-based insights
26   for policymakers, regulators, and banking institutions on enhancing governance frameworks to prevent
27   future crises and foster a more resilient financial sector.

28   **Keywords**: Corporate Governance, Financial Stability, Board Composition, Regulatory Compliance, Risk
29   Management, Ghana.

30   **1. Introduction**

31   The banking sector's stability is crucial for a healthy economy, acting as a vital link for financial
32   intermediation, credit allocation, and the transmission of monetary policy. In emerging economies like
33   Ghana, a robust banking system is essential for sustainable development and investor confidence. Over the
34   past few decades, Ghana has undertaken significant financial sector reforms aimed at modernization and
35   growth, including adopting international banking standards and liberalizing the market to encourage
36   competition (Antwi-Bosiako, 2022; International Monetary Fund (IMF), 2008).

Despite these advancements, the sector has experienced periods of instability, culminating in several high-profile bank failures between 2017 and 2019 (Atuwo et al., 2025; Kawor et al., 2022; Osei et al., 2019; Torku & Laryea, 2021). This "banking sector clean-up" revealed deep-seated issues within the failed institutions, with regulatory reports from the Bank of Ghana (BoG) consistently citing severe deficiencies in corporate governance as a primary cause (Agyenim-Boateng et al., 2022; Banahene, 2018). These failures, which led to the revocation of licenses and the consolidation of several banks, resulted in significant economic consequences, including the erosion of public trust, financial losses for depositors and investors, and a threat to systemic stability (Affum, 2020; Bawumia, 2020).

Corporate governance provides the framework of rules, relationships, systems, and processes by which an institution is directed and controlled. In banking, its effectiveness is crucial for ensuring transparency, accountability, and prudent risk management, thereby safeguarding depositor funds and maintaining financial stability (Basel Committee on Banking Supervision, 2015). The recent crises in Ghana suggest a disconnect between the prescribed governance standards and their practical implementation, raising critical questions about the adequacy of existing policies and oversight mechanisms.

This study aimed to address this gap by empirically assessing the relationship between specific corporate governance practices and the likelihood of bank failures in Ghana. The primary objectives were to: assess the relationship between corporate governance practices (board composition, risk management) and the likelihood of bank failures in Ghana; identify key governance factors that contribute to bank failures; evaluate the effectiveness of current regulatory frameworks in preventing bank failures; provide evidence-based recommendations for strengthening corporate governance in Ghana's banking sector. By investigating these linkages, this paper can provide actionable insights for policymakers, regulators, and financial institutions to fortify the banking sector against future shocks.

2. Literature Review

2.1. Theoretical Frameworks of Corporate Governance

The relationship between corporate governance and institutional performance is explained through several established theories, each offering a distinct perspective on the dynamics between managers, boards, and stakeholders.

The agency theory is the most dominant framework in corporate governance research. It describes the relationship between principals (shareholders) and agents (managers), where a conflict of interest, or "agency problem," can arise if agents prioritize personal interests over those of the principals (Jensen & Meckling, 1976). In banking, this can manifest as excessive risk-taking, related-party lending, and financial misreporting—all of which were factors in the Ghanaian bank collapses (Bank of Ghana, 2019; Kauppinen, 2022; Torku & Laryea, 2021). Effective governance mechanisms, such as a strong, independent board, serve to monitor management and align incentives, thereby mitigating agency costs. In contrast, stewardship theory posits that managers are "stewards" motivated by a desire to act in the best interests of the organization and its owners (Davis, Schoorman, & Donaldson, 1997). This theory emphasizes trust, ethical behavior, and intrinsic motivation. From this perspective, bank failures can be seen as a breakdown of stewardship, where directors and executives abdicate their fiduciary duties. This framework helps explain why some Ghanaian banks remained resilient during the crisis, likely guided by strong ethical leadership and a long-term vision.

Stakeholder theory expands the focus of governance beyond shareholders to include a broader network of stakeholders such as depositors, employees, customers, and regulators (Freeman, 1984). This is particularly relevant for the banking sector, where public trust and systemic stability are paramount. The failure of a

80 bank impacts the entire economy. Weak governance structures that neglect the interests of key stakeholders,
81 such as non-compliance with regulatory directives from the Bank of Ghana, can precipitate institutional
82 collapse and erode depositor confidence (Atinyo & Kawor, 2022; Kawor et al., 2022).

83 **2.2. Empirical Literature Review**

84 **2.2.1 Board Composition and Bank Performance**

85 A substantial body of research links board composition to firm performance and risk-taking. A higher
86 proportion of independent, non-executive directors is generally associated with more effective monitoring
87 and better financial performance (Bhagat & Bolton, 2008). Specifically in banking, board independence
88 has been found to be negatively correlated with non-performing loans (NPLs), suggesting that independent
89 oversight improves credit risk management (Islam, 2020; Musah & Adutwumwaa, 2021; Ramadhanti et
90 al., 2021). Board diversity, including gender and expertise, has also been linked to improved decision-
91 making and risk assessment (Adams & Ferreira, 2007; García-Meca et al., 2015). Conversely, large boards
92 can sometimes lead to inefficiencies and slower decision-making, a concept noted by Jensen (1993).

