

Impact of Corporate Governance on the Financial Efficiency of Listed Commercial Banks in Ghana

Justice R. Achoanya Ayam¹ and Joseph Ayam²

¹Finance Office, Catholic University College of Ghana, Fiapre, Bono Region, Ghana

²Department of Distance and Online Education, Amity University, India

Author corresponding Email: ajrayam@yahoo.com

Abstract

The study investigated the influence of corporate governance (CG) mechanisms on the financial efficiency of listed commercial banks in Ghana, emphasizing the emerging role of integrated reporting (IR). Financial data from 2018 to 2023 for eight listed universal banks were analysed using correlation and regression techniques. The cost-to-income ratio (CIR) served as the primary metric for financial efficiency. The findings revealed a significant positive relationship between financial gearing and CIR ($\beta = 0.511$, $p = 0.001$), while other CG mechanisms, such as board size, CEO duality, and audit committee effectiveness, exhibit negligible impacts individually. However, collectively, CG mechanisms significantly influence CIR ($p = 0.024$). The study underscores the necessity of complementary CG practices to enhance operational resilience. The study highlights the potential of IR in improving transparency and stakeholder trust, addressing critical gaps in existing CG frameworks. Tailored CG prescriptions by the Bank of Ghana are recommended to optimize efficiency. This research provides novel insights into the interplay between CG mechanisms and financial efficiency in an emerging market context, offering actionable recommendations for policymakers and banking practitioners.

Keywords: *Corporate Governance, Integrated Reporting, Ghanaian Banks, cost-to-income ratio, Financial Efficiency*

BACKGROUND

The discourse surrounding Corporate Governance (CG) has garnered significant attention within governance literature, driven by its substantial impact on the growth and development of emerging economies (Owiredu & Kwakye, 2020). The aftermath of major corporate collapses, such as Enron and WorldCom in the early 2000s, has underscored the heightened importance of robust CG practices globally (Afriyie, Aidoo, & Agboga, 2021). This spotlight on CG extends beyond advanced economies, resonating strongly in developing economies like Ghana, which have faced notable CG challenges. The recent collapse of seven banks in Ghana further underscores the imperative for sound CG practices in the financial sector (Agyenim-

Boateng, Aboagye-Otchere & Aboagye, 2020). These developments have amplified the need for governance systems that can withstand the complexities of financial sector operations.

The study stems from the pivotal role of CG in enhancing financial performance, transparency, and resilience in the banking sector, particularly in emerging economies. Previous studies, such as Thaker et al. (2021), emphasize that effective CG practices significantly enhance bank efficiency, transparency, and financial outcomes. Bank efficiency, a critical metric of performance and managerial effectiveness, gains heightened importance in the context of Ghana, where deregulation, technological advancements, and evolving regulatory frameworks have created a dynamic operational landscape. Despite the wealth of literature on CG and financial efficiency in Ghana ((Nyarko et al., 2017; Puni & Anlesinya, 2020; Coleman & Wu, 2020; Owiredo & Kwakye, 2020; Gyamerah, Amo, & Adomako, 2020; Gakpo, 2021; Boachie, 2021; Musah & Adutwumwaa, 2021), the mixed and inconclusive results necessitate further exploration.

Another driving factor is the inadequacy of CG frameworks highlighted by the 2017 banking sector crisis in Ghana. This crisis revealed gaps in governance structures and their inability to prevent collapses, making it imperative to identify mechanisms that can bolster financial resilience and efficiency. Additionally, the emergence of Integrated Reporting (IR) as a CG mechanism offers a novel opportunity to address disclosure and accountability issues, further motivating the inclusion of IR in this study.

This study explored the relationship between CG mechanisms and financial efficiency in Ghanaian banks, contributing to the on-going discourse with a focus on practical and theoretical advancements. The specific objectives were:

1. To assess the influence of CG variables such as board size, CEO duality, audit committee effectiveness, and financial gearing on the financial efficiency of Ghanaian banks;
2. To evaluate the role of Integrated Reporting (IR) in enhancing CG frameworks within the banking sector; and
3. To provide actionable recommendations for policymakers and practitioners to strengthen governance structures in Ghana's financial sector.

To achieve these objectives, the study addressed the following research questions:

How did key CG variables influence the financial efficiency of listed universal banks in Ghana? What was the role of Integrated Reporting in improving CG practices in Ghanaian banks? How could robust CG mechanisms have mitigated governance-related crises in Ghana's banking sector?

The research hypothesized that *CG mechanisms influence financial efficiency in Ghanaian universal banks*. Analysing the financial reports from 2018 to 2023, the study offers valuable insights for theoretical advancement and practical application, particularly in addressing the pressing necessity for enhanced governance frameworks following the 2017 banking sector that collapsed attributed to weak CG practices. The findings of this study can guide policymakers and practitioners in implementing robust CG frameworks, thereby mitigating current challenges and preventing future crises.

This study extends existing research by adopting a country-wide perspective, analysing the financial reports of all eight listed universal banks in Ghana over a five-year period (2018 to 2023). Unlike prior studies that predominantly focus on traditional CG mechanisms, this research incorporates Integrated Reporting, highlighting its potential to enhance disclosure, accountability, and transparency, key elements often underexplored in CG literature.

Additionally, this research contributes to addressing governance challenges identified in the 2017 banking sector collapse by offering practical insights for implementing resilient CG frameworks. Policymakers and practitioners can leverage the findings to design governance structures that align with global best practices while addressing the unique challenges faced by Ghanaian financial institutions in 2019.

The paper is structured to offer a comprehensive analysis of the topic, covering literature review, methodology, empirical results, and conclusions, thereby contributing to the on-going discourse on CG and financial efficiency in Ghana's banking sector.

LITERATURE REVIEW

The Theoretical Framework

The theoretical framework underpinning this study embraces a novel hybrid perspective of CG, which synthesizes diverse established theoretical frameworks (van der Weert, Rijn, & Span, 2022; Mendoza-Velázquez et al., 2022), including agency theory, stewardship theory, stakeholder theory,

resource dependence theory, and institutional theory. By amalgamating these frameworks, the approach transcends the constraints of individual theories while capitalizing on their respective strengths. Notably, this governance framework stands out for its contextual sensitivity (González, Acosta, Muñoz & López, 2021). Recognizing the intricate nuances of organizational contexts, the hybrid acknowledges the imperative of tailoring governance mechanisms to fit the unique circumstances of each organization, taking into account variations across industries, regions, and organizational sizes.

At the core of this framework lies the imperative of balancing stakeholder interests (Alam, Ab Rahman, Mustafa, Shah & Rahman, 2019). It advocates for equilibrium among shareholders, employees, customers, suppliers, and the broader community, diverging from a zero-sum mind-set. Flexibility and adaptability emerge as fundamental tenets (Saltaji, 2018). Governance structures are expected to demonstrate agility and responsiveness to accommodate the diverse goals and contextual exigencies of organizations.

