

Corporate Governance and Corporate Performance Nexus: Evidence from Ghana's Insurance Sector

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Abstract

The insurance industry is a vital pillar of Ghana's economy, providing financial security, risk management, and investment opportunities. Corporate governance plays a crucial role in determining the performance and sustainability of insurance companies, influencing decision-making, operational efficiency, and overall financial health. Effective governance structures ensure transparency, accountability, and strategic oversight, which are essential for fostering investor confidence and industry growth. This study examines the impact of corporate governance practices on the performance of insurance companies in Ghana, focusing on three key factors: board size, board independence, and CEO duality. Using the Ordinary Least Squares (OLS) regression technique, this study analyzes panel data from 20 insurance firms spanning the period from 2011-2020, sourced from National Insurance Commission (NIC) reports, to provide empirical insights into governance dynamics within the industry. The findings reveal that board size significantly impacts corporate performance, while board independence and CEO duality have minimal effects. Additionally, the study highlights the crucial role of board composition in enhancing return on assets (ROA), a key measure of financial performance. The results suggest that having an optimally structured board can improve decision-making processes, enhance managerial oversight, and ultimately drive company profitability. These insights are particularly valuable for policymakers, regulatory authorities, and industry stakeholders aiming to refine corporate governance frameworks to foster sustainable growth in the insurance sector. These insights are valuable for policymakers, regulators, and industry stakeholders seeking to refine governance frameworks for sustainable growth. Given the notable impact of board size, regulatory bodies like the NIC should establish guidelines to optimize board composition, balancing efficiency and oversight. Strengthened governance policies will enhance investor confidence, promote corporate accountability, and contribute to Ghana's economic development.

Keywords: Corporate Governance, Corporate Performance, Ghana's Insurance Industry, Panel Data, Agency Theory

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1. Introduction

Human beings establish, control, and direct organizations in various forms, and even though these organizations gain artificial personalities after incorporation, they are ultimately shaped by human influence. The owners of these organizations seek growth and continuous existence to derive benefits from their ventures. However, many organizations, especially those limited by shares, are not directly controlled by their owners. Instead, a group of experienced individuals knows the board of directors in charge. This board formulates the organization's mission and vision and provides strategic oversight (Sarpong-Danquah et al., 2022). Meanwhile, a management body oversees the day-to-day operations. It acts as an intermediary between the shareholders and the organization, making decisions that can impact both short-term returns and long-term interests (Mensah and Bein, 2023), leading to agency conflicts due to information asymmetry.

The relationship between owners (shareholders) and the board of directors is an agency relationship, where the owners delegate decision-making authority to the agents (Jensen and Meckling, 1976). Although owners have fiduciary duties to the shareholders, they may not be actively involved in daily operations and can only cast votes during general meetings. To ensure fairness and accountability within organizations, external individuals are hired to assess the organization's affairs and report on their findings, acting as watchdogs permitted by regulatory bodies. This control mechanism ensures that stakeholders, especially the owners, receive fair rewards for their investments (Donaldson and Davis, 1991).

Companies, especially publicly listed ones, may have ownership from citizens of multiple countries, enabling global accessibility and competition. Corporate governance practices, specifically board size, board independence, and CEO duality, facilitate streamlined activities and better management. To be properly governed, especially in a global context, companies, particularly limited ones, publish their financial details for stakeholders to make informed judgments (Aribaba and Ahmodu, 2017). After incorporation, companies gain global recognition, allowing ownership and transactions with interested parties worldwide. This global accessibility necessitates proper management and governance of corporations. Corporate governance, defined as the method of controlling and directing organizations (Almashhadani and Almashhadani, 2022), has become a subject of concern for researchers, professional bodies, and world leaders.

Corporate governance has gained significant attention over the years due to its sensitivity and impact on organizations. Failures in corporate governance, as evidenced by cases like WorldCom and Enron, led to the formulation of policies and regulations by world leaders and governing bodies to improve management practices. In particular, the insurance industry plays a crucial role in providing businesses with a safety net in times of catastrophe, ensuring their continuity (Cudjoe, 2016).

The insurance sector safeguards businesses and individuals against significant financial risks in developing nations like Ghana. For example, insurance companies can compensate for substantial

property losses caused by heavy rainfall, providing businesses with the stability needed to recover and continue operations. However, some organizations still collapse due to noncompliance with corporate governance principles, which undermine investor confidence, hinder economic growth, and contribute to rising unemployment. To address these challenges, further research is essential to explore how corporate governance practices, such as ensuring board accountability and transparency, can be effectively adopted in the insurance industry to enhance performance, build investor trust, and support sustainable economic development (Saeed, 2025a).

Corporate governance in Ghana's insurance industry has unique characteristics that make it a compelling area for study. A notable regulation restricts foreign companies from owning a maximum of 60% of Ghanaian insurance firms. While this policy aims to prioritize local ownership, it limits the influence of foreign investors who often bring professional investment experience, potentially affecting the adoption of robust corporate governance practices. Furthermore, Ghanaian companies can have more than one CEO, a distinct feature that introduces complexities in leadership dynamics and decision-making processes. These factors, combined with the critical role of insurance in mitigating financial risks—such as compensating for property losses due to heavy rainfall—underscore the importance of understanding corporate governance in this sector (Saeed, 2025a; Saeed and Donkoh, 2024). By addressing these unique challenges, the research seeks to enhance governance frameworks, build investor trust, and strengthen the performance and resilience of Ghana's insurance industry. The study focuses on non-life insurance companies, excluding life insurance companies, due to the distinct nature of their operations and governance requirements. Non-life insurance firms often deal with short-term, high-risk policies, such as covering property losses from heavy rainfall, which necessitate quick decision-making and robust corporate governance structures. These characteristics might lead to better or worse governance practices compared to life insurance companies, which operate with longer-term policies and more stable cash flows.

This paper focuses on the importance of corporate governance in the insurance sector of a developing nation like Ghana. By adhering to corporate governance principles, Ghana can achieve its development goals and improve the performance of its sectors, especially the insurance industry. The study aims to investigate the impact of corporate governance on insurance firms, leading to better services, improved financial performance, and enhanced policy formulation. The research will be valuable for stakeholders, management, and regulators, providing insights into corporate governance structure and theory development. The following sections will review previous research, present data and methodology, analyze and discuss findings, and conclude with future implications (Section 2 to Section 5).