93 **2.2.2 Risk Management and Regulatory Compliance**

94 Inadequate risk management is a direct antecedent of bank failure (Maseke & Swartz, 2021; Ogundele &
95 Nzama, 2025; Von Tamakloe et al., 2023). Effective risk management frameworks, which include robust
96 internal controls and adherence to standards like COSO ERM or ISO 31000, are critical for identifying,
97 assessing, and mitigating risks (Fraser & Simkins, 2016). In Africa, regulators have increasingly
98 emphasized risk-based supervision to build resilience (African Development Bank, 2025; Gerged et al.,
99 2022; International Finance Business Desk, 2024). Studies show that weak compliance with regulatory
100 frameworks is a strong predictor of bank distress (Demirgüç-Kunt & Detragiache, 2002). In Ghana, the
101 2017-2019 banking crisis was largely attributed to weak risk management, poor corporate governance, and
102 ineffective monitoring by the regulator (Agyenim-Boateng et al., 2022; Atuwo et al., 2025; Ofei et al.,
103 2020).

104 **2.2.3 The Ghanaian Context**

105 Ghana's regulatory framework has evolved significantly, with the Bank of Ghana implementing reforms to
106 align with international standards like the Basel Accords (Abdallah, 2015; Abunyuwah, 2020; MacCarthy
107 & Dery, 2016). The recent introduction of new Corporate Governance Directives aims to strengthen board
108 composition, risk management, and transparency (Atuwo et al., 2025; Ofori-Acquah et al., 2022; Templars,
109 2025). However, studies on the 2018 crisis revealed that many failed banks breached these regulations
110 through practices like interrelated lending and overriding internal controls (Adeabah & Andoh, 2020; Torku
111 & Laryea, 2021). This highlights a persistent gap between regulation and enforcement, a critical area this
112 study aims to address through empirical analysis.

113 **2.3. Conceptual Framework**

114 The theoretical perspectives and empirical findings reviewed culminate in the conceptual framework for
115 this study, as described below. This framework (see Figure 1) visually articulates the hypothesized causal
116 pathway from corporate governance deficits to bank failure within the Ghanaian context. It posits that
117 weaknesses in foundational governance pillars create an environment where poor operational decisions
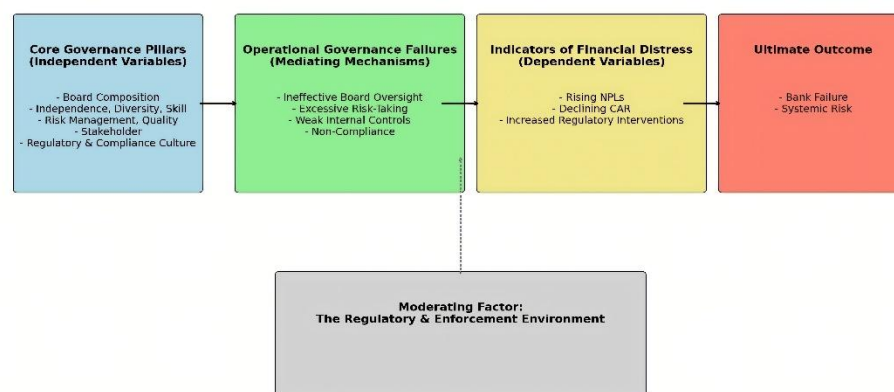118 flourish, leading to measurable financial distress and, ultimately, institutional collapse.

119

Figure 1: The pathway from governance deficits to bank failure in Ghana. *Source: Authors, 2025*

121 The framework is composed of four interconnected stages, moderated by the external regulatory
122 environment.

2.3.1. Core Governance Pillars (Independent Variables)

124 The framework's origin lies in the fundamental pillars of corporate governance, which are the structural
125 attributes that form the first line of defense against institutional fragility. The primary pillars identified from
126 the literature include board composition, risk management quality, and a culture of compliance. An
127 effective board is central to good governance, and its composition, particularly the proportion of
128 independent directors, is critical for objective oversight and mitigating agency problems (Bhagat & Bolton,
129 2008; Adams & Ferreira, 2007). Board diversity further enhances decision-making by incorporating a
130 variety of perspectives, which is crucial for complex risk assessment (García-Meca et al., 2015). For
131 banking institutions, robust risk management is not optional but essential for survival, which includes
132 having well-defined risk management systems, strong internal controls, and adherence to established
133 frameworks (Basel Committee on Banking Supervision, 2015). As Fraser and Simkins (2016) note, the
134 maturity of these frameworks is a key determinant of an organization's resilience. Finally, an ingrained
135 regulatory and compliance culture, which refers to the organizational commitment to adhering to both the
136 letter and the spirit of regulatory requirements, ensures that institutional practices are aligned with the
137 stability-oriented goals of regulators (Laeven & Levine, 2009).

2.3.2. Operational Governance Failures (Mediating Mechanisms)

139 Deficiencies in the core pillars do not directly cause failure but manifest through poor operational practices.
140 This stage acts as a mediating mechanism, translating structural weaknesses into tangible risks. These
141 failures include ineffective board oversight, where a board lacking independence or expertise fails in its
142 primary duty to monitor management, allowing agency conflicts to thrive (Jensen & Meckling, 1976). A
143 direct consequence of poor risk management and oversight is excessive risk-taking and poor lending, which
144 includes practices such as issuing loans without adequate collateral and engaging in related-party
145 transactions, all of which were prevalent in the failed Ghanaian banks (Amoah, 2021; Tetteh, 2019).

146 Furthermore, a poor compliance culture leads to the breakdown of weak internal controls, enabling
147 mismanagement and fraudulent activities to go unchecked.

