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Exploring the Efficiency of Corporate Governance in State-Owned Agencies and Enterprises: A Comparative Analysis of Nigeria and Ghana

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Abstract. In sub-Saharan Africa, state-owned enterprises (SOEs) play a crucial role in delivering public goods and promoting economic growth. However, the disparate performance track records between Nigeria and Ghana are attributed to differences in the quality of governance. This study examines three dimensions of governance—board independence, regulatory autonomy, and transparency—and evaluates their impact on three key performance indicators: revenue per employee, return on assets (ROA), and net profit margin. We draw on hypotheses informed by empirical gaps, agency, resource dependence, and stakeholder theories and use cross-sectional regression logic with interaction variables to show the effect of institutional factors on the effectiveness of governance. These findings demonstrate that transparency is consistently effective in enhancing operations. However, board independence and regulatory autonomy generate significant improvements in performance only when accompanied by the existence of robust institutional frameworks. The consequences of context-specific governance reforms are also discussed.

Keywords: Corporate Governance, Efficiency, Ghana, Nigeria, SOEs, State-Owned Enterprises.

1. INTRODUCTION

State-owned enterprises (SOEs) in sub-Saharan Africa are strategically important and operate in key sectors, such as energy, transport and financial services, where they often become the key drivers of national investment and employment. (Megginson & Netter, 2001). Although they are critical, a number of state-owned enterprises are not efficient and therefore require constant fiscal interventions, which undermines sustainable development prospects. Existing literature acknowledges the prevalence of poor governance, characterised by politicised board appointments, inadequate oversight frameworks, and poor stakeholder engagement; however, it does not identify the specific mechanisms through which governance actions are translated into measurable performance outcomes. (Paniagua, Rivelles, & Sapena, 2018).

This paper addresses this gap by providing a comparative theory-based analysis that operationalises three dimensions of governance, namely, board independence, regulatory autonomy, and transparency and expounds on their relative influence on performance in Nigeria and Ghana. It also contributes to the scholarly understanding and reform efforts aimed at governing SOEs and the practical policy discussion on such governance, which combines both empirical research and scholarly discourse on policy.

These two economies also have a history of colonialism; however, they differ significantly in the lines of their governance and offer a natural experiment to help us understand how institutional settings determine the effectiveness of governance reforms.

The following sections will focus on the governance challenges that state-owned organisations in Nigeria and Ghana face, serving as a foundation for a focused analysis of the comparative effects they have on organisational performance. (World Bank, 2014)

2. STATEMENT OF THE PROBLEM

Nigeria has implemented several policy actions in the past two decades to boost the output of state-owned enterprises, including the partial privatisation of key utilities, the development of performance-based management contracts, and the creation of anti-corruption task forces. (Aebi, Sabato, & Schmid, 2015) (Arbabi, Islam, & Rahman, 2020)

In spite of this, state-owned enterprises in Nigeria have consistently shown very poor returns on assets (ROA), high administrative costs, and persistent dependency on government bailouts. Empirical analyses attribute such results to fragmented institutional structures that undermine the rigidity of performance contracts, making boards vulnerable to political appointments. (Nwafor et al, 2024). Additionally, anti-corruption efforts have often faltered because of inconsistent court action and a lack of transparency in the prosecution process of individuals, allowing rent-seeking activities to persist. (Arbabi et al., 2020).

In contrast, the implementation of reforms for State-owned enterprises in Ghana has been characterised by the establishment of legally enshrined regulatory bodies with a clear mission statement, the implementation of independent audits, and the sustainability of well-aligned policy popularised by the unity of both political parties. (Liang, Wang, & Sun, 2021), (Baltrunaite et al., 2021)

These strategies have led to increased revenue and profitability in specific areas, such as the exportation of cocoa and the distribution of electricity. However, challenges still exist: In the context of Ghana, regulatory

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authorities lack access to adequate resources, which may impair monitoring capacity on a regular basis, and accountability and confidence by the population have not been effectively institutionalised in the form of a stakeholder engagement structure.

Although these policy trajectories are descriptively well described, there is a clear need for a focused, hypothesis-driven study that deconstructs governance into individual, testable constructs - namely, board independence, regulatory independence and transparency - and tests the differential implications of their performance in Nigeria and Ghana.