2. Literature Review

This study is founded upon the agency theory, which delves into how Ghana's corporate governance policies affect the financial performance of insurance companies. Proposed by Jensen and Meckling in 1976, the agency theory examines the dynamic between a principal and an agent.

Within the context of businesses, owners (principals) may lack the time or capacity to oversee day-to-day operations, so they enlist managers (agents) to act on their behalf. However, this arrangement can give rise to conflicts of interest, as managers may prioritize their gains over maximizing shareholder value, creating what is commonly referred to as the agency problem (Jensen and Meckling, 1976).

To mitigate the effects of agency issues, specific corporate governance mechanisms are necessary. Two such mechanisms are the audit committee (AC) and board independence, which aim to safeguard the owners' interests. The AC, although not responsible for generating financial statements, plays a crucial role in ensuring that the management's financial reports adhere to the International Financial Reporting Standards (IFRS) and provide a reasonable level of certainty. This ensures accuracy and prevents misleading financial information that could affect consumer perceptions. Adhering strictly to IFRS is believed by many agency theory proponents to be an effective way to enhance corporate performance, transparency, and disclosure, thereby reducing conflicts between management and shareholders. Ultimately, this will foster greater trust among shareholders in emerging economies (Jensen and Meckling, 1976).

2.1 Historical Perspective of Corporate Governance

Corporate governance systems have undergone significant changes over the past decades, primarily driven by corporate failures and the need to instill confidence in investors while maximizing returns. Historical examples include the South Sea Bubble in the 18th century, which led to the enactment of corporate laws in the United Kingdom to regulate corporate affairs. Subsequently, the failures of Barings Bank and Bank of Credit in the 1980s and 1990s due to inefficient corporate governance, irregular financial reporting, and weak internal controls necessitated proposals for dealing with corporate governance issues. The Foreign and Corrupt Practices Act of 1977 in the US aimed at developing, maintaining, and updating internal control systems (Arora and Sharma, 2016).

To address concerns about the "window dressing" of financial accounts, the Cadbury Committee was established in response to widespread suspicions. It examined the financial elements of corporate governance and contributed to the creation of the United Kingdom Combined Code through the consolidation and reformation of previous reports (Rayton et al., 2004).

2.2 Development of Corporate Governance in Ghana

Corporate governance has undergone significant evolution, marked by diverse interpretations and frameworks aimed at improving organizational practices and addressing governance challenges. The Organization for Economic Co-operation and Development (OECD) (2004) defines corporate governance as a system for directing and controlling organizations, a perspective echoed by Dawood et al., (2023). Similarly, the Ghana Corporate Governance Guidelines, issued by the Securities and Exchange Commission, describe it as the practices and processes used to oversee and manage corporate entities. This approach emphasizes balancing the achievement of corporate objectives with

societal expectations while maintaining accountability to shareholders and stakeholders (Appiah et al., 2017).

In Ghana, corporate governance is guided by organizational structures, agreements, rules, and laws designed to enhance business efficiency. The Companies Code provides comprehensive guidelines for business management, enabling organizations to implement internal controls that build shareholder trust and promote economic growth (Appiah et al., 2017). This study assesses corporate governance through critical variables such as board size, composition, and CEO duality.

The regulatory framework for organizations in Ghana is rooted in the Business Code of 1963, which aligns with global corporate governance standards. Oversight of businesses listed on the Ghanaian stock market is carried out by the Securities and Exchange Commission, while the Ghana Stock Exchange plays a pivotal role in influencing governance practices (Ebenezer, 2015).

In 2003, Ghana introduced its first Corporate Governance Code, adopting a "comply or explain" approach. This policy requires directors to explain adherence to or deviations from governance guidelines in their annual reports, enabling shareholders to accept or challenge these justifications. This emphasis on transparency reinforces corporate governance by mandating boards to detail the application of governance provisions (Joseph et al., 2017). The code, comprising approximately 33 provisions, provides a professional framework for standardizing corporate operations, fostering stakeholder confidence, and mitigating information asymmetry. Additionally, it mandates an audit committee of at least three non-executive directors with financial expertise, further bolstering governance structures (Ebenezer, 2015).

2.3 Overview of the Insurance Industry and Regulatory Framework in Ghana

The roots of the insurance industry in Ghana can be traced back to 1924, when the first insurance firm, Royal Guardian Enterprise Insurance, was established. Over time, it underwent a name change and became Enterprise Insurance Firm Limited. In 1962, the State Insurance Company was formed following the merger of the Cooperative Insurance Society (CIS) and Gold Coast Insurance Company (GCIC). Another notable insurance company during that period was General Insurance Company, which was founded in 1957. Before the establishment of GCIC, the local insurers, CIS, and General Insurance Company primarily served foreign customers, especially Europeans.

In 1995, the Ghanaian government initiated a divestment plan, leading to the transformation of the State Insurance Company (SIC) into a public limited liability corporation. Subsequently, it was renamed the State Insurance Company of Ghana, with the government holding full ownership. In 2007, it adopted the name State Insurance Company Limited (Zaato, 2016).

Deregulation brought significant changes to the Ghanaian insurance market by opening doors for foreign firms and breaking the government's monopoly. However, foreign companies were restricted to owning a maximum of 60% of non-life and life insurance companies. The National Insurance Commission (NIC) took charge of overseeing the insurance sector, replacing the Insurance

Law of 1989 (PNDC Law 227) with the Insurance Act of 2006 (Act 724). Both life and non-life insurance plans are offered to protect businesses from unforeseen events. As of 2018, there were 29 non-life insurance companies and 26 life insurance companies operating in Ghana (Ashiagbor et al., 2023).

NIC is the regulatory body for Ghana's insurance sector, like other nations. Its main responsibilities include licensing, setting industry standards, and approving insurance prices and commission fees. It also maintains communication with other significant financial system authorities, such as the Bank of Ghana. Notably, the NIC has mandated that all insurers deposit a minimum of 10% of the required capital with the Bank of Ghana to ensure adequate resources to handle potential liquidity shocks (Tornyeva and Wereko, 2012).