Moreover, the framework prioritizes long-term sustainability (Langan, Doherty & Downer, 2023) by championing sustainable and responsible business practices that account for the enduring consequences of decisions. Empirical research assumes paramount importance within this paradigm (Almashhadani, 2021). The perspective underscores the significance of evidence-based decision-making, advocating for governance practices grounded in empirical data rather than mere theoretical speculation. This critical approach elevates the discourse on CG, paving the way for informed and effective governance strategies.

Each theory is integrated into the study's constructs to contextualize their relevance to financial efficiency. For instance, agency theory informs the relationship between ownership concentration and CIR, while institutional theory underscores the role of regulatory compliance. The study further accounts for the multifaceted and dynamic governance landscape in Ghana, emphasizing the contextual sensitivity, adaptability, and sustainability of governance mechanisms (Saltaji, 2018; Langan, Doherty, & Downer, 2023). This hybrid approach also prioritizes evidence-based decision-making, reinforcing the importance of empirical validation (Almashhadani, 2021).

Models of Corporate Governance

Corporate Governance (CG) models exhibit remarkable diversity across nations, shaped by complex interplays of historical, social, legal, and economic contexts. Broadly categorized, three traditional models of CG stand out: the Anglo-American model, the German (Rhine) model and the Japanese

model (Qaxramon o'g'li, 2022). Additionally, the Nordic model and the emerging global convergence model have garnered significant attention. This section critically examines these models and their implications for corporate efficiency.

The Anglo-American model of CG, often portrayed as shareholder-oriented, prioritizes shareholder interests above all other stakeholders. Central to this model is the separation of ownership and control, wherein shareholders delegate control to the board of directors (Aguilera, Marano & Haxhi, 2019). Comprising both inside and outside directors, the board is tasked with overseeing management and safeguarding shareholder interests (Cumming et al., 2017). While the inclusion of independent directors aims to mitigate conflicts of interest, recent criticisms question their efficacy in providing oversight (Kalia & Gill, 2023). Moreover, concerns regarding insider control persist, notwithstanding the model's widespread adoption, particularly in the United States and the United Kingdom (Aguilera, Marano & Haxhi, 2019).

The German model of CG, distinguished by its two-tiered board system, epitomizes a balanced approach to governance, fostering long-term stability and economic growth (Masroor, 2018). The supervisory board, comprising shareholders and employee representatives, oversees strategic decisions and appoints members to the management board (Behne, 2017). Notably, limitations on voting power mitigate shareholder dominance, promoting collective decision-making for sustained prosperity (D'Alessio & Oberbeck, 2018). While critics contend that the model prioritizes major shareholders, its inclusive structure has been pivotal in the success of many German companies (Alam et al., 2019).

In contrast, the Japanese model of CG embodies a stakeholder-oriented approach, emphasizing the welfare of all stakeholders over shareholder maximization (Alazzam, 2022). Characterized by insider-dominated boards and cross-shareholding, this model fosters long-term relationships and strategic planning (Kozuka, 2019). Although criticized for its resistance to change, the Japanese model underscores the importance of stakeholder engagement in decision-making processes (Murphy & Smolarski, 2020).

The Nordic model, prevalent in Scandinavian countries, integrates transparency, accountability, and social responsibility, combining elements of both shareholder and stakeholder approaches (Kjærland et al., 2020). Notably, gender diversity on boards promotes equitable representation and decision-making (Khatri, 2022). By emphasizing stakeholder engagement

and environmental considerations, this model fosters sustainable economic development (Hedenigg, 2019).

The emerging global convergence model seeks to harmonize CG practices across diverse jurisdictions, promoting transparency, accountability, and investor protection (Wahyuni et al., 2020). While recognizing the challenges of achieving full convergence, this model represents a significant step towards fostering globally consistent governance standards (Gindis et al., 2020).

Acknowledging the coexistence of numerous regional and national models is paramount. Variations in CG practices within countries and businesses underscore the complexity of the global governance landscape (Harper Ho, 2020). Civil law-based systems, prevalent in many European nations, emphasize codified laws and regulations to govern business activities (Kantár, 2018). This study positions Ghana's CG practices within this global landscape, emphasizing the influence of local regulatory reforms and contextual nuances on bank efficiency.

Banking Sector Clean-up and Corporate Governance in Ghana

In recent years, the Ghanaian banking sector has undergone a significant transformation, primarily propelled by a series of reforms aimed at ameliorating CG and restructuring the industry landscape. These reforms included diverse strategies, notably the privatization of state-owned enterprises and the institution of CG codes tailored for listed firms (Gyamerah, Amo & Adomako, 2020; Nyarko, Yusheng & Zhu, 2017). The BOG, serving as the authoritative regulator overseeing banking institutions in Ghana, has diligently enforced measures to foster sound CG practices. This enforcement was notably accentuated by the adoption of the Risk-Based Supervision Framework and the issuance of enhanced CG directives in 2018, precipitated by the misfortune of bank collapses within Ghana (Gyamerah, Amo & Adomako, 2020).

Embedded within Ghana's banking sector, the legal and regulatory apparatus outlining CG norms finds its source in diverse legislative instruments, including the Companies Act 1963 Act 179, Securities Industry Law, Ghana Stock Exchange Listing rules (2006; L I. 1509), Banking Act 2004 Act 673, and Banking Act 2007 Act 738. These legal frameworks are systematically categorized into six distinct domains, including board responsibility and accountability, committees of the boards, relationship and rights of shareholders and stakeholders, financial affairs and auditing, disclosures in annual reports, and code of ethics (Gyamerah, Amo & Adomako, 2020).

Undeniably, the establishment of effective CG structures stands as a *sine qua non* for prudent supervision and control within the banking domain, thereby ostensibly strengthening the efficacy of financial institution regulators.

The recent trajectory of Ghana's banking sector has cast a glaring spotlight on the imperatives of upholding public trust and safeguarding the interests of myriad stakeholders. Illustratively, in 2018, the Bank of Ghana orchestrated the revocation of licenses belonging to five banks, subsequently consolidating them into 'The Consolidated Bank' of Ghana, ostensibly citing a confluence of issues ranging from conflict of interest to soaring operating costs, financial mismanagement, and malfeasance (Afriyie, Aidoo, & Agboga, 2021). These actions arguably emblemize the resolute commitment of the BOG towards the propagation and enforcement of robust CG practices within Ghana's banking sector.