148 **2.3.3. Indicators of Financial Distress (Dependent Variables)**

149 These operational failures result in observable and measurable indicators of financial distress, which serve
150 as proximate predictors of bank failure. The framework identifies three key indicators. The first is rising
151 Non-Performing Loans (NPLs), as high NPL ratios are a direct outcome of poor lending practices and are
152 one of the most reliable indicators of deteriorating asset quality. As these risky loans sour and losses mount,
153 a bank's capital buffer is eroded, leading to a declining Capital Adequacy Ratio (CAR), which signals a
154 reduced capacity to absorb further losses and increases its vulnerability to shocks (Bank for International
155 Settlements, 2011). In response, as regulators detect rising NPLs and declining CAR, they increase their
156 scrutiny, resulting in increased regulatory interventions, a clear sign that a bank is under significant distress.

157 **2.3.4. Ultimate Outcome: Bank Failure**

158 When these indicators of distress cross critical thresholds and corrective actions fail, the ultimate outcome
159 is bank failure. This represents the complete collapse of the institution, which can, in turn, pose a systemic
160 risk to the broader financial system if not managed effectively.

161 **2.3.5. The Moderating Role of the Regulatory and Enforcement Environment**

162 The entire causal pathway is moderated by the effectiveness of the external regulatory and enforcement
163 environment. A strong, proactive, and well-resourced regulator like the Bank of Ghana can disrupt this
164 chain at any stage—by enforcing rules on board composition, mandating stronger risk controls, or
165 intervening early to force corrective action. Conversely, a weak or poorly enforced regulatory framework
166 allows governance deficits to fester, accelerating the progression toward bank failure. This aligns with the
167 findings of several studies (e.g., Barth et al., 2004; Demetriades et al., 2024) that demonstrated that effective
168 supervision is critical for maintaining banking sector stability, irrespective of the specific regulations in
169 place. This conceptual framework, therefore, provides a comprehensive, theory-driven structure for
170 analyzing bank failures in Ghana and forms the basis for the hypotheses tested in the subsequent sections
171 of this study.

172

173 **3. Materials and Methods**

174 This study employs a quantitative, cross-sectional research design to investigate the relationship between
175 corporate governance, risk management, regulatory compliance, and bank failures in Ghana. A correlational
176 research strategy was utilized to explore the strength and direction of associations between key variables.

177 **3.1. Data Collection**

178 Data for this study were collected from both primary and secondary sources. Primary data were gathered
179 through surveys administered to bank managers, executives, and regulatory officials to assess perceptions
180 and practices related to corporate governance, risk management quality, and compliance. Concurrently,
181 secondary financial and operational data were sourced from publicly available annual reports and regulatory
182 filings from the Bank of Ghana. The research sample comprised 30 banks, selected using a stratified random
183 sampling technique to ensure a balanced representation across different asset sizes and ownership
184 structures, including both domestic and foreign institutions.

3.2. Variables and Measurement

The study analyzed three main hypotheses, each defined by a set of independent and dependent variables. The first hypothesis, concerning board composition and bank failures, utilized three independent variables: the proportion of independent directors, the total board size, and a composite Board Diversity Index measured on a 0-1 scale. The risk of bank failure for all hypotheses was proxied by three key dependent variables: the Non-Performing Loans (NPL) Ratio, the Capital Adequacy Ratio (CAR), and the Regulatory Intervention Count.

The second hypothesis investigated the role of risk management, using independent variables measured on a 1-5 Likert scale (Likert, 1932) from the surveys, namely the Quality of Risk Management System (QRMS), Adherence to Risk Management Standards (ARMS), and the Effectiveness of Risk Mitigation Strategies (ERMS). Similarly, the third hypothesis focused on regulatory compliance, with its independent variables being Compliance with Regulatory Frameworks and Compliance with Corporate Governance Codes, also measured on a 1-5 Likert scale. These sets of independent variables for the second and third hypotheses were analyzed against the same dependent variables of NPL Ratio, CAR, and Regulatory Intervention Count.

3.3. Data Analysis

The data analysis was analyzed using a multi-step approach. Initially, descriptive statistics, including means, standard deviations, minimums, and maximums, were calculated to summarize the central tendency and dispersion of all variables. Following this, a Pearson Correlation analysis (Pearson, 1896) was performed to generate a correlation matrix, measuring the strength and direction of the linear relationships between independent and dependent variables. Finally, multiple regression models were specified to quantify the impact of the governance, risk, and compliance variables on the likelihood of bank failure. To ensure the quality of the research, the validity of the survey instrument was confirmed through review by a panel of banking and governance experts, and its internal consistency was assessed using Cronbach's alpha (Cronbach, 1951). Throughout the research process, all ethical considerations, including informed consent and data confidentiality, were strictly followed.

4. Results

4.1. Descriptive Statistics

The initial analysis involved compiling descriptive statistics to summarize the characteristics of the sampled banks across board composition, failure risk, risk management, and compliance dimensions. The following tables provide an overview of the central tendencies and dispersions for these variables. A detailed summary of all variables is available for review in **Table S1**.

Regarding board composition (**Table 1**), the average board has 10.2 members, with 45% being independent directors. This proportion of independent directors is below the majority often required in developed markets. The board diversity index averaged 0.60, suggesting a moderate level of diversity across the sample.