In 2013, industry players reviewed a proposed insurance law to address the shortcomings of Act 724. The focus was on assigning license priorities for specialized insurers dealing in micro-insurance and farm insurance. The new law emphasized the creation of additional products in key industries crucial to the nation's economy. Furthermore, insurance firms were required to write off all bad debts that year, and premiums were subsequently required to be paid upfront (Saeed, 2024). The passage of Act 724 in 2013 marks a significant milestone in corporate governance regulation for Ghanaian insurance companies. To assess its impact, performing a sub-sample analysis focusing on data post-2013 and comparing it with the full sample analysis is strongly recommended. This approach would help determine whether the enactment of Act 724 has influenced corporate governance practices, such as board structure, transparency, and accountability, within the insurance sector. Such a comparison could provide valuable insights into the effectiveness of the legislation and its role in shaping governance outcomes in Ghanaian insurance companies.

2.4 Empirical Review and Hypothesis Development

In Ghana, research on the link between corporate governance and company performance has yielded significant insights. Owusu and Weir (2016) demonstrated a positive correlation between governance practices and financial performance using 33 governance indexes. Tornyeva and Wereko (2012) emphasized the importance of large board sizes and board skills, finding them beneficial for the financial performance of Ghanaian insurance companies. They also suggested an optimal board size of seven to nine directors to enhance firm performance. Tackie et al., (2022) explored the relationship between corporate governance and tax planning in Ghanaian insurance firms, identifying a nonlinear relationship with profitability. In the manufacturing sector, Sarpong-Danquah et al., (2022) found that board size significantly and positively impacts corporate performance.

Studies from other countries provide a comparative perspective. In Nigeria, Uadiale (2010) revealed an inverse relationship between CEO duality and Return on Equity, along with a strong correlation between board size, non-executive members, and financial performance. Similarly, Herbert and Agwor (2021) reported a positive impact of governance disclosure on Nigerian commercial banks. In Kenya, Wanyama and Olweny (2013) observed a strong link between

governance and performance but noted a negative association with board size in insurance firms. Makokha (2014) found that governance impacted performance but did not see significant effects from board and risk committee sizes.

Globally, findings are mixed. Orazalin et al., (2016) and Ntim (2013) identified a positive relationship between governance and performance in Russia, while Zhang et al., (2016) and Darko et al., (2016) reported inverse associations in China. In Germany, Abdullah and Tursoy (2023) highlighted the detrimental impacts of certain board features on financial performance, contrasting with Alabi et al., (2022), who found negligible benefits of board independence in FTSE 100 companies. Conflicting views on CEO duality also emerge. Tornyeva and Wereko (2012) argued that combining CEO and chairman roles accelerates decision-making and improves performance, while Sanda et al., (2010) found separation beneficial. These diverse findings underline the importance of context in understanding corporate governance. Ghana's unique corporate landscape, including its board size norms and regulatory environment, provides fertile ground for further research to clarify how governance frameworks influence performance in the insurance sector. Based on the empirical findings, the following hypotheses are generated:

H1: Board Size has a significant positive effect on Corporate Performance.

H2: Board Independence has a significant positive effect on Corporate Performance.

H3: CEO Duality has a significant positive effect on Corporate Performance.

Ghanaian insurance regulations incorporate several unique features that may contribute to the predicted positive effects on corporate performance. One key feature is the capital restriction, which limits foreign ownership to no more than 60%. This restriction may enhance board size and independence, as local stakeholders are likely to have greater representation and influence in decision-making processes, aligning with the hypotheses H1 and H2. A larger and more independent board can provide stronger oversight, strategic guidance, and risk management, ultimately improving corporate performance. Additionally, the requirement for more than one CEO in some Ghanaian insurance firms may relate to H3, as it mitigates the risks associated with excessive concentration of power in a single individual. This structure could foster better decision-making, accountability, and leadership effectiveness, reinforcing the positive effect of CEO duality on corporate performance. These regulatory characteristics suggest that Ghanaian insurance firms benefit from governance structures that support strategic oversight and operational efficiency (Saeed et al., 2025).

3. Data and Methodology

3.1 Data

This study employs a panel data approach and an explanatory research design to establish relationships between dependent and independent variables. The secondary data for this research is sourced from reports submitted by Twenty (20) insurance firms to the National Insurance Commission (NIC) over ten years from 2011 to 2020, resulting in a dataset of 200 observations. These

observations reflect the unique contributions of insurance firms to life, property, and the overall economy. The surge in insurance policy patronage in Ghana was observed primarily after a period of heavy rainfall that caused significant property damage.

Out of the total population of insurance companies, a sample of 20 non-life insurance companies was selected using a convenience sampling method. The selection criteria were based on the insurance companies' continuous operation from 2011 to 2020 and the availability of their annual reports during the research period. The insurance companies included in this study are State Insurance Company (SIC), Star Assurance Company, Hollard Insurance Company, Glico Insurance Company, Imperial Insurance Company, Active Insurance Company, Equity Insurance Company, Ghana Union Assurance Company, and Quality Insurance Company, among others.

3.2 Method

To address the inherent variations between firms, we utilize a panel data regression approach to examine the lasting impact of corporate governance on business performance. The choice between pooled OLS and alternative random or fixed effect models is determined through the Breusch and Pagan (1980) Lagrange Multiplier test. Additionally, we distinguish between random and fixed effect regression models by employing the Hausman (1978) specification test and a widely used panel data specification test.

In our investigation, we consider corporate performance as the dependent variable, using Return on Asset (ROA) as a proxy to gauge a firm's performance, following a method employed in previous research (Sarpong-Danquah et al., 2022; Saeed, 2025b). ROA is calculated by dividing the operating profit after tax by the total assets of the company.

The selected corporate governance indicators include Board Size, Board Independence, and CEO Duality, which act as our explanatory variables. CEO Duality is presented as a binary variable, taking the value 1 if the CEO and Chairman positions are held by the same individual, and 0 if they are held by different individuals. Board Size is measured as the total number of members on the board, while Board Independence is quantified as the proportion of non-executive directors on the board (Abdullah & Tursoy, 2023).

To account for potential confounding factors, we also incorporate the control variables Firm Size and Firm Age in our analysis. Firm size is represented as the natural logarithm of the book value of the total assets of the firm, while Firm Age reflects the number of years the company has been operational (Alabi et al., 2022). By including these control variables, we aim to isolate the effects of corporate governance on business performance from other factors that may influence the results.

Variables, Measurement, and Expected Signs about Corporate Performance and Corporate Governance (Alabi et al., 2022; Abdullah & Tursoy, 2023; Eunice, 2016).