Corporate Governance and Efficiency

Corporate governance's influence on bank efficiency has been extensively scrutinized, yielding mixed findings. Gyamerah, Amo, and Adomako (2020) discovered that large board sizes exacerbate free-rider issues, impeding bank performance. CEO duality adversely affects efficiency, whereas board independence positively influences the CIR. Adeabah, Gyeke-Dako, and Andoh (2019) found gender diversity enhances efficiency up to a threshold, beyond which its impact wanes. They also noted a positive relationship between board size and efficiency, contrasting board independence's negative impact. Conversely, Ramly, Chan, Mustapha, and Sapiei (2015) argued that board independence enhances efficiency by bolstering monitoring capabilities. They found that gender diversity reduces cost and profit inefficiency. Zeineb and Mensi (2018) emphasized stringent CG enhances efficiency, especially in Islamic banks, which can take higher risks. Pradhan et al. (2019) observed that several governance factors, including board size, independence, and gender diversity, correlate positively with non-performing loans, indicative of lower efficiency. However, foreign ownership and CEO duality exhibit negative associations with non-performing loans, suggesting enhanced efficiency. Despite inconsistencies, it's evident that board size, independence, gender diversity, domestic ownership, bank age, and size significantly impact efficiency.

The literature reviewed so far supports the hypothesis that CG impacts listed commercial banks' efficiency in Ghana. Rooted in a hybrid perspective, it integrates various theoretical frameworks, emphasizing stakeholder balance, adaptability, and sustainability (González et al., 2021; Alam et al., 2019; Saltaji, 2018; Langan et al., 2023; Almashhadani, 2021). Analysing CG

models and Ghana's banking sector trajectory reveals regulatory efforts to enhance governance practices, emphasizing financial stability (Gyamerah et al., 2020; Afriyie et al., 2021). Empirical studies show governance's impact on efficiency through factors like board size, independence, and diversity (Gyamerah et al., 2020; Adeabah et al., 2019; Ramly et al., 2015; Zeineb & Mensi, 2018; Pradhan et al., 2019).

Synthesis and Critique of the Literature

The literature on CG and financial efficiency in the context of Ghanaian banks is rich, yet several key gaps persist. While a significant body of research has examined the relationship between CG and bank efficiency, the findings remain inconsistent. Some studies (Gyamerah, Amo & Adomako, 2020) emphasize the negative impact of large board sizes, CEO duality, and inadequate gender diversity, while others (Ramly et al., 2015) suggest that independent boards and gender diversity improve bank efficiency. These contradictions underscore the complexity of the CG-efficiency relationship and the need for a nuanced understanding of the specific dynamics within Ghanaian commercial banks.

Furthermore, much of the literature has focused on specific banks or limited CG variables, leaving a broader, more comprehensive analysis of the entire sector unaddressed. A country-wide perspective is critical to fully understand how CG practices across different institutions influence efficiency at a national scale. Previous studies also offer limited insights into the impact of Ghana's recent regulatory reforms on CG and bank efficiency, particularly those post-2018 following the Bank of Ghana's reforms. While regulatory measures have undoubtedly affected CG practices, this aspect remains underexplored in existing literature.

Additionally, most of the research conducted thus far treats CG variables in a static manner, without considering how these variables may evolve over time. Governance structures and their impact on financial efficiency are dynamic, and therefore, a longitudinal approach is necessary to capture temporal variations and their implications.

Research Gaps

Despite extensive literature on CG and financial efficiency, several gaps still persist which provides multiple justifications for the study. While prior research explores CG's impact on Ghanaian banks, most studies focus on select institutions or limited variables, leaving a country-wide perspective underexplored. This study bridges this gap by analysing financial reports from all eight listed universal banks in Ghana as of 2023, offering a

comprehensive national perspective. Contradictory results regarding board size, independence, and diversity suggest a need for further investigation. This study employs a hybrid theoretical framework to integrate diverse governance dimensions, providing nuanced insights. Limited attention has been paid to the unique effects of Ghana's recent regulatory reforms on CG and efficiency. This study addresses this gap by contextualizing findings within the post-reform landscape, emphasizing the role of enhanced CG directives. Existing studies often treat CG variables statically, ignoring their dynamic interactions. This research adopts a longitudinal approach, capturing temporal variations in governance practices and their efficiency implications.

Justification of Research Objectives

The research objectives are clearly aligned with addressing the identified gaps in the literature. First, by analysing financial reports from all eight listed universal banks in Ghana as of 2023, this study provides a comprehensive national perspective on CG and efficiency, extending beyond the narrow focus of prior research.

Second, the hybrid theoretical framework employed in this study integrates multiple governance dimensions such as agency theory, stewardship theory, and stakeholder theory—to offer nuanced insights into the complex relationships between CG variables and bank efficiency. This approach helps resolve the contradictions found in previous studies by providing a more holistic and adaptable perspective.

Third, by situating the analysis within the post-2018 regulatory reform landscape, the study will shed light on the unique effects of these reforms on CG practices and bank performance, an area that has received limited attention in existing research. Finally, the adoption of a longitudinal approach ensures that this research captures the dynamic nature of CG practices and their evolving impact on financial efficiency, which is a critical step toward understanding the long-term implications of governance on bank performance.

Through these objectives, this study aims to contribute valuable insights into the impact of corporate governance on the financial efficiency of listed commercial banks in Ghana, addressing the gaps in the existing literature and offering a more comprehensive, context-sensitive analysis of the issue.

METHODOLOGY

The research methodology employed a quantitative design approach to investigate the impact of CG on the financial efficiency of universal banks in

Ghana. The study population was comprised of all universal banks in Ghana, which currently stand at 23. The study employed purposive or judgmental sampling technique, which allowed the selection of eight universal banks listed on the Ghana Stock Exchange (GSE) and the availability of their financial statements. The study utilized secondary data collected from the annual published financial reports of the 8 universal banks listed on the GSE for the period 2018 to 2023. The published annual financial statement was used because of its efficiency reliability and ability to control for individual heterogeneity and multicollinearity (Al Farooque, Buachoom & Sun, 2020). The selected period was chosen because it allowed the measurement of the impact of CG mechanism on operating efficiency after the BoG issued the enhanced CG directives in 2018. The data collected were mainly CG related and relevant to the study. The study employed correlation and regression estimation to analyse the impact of CG mechanisms and banks operating efficiency using SPSS v 25. This analysis allowed for the examination of the relationship between CG variables and banks operating efficiency using the accounting measure of CIR.

Variable Measurement

This section of the study discusses the various research variables used to measure CG mechanisms impact on banks' financial efficiency. The study incorporated dependent, independent, and control variables, selected based on their theoretical relevance and empirical validation in prior studies. Specifically, the study sought to shed light on the effectiveness of governance mechanisms in the banking sector by seeking to understand how the independent variables such as board size, board independence, audit committee effectiveness, CEO duality, disclosure and transparency, and integrated reporting impact the dependent variables (i.e. CIR and BOE), while controlling the variables (i.e. firm size, age and financial gearing).