Table 1: Descriptive statistics of board composition variables

Variable	Mean	Standard Deviation	Minimum	Maximum
Proportion of Independent Directors	0.45	0.12	0.20	0.75
Board Size	10.2	2.3	7	15
Board Diversity Index	0.60	0.15	0.30	0.85

223 *Source: Field data, 2025*

224 In terms of risk and failure indicators (**Table 2**), the average NPL ratio was 7%, which is in a cautionary
225 range that suggests moderate credit risk. The average Capital Adequacy Ratio (CAR) was 11%, moderately
226 above the Basel III minimum of 8%, though some banks were close to the minimum at 7%. Banks
227 experienced an average of 2 regulatory interventions, indicating significant oversight activity.

228 **Table 2:** Descriptive statistics of bank failure indicators

Indicator	Mean	Standard Deviation	Minimum	Maximum
Non-Performing Loans Ratio	0.07	0.04	0.03	0.15
Capital Adequacy Ratio	0.11	0.05	0.07	0.20
Regulatory Intervention Count	2.0	1.2	0	4

229 *Source: Field data, 2025*

230 Additionally, for risk management and compliance (**Table 3**), on a 1-5 scale, the effectiveness of risk
231 mitigation strategies scored highest (mean=3.8), followed by the quality of the risk management system
232 (mean=3.6). Adherence to standards was slightly lower (mean=3.4). Compliance with regulatory
233 frameworks (mean=4.0) was rated higher and was more consistent than compliance with corporate
234 governance codes (mean=3.9), suggesting that legal enforcement drives regulatory adherence.

235 **Table 3:** Descriptive statistics of risk and compliance practices (1-5 scale)

Variable	Mean	Std. Deviation	Minimum	Maximum
Quality of Risk Management System	3.6	0.9	2	5
Adherence to Risk Mgt. Standards	3.4	1.0	2	5
Effectiveness of Risk Mitigation	3.8	0.8	2	5
Compliance w/ Regulatory Frameworks	4.0	0.8	2	5
Compliance w/ Corp. Gov. Codes	3.9	0.9	2	5

236 *Source: Field data, 2025*

237 **4.2. Correlation Analysis**

238 To explore the relationships between the variables, a Pearson Correlation analysis was conducted. Table 4
239 presents the correlation matrix, revealing the associations between board composition variables and the key
240 indicators of bank failure risk. The full Pearson correlation matrix showing the relationships between all
241 variables is provided in **Table S2**.

242 **Table 4:** Pearson correlation matrix

Variable	Independent Directors	Board Size	Board Diversity Index	NPL Ratio	CAR	Regulatory Intervention
Proportion of Independent Directors	1.00					
Board Size	-0.25	1.00				
Board Diversity Index	0.30	-0.15	1.00			
Non-Performing Loans Ratio (NPL)	**-0.40**	0.05	-0.25	1.00		
Capital Adequacy Ratio (CAR)	0.20	-0.10	0.35	-0.30	1.00	
Regulatory Intervention Count	**-0.35**	**0.20**	-0.20	**0.70**	-0.25	1.00

243 *Source: Field data, 2025*

244 The analysis of board composition revealed that the proportion of independent directors showed a
245 significant negative correlation with the NPL Ratio (r = -0.40) and Regulatory Interventions (r = -0.35).
246 This implies that greater board independence is associated with better loan quality and less regulatory
247 scrutiny. In contrast, board size had a slight positive correlation with Regulatory Interventions (r = 0.20),
248 suggesting that larger boards might face more oversight, possibly due to inefficiencies.

249 Furthermore, stronger risk management and compliance metrics were consistently associated with better
250 outcomes. For example, compliance with regulatory frameworks was negatively correlated with the NPL
251 Ratio (r = -0.40) and Regulatory Interventions (r = -0.45) but positively correlated with CAR (r = 0.30).
252 Critically, the NPL Ratio had the strongest positive correlation with Regulatory Interventions (r = 0.70),
253 confirming that poor asset quality is a major trigger for regulatory action.

254 **4.3. Multiple Regression Analysis**

255 **Model 1: The Effect of Board Composition**

256 The regression results indicated that the proportion of independent directors was a statistically significant
257 predictor of bank stability (Table 5). A higher proportion of independent directors was significantly
258 associated with a lower likelihood of failure (p = 0.02). Board size (p = 0.74) was not a significant predictor,
259 while board diversity (p = 0.07) had a marginally significant negative effect, which may indicate
260 coordination costs in the short term.

261 **Table 5:** Multiple regression results for board composition

Predictor Variable	Coefficient	Std. Error	t-Value	p-Value
(Intercept)	0.08	0.05	1.60	0.12
Proportion of Independent Directors	–0.25	0.10	–2.50	0.02
Board Size	0.01	0.03	0.33	0.74
Board Diversity Index	–0.15	0.08	–1.88	0.07

262 *Source: Field Data, 2025*

263 **Model 2: The Effect of Compliance**

264 Both compliance with regulatory frameworks ($p = 0.02$) and compliance with corporate governance codes
265 ($p = 0.05$) were found to be significant predictors (Table 6). Higher compliance in both areas was associated
266 with a reduced likelihood of bank failures. The effect of regulatory compliance was slightly stronger,
267 reinforcing the importance of legal and regulatory enforcement.

268 **Table 6: Multiple regression analysis results for compliance**

Predictor Variable	Coefficient	Std. Error	t-Value	p-Value
(Intercept)	0.12	0.05	2.40	0.02
Compliance with Regulatory Frameworks	–0.20	0.08	–2.50	0.02
Compliance with Corporate Governance Codes	–0.18	0.09	–2.00	0.05

269 *Source: Field Data, 2025*

270

271 **5. Discussion**

272 This study delved into the complex relationship between corporate governance failures and bank failures
273 in Ghana. The goal was to understand how specific corporate governance practices—like board
274 composition, risk management, and regulatory compliance—affect the stability of banks in Ghana. The
275 findings, based on careful statistical analyses, go beyond simple numbers, offering insights into the
276 underlying problems that have historically plagued Ghana's banking sector.