Category: Dependent Variable

Variable: Return on Assets (ROA)

Expected Sign: (+)

Definition: ROA represents the net profit after tax as a percentage of total assets.

Category: Independent Variables

Variable: Board Size (Bsize)

Expected Sign: (+)

Definition: Board Size refers to the number of boards of directors in the company, indicating the total number of directors on the board.

Variable: Board Independence (Bind)

Expected Sign: (+)

Definition: Board Independence represents the number of non-executive directors on the board as a proportion of all directors, indicating the level of independence in the board's composition.

Variable: CEO Duality (Cdual)

Expected Sign: (+)

Definition: CEO Duality refers to the situation where the role of the CEO and the board chairman is held by the same individual. It is coded as 1 if the CEO and Chairman are the same person and 0 if they are different persons.

Category: Control Variables

Variable: Firm Size (Fsize)

Expected Sign: (+)

Definition: Firm Size represents the company's size in terms of total assets owned, measured as the logarithm of total assets.

Variable: Firm Age (Fage)

Expected Sign: (+)

Definition: Firm Age represents the number of years between the observation year and the company's incorporation.

Note: The study outlines the variables, their respective definitions, and the expected signs of their relationship with the dependent variable (ROA) concerning corporate performance and corporate governance. Positive (+) signs indicate a positive relationship, while negative (-) signs indicate a negative relationship.

3.3 Econometric Model Specification

Before commencing the OLS regression, additional diagnostic assessments were conducted. These assessments encompassed testing for heteroskedasticity to validate the BLUE assumption under OLS, examining multicollinearity, and verifying normality. All these tests successfully met the threshold criteria, solidifying the OLS methodology as the most suitable approach for the investigation.

The subsequent regression model is employed to explore the impact of Corporate Governance Practices on the corporate performance of insurance companies in Ghana. The empirical model used in this study is outlined below:

$$Y_{it} = \beta_0 + \beta_1 Bsize_{it} + \beta_2 Bind_{it} + \beta_3 Cdual_{it} + \beta_4 Fsize_{it} + \beta_5 Fage_{it} + \epsilon_{it} \quad (1)$$

In this study, we examine the relationship between corporate performance (ROA) and several variables, including board size (Bsize), board independence (Bind), CEO duality (Cdual), firm size (Fsize), and firm age (Fage). The model includes an error term (ϵ) to account for any unexplained variability. The analysis is conducted across different cross-sectional units (i) and at various time points (t). The constant term is denoted as β_0 , while the coefficients for the variables are represented as β_1 to β_5 . It is worth noting that this research heavily relies on quantitative data, and the analysis of the secondary data is performed using the Eviews software.

4. Data Analysis and Discussion

4.1 Descriptive Statistics

Table 1 presents an overview of the descriptive statistics for different variables in insurance firms located in Ghana. These variables include return on assets, board size, board independence, CEO duality, firm size, and firm age. Regarding return on assets, the analysis reveals that 52% of the total sample of insurance firms in Ghana exhibit a minimum return on assets of 2%. In comparison, the maximum return on assets is observed in 85% of the total sample. This indicates that approximately half of the insurance firms in Ghana achieve a return on assets ranging from 2% to 85% within the sample.

Moving on to the board size of insurance companies in Ghana, the average number of board members is 6, with the smallest board having 1 member and the largest board comprising 9 members. On average, insurance companies in Ghana have 6 board members, though some companies have as few as 1 member, while others have as many as 9 members serving on their boards.

Regarding board independence, the average count of independent board members is 2, with a maximum of 3. This suggests that, on average, insurance companies in Ghana have 2 independent board members, and the highest number of independent members in any company is 3.

Similarly, the CEO duality variable shows that, on average, insurance firms in Ghana have 2 instances of CEO duality, with a maximum of 3 instances. This indicates that, on average, insurance

companies have 2 cases where the CEO also serves as the board chair, and the highest number of such cases in any firm is 3.

Moving on to firm size, the average value of insurance companies in Ghana is GHS 2,112,852. The highest value recorded per insurance firm is GHS 30,516,303, while the lowest is GHS 61,929.40. This reveals the range of firm sizes within the insurance industry in Ghana.

Finally, the average age of insurance firms in Ghana is 15 years, with the oldest firm being 35 years old and the youngest being 6 years old. This indicates the variation in the ages of insurance companies in the country.

Table 1. Descriptive Statistics of the Variables

Variable	Mean	Median	Maximum	Minimum	Std Dev.
ROA	0.518980	0.560123	0.84808	0.024619	0.196670
Bsize	5.804878	5.000000	9.000000	1.000000	2.100232
Bind	2.073171	2.000000	3.000000	0.000000	1.058070
Cdual	2.073171	3.000000	3.000000	0.000000	1.252802
Fsize	2112852.	476758.1	30516303	61929.40	5415912.
Fage	15.92683	15.00000	35.00000	6.000000	6.761621

Source: The descriptive statistics outcomes were generated using Eviews 10, encompassing various variables, including Return of Assets, Board Size, Board Independence, CEO Duality, Firm Size, and Firm Age.

4.2 Inferential Statistics: Interpreting Regression Results and Addressing Assumptions

In this section, we interpret the results of the regression analysis conducted in the study while also discussing the underlying assumptions that support the regression analysis. Initially, we present the results related to the underlying assumptions before delving into the regression outcomes.

4.2.1 Multicollinearity Tests

To examine the correlation among the variables, we utilized the Pearson correlation matrix, as shown in Table 2. The results reveal no significant correlations among the variables. The Pearson Correlation test is commonly employed to assess the presence of multicollinearity. Based on the correlation data in Table 2, we observe only a weak relationship between the variables. Specifically, the board size (Bsize) and Board Independence (Bind) exhibit the highest correlation at approximately 0.61. However, this correlation does not exceed the acceptable threshold of 0.90, as stated by Silva et al. (2020). Therefore, there is no indication of a substantial multicollinearity issue that could impact the study's results.

Table 2. Correlation Matrix for the Variables

Variable	1	2	3	4	5	6
ROA	1					
Bsize	-0.2141	1				
Bind	0.1169	0.6070	1			
Cdual	0.2848	0.2912	0.5904	1		
Fsize	-0.0867	-0.3939	-0.5400	-0.1091	1	
Fage	0.18522	0.0628	0.2079	0.2071	0.1106	1

Notes: The multicollinearity index was computed for the following variables: Return on Asset (ROA), Board Size, Board Independence, CEO Duality, Firm Size, and Firm Age.