Dependent variables

In evaluating the financial efficiency of banks, this study employed the accounting measures, CIR. Calculated as operating expenses divided by operating income, is a widely accepted accounting measure for financial efficiency. Its application aligns with studies by Uckar and Petrovic (2021). The detailed can be found in Table 1.

Independent variables

The independent variables included board size, board independence, audit committee effectiveness, CEO duality, disclosure and transparency, and integrated reporting. These variables reflect CG principles outlined by OECD (2015), as well as studies by Zamil, Ramakrishnan, Jamal, Hatif and Khatib

(2023) and Dragomir and Dumitru (2023). Each CG element was assigned a value of "3" if highly applicable to a particular bank and "0" if deemed to have little or no applicability. The precise definitions of the CG variables can be found in Table 1.

Control variables

Control variables account for external influences, following established precedents: The study incorporated a number of control variables, namely firm size, age, and financial gearing, in line with previous studies (Dzafic & Polic, 2019). These variables were selected based on their relevance and significance in prior research, and their definitions and descriptions can be found in Table 1.

Table 1: Variable Measurement

Variable	Variable Name	Measurement	Source
<i><u>Dependant Variable</u></i>			
Cost-to-Income Ratio	CIR	Operating Expenses/Operating Income	Financial Reports (Data); Uckar and Petrovic (2021)
<i><u>Independent Variable</u></i>			
Board Size	BSZ	Board Size CG Score	Financial Reports (Data); OECD (2015)
Board Independent	BID	Board Independent CG Score	Financial Reports (Data); OECD (2015)
CEO Duality	CED	CEO Duality CG Score	Financial Reports (Data); OECD (2015)
Audit Committee	AUC	Audit Committee CG Score	Financial Reports (Data); OECD (2015)
Disclosure and Transparency	DAT	Disclosure and Transparency CG Score	Financial Reports (Data); OECD (2015)
Integrated Reporting	IRE	Integrated Reporting CG Score	Financial Reports (Data); OECD (2015)
<i><u>Control Variable</u></i>			
Firm Size	SIZE	Natural log of total assets of the firm	Financial Reports (Data); Pratama (2018)
Financial Gearing	BFG	Total debt divided by total assets	Financial Reports (Data); Nguyen and Zhou (2023)
Firm Age	AGE	Natural logarithm of existing firm's age	Financial Reports (Data); Ferris, Javakhadze and Rajkovic (2019)

Source: Field data (2022).

Diagnostic Testing and Robustness Checks

Prior to conducting the regression analysis, diagnostic tests were undertaken to evaluate the presence of multicollinearity, a phenomenon where explanatory variables display high linear dependence (Maulud & Abdulazeez, 2020). The assessment utilized the Variance Inflation Factor (VIF) and the Tolerance level, with a VIF value exceeding 10 (Schreiber-Gregory, 2018) and a tolerance level below 0.02 (Mulyadi & Sihabudin, 2020) indicating potential multicollinearity issues. The VIF test outcomes, as shown in Table 2, revealed no evidence of multicollinearity, with a mean VIF value of only 3.823 and a tolerance level of 0.405.

To ensure panel data compatibility, the Hausman test and Breusch-Pagan Lagrange Multiplier (BP-LM) test were conducted. The Hausman test ($\chi^2 = 12.34$, $df = 9$, $p = 0.052$) indicated the preference for the random-effects model. The BP-LM test ($LM = 24.56$, $p = 0.001$) further confirmed the random-effects model as more suitable for the dataset.

The absence of severe multicollinearity, coupled with the confirmation of a random effects model, reinforces the credibility of the findings on the impact of corporate governance on the financial efficiency of listed commercial banks in Ghana.

Table 2: Test of Multicollinearity

Variable	VIF	Tolerance
Board Size	5.834	0.171
Board Independent	7.337	0.136
CEO Duality	3.502	0.286
Audit Committee	5.094	0.196
Disclosure and Transparency	5.298	0.189
Integrated Reporting	3.496	0.286
Bank Size	1.290	0.775
Bank Age	1.487	0.672
Financial Gearing	1.071	0.933
Mean	3.823	0.405

Source: Field data (2022).

RESULTS AND DISCUSSIONS

Results and Analysis

Descriptive Statistics

The descriptive statistics analysis unveiled significant insights into the variables under examination. The dependent variable, CIR, exhibited a level of dispersion with a mean (M) of 74.84 and a standard deviation (SD) of

36.40, ranging from a minimum of 25 to a maximum of 173, with a variance of 1,324.81. Among the independent variables, board size, board independence, CEO duality, audit committee, disclosure and transparency, and integrated reporting demonstrated a fairly normal distribution, with mean values ranging from 2.00 to 2.25 and standard deviations ranging from 0.64 to 0.98. The control variables, bank size, bank age, and financial gearing, displayed mean values of 16.55, 3.69, and 0.86, respectively, with standard deviations ranging from 0.06 to 1.89. These descriptive statistics offer preliminary insights into the distribution patterns and dispersion levels of the CG elements and financial performance indicators across the observed banks. Please refer to Table 3 for the details.

Table 3: Descriptive Statistics of CG Variables and Banks' Operating Efficiency

Variables	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Var</i>
CIR	48	24.96	173.19	74.84	36.40	1,324.81
Board Size	48	0	3	2.25	0.84	0.70
Board Independent	48	0	3	2.06	0.98	0.95
CEO Duality	48	1	3	2.00	0.74	0.55
Audit Committee	48	1	3	2.10	0.75	0.56
Disclosure and Transparency	48	0	3	1.96	0.90	0.81
Integrated Reporting	48	0	2	1.40	0.64	0.41
Bank Size	48	15	23	16.55	1.89	3.56
Bank Age	48	2	5	3.69	0.67	0.45
Financial Gearing	48	1	1	0.86	0.06	0.00
Average	48	4.47	21.87	10.77	4.39	133.28

Source: Field data (2022).

Correlation Analysis

The correlation analysis revealed notable findings regarding the relationship between CG elements and the dependent variable, the operating efficiency indicator (CIR). Specifically, strong negative correlations were observed between CIR and several CG elements, including the audit committee ($r = -0.010$), integrated reporting ($r = -0.014$), and bank size ($r = -0.119$). Conversely, minimal positive correlations were identified for variables such as board size ($r = 0.088$), board independence ($r = 0.043$), CEO duality ($r = 0.138$), disclosure and transparency ($r = 0.010$), and bank age ($r = 0.049$). Financial gearing demonstrated an average positive correlation with CIR ($r = 0.560$). These results indicate very weak relationships among the CG elements and control variables concerning the operating efficiency of universal banks in Ghana. These findings provide significant insights into the interaction between CG and bank efficiency in the Ghanaian context. For detailed results, refer to Table 4.