277 Our analysis showed a significant negative correlation between the number of independent directors on
278 bank boards and the occurrence of non-performing loans (NPLs). This aligns with agency theory (Fama &
279 Jensen, 1983; Islam, 2020; Musah & Adutwumwaa, 2021), which suggests that independent oversight is
280 crucial in preventing managers from taking excessive risks. Banks with more independent directors are
281 better at enforcing sound lending practices, leading to better loan quality and fewer regulatory interventions.
282 This highlights the importance of an independent board in maintaining financial integrity and reducing the
283 risk of unethical behavior. Despite this, the study found that, on average, only 45% of bank board members
284 were independent. While this is an improvement, it still falls short of the best practices seen in developed
285 financial markets. This gap highlights a critical area for reform and strategic action by regulators and
286 institutions to strengthen governance structures.

287 Furthermore, the study confirmed that strong risk management and strict regulatory compliance are
288 essential for bank stability. A strong negative correlation was found between compliance levels and
289 indicators of financial distress, such as NPLs and regulatory interventions. This supports the idea that
290 following established rules is not just a formality but a key defense against financial instability. Countries

with stronger regulatory enforcement tend to have more stable banking systems (Barth, Caprio, & Levine, 2004; Demetriades et al., 2024), a pattern also seen in Ghana. The fact that compliance with formal regulations was stronger than adherence to broader corporate governance codes suggests that the threat of legal penalties is a more effective motivator than the "comply or explain" approach often used with governance codes. This underscores the urgent need for stricter enforcement to ensure that the spirit, not just the letter, of governance directives is followed. Effective risk management frameworks, including a strong internal control environment, are essential for identifying, assessing, and mitigating risks, thereby safeguarding the bank's assets and profitability (Von Tamakloe et al., 2023).

The collapses of Capital Bank and UT Bank provide a clear example of these statistical findings. Both institutions failed due to major governance failures, including weak board oversight, dominant shareholders engaging in related-party lending, and inadequate internal controls. These issues led to a rise in NPLs and, eventually, regulatory takeovers (Amoah, 2021; Tetteh, 2019; Akonor, 2022). This combination of quantitative data and real-world examples paints a clear picture: governance failures directly lead to financial instability, although this is preventable.

While this study provides valuable insights, it also has limitations that suggest areas for future research. First, the data used was cross-sectional, meaning it only captured a snapshot in time, which limits the ability to determine cause and effect. Future studies that track Ghanaian banks over longer periods would be better at showing the dynamic relationship between changing governance practices and financial stability, as the effectiveness of governance is not static but a continuous process (Adams, Hermalin, & Weisbach, 2010; Brimah et al., 2024). Second, while the quantitative data were thoroughly analyzed, adding qualitative methods, such as in-depth case studies or interviews with board members and regulators, could provide a richer understanding of the context and decision-making processes behind the statistical findings. Third, the research focused on firm-level governance variables, but future studies could incorporate macroeconomic factors (e.g., GDP growth, inflation), which significantly influence banking sector health and can moderate the impact of corporate governance (Beck, Demirgüç-Kunt, & Levine, 2006). Finally, the study's focus on Ghana limits the generalizability of the findings. Comparative studies across different countries in Sub-Saharan Africa could further explore how different institutional and regulatory environments shape the relationship between corporate governance and bank failures, leading to a more comprehensive regional understanding.

6. Conclusions

This study provides compelling evidence that weak corporate governance significantly contributes to bank failures in Ghana. Our findings highlight that inadequate board independence, poor risk management practices, and inconsistent adherence to regulatory and governance codes are key factors driving this vulnerability. We observed a clear and statistically significant link: stronger governance, characterized by a higher proportion of independent directors and strict rule-following, correlates with a reduced risk of bank failure. This underscores the urgent need for a comprehensive policy response to address these structural weaknesses and foster long-term stability. On the regulatory front, the Bank of Ghana should move beyond simply issuing guidelines. Rigorous enforcement is crucial. This includes mandating a majority of independent directors on all bank boards and enhancing supervisory oversight through a proactive, risk-based model. This model should focus on the early detection of governance weaknesses. Furthermore, promoting a culture of accountability, where directors and senior managers are personally responsible for governance breaches, is essential. For banking institutions themselves, improvements are needed in board composition and competence. This involves prioritizing the appointment of independent, skilled directors and implementing mandatory, ongoing training in risk management and ethics. Banks must also implement

robust risk management frameworks with early warning mechanisms. Greater transparency through increased public disclosures is also vital to enhance market discipline. By adopting these integrated measures, Ghana can build a more resilient, transparent, and stable banking sector, ultimately supporting the nation's long-term economic growth.

Authors' Biography: Mr. Osei-Dwomoh Emmanuel is an Accountant at Controller and Accountant General's Department, Kumasi, Ghana. Dr. Nkuah Joseph Kofi is a Senior Lecturer, Department of Management and General Studies, School of Business, Christian Service University, Kumasi, Ghana. Mr. Forkuo Gabriel Osei is a PhD candidate/Research Assistant at Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Brasov, Romania.