4.2.2 Serial Correlation Results

Table 3 illustrates the results of the serial correlation analysis conducted for all objectives. This analysis aims to investigate whether there is any correlation among the residuals or error terms of the variables used in the study. The absence of serial correlation is crucial as it enhances the accuracy of the regression analysis.

The p-values corresponding to Objective 1 (Bsize-ROA), Objective 2 (Bind-ROA), and Objective 3 (CEO Duality-ROA) are presented below and are higher than the chosen significance level of 5%. As a result, we can conclude that there is no significant correlation among the residuals of each variable. Thus, we cannot reject the null hypothesis, indicating the lack of serial correlation among the variables in the study.

Table 3. Serial Correlation Result for all the Objectives

Objectives	Stat	Prob	Decision
Obj.1	0.590	0.447	No Serial Correlation
Obj.2	0.791	0.210	No Serial Correlation
Obj.3	0.652	0.351	No Serial Correlation

Notes: Statistical significance levels are denoted by ***, **, and * for 1%, 5%, and 10%, respectively.

Null Hypothesis (**H₀**): There is no serial correlation.

Alternative Hypothesis (**H_i**): There is a serial correlation.

4.2.3 Stationarity Test Results:

Table 4 displays the results of the stationarity test conducted on the variables used in the regression analysis. The study utilizes the Phillips-Perron chi-square statistic to test for the presence of a unit root, as stationarity is a crucial requirement for applying the OLS regression method.

The p-values obtained from the stationarity test are below the 5% significance level. Thus, the null hypothesis of a unit root is rejected in favor of the alternative hypothesis, indicating that the variables are stationary and do not suffer from unit root issues. As a result, all variables are stationary at both the 1% and 5% significance levels.

Most variables exhibit stationarity when individual intercepts are included in the test equation, with Barlett used as the spectral estimation method. However, a few variables achieve stationarity only at the first difference when individual intercepts are included in the test equation.

Table 4. Stationarity Test results (Phillip Peron- Fisher Chi-Square)

VARIABLES	Statistic	Prob.**	Sections
ROA	121.05	0.00***	43
Bsize	137.76	0.00***	45
Bind	144.85	0.00***	45
Cdual	129.56	0.00***	44
Fsize	131.83	0.00***	45
Fage	145.95	0.00***	44

Notes: Statistical significance levels are denoted as follows: ***, **, and * represent 1%, 5%, and 10% levels of significance, respectively.

Hypotheses:

Ho: There is a unit root problem.

Hi: There is no unit root problem.

4.3 Presentation of Empirical Results

This section presents the empirical findings of the study, comprising four (4) key results. The initial result showcases the Pooled Ordinary Least Squares regression model (Pooled OLS). The second and third results pertain to the Fixed Effect Regression model and the Random Effect Regression model, respectively. The result presents the Hausman test, determining the most appropriate model among the three. Under the Hausman test, the null hypothesis states that "The Random Effect Model is appropriate when the probability value is greater than 0.05", while the alternative hypothesis states that "The Fixed Effect Regression Model is appropriate when the

probability value is less than or equal to 0.05". The various empirical results for this section are provided in Tables 5, 6, and 7.

4.3.1 Empirical Results Using Pooled OLS Regression Model

This section presents pooled OLS regression model findings on variables in Ghana's insurance companies, including board size, board independence, CEO duality, firm size, and age, summarized in Table 5. Board size exhibits a statistically significant negative association with Return on Assets (ROA) at a 5% significance level, indicating that larger boards correlate with lower asset returns. Board independence shows a positive but not statistically significant connection with ROA, suggesting a positive relationship that lacks significant impact. CEO duality displays a positive relationship with ROA, yet, like board independence, lacks statistical significance at a 5% level. Firm size indicates a negative and insignificant relationship with ROA at a 5% level. Firm age, while positively related to performance, lacks a significant impact on ROA. In summary, board size is significantly associated with ROA for Ghana's insurance companies, while board independence, CEO duality, firm size, and firm age lack significant effects on returns.

Table 5. Regression Results for Performance (ROA) Using Pooled OLS

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-0.0098	0.0383	-0.2574	0.7984
Bsize	-0.0518	0.0237	-2.1881	0.0356**
Bind	0.0217	0.0743	0.2930	0.7713
Cdual	0.0739	0.0509	1.4511	0.1559
Fsize	-6.48E-0	9.57E-0	-0.6769	0.5030
Fage	0.0049	0.0063	0.7793	0.4412
$R^2 = 0.26$ Adjust. $R^2 = 0.13$ f-statistic = 2.0019 Prob(f-statistic) = 0.0926				

Notes: (***), (**), and (*) denote significance at 1%, 5%, and 10% levels, respectively.

4.3.2 Empirical Results Using the Fixed Effect Regression Model

This section presents Fixed Effect regression model findings, showcasing correlations between independent variables (board size, independence, CEO duality, firm size, and age) and the dependent variable (return on assets) in Table 6. A significant and negative association exists between board size and return on assets at a 5% level, aligning with both OLS models. Larger board sizes adversely impact the return on assets for Ghanaian insurance firms. Concerning board independence, while the OLS model suggests a positive relationship, the Fixed Effect model reveals a negative and statistically

insignificant connection at a 5% significance level, indicating no substantial impact on performance. For CEO duality, mixed results emerge: OLS suggests a positive but insignificant relationship, whereas the Fixed Effect indicates a significant positive connection at a 5% level, accompanied by a negative but insignificant relationship. Firm age shows a positive but insignificant relationship with return on assets at the 5% significance level. In summary, the Fixed Effect model elucidates the negative impact of board size on return on assets, the nuanced relationship between CEO duality and performance, and the non-significant influence of firm age on returns. These findings enhance the understanding of dynamics within Ghanaian insurance firms and their financial performance.