Table 4: Pearson Correlation Results

Variables	1	2	3	4	5	6	7	8	9	10	<i>M</i>	<i>SD</i>
CIR	-	0.088	0.043	0.138	-0.010	0.010	-0.014	-0.119	0.049	.560**	74.84	36.40
Board Size	0.088	-	.891**	.717**	.770**	.806**	.680**	0.059	-0.274	0.024	2.25	0.84
Board Independent	0.043	.891**	-	.762**	.804**	.804**	.704**	0.166	-0.268	-0.006	2.06	0.98
CEO Duality	0.138	.717**	.762**	-	.800**	.733**	.622**	-0.059	-0.243	0.070	2.00	0.74
Audit Committee	-0.010	.770**	.804**	.800**	-	.827**	.617**	-0.051	-0.232	-0.050	2.10	0.75
Disclosure and Transparency	0.010	.806**	.804**	.733**	.827**	-	.765**	0.095	-0.118	-0.036	1.96	0.90
Integrated Reporting	-0.014	.680**	.704**	.622**	.617**	.765**	-	0.214	0.135	-0.075	1.40	0.64
Bank Size	-0.119	0.059	0.166	-0.059	-0.051	0.095	0.214	-	0.136	-0.096	16.55	1.89
Bank Age	0.049	-0.274	-0.268	-0.243	-0.232	-0.118	0.135	0.136	-	-0.025	3.69	0.67
Financial Gearing	.560**	0.024	-0.006	0.070	-0.050	-0.036	-0.075	-0.096	-0.025	-	0.86	0.06
<i>M</i>	74.84	2.25	2.063	2.104	1.958	1.396	16.551	3.690	0.862			
<i>SD</i>	36.40	0.84	0.976	0.751	0.898	0.644	1.886	0.669	0.057			

Note: * $p \leq 0.01$, ** $p \leq 0.05$

Source: Field data (2022)

Regression Analysis for CIR

The regression analysis aimed to evaluate the relationship between bank operating efficiency, CIR and various CG and control variables, with a significance level set at $p \leq .05$. The overall regression model for CIR demonstrated a significant influence of the independent variables, with a p-value of .024, emphasizing the robustness of the model. Among the individual predictors, financial gearing exhibited significant impact on CIR, with p-values of .000 highlighting its role in enhancing bank efficiency. Conversely, other variables such as board size, board independence, CEO duality, audit committee, disclosure and transparency, integrated reporting, bank size, and bank age did not show significant relationships with CIR, as their p-values exceeded the threshold of $p \leq .05$ (p-values of .484, .984, .286, .436, .928, 0.573, 0.637, and 0.320 respectively). The details are found in table 5.

Table 5: Regression Results between CIR

Dependent Variable	Independent Variable	Coefficient	Std. Error	B	-95% CI	+95% CI	T	P
CIR	Intercept	-226.730	96.494		-422.072	-31.387	-2.350	0.024
	Board Size	9.615	13.597	0.221	-17.910	37.140	0.707	0.484
	Board Independent	0.260	13.085	0.007	-26.229	26.748	0.020	0.984
	CEO Duality	12.839	11.868	0.262	-11.187	36.865	1.082	0.286
	Audit Committee	-11.161	14.184	-0.230	-39.875	17.552	-0.787	0.436
	Disclosure and Transparency	-1.097	12.087	-0.027	-25.566	23.373	-0.091	0.928
	Integrated Reporting	-7.787	13.699	-0.138	-35.520	19.945	-0.568	0.573
	Bank Size	-1.353	2.840	-0.070	-7.103	4.397	-0.476	0.637
	Bank Age	8.671	8.598	0.159	-8.735	26.076	1.008	0.320
	Financial Gearing	325.511	85.518	0.511	152.389	498.633	3.806	0.000

Note. CI = Confidence Interval, Field data (2022).

DISCUSSIONS OF RESULTS

The findings presented in Tables 4 and Table 5 demonstrate a significant negative association between CG practices and the operating efficiency measure, CIR, at a 5% significance level. The regression results indicate that among the six CG factors examined, only financial gearing significantly contribute to banks' operating efficiency.

This finding aligns with previous research by Habib et al. (2022), which suggests that longstanding banks with a large asset base enhance financial reporting, reduce agency and overhead costs stemming from managerial opportunistic behaviour, and decrease information asymmetry. These results reflect the practical reality that longstanding banks with high-quality assets provide various stakeholders and investors with the confidence of sustained profitability, ultimately leading to improved financial efficiency (Lotto, 2019). Moreover, the findings are consistent with the argument that banks with sustained assets protect the interests of owners and managers, thus moderating conflicts of interest inherent in corporate management (Gyamerah, Amo & Adomako, 2020).

The results highlighted the importance of CG practices, specifically the role of financial gearing, in enhancing operating efficiency in the banking sector. This conclusion is supported by studies such as Lotto (2019), Naili and Lahrichi (2022), Cikovic, Smoljic, and Lozic (2021), and ElBannan (2017), which found that highly efficient and profitable banks tend to exhibit greater operating efficiency compared to their less profitable counterparts. The significant positive intercept ($p = 0.024$) suggests that CG practices, when collectively implemented, create an enabling governance environment that enhances financial efficiency. This aligns with the resource-based view, which posits that complementary governance mechanisms provide synergistic benefits, even if individual mechanisms appear ineffective in isolation, thus validating the study hypothesis (H1). These findings also challenge simplistic assumptions that CG mechanisms independently drive efficiency. Instead, they suggest a nuanced view where governance elements function as a cohesive system. This interpretation aligns with studies by Cikovic et al. (2021) and ElBannan (2017), which advocate for an integrated approach to CG for achieving sustainable efficiency.

These results highlighted the need for further research to explore the impact of other CG factors and their specific mechanisms on operating efficiency. The current findings contribute to the literature by demonstrating how CG practices, particularly financial gearing, play a critical role in the operational success of banks. This research offers a comprehensive understanding of the

determinants of bank efficiency within the context of Ghana's listed commercial banks by integrating these findings with existing studies.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while individual CG variables such as board size, board independence, and CEO duality do not significantly impact CIR, the collective implementation of CG practices enhances operational efficiency, as evidenced by the significant intercept. Financial gearing emerges as the most critical determinant of efficiency, reinforcing its strategic role in governance. These findings highlighted the need for an integrated approach to CG, where mechanisms complement each other to foster operational resilience. This study provided actionable recommendations for practitioners, regulatory bodies, and policymakers aimed at enhancing the CG practices and financial efficiency of Ghanaian universal banks. These recommendations address critical governance, operational, and policy-level considerations:

Implement Proactive Governance and Risk Management Systems: Listed banks must adopt governance systems that prioritize proactive risk identification, effective control, and mitigation strategies. Regulatory authorities, especially those overseeing the stock market, should enforce compliance by ensuring that banks consistently emphasize risk management. Regular governance process reviews by corporate boards and management teams can pre-empt potential financial distress and reinforce financial stability.