References

Abdallah, M. I. (2015). Financial sector regulatory and supervisory framework in Ghana. International Journal of Economics, Commerce and Management, 3(5), 1043-1055.

Abunyuwah, I. (2020). Partial Ordered Logit Analysis of Confidence Levels in Financial Institutions in Ghana. The Case of Asante Mampong Municipality. International Journal of Economics and Finance, 12(7), 21. https://doi.org/10.5539/ijef.v12n7p21

Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. Journal of Finance, 62(1), 217-250. https://doi.org/10.1111/j.1540-6261.2007.01206.x

Adeabah, D., & Andoh, C. (2020). Cost efficiency and welfare performance of banks: Evidence from an emerging economy. International Journal of Managerial Finance, 16(5), 549–574. https://doi.org/10.1108/IJMF-06-2019-0212

Affum, F. (2020). The Unintended Effects of Bank of Ghana's Clean-Up Exercise on Unaffected Financial Institutions: Evidence from Yilo Krobo Municipality, Ghana. Asian Journal of Economics, Business and Accounting, 1–12. https://doi.org/10.9734/ajeba/2020/v17i130249

African Development Bank. (2024). Operational risk management. Available online at: https://www.afdb.org/en/about-us/corporate-information/financial-information/risk-management/operational-risk-management (accessed 17 September 2025)

Agyenim- Boateng, C., Aboagye- Otchere, F., & Aboagye, A. A. (2022). Saints, demons, wizards, pagans, and prophets in the collapse of banks in Ghana. African Journal of Management Research, 27(1), 20–38. https://doi.org/10.4314/ajmr.v27i1.2

Akonor, E. T. (2022). Criminality in the microfinance sector: A symptom of "broken window." UCC Law Journal, 2(1), 113–132. https://doi.org/10.47963/ucclj.v2i1.901

Amoah, B. (2021). Governance failures and the collapse of Capital Bank in Ghana. African Journal of Governance and Development, 10(2), 123-145.

Antwi-Bosiako, S. (2022). *Effects of financial sector reforms on economic growth: Digital transformation of Ghana's banking industry through third generation financial sector reforms* [Doctoral dissertation, Selinus University of Sciences and Literature]. Selinus University Repository. Available online at: https://www.uniselinus.education/sites/default/files/2023-03/Antwi-bosiako-Steve.pdf (accessed 26 August 2025)

Atinyo, D. and Kawor, S. (2022). Relationship between corporate governance and financial crisis: a study of Ghana's banking sector. The International Journal of Business & Management, 10(2). https://doi.org/10.24940/theijbm/2022/v10/i2/BM2202-025

Atuwo, S., Oppong-Kyekyeku, K., Bonsing, N., & Oblie, L. (2025). Banking laws and regulations: Ghana. In Global Legal Insights – Banking & Finance 2025. Global Legal Group. Available online at: https://www.globallegalinsights.com/practice-areas/banking-and-finance-laws-and-regulations/ghana (accessed 1 September 2025)

Banahene, K. O. (2018). Ghana banking system failure: The need for restoration of public trust and confidence. International Journal of Business and Social Research, 8(10), 1–5. https://doi.org/10.18533/ijbsr.v8i10.1145

Bank of Ghana. (2019). *Annual Report*. Bank of Ghana. Available online at: https://www.bog.gov.gh/wp-content/uploads/2020/07/Annual-Report-2019.pdf (accessed 9 September 2025)

Barth, J. R., Caprio, G., & Levine, R. (2004). Bank regulation and supervision: What works best? Journal of Financial Intermediation, 13(2), 205-248. https://doi.org/10.1016/j.jfi.2003.06.002

Basel Committee on Banking Supervision. (2015). Corporate Governance Principles for Banks. Bank for International Settlements.

Bawumia, M. (2020). Ghana's Banking Sector Clean-up: The Facts and Fiction. Accra, Ghana.

407 Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. Journal of Corporate
408   Finance, 14(3), 257-273. https://doi.org/10.1016/j.jcorpfin.2008.03.006

409 Brimah, A. N., Ahmed, N. B., & Olayiwola, G. H. (2024). Effect of Corporate Governance on the
410   Performance of Listed Deposit Money Banks in Nigeria. African Journal of Management and
411   Business Research, 15(1), 146–154. https://doi.org/10.62154/10cjjf40

412 Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297–
413   334. https://doi.org/10.1007/BF02310555

414 Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management.
415   Academy of Management Review, 22(1), 20-47. https://doi.org/10.2307/259223

416 Demetriades, P. O., Rewilak, J. M., & Rousseau, P. L. (2024). Finance, Growth, and Fragility. Journal of
417   Financial Services Research, 66(1), 29–49. https://doi.org/10.1007/s10693-023-00402-w

418 Demirgüç-Kunt, A., & Detragiache, E. (2002). Does deposit insurance increase banking system stability?
419   An empirical investigation. Journal of Monetary Economics, 49(7), 1373-1406.
420   https://doi.org/10.1016/S0304-3932(02)00171-X

421 Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. Journal of Law and Economics,
422   26(2), 301-325. https://doi.org/10.1086/467037

423 Fraser, J. R., & Simkins, B. J. (2016). The challenges of enterprise risk management. Journal of Applied
424   Corporate Finance, 28(3), 14-23.

425 Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Pitman Publishing Inc.