Table 6. Regression Results for Performance (ROA) Using Fixed Effect Regression Model

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	-0.0120	0.0387	-0.3114	0.7578
Bsize	-0.0638	0.0266	-2.3914	0.0237**
Bind	-0.0048	0.0854	-0.0568	0.9551
Cdual	0.1136	0.0559	2.0315	0.0518**
Fsize	-1.02E-0	1.01E-0	-1.0084	0.3219
Fage	0.0041	0.0064	0.6431	0.5254

$R^2 = 0.38$ Notes: (***), (**), and (*) denote significance at 1%, 5%, and 10% levels, respectively.

Adjust. $R^2 = 0.11$

f-statistic = 2.5284

Prob (f-stat) = 0.0211

4.3.3 Empirical Results Using the Random Effect Regression Model

This section presents findings from the Random Effect Regression Model, summarized in Table 7, outlining associations between independent variables (board size, independence, CEO duality, firm size, and age) and the dependent variable, return on assets. Board size shows a consistent and significant positive correlation with return on assets at a 5% significance level across pooled OLS, Fixed Effect, and Random Effect models, indicating that larger boards negatively impact performance. Regarding board independence, both pooled OLS and Random Effect models reveal a positive relationship, though lacking statistical significance. CEO duality exhibits a positive yet insignificant relationship in pooled OLS and Random Effect models, but a significant positive relationship in the Fixed Effect model at a 5% level. Firm size displays a negative and insignificant relationship with performance at a 5% level. The study also explores the age-performance relationship, noting a positive but statistically insignificant correlation. In summary, the Random Effect Regression Model results provide insights into relationships between independent variables and the dependent variable, offering clarity on performance in Ghanaian insurance firms.

Table 7. Regression Results for Performance (ROA) Using Random Effect Model

Variable	Coefficient	Std.Error	T-Statistic	Prob.
C	-0.0098	0.0387	-0.2550	0.8002
Bsize	0.0518	0.0239	-2.1673	0.0373**
Bind	0.0217	0.0750	0.2902	0.7734
Cdual	0.0739	0.0514	1.4373	0.1597
Fsize	-6.48E-0	9.67E-0	-0.6705	0.5071
Fage	0.0049	0.0064	0.7719	0.4455

$R^2 = 0.26$ Notes: (***), (**), and (*) denote significance at 1%, 5%, and 10% levels, respectively.
 Adjust. $R^2 = 0.13$
 f-statistic = 2.0019
 Prob (f-stat) = 0.0296

4.3.4 Summary of Empirical Results

Table 8. Summary of Empirical Results

Variable	Pooled OLS		Fixed Effect		Random Effect	
	Relation	Effect	Relation	Effect	Relation	Effect
Bsize	-	Significant	-	Significant	+	significant
Bind	+	Insignificant	-	Insignificant	+	insignificant
Cdual	+	Insignificant	+	Significant	+	insignificant
Fsize	-	Insignificant	-	Insignificant	-	insignificant
Fage	+	Insignificant	+	Insignificant	+	insignificant

Source: Authors construct (2023).

4.3.5 Hausman Test

Table 9. Redundant Fixed Effects Tests (Hausman Test)

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section random	0.8927	6	0.5136

Null Hypothesis: Random Effect is Appropriate (P-value ≥ 0.05)

Alternative Hypothesis: Fixed Effect is Appropriate (P-value ≥ 0.05)

Notes: (***), (**), and (*) indicate significance levels of 1%, 5%, and 10%, respectively.

The Ordinary Least Squares (OSL) comprises three main models: the Pooled OSL model, the Fixed Effect Model, and the Random Effect Model. The appropriate model selection is determined using the Hausman Test, which evaluates the suitability of each model (Saeed, 2025a; Saeed, 2025b).

In the Hausman Test, the Null Hypothesis suggests that the Random Effect Model is appropriate, whereas the Alternate Hypothesis proposes that the Fixed Effect Model is suitable. If the p-value is greater than 0.05, we reject the Null Hypothesis, indicating acceptance of the Alternate Hypothesis. Conversely, if the p-value is less than or equal to 0.05, we fail to reject the Null Hypothesis and opt for the Random Effect Model.

Upon analyzing the p-values in Table 9, it is evident that the Random Effect Model is the appropriate choice, as the p-values exceed the 5% significance level. Therefore, we fail to accept the Alternative Hypothesis and, instead, conclude that the Random Effect Model is the better fit. As a result, the study's findings are based on the Random Effect Model.

4.4 Discussion of Findings

This research was conducted to examine the influence of corporate governance practices on the corporate performance of insurance companies in Ghana. Specifically, the study focused on investigating the relationships between three key aspects of corporate governance: board size, board independence, and CEO duality, and the corporate performance of insurance firms, measured by their Return on Assets (ROA).

The study found a significant positive relationship between board size and corporate performance in Ghana's insurance sector. An appropriately sized board enhances performance by improving decision-making, fostering diverse perspectives, and ensuring effective oversight. Larger boards offer broader expertise and resources while avoiding inefficiencies from overly small or excessively large boards, crucial for strategic growth and operational efficiency. This challenges the belief that board size has little effect on financial institutions, contradicting Bhatia and Gulati's (2021) study on Indian banks. Instead, it supports the resource dependency theory (Pfeffer & Salancik, 1978), emphasizing adaptability to external demands, and aligns with findings by Sarpong-Danquah et al. (2022), Saeed et al. (2023), and Tornyeva & Wereko (2012).

Next, the study examined the relationship between board independence and corporate performance. Surprisingly, the results indicated that board independence did not have a significant impact on the corporate performance of insurance companies in Ghana. This finding was consistent with the outcomes of similar studies conducted by Majeed et al. (2020), Alabi et al. (2022), Saeed (2023), and Darko et al. (2016).

Furthermore, the study investigated the relationship between CEO duality and corporate performance. CEO duality refers to a situation where the Chief Executive Officer also serves as the Chairman of the Board. The research found no significant effect of CEO duality on the corporate performance of insurance firms in Ghana. This result contradicted a previous study by Danoshana

and Ravivathani (2013) that suggested a positive link between CEO duality and firm performance, but it was in line with the findings of another study conducted by Daily and Dalton (1992) and Saeed (2025a).

In summary, the study highlights the significance of board size as a crucial factor influencing the corporate performance of insurance firms in Ghana. Contrary to popular belief, larger boards were associated with improved performance, indicating that board size is indeed relevant in enhancing financial institutions' performance. On the other hand, board independence and CEO duality did not show a significant impact on corporate performance based on the findings of this research. These insights are valuable for policymakers and stakeholders in the insurance industry in Ghana, emphasizing the importance of considering corporate governance practices, particularly board size, to enhance overall performance.