Without focused research, a reform agenda is likely to be vague and lacking context, thereby losing its ability to tackle specific institutional barriers that continue to hinder the effectiveness of SOEs.

3. LITERATURE REVIEW

The vast literature on the governance of SOEs can be divided into three elements investigated in this paper: the independence of the board, the autonomy of regulations, and transparency, which are grounded on three different theoretical frameworks and justified in up-to-date empirical evidence.

3.1. Board Independence and Agency Theory:

The agency theory holds that independent, non-executive directors enhance board supervision and shape management incentives toward organisational objectives, thereby reducing the cost of agency (Hillman & Dalziel, 2003). This mechanism is confirmed by empirical studies in the African contexts. According to research by Baltrunaite et al. (2021), the state-owned businesses with at least 50% independent directors demonstrated significantly higher returns on assets in different African markets.

As evidenced by Nwafor, Eze, and Okafor (2024), the improvement of income per employee in Nigerian state-owned enterprises averaged 15% after the composition of the boards emphasised director independence. On a global level, the research shows limited results: analysing Chinese state-owned enterprises, scholars suggest that over-independence of the board can lead to a lack of coordination and a reduction in strategic consistency, as Liu et al. (2014) put it, so cultural and institutional contexts can change the effectiveness of independent oversight.

3.2. Regulatory Autonomy and Resource Dependence Theory:

According to resource dependence theory, external actors play an important role in granting vital resources and determining organisational autonomy (Pfeffer & Salancik, 2011). In the context of state-owned enterprises, financial access and strategic decisions are amenable to the legal protection and autonomy of regulatory agencies. In their cross-national analysis, Liang, Ren, and Sun (2014) found that state-owned enterprises with independent regulators have a better profit margin, being 20% higher than those with direct administration by ministers. Beck (2021) provides evidence to support these conclusions, showing that regulatory bodies with clear goals and budgetary powers mitigate the corrosive effects of the politicisation of resource allocation and enhance the quality of service provision.

In contrast, a study of Eastern European SOEs by Szarzec & Nowara (2017) showed that regulatory autonomy was insufficient to guarantee performance improvements unless it was implemented in conjunction with governance restructuring, pointing to the importance of policy packages.

3.3. Transparency and Stakeholder Theory:

According to stakeholder theory, the dissemination of transparent information can lead to an increase in stakeholder trust, reduce knowledge asymmetry, and minimise reputational risk (Grossi, Papenfuß, & Tremblay, 2015). Transparency mechanisms, including the timely release of audited financial reports and the use of stakeholder forums in SOEs, are associated with an improvement in accountability and business performance.

According to Arbabi, Islam, and Rahman (2020), in developing countries where transparency indices are high, state-owned enterprises reduced the operating losses by approximately 25%. Aebi, Sabato and Schmid (2015) also reveal that OECD state-owned enterprises with high disclosure standards outperform their counterparts in a range of efficiency measures, suggesting that emerging markets might have a comparative advantage.

The opposite is also true; when researching Latin American state-owned enterprises, it became clear that transparency campaigns may conceal the underlying incapacity of governance due to selective reporting, the importance of enforcement, and the quality of audit. (De Acevedo Sánchez, 2016)

3.4. Linking Theoretical and Contextual Learnings:

Taken together, these aspects suggest that the aspects of governance operate through independent theoretical dynamics and converge on the common goal of improving performance. The effectiveness of these strategies depends on institutional conditions, the overall stability of which is closely linked to political stability or anti-corruption policies (Liang, Wang, & Sun, 2021).

This review reiterates the importance of conducting studies into the contextual variables that may either stimulate or hinder the process of transforming governance reforms with real results in terms of performance improvements.

3.5. Contextual Moderators

Institutional quality and, most importantly, anti-corruption measures and political stability, are crucial moderators used to determine government performance. (World Bank, 2021). The de-bureaucratized regulatory environment and uniform policies in Ghana have established a positive environment that supports continuous changes. In contrast, the unstable regulatory requirements and bureaucratic divisions in Nigeria weaken the impact of governance procedures. (Netswera et al, 2022).