426 García-Meca, E., García-Sánchez, I. M., & Martínez-Ferrero, J. (2015). Board diversity and its effects on
427   bank performance: An international analysis. Journal of Banking & Finance, 53, 202-214.
428   https://doi.org/10.1016/j.jbankfin.2014.12.002

429 Gerged, A. M., Marie, M., & Elbendary, I. (2022). Estimating the Risk of Financial Distress Using a Multi-
430   Layered Governance Criterion: Insights from Middle Eastern and North African Banks. Journal of
431   Risk and Financial Management, 15(12), 588. https://doi.org/10.3390/jrfm15120588

432 International Finance Business Desk. (2024). African banks successfully managing risk. Available online
433   at: https://internationalfinance.com/magazine/banking-and-finance-magazine/african-banks-
434   successfully-managing-risk/ (accessed 24 September 2025)

435 International Monetary Fund (IMF). (2008). African Financial Reform: Ghana's Reforms Transform Its
436   Financial Sector. Available online at: https://tinyurl.com/4kb629nu (accessed 30 August 2025)

437 Islam, M. N. (2020). The impact of board composition and activity on non-performing loans. 2020 Awards
438   for Excellence in Student Research and Creative Activity. Eastern Illinois University. Available
439   online   at:
440   https://thekeep.eiu.edu/cgi/viewcontent.cgi?article=1002&context=lib_awards_2020_docs
441   (accessed 28 September 2025)

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. The Journal of Finance, 48(3), 831-880. https://doi.org/10.1111/j.1540-6261.1993.tb04022.x

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X

Kauppinen, A.R. (2022). Saving the 'indigenous banks': Moral politics of economic sovereignty in Ghana's 2017–19 financial crisis. Africa, 92(4), 561–580. https://doi.org/10.1017/S000197202200033X

Kawor, S., Atinyo, D., Amedede, S., Aboagye, G., Dodoo, K. N., Kporku, E., & Creppy, C. (2022). Effect of Credit Risk on Odds of Occurrence of Financial Crisis: Evidence from Ghana. American Journal of Finance, 7(3), 74–84. https://doi.org/10.47672/ajf.1279

Likert, R. (1932). A technique for the measurement of attitudes. Archives of Psychology, 22(140), 1–55.

MacCarthy, J., & Dery, L. B. (2016). Banking regulatory and market framework in Ghana: Strength, weaknesses, opportunities and threats. SSRN Preprint, SSRN-2770759. Available online at: https://ssrn.com/abstract=2770759 (accessed 5 September 2025)

Maseke, B. F., & Swartz, E. M. (2021). Risk management impact on non-performing loans and profitability in the namibian banking sector. Open Access Library Journal, 8, 1-20. https://doi.org/10.4236/oalib.1106943.

Musah, A., & Adutwumwaa, M. Y. (2021). The effect of corporate governance on financial performance of rural banks in Ghana. International Journal of Financial, Accounting, and Management, 2(4), 305–319. https://doi.org/10.35912/ijfam.v2i4.336

Ofei, E. F., Owusu, M. A., & Asante, C. R. (2020). Effect of Internal Audit Practices on Financial Performance of Banks in Ghana. International Journal of Current Aspects in Finance, Banking and Accounting, 2(2), 46–58. https://doi.org/10.35942/ijcfa.v2i2.131

Ofori-Acquah, C., Avortri, C., & Preko, A. (2022). Taking Stock of Policies, Regulations, and Initiatives That Leverage Technology to Build Trust: Lessons from Ghana's Financial Sector. Global Social Welfare, 10(1), 9–17. https://doi.org/10.1007/s40609-022-00260-9

Ogundele, O. S., & Nzama, L. (2025). Risk Management Practices and Financial Performance: Analysing Credit and Liquidity Risk Management and Disclosures by Nigerian Banks. Journal of Risk and Financial Management, 18(4), 198. https://doi.org/10.3390/jrfm18040198

Osei, A. A., Yusheng, K., Caesar, A. E., Tawiah, V. K., & Angelina, T. K. (2019). Collapse of big banks in Ghana: Lessons on its corporate governance. International Institute for Science, Technology, and Education, 10(10), 27-36. https://doi.org/10.7176/RJFA

Pearson, K. (1896). Mathematical contributions to the theory of evolution. III. Regression, heredity, and panmixia. Philosophical Transactions of the Royal Society of London. Series A, 187, 253–318. https://doi.org/10.1098/rsta.1896.0007

477 Ramadhanti, J., Butar Butar, I. D., & Pangaribuan, C. H. (2021). The analysis of corporate governance on
478   non-performing loans: Evidence from Indonesia. Journal of Business, Management, and Social
479   Studies, 1(1), 1-23. https://doi.org/10.53748/jbms.v1i1.5

480 Templars. (2025). Bank of Ghana issues new corporate governance guidelines for payment service
481   providers. Client Alert, Templars Law. Available online at: https://www.templars-
482   law.com/app/uploads/2025/07/Client-Alert_Bank-of-Ghana-Issues-New-Corporate-Governance-
483   .pdf (accessed 9 September 2025)

484 Tetteh, E. (2019). Corporate governance and bank collapse in Ghana: The case of UT Bank. Journal of
485   Business and Economic Research, 8(3), 88-105.