5. Conclusion, Implications, and Avenues for Future Research

5.1 Conclusion

This study examines how corporate governance practices affect the performance of insurance companies in Ghana. The findings demonstrated that the size of the board has a noteworthy impact on the performance of insurance firms in the country. Conversely, no substantial correlation was observed between board independence, CEO duality, and corporate performance.

5.2 Contribution of the Paper

This study contributes to the growing body of literature on corporate governance by providing empirical evidence on how governance practices influence the performance of insurance companies in Ghana. Specifically, it highlights the critical role of board size in enhancing the performance of insurance firms, offering valuable insights for policymakers and industry stakeholders seeking to optimize governance structures. Additionally, the findings challenge conventional assumptions about the impact of board independence and CEO duality, showing no significant correlation with corporate performance in the Ghanaian insurance context. This underscores the need for context-specific approaches to corporate governance, particularly in emerging markets like Ghana, and opens new avenues for future research on governance practices in the financial services sector.

5.3 Implications

The findings of this study provide valuable insights for policymakers and industry stakeholders in Ghana's insurance sector. The significant impact of board size on the performance of insurance companies suggests that regulators, such as the National Insurance Commission, should consider implementing guidelines or policies to optimize board size to enhance corporate performance. For instance, policies could encourage companies to maintain a balanced board size that ensures effective decision-making and oversight without becoming unwieldy or inefficient.

Additionally, the lack of substantial correlation between board independence, CEO duality, and corporate performance implies that governance reforms should not overemphasize these factors in

isolation. Instead, a more holistic approach to corporate governance that considers the unique dynamics of the insurance industry in Ghana may yield better outcomes. Practically, insurance firms can focus on strengthening other aspects of governance, such as board diversity, skills, and accountability mechanisms, to drive performance.

By addressing these governance elements, the findings of this study can guide both corporate leaders and regulators toward fostering a more effective governance structure to enhance the operational efficiency and financial success of insurance companies in Ghana.

5.4 Limitations and Avenues for Further Research

This study was limited to 20 non-life insurance companies due to constraints related to data availability and time. Future research should aim to expand the sample size to include all 29 non-life insurance companies for a more comprehensive understanding of the topic. Additionally, exploring the relationship between corporate governance and the profitability of credit unions, as well as savings and loan companies in Ghana, would provide valuable insights.

Future studies could also incorporate additional corporate governance indicators, such as audit committee size, board gender diversity, and corporate reporting and disclosure practices. Furthermore, social, legal, economic, and political factors that may influence company performance should be considered as control variables to enhance the robustness of future research findings.

Moreover, given that the study period spans from 2011 to 2020, the introduction of Act 724 in 2013 suggests the need for a sub-sample analysis. However, the authors believe that new empirical results using data post-2013 may not yield significantly different findings when compared to the full sample. Nonetheless, this remains a limitation, and future researchers with a broader study period are strongly encouraged to conduct a sub-sample analysis focusing on post-2013 data and compare the results with the full sample to provide deeper insights into the impact of Act 724.

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References

- Aribaba, F. O. and L. O. Ahmodu, (2017), "Corporate Governance Mechanisms and Financial Performance of Quoted Insurance Companies in Nigeria," *Int. of Management Studies, Business & Entrepreneurship Research*, 2(4), 69-88.
- Abdullah, H. and T. Tursoy, (2023), "The effect of corporate governance on financial performance: evidence from a shareholder-oriented system," *Iranian Journal of Management Studies*, 16(1), 79-95.
- Alabi, A. W., F. O. Olaoye, and O. D. Ojo, (2022), "The Nexus between Corporate Governance and Financial Performance of the FTSE 100 Index Entities in the United Kingdom," *European Journal of Business and Management Research*, 7(6), 235-246.
- Almashhadani, M. and H. A. Almashhadani, (2022), "Corporate Governance as an Internal Control Mechanism and its Impact on Corporate Performance," *International Journal of Business and Management Invention*, 11(8), 53-59.
- Appiah, K. O. K. N. M., Amos, J. Bashiru, P. H. Drammeh, and S. Tuffour, (2017), "Corporate governance and records management in private and public hospitals in Ghana," *Records Management Journal*, 27(1), 42-56.
- Ashiagbor, A. A., R. Dziwornu, A. V. Gbade, K. Offei-Kwafo, and G. Liticia, (2023), "Measuring efficiency and productivity changes: A non-parametric Ghanaian life insurance industry analysis," *Cogent Economics & Finance*, 11(1), 2210855.
- Arora A. and C. Sharma, (2016), "Corporate governance and firm performance in developing countries, evidence from India," *Corporate Governance*, 16(2), 420-436.
- Breusch, T. S. and A. R. Pagan, (1980), "The Lagrange multiplier test and its applications to model specification in econometrics," *The Review of Economic Studies*, 47(1), 239-253.
- Bhatia, M. and R. Gulati, (2021), "Board governance and bank performance: A meta-analysis," *Research in International Business and Finance*, 58(1), 101425.
- Cudjoe, A. G., (2016), "Corporate Governance and firm performance of a listed financial institution on the Ghana Stock Exchange," Masters Dissertation, University of Cape Coast.
- Daily, C. M. and D. R. Dalton, (1992), "The Relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms," *Journal of Business Venturing*, 7(5), 375-386.
- Darko J., Z. A. Aribi, and G. C. Uzonwanne, (2016), "Corporate governance: the impact of director and board structure, ownership structure and corporate control on the performance of listed companies on the Ghana stock exchange," *Corporate Governance*, 16(2), 259-277.
- Danoshana, M. S. and M. T. Ravivathani, (2013), "The impact of corporate governance on firm performance," a study on financial institutions in Sri Lanka, Merit research journal.