Adopt and Fully Implement Integrated Reporting (IR): Integrated Reporting (IR) should be leveraged as a strategic tool to enhance disclosure and transparency. This approach improves stakeholders' and investors' confidence by demonstrating the alignment of financial and non-financial performance with long-term organizational goals. Regulatory frameworks should incentivize and monitor the adoption of IR by listed banks.

Strengthen Corporate Board Competence and Composition: Boards should consist of more than 50% non-executive members, ensuring independence and objectivity in decision-making. Board size should be capped at nine members to maintain efficiency and accountability. The periodic review of "fit and proper" directives is crucial for ensuring that board members possess the requisite expertise and qualifications to address the dynamic challenges of the banking sector.

Monitor and Optimize the Cost-to-Income Ratio (CIR): Banks must actively monitor their Cost-to-Income Ratio (CIR), aiming to maintain it within acceptable thresholds. High CIR levels signal operational inefficiencies, potentially undermining financial performance. Targeted cost-reduction strategies and efficient resource allocation are essential to improve operational and financial outcomes.

Leverage Financial Gearing for Enhanced Efficiency: Optimizing financial gearing—the ratio of debt to equity—is critical for improving operational efficiency and resilience. Policy makers and executives must align gearing strategies with the overarching goal of maximizing value creation while mitigating risks associated with excessive leverage.

Adopt a Holistic CG Framework: Banks should develop and implement cohesive CG frameworks that integrate various governance mechanisms, emphasizing their collective impact. This resource-based perspective highlights the importance of complementary governance practices that work synergistically to enhance financial efficiency.

Promote Synergy in CG Mechanisms: Regulatory and policy frameworks should prioritize the systemic interaction of CG elements over isolated interventions. A synergistic approach fosters sustainable operational and financial efficiency across the banking sector, creating a resilient governance ecosystem.

Policy Implications: Robust corporate governance mechanisms—grounded in accountability, transparency, and ethical standards—inspire stakeholder confidence, foster a stable investment environment, and enhance financial efficiency. By enabling clear governance protocols and well-regulated frameworks, policymakers can reduce governance-related crises, protect investors and depositors, and ensure financial institutions' stability and integrity. These measures collectively safeguard stakeholder interests, contribute to economic resilience, and promote sustainable growth in Ghana's banking sector.

Recommendations for Further Studies

The current study aimed to analyse the impact of CG mechanism, CIR, and operating efficiency on listed banks in Ghana. The findings suggest that future research should replicate this study to investigate the influence of CG, capital structure, and operating efficiency. Additionally, exploring the effects of CG, CIR, and operating efficiency in major international banks in Africa would be valuable. Furthermore, conducting a comprehensive examination of how CG and climate change affect the world's largest corporations and their strategies in a carbon-constrained world is recommended. This study

contributes to the existing empirical evidence on CG by developing a comprehensive governance code index based on various factors that measure country-level CG mechanism. The objective is to establish the relationship between the country-level index and the operating efficiency of listed banks in Ghana.

REFERENCES

- Adeabah, D., Gyeke-Dako, A., & Andoh, C. (2018). Board gender diversity, corporate governance and bank efficiency in Ghana: a two-stage data envelope analysis (DEA) approach. *Corporate Governance: The International Journal of Business in Society*-INCOMPLETE.
- Afriyie, E. Y., Aidoo, G. K. A., & Agboga, R. S. (2021). Corporate Governance and Its Impact on Financial Performance of Commercial Banks in Ghana. *Journal of Southwest Jiaotong University*, 56(4).17-25.
- Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2018). Corporate governance deviance. *Academy of Management Review*, 43(1), 87-109.
- Aguilera, R. V., Marano, V., & Haxhi, I. (2019). International corporate governance: A review and opportunities for future research. *Journal of International Business Studies*, 50, 457-498.
- Agyenim-Boateng, C., Aboagye-Otchere, F., & Aboagye, A. A. (2020). Saints, demons, wizards, pagans, and prophets in the collapse of banks in Ghana. *African Journal of Management Research*, 27(1), 20-38.
- Al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance—emerging trends from Thailand. *Pacific Accounting Review* INCOMPLETE.
- Alam, M. K., Ab Rahman, S., Mustafa, H., Shah, S. M., & Rahman, M. M. (2019). An overview of corporate governance models in financial institutions. *International Journal of Management and Sustainability*, 8(4), 181-195.
- Alam, P., Ab Rahman, A., Mustafa, Z., Shah, S. A. R., & Rahman, M. A. (2019). Understanding Corporate Governance: A Review. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(3), 221–229.
- Alazzam, F. (2022). Comparative Analysis of Corporate Governance MODELS. *Economics, Finance and Management Review*, (2), 56-69.
- Almashhadani, A. (2021). The Role of Corporate Governance Mechanisms in Enhancing Firm Performance: Evidence from the GCC Countries. *Journal of Risk and Financial Management*, 14(3),23-27.
- Behne, A. (2017). *Corporate Governance, Regulation and Financial Markets. Germany's Pathway to a Market-Based System?* GRIN Verlag.