486 Torku, K., & Laryea, E. (2021). Corporate governance and bank failure: Ghana's 2018 banking sector crisis.
487   Journal of Sustainable Finance & Investment, 1-21.
488   https://doi.org/10.1080/20430795.2021.1981210

489 Von Tamakloe, B., Boateng, A., Mensah, E. T., & Maposa, D. (2023). Impact of Risk Management on the
490   Performance of Commercial Banks in Ghana: A Panel Regression Approach. Journal of Risk and
491   Financial Management, 16(7), 322. https://doi.org/10.3390/jrfm16070322

492

493

494 **Supplementary Materials**

495 **Table S1:** Detailed descriptive statistics of key variables

Variable	Mean	Std. Dev.	Min	Max
Board Composition				
Proportion of Independent Directors	0.45	0.12	0.20	0.75
Board Size	10.2	2.3	7	15
Board Diversity Index	0.60	0.15	0.30	0.85
Bank Failure Indicators				
Non-Performing Loans Ratio (%)	7.0	4.0	3.0	15.0
Capital Adequacy Ratio (%)	11.0	5.0	7.0	20.0
Regulatory Intervention Count	2.0	1.2	0	4
Risk Management Practices (1-5 Scale)				
Quality of Risk Mgt. System	3.6	0.9	2	5
Adherence to Risk Mgt. Standards	3.4	1.0	2	5
Effectiveness of Risk Mitigation	3.8	0.8	2	5
Compliance Variables (1-5 Scale)				
Compliance w/ Regulatory Frameworks	4.0	0.8	2	5
Compliance w/ Corp. Gov. Codes	3.9	0.9	2	5

496 *Source: Field Data, 2025*

497

498   **Table S2:** Full Pearson correlation matrix of all variables

Variable	1	2	3	4	5	6
1. Prop. of Ind. Directors	1.00					
2. Board Size	-0.25	1.00				
3. Board Diversity Index	0.30	-0.15	1.00			
4. NPL Ratio	**-0.40**	0.05	-0.25	1.00		
5. Capital Adequacy Ratio	0.20	-0.10	0.35	-0.30	1.00	
6. Regulatory Intervention Count	**-0.35**	0.20	-0.20	**0.70**	-0.25	1.00

499   *Source: Field Data, 2025. Bold values indicate strong correlations discussed in the main text.*

500

501   **Python Code Snippets.** *Note: some code parts are dependent on the terminal used in this study and*
502   *should be adapted for use on other terminals.*

503
504   **Code for Figure 1: The pathway from governance deficits to bank failure in Ghana**

505
506   # **Code for importing libraries**
507   import matplotlib.pyplot as plt
508   import matplotlib.patches as patches

509
510   fig, ax = plt.subplots(figsize=(24, 12))
511   ax.set_xlim(0, 24)
512   ax.set_ylim(0, 14)
513   ax.axis('off')

514
515   def draw_box(x, y, width, height, color, title, content, fontsize=14):
516   box = patches.FancyBboxPatch((x, y), width, height, boxstyle="round,pad=0.1",
517   edgecolor='black', facecolor=color)
518   ax.add_patch(box)
519   ax.text(x + width / 2, y + height - 0.8, title, ha='center', va='top',
520   fontsize=fontsize + 2, weight='bold', wrap=True)
521   ax.text(x + width / 2, y + height - 2.2, content, ha='center', va='top',
522   fontsize=fontsize, wrap=True)

523
524   # **Code for specifying box dimensions**
525   box_w = 4.5
526   box_h = 5.0
527   y_main = 7

528
529   # **Code for draw main boxes**
530   draw_box(1, y_main, box_w, box_h, 'lightblue',
531   "Core Governance Pillars\n(Independent Variables)",
532   "- Board Composition\n- Independence, Diversity, Skill\n- Risk Management, Quality\n-
533   Stakeholder\n- Regulatory & Compliance Culture")

534
535   draw_box(6.5, y_main, box_w + 1, box_h, 'lightgreen',

```
        "Operational Governance Failures\n(Mediating Mechanisms)",
        "- Ineffective Board Oversight\n- Excessive Risk-Taking\n- Weak Internal Controls\n- Non-
Compliance")

draw_box(12.5, y_main, box_w + 1, box_h, 'khaki',
        "Indicators of Financial Distress\n(Dependent Variables)",
        "- Rising NPLs\n- Declining CAR\n- Increased Regulatory Interventions")

draw_box(18.5, y_main, box_w, box_h, 'salmon',
        "Ultimate Outcome",
        "- Bank Failure\n- Systemic Risk")

# Code for moderating box
draw_box(7.5, 1, 9, 3.5, 'lightgray',
        "Moderating Factor:\nThe Regulatory & Enforcement Environment",
        "")

# Code for placing arrows between boxes (placed between edges)
arrow_props = dict(arrowstyle="->", color='black', linewidth=2)
ax.annotate('', xy=(6.5, y_main + box_h / 2), xytext=(5.5, y_main + box_h / 2), arrowprops=arrow_props)
ax.annotate('', xy=(12.5, y_main + box_h / 2), xytext=(11.5, y_main + box_h / 2),
arrowprops=arrow_props)
ax.annotate('', xy=(18.5, y_main + box_h / 2), xytext=(17.5, y_main + box_h / 2),
arrowprops=arrow_props)

# Code for drawing dotted arrow from moderator to center arrow
ax.annotate('', xy=(12, y_main + 1), xytext=(12, 4.5),
        arrowprops=dict(arrowstyle="->", linestyle='dotted', color='gray', linewidth=2))

# Save the figure
plt.savefig("Enhanced_Flowchart_Corrected.png", dpi=300, bbox_inches='tight')
plt.savefig("Enhanced_Flowchart_Corrected.pdf", format='pdf', bbox_inches='tight')
plt.show()
```