3.6. Conceptual Contribution

Building on these, we introduce a conceptual framework that situates the characteristics of governance within context, that is, in relation to the broader institutional environment, indicating both direct and indirect effects with measures of institutional quality. The key points are that this approach to literature improves on the academic perspective, as it involves conditionally defined hypotheses and a clear empirical objective.

3.7. Conceptual Framework

The conceptual framework outlines the aspects of board independence, regulatory autonomy, and transparency as key governance factors that impact the performance outcomes of state-owned enterprises.

With the help of agency theory, we argue that independent directors can reduce agency costs by enhancing monitoring and control. The resource dependence theory explains the process through which autonomous regulatory entities access resource flows, as well as strategic autonomy, which safeguards state-owned enterprises against politicised interference. The stakeholder theory explains the linkages between transparent processes that develop stakeholder trust, thereby offsetting information asymmetry and reputational risks. Political stability and perceptions of corruption are argued to act as institutional moderators that improve or worsen the effects of governance on performance indicators.

3.8. Comparative Contextual Background

To have a proper overview of the governance of SOEs in Nigeria and Ghana, it is important to appreciate the differences in their colonial experience, economic policies, and political environment. The two countries were inheritors of British colonial structures of administrative systems in which resources were exploited and the governance of the state was centralised in the public sector of the economy.

The economic policies after independence differed, with Ghana initially attempting socialist-based state planning under Kwame Nkrumah, leading to a proliferation of state enterprises. These were then reorganised in the 1980s Structural Adjustment Program to focus on regulatory freedom and privatisation protection. On the other hand, the oil boom that took place in Nigeria during the 1970s facilitated the rapid expansion of state-owned enterprises under military regimes, but without the simultaneous creation of independent regulatory agencies.

The shifts in politics in Ghana have generally been less dramatic and marked by bipartisan consensus on the continuation of existing policies. In contrast, Nigeria has experienced frequent military coups, ethno-regional conflicts, and policy reversals, resulting in the erosion of institutional stability.

Historical and political differences have influenced the formation of regulatory institutions, the procedures for appointing boards, and transparency, thereby shaping the framework of the current governance reforms.

3.9. Research Hypotheses

Based on empirical evidence and guided by agency, resource dependence, and stakeholder theories as a research framework, this study advances three hypotheses that are interlinked. The hypotheses are theoretically supported to explain how the characteristics of governance affect the performance of SOEs.

3.10. Hypothesis 1 (Board Independence)

According to agency theory, independent non-executive directors enhance supervision, ensure that managerial actions align with organisational objectives, and reduce information asymmetry and conflicts of interest (Hillman & Dalziel, 2018). Theoretically, independent directors, who have no executive duties toward the management, are able to review strategic decisions and to avert self-serving managerial practices. This is supported by empirical evidence that shows that broader independence on the board is linked to improved financial performance among state-owned enterprises (Nwafor et al., 2024).

We hypothesise that the higher the proportion of independent directors in the state-owned enterprises, the greater the performance in terms of revenue per employee and the level of returns on assets (ROA). However, the exact measurement of board independence can be impaired by the differences in disclosure across organisations.

3.11. Hypothesis 2 (Regulatory Autonomy)

Resource dependence theory posits that organisations are dependent on other entities to supply resources, and the less dependent an organisation is on external entities, the more strategic flexibility and resource stability can be achieved (Pfeffer & Salancik, 2018). The regulatory agencies, in the context of state-owned enterprises, are the most significant external parties that determine the legal autonomy and independence of an enterprise's operations in terms of access to financing, approvals and operational guidelines. Where regulators are shielded against political influence through legislation and fixed policy design, state-owned enterprises have a lower likelihood of experiencing interference and are better equipped to optimise resource allocation. Empirical studies show that state-owned enterprises with independent regulators achieve higher profit margins and reduced resource diversion characterised by politics (Liang, Wang, & Sun, 2021; Berg & Lin, 2018).

We hypothesise that a state enterprise with an autonomous and independent regulatory body will get higher net profit margins. Creating a composite index of regulatory autonomy would be inefficient in showing the informal political forces that affect decision-making.