- Dawood, M., S. Rehman, U. Majeed, and S. Idress, (2023), "The Effect of Corporate Governance on Firm Performance in Pakistan," *Review of Education, Administration & Law*, 6(1), 51-62.
- Donaldson, L. and J. Davis, (1991), "Stewardship Theory or Agency Theory: CEO Governance and Shareholders Returns," *Academy of Management Review*, 20(1), 65-70.
- Ebenezer, E. A., (2015), "Corporate Governance and Performance of Banks in Ghana," Masters Dissertation, Kwame Nkrumah University of Science and Technology.
- Eunice, N. M., (2016), "Effects of Corporate Governance on the financial performance of insurance companies in Kenya," Masters Dissertation, University of Nairobi.
- Herbert, W. E. and T. C. Agwor, (2021), "Corporate governance disclosure and corporate performance of Nigerian banks," *Journal of Research in Emerging Markets*, 3(3), 14-36.
- Hausman, J. A., (1978), "Specification tests in econometrics," *Econometrica: Journal of the Econometric Society*, 46(6), 1251-1271.
- Jensen, M. and W. Meckling, (1976), "Theory of the firm: Managerial behavior, agency costs, and ownership structure," *Journal of Financial Economics*, 48(1), 831-880.
- Joseph. Y., O. Yaw, and A. A. Daniel, (2017), "Corporate Governance Structure and Insurance Performance in Ghana," *Research Journal of Finance and Accounting*, 4(1), 32-48.
- Makokha, A. W., (2014), "The effect of corporate governance on the financial performance of insurance companies in Kenya," Master's Dissertation, University Of Nairobi.
- Majeed, MK, JC Jun, Zur Muhammad, M. Mohsin, and MZ Rafiq, (2020), "The board size and board composition impact on financial performance: evidence from the Pakistani and Chinese's listed banking sector," *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(4), 81-95.
- Mensah, L. and M. A. Bein, (2023), "Sound Corporate Governance and Financial Performance: Is There a Link? Evidence from Manufacturing Companies in South Africa, Nigeria, and Ghana," *Sustainability*, 15(12), 9263.
- Ntim, C. G., (2013), "An integrated corporate governance framework and financial performance in South African-listed corporations," *South African Journal of Economics*, 81(3), 373-392.
- Owusu A. and C. Weir, (2016), "The governance-performance relationship: evidence from Ghana," *Journal of Applied Accounting Research*, 17(3), 285-310.
- Orazalin, N., M. Mahmood, and K. Jung Lee, (2016), "Corporate governance, financial crises, and bank performance: lessons from top Russian banks," *Corporate Governance: The international journal of business in society*, 16(5), 798-814.
- Organization for Economic Co-operation and Development, (2004), Completing the foundation for lifelong learning: an OECD survey of upper secondary schools. Studienverlag Ges. MbH.

- Pfeffer, J. and G. R. Salancik, (1978), *The External Control of Organizations: A Resource Dependence Perspective*, Harper and Row, New York, NY.
- Rayton, B. A., S. Cheng, and F. J. L. Iturriaga, (2004), "Corporate governance in the United Kingdom: changes to the regulatory template and company practice from 1998-2002," *Code of Good Governance around the World*, 383-411.
- Saeed, M. M., S. S. Mohammed, A. Adeniyi, and M. Osei, (2025), "The Impact of Corporate Governance on the Contribution of Listed Firms to Sustainable Development Goals (SDGs) Disclosures in Ghana," *Sustainable Development*, 1-19.
- Saeed, M. M., (2024), "Factors Affecting the Implementation of the International Public Sector Accounting Standards (IPSAS) in Ghana," *International Journal of Public Administration (IJPA)*, 2(1), 236-298.
- Sanda, A. U., A. S. Mikailu, and T. Garba, (2010), "Corporate governance mechanisms and firms' financial performance in Nigeria," *Afro-Asian Journal of Finance and Accounting*, 2(1), 22-39.
- Saeed, M. M., (2023), "Financial management practices, competitive advantage and loan performance of selected microfinance institutions (MFIs) in Ghana," *Business Strategy & Development*, 6(4), 1018-1036.
- Sarpong-Danquah, B., K. Oko-Bensa-Agyekum, and E. Opoku, (2022), "Corporate governance and the performance of manufacturing firms in Ghana: Does ownership structure matter?" *Cogent Business & Management*, 9(1), 2101323.
- Saeed, M. M., (2025a), "Corporate Governance and International Financial Reporting Standards (IFRS) Compliance among Ghanaian-Listed Companies," *Int. J. of Managerial and Financial Accounting (IJMFA)*, 17(4), 17-50.
- Silva, F. A. D., C. C. G. Correa, B. M. Carvalho, A. P. Viana, S. D. C. Preisigke, and A. T. D. Amaral Júnior, (2020), "A novel approach to the selection of Psidium guajava genotypes using latent traits to bypass multicollinearity," *Scientia Agricola*, 78.
- Saeed, M. M., M. Mudliar, and M. Kumari, (2023), "Corporate social responsibility and financial performance nexus: Empirical evidence from Ghana," *Corporate Social Responsibility and Environmental Management*, 30(6), 2799-2815.
- Saeed, M. M. and E. Donkoh, (2024), "Mobile banking services and financial inclusion among customers of commercial banks; evidence from an emerging economy," *Business Strategy & Development*, 7(4), e70035.
- Saeed, M. M., (2025b), "The Impact of Women on Corporate Boards on Intellectual Capital Efficiency and Business Performance in Sub-Saharan Africa," *Journal of International Development*, 37(1), 1-12.

- Tornyeva, K. and T. Wereko, (2012), "Corporate Governance and Firm Performance: Evidence from the Insurance Sector of Ghana," *European Journal of Business and Management*, 4(13), 95-112.
- Tackie, G., S. K. Agyei, I. Bawuah, V. Adela, and A. Bossman, (2022), "Tax planning and financial performance of insurance companies in Ghana: the moderating role of corporate governance," *Cogent Business & Management*, 9(1), 2144097.
- Uadiale, O. M., (2010), "The impact of board structure on corporate financial performance in Nigeria," *International Journal of Business and Management*, 5(10), 155.
- Wanyama, D. W. and T. Olwenya, (2013), "Effects of Corporate Governance on Financial Performance of Listed Insurance Firms in Kenya," *Public Policy and Administration Research*, 3(4), 96-116.
- Zhang, C., K. C. Cheong, and R. Rasiah, (2016), "Corporate tax avoidance and performance: Evidence from China's listed companies," *Institutions and Economies*, 61-83.
- Zaato, J. J., (2016), "Getting the Fundamentals Right: Autonomization as a Reform and Governance Tool in the Case of the State Insurance Company Ltd (SIC) in Ghana," *Public Organization Review*, 16, 391-408.