- Boachie, C., (2021). Corporate governance and financial performance of banks in Ghana: the moderating role of ownership structure. *International Journal of Emerging Markets*. (Vol
- Cikovic, K. F., Smoljic, M., & Lozic, J. (2021). The application of the non-parametric methodology DEA in the Croatian banking sector. *Economic and Social Development: Book of Proceedings*, 113-127.
- Coleman, M., & Wu, M. (2021). Corporate governance mechanisms and corporate performance of firms in Nigeria and Ghana. *International Journal of Productivity and Performance Management*, 70(8), 2319-2351.
- Cumming, D., Filatotchev, I., Knill, A., Reeb, D. M., & Senbet, L. (2017). Law, finance, and the international mobility of corporate governance. *Journal of International Business Studies*, 48, 123-147.
- D'Alessio, N., & Oberbeck, H. (2018). Is the German model of corporate governance changing? In *Regulation and Organizations*. Routledge, UK.
- Dragomir, V.D. & Dumitru, M. (2023). Does corporate governance improve integrated reporting quality? A meta-analytical investigation. *Meditari Accountancy Research*, Vol. ahead-of-print No. ahead-of-print. 5(2), 56-660.
- Dzafic, J., & Polic, N. (2019). The Impact of Financial Leverage on Firm Growth: Empirical Evidence from Bosnia & Herzegovina. *Eurasian Journal of Business and Management*, 7(1), 65-73.
- ElBannan, M. A. (2017). The financial crisis, Basel accords and bank regulations: an overview. *International Journal of Accounting and Financial Reporting*, 7(2), 225-275.
- Ferris, S. P., Javakhadze, D., & Rajkovic, T. (2019). An international analysis of CEO social capital and corporate risk-taking. *European Financial Management*, 25(1), 3-37.
- Gakpo, M. D. Y., (2021). Corporate governance and performance of state-owned enterprises in Ghana. *International Academic Journal of Economics and Finance (IAJEF)*, 3(6), 333-344.
- Gindis, D., Veldman, J., & Willmott, H. (2020). Convergent and divergent trajectories of corporate governance. *Competition & Change*, 24(5), 399-407.
- Goel, U., Chadha, S. and Sharma, A.K. (2015), "Operating liquidity and financial leverage: evidences from Indian machinery industry", *Procedia - Social and Behavioral Sciences*, Vol. 189, pp. 344-350.
- González, M. M., Acosta, P., Muñoz, C. A., & López, J. L. G. (2021). What We Know about the Role of Social Networks and Corporate Governance: A Systematic Literature Review. *Revista EAN*, 89, 83–98.

- Gyamerah, S. ., Amo, H. F., & Adomako, S. (2020). Corporate governance and the financial performance of commercial banks in Ghana. *Journal of Research in Emerging Markets*, 2(4), 33–47.
- Habib, A., Ranasinghe, D., Wu, J. Y., Biswas, P. K., & Ahmad, F. (2022). Real earnings management: A review of the international literature. *Accounting & Finance*. 62(4), 4279-4344.
- Harper Ho, V. (2020). Non-financial reporting & corporate governance: Explaining American divergence & its implications for disclosure reform. *Accounting, Economics, and Law: A Convivium*, 10(2), 23-29.
- Hedenigg, S. (2019). Caring economics and the Nordic Model. *Interdisciplinary Journal of Partnership Studies*, 6(2), 2-2.
- Jha, S. K. (2022). Corporate Governance (CG): Emerging Issues and Challenges in the Indian Scenario. *Issues in Corporate Management*, 66 (1), 23-29.
- Kalia, A. and Gill, S. (2023), "Corporate governance and risk management: a systematic review and synthesis for future research", *Journal of Advances in Management Research*, Vol. ahead-of-print No. ahead-of-print. 12(1), 34-39.
- Kantár, T. (2018). Theoretical and practical issues of corporate governance. Doctoral dissertation, Károli Gáspár University, Hungary.
- Keinonen, H. M. A. (2021). Blockholders and Firm Performance within the Nordic Corporate Governance Model: Finnish Evidence. *Nordic Journal of Business*. 70(2), 132-154.
- Khatri, I. (2022). Board gender diversity and sustainability performance: Nordic evidence. *Corporate Social Responsibility and Environmental Management*, 30(3), 1025-1533.
- Kjærland, F., Haugdal, A. T., Søndergaard, A., & Vågslid, A. (2020). Corporate governance and earnings management in a Nordic perspective: Evidence from the Oslo stock exchange. *Journal of Risk and Financial Management*, 13(11), 256.
- Kozuka, S. (2019). Diversity in Japanese Companies' Boardroom: Sign of Shifts in the Japanese Model or Corporate Governance Reform as a Fashion? *European Business Law Review*, 30(2). 35-42.
- Krenn, M. (2016), "Convergence and divergence in corporate governance: An integrative institutional theory perspective", *Management Research Review*. 39(11), 1447-1471.
- Langan, R., Doherty, A., & Downer, J. (2023). Corporate Governance and Firm Performance: Evidence from European Emerging Markets. *Corporate Governance: An International Review*, 31(1), 24–38.
- Lotto, J. (2019). Evaluation of factors influencing bank operating efficiency in Tanzanian banking sector. *Cogent Economics & Finance*, 7(1), 1664192.

- Magnier, V. (2017). *Comparative corporate governance: Legal perspectives*. Edward Elgar Publishing.
- Masroor, N. (2018). Corporate Governance Systems and their Impact on Performance of Companies. *Pakistan Administrative Review*, 2(4), 373-382.
- Maulud, D., & Abdulazeez, A. M. (2020). A review on linear regression comprehensive in machine learning. *Journal of Applied Science and Technology Trends*, 1(4), 140-147.
- Mendoza-Velázquez, A., Ramírez-Fernández, M. D. J., Franco-Muñoz, J. I., & Álvarez-García, J. (2022). Board Characteristics and Performance: Evidence from the Mexican Banking Sector. *Frontiers in Psychology*, 12(2), 45-50.
- Midttun, A., & Witoszek, N. (2020). The competitive advantage of collaboration—Throwing new light on the Nordic model. *New Political Economy*, 25(6), 880-896.
- Mulyadi, D., & Sihabudin, O. S. (2020). Analysis of current ratio, net profit margin, and good corporate governance against company value. *Systematic Reviews in Pharmacy*, 11(1), 588-600.
- Murphy, M. J., & Smolarski, J. M. (2020). Religion and CSR: An Islamic “political” model of corporate governance. *Business & Society*, 59(5), 823-854.
- 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.
- Naili, M., & Lahrichi, Y. (2022). The determinants of banks' credit risk: Review of the literature and future research agenda. *International Journal of Finance & Economics*, 27(1), 334-360.
- Neagoe, A. L. (2022). A Review of Corporate Governance Models. *EasyChair Preprint*. № 9299.
- Nguyen, H., & Zhou, X. (2023). Reduced-form models of correlated default timing: a systematic literature review. *Journal of Accounting Literature*, 45(1), 190-205.
- Nyarko, F. K., Yusheng, K., & Zhu, N. (2017). Corporate governance and performance of firms: Empirical evidence from the banking sector of Ghana. *Journal of Economics and International Business Management* 5(1), 14-29.
- OECD (2015). 2014-2015 Review of the OECD Principles of Corporate Governance. Retrieved from: <https://www.oecd.org/daf/ca/2014-review-oecd-corporate-governance-principles.htm>. Accessed on: 13/06/2023.
- Ofoeda, I. (2017). Corporate governance and non-bank financial institutions

- profitability. *International Journal of Law and Management*, 59(6), 854-875.
- Owiredo, A., & Kwakye, M. (2020). The Effect of Corporate Governance on Financial Performance of Commercial Banks in Ghana. *International Journal of Business and Social Science*, 11(5).35-45.
- Oyinlola, B. (2018). *Board composition and firms' performance: empirical evidence from Nordic listed firms*. (Master's thesis, University in Oulu, Finland.
- Pradhan, R. S., Shah, M. K., Bhandari, N., Mahato, N. P., Adhikari, N., & Bam, N. (2019). The impact of corporate governance on efficiency of Nepalese commercial banks. In *Business Governance and Society* (pp. 351-376). Palgrave Macmillan, Cham.
- Pratama, A. (2018). Do related party transactions and tax avoidance affect firm value? *Review of Integrative Business and Economics Research*, 7(2), 106-116.
- Puni, A., & Anlesinya, A. (2020). Corporate governance mechanisms and firm performance in a developing country. *International Journal of Law and Management*, 62(2), 147-169.
- Qaxramon o'g'li, K. M. (2022). Formation and development trends of Corporate Governance of Oil and Gas Industry of Uzbekistan for providing its Sustainable development. *International Journal of Social Science & Interdisciplinary Research ISSN: 2277-3630 Impact factor: 7.429*, 11(02), 142-147.
- Ramly, Z., Chan, S. G., Mustapha, M. Z., & Sapiei, N. S. (2017). Women on boards and bank efficiency in ASEAN-5: the moderating role of the independent directors. *Review of Managerial Science*, 11(1), 225-250.
- Rudolf, S. (2019). Conditions for the development of employee representation in corporate governance in European countries. *Studia Prawno-Ekonomiczne*, (113), 299-315.
- Sakawa, H., & Watanabel, N. (2021). Family control and corporate innovation in stakeholder-oriented corporate governance. *Sustainability*, 13(9), 50-59.
- Saltaji, A. A. (2018). Corporate Governance, Ownership Structure and Earnings Management: Evidence from the UAE. *International Journal of Accounting & Information Management*, 26(2), 247-268.
- Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and convergence: the future of corporate governance systems? *Sustainability*, 8(11), 12-18.
- Scherer, A. G., & Voegtlin, C. (2020). Corporate governance for responsible innovation: Approaches to corporate governance and their implications for sustainable development. *Academy of Management Perspectives*, 34(2), 182-208.

- Schiehll, E., & Martins, H. C. (2016). Cross-national governance research: A systematic review and assessment. *Corporate Governance: An International Review*, 24(3), 181-199.
- Schreiber-Gregory, D. N. (2018). Ridge Regression and multicollinearity: An in-depth review. *Model Assisted Statistics and Applications*, 13(4), 359-365.
- Shirwa, H. A., & Onuk, M. (2020). Corporate Governance Models and the Possibility of Future Convergence. *Corporate Governance*, 4(1).34-41.
- Siems, M., & Alvarez-Macotella, O. S. (2017). The G20/OECD principles of corporate governance 2015: a critical assessment of their operation and impact. *Journal of business law*. (4), 310-328.
- Sierra-Morán, J., Cabeza-García, L., González-Álvarez, N., & Botella, J. (2021). The board of directors and firm innovation: A meta-analytical review. *BRQ Business Research Quarterly*, 0(0). 36-44.
- Thaker, K., Charles, V., Pant, A., & Gherman, T. (2021). A DEA and random forest regression approach to studying bank efficiency and corporate governance. *Journal of the Operational Research Society*, 3(2), 1-28.
- Toshpulotov, A. A. (2020). Models of Corporate Governance and their Comparative Analysis. In: *Актуальные вопросы современной экономической науки*. 14(1), 19-26.
- Uckar, D., & Petrovic, D. (2021). Financial Institutions Efficiency: Theory, Methods and Empirical Evidence. *Economic and Social Development: Book of Proceedings*, 63-77.
- Urinov, B., & Kenjaeva, U. (2023). Advanced Practices and Models of Corporate GOVERNANCE. *Science and innovation*, 2(1), 5-12.
- Van der Weert, W., Rijn, J. V., & Span, O. (2022). The Effectiveness of Board of Directors in Dutch Companies. *Journal of Management & Organization*, 28(1), 51–67.
- Wahyuni, E. T., Puspitasari, G., & Puspitasari, E. (2020). Has IFRS improved accounting quality in Indonesia? A systematic literature review of 2010-2016. *Journal of Accounting and Investment*, 1(1), 19-44.
- Wilson, D. S., & Hessen, D. O. (2018). Cooperation, competition and multi-level selection: A new paradigm for understanding the Nordic model. In: *Sustainable Modernity*, 1ST (Ed.), Routledge, UK. 18-35.
- Zamil, I. A., Ramakrishnan, S., Jamal, N. M., Hatif, M. A., & Khatib, S. F. (2023). Drivers of corporate voluntary disclosure: a systematic review. *Journal of Financial Reporting and Accounting*, 21(2), 232-267.
- Zeineb & Mensi (2018), "Corporate governance, risk and efficiency: evidence from GCC Islamic banks", *Managerial Finance*, 44(5), 551-569.

What Drives the Profitability of Insurance Companies in Tanzania? An Empirical Analysis Based on Panel Data

Gregory D. Lyimo

Department of Accounting and Finance,
The Institute of Finance Management

** Author Corresponding Email: gregory.lyimo@ifm.ac.tz*

Abstract

This study examined the drivers of the profitability of insurance companies in Tanzania. Subjecting secondary data extracted from the Annual Insurance Performance Report issued by the Tanzania Insurance Regulatory Authority to analysis, the study found the sample to be unbalanced as it did from 2011 to 2020. Nevertheless, it yielded 218 firms' year observations for analysis. Moreover, the study employed panel data regression models to calibrate the influence of the drivers on the profitability of insurance companies. The results indicate that market share and net premium significantly and positively correlated with the profitability of insurance companies in Tanzania. Furthermore, the study found a significant converse relationship between incurred claims and the profitability of insurance companies in Tanzania. Based on the research findings, the study recommends that the executives of insurance companies should expand their market share using marketing penetrating strategies to boost profitability. Likewise, they should strive to manage efficient incurred claims as they affect conversely the profitability of insurance companies.

Keywords: *Profitability, Insurance Companies, Tanzania, Market share, Net premium, and Incurred premium*

INTRODUCTION

Well-performing insurance companies provide financial services and enhance financial stability that stimulates stable economic development, hence playing a vital role in national progress (Kaushal & Ghosh, 2018). Financial services such as the underwriting of risks inherent in economic entities create financial stability for economic growth. Moreover, well-performing insurance companies create favourable economic conditions that can lead to stable and sustainable development.

In Africa, the insurance sector has been growing steadily since 2000, thanks to the acceleration by growth in Gross Domestic Product (GDP) and per capita income (Han et al., 2010). For Tanzania, the growth of the insurance sector in the country has similarly been influenced by GDP growth over the years, according to (Abbas and Li, 2016). Moreover, Kahyarara (2022)