3.12. Hypothesis 3 (Transparency)

The stakeholder theory also emphasises the importance of transparent communication, which fosters trusting relationships with investors, employees, customers and the general public. It thus acts as a protective factor against uncertainty and reputational risk (McGregor, 2024).

Transparent practices, such as the timely publication of audited financial statements and the structured involvement of stakeholders, are presumed to enhance accountability, curb power-seeking, and promote effective management. The results of empirical research in emerging economies show that high levels of transparency indices are associated with significant reductions in operational losses (Arbabi, Islam, & Rahman, 2020).

Thus, we hypothesise that the more state-owned enterprises have elaborate systems of disclosure and stakeholder engagement, the fewer losses they will have in their operations and the greater the confidence of the stakeholders. Measurement issues include the potential of selective disclosure to produce overly favourable information.

These hypotheses are a combination of theory-based assumptions and practical considerations that form a sound conceptual framework for testing the different implications of governance variables on the performance of SOEs in Nigeria and Ghana.

4. METHODOLOGY

The study employs a cross-sectional quantitative design, utilising secondary sources of data that evaluate ten major state-owned companies in Nigeria and Ghana, respectively. A cross-sectional approach involves studying collected data at a specific point in time, in this case, the fiscal year 2023, to identify patterns and correlations between governance characteristics and performance outcomes. This was done because it enables focused comparison of governance practices and performance outcomes under the same economic and regulatory environment, thus eliminating any temporal confounding which is likely to arise in a longitudinal analysis of multiple policy regimes.

Given that longitudinal designs can trace changes over time, our research is interested in examining how specific governance variables are related to performance in a stable institutional environment.

To reduce sample bias and ensure they are comparable, state-owned Enterprises were selected using relatively straightforward criteria: the SOEs should be in the top ten of revenue generating entities in their respective countries, which are in essential sectors (utilities, extractives, and financial services), and have available and extensive governance and financial disclosures during the study period.

Such selection criteria ensure that selected SOEs are of great significance to the economy and are diverse in their operations, thus providing a representative sample of high-impact firms. This focus on state-owned large enterprises is likely to limit understanding of other smaller or locationally concentrated types of organisations; we discuss this and its effect on generalisability later in the limitations section.

4.1. Data Collection and Variable Operationalisation

We collected performance indicators, including revenue per employee, rate of return on assets (ROA), and net profit margin, on audited financial statements, annual reports, and those of central banks. Revenue per employee indicates the average productivity of the worker, and ROA determines how well the assets are utilised in terms of profitability. The net profit margin indicates the percentage of revenue that remains after all expenses have been taken.

Board independence was assessed by calculating the percentage of independent, non-executive directors on the board as reported in the corporate governance reports. The independent directors do not hold executive roles within the corporation, and this reduces the possibility of conflicts of interest.

Regulatory autonomy was measured as a composite measure incorporating three components, namely: the legislative protection of regulatory organisations against complete intrusion by the ministry, the higher rate of documented ministerial interventions, and the regularity of policy requirements over the last five years.

Transparency was assessed using an annual disclosure index that combines scores measuring the timeliness of reports, the autonomy of stakeholder involvement disclosures, and the quality ratings of third-party audits.

The institutional moderators include the political stability and corruption perception indices, which are obtained from the World Bank Worldwide Governance Indicators and Transparency International's Corruption Perception Index. Political stability is related to the likelihood of political insecurity, and the Corruption Perceptions Index (CPI) score represents the assessment of how pervasive corruption is perceived to be in the sector.

4.2. Analytical Methodology

The analysis of data is done in two stages to test our hypotheses. At the lowest level, descriptive statistics summarise the basic features of the data, including simple averages, standard deviations, and simple correlations that show how pairs of variables move together.

Second, we employ multivariate linear regression, a statistical method that simultaneously evaluates the connection between a single dependent variable and multiple independent factors. To examine whether the linkage between governance aspects and performance is dependent on differences in political stability or perception of corruption, we include the terms of interaction.

We conduct additional research to make the study robust, including alternatives to the transparency measures. This involves a manual assessment of annual reports and the lagged models, in which we use data on governance from the past year to capture their effects in the current year.

4.3. Incorporation of Qualitative Insights

The research design places more emphasis on quantitative aspects; nonetheless, it is possible to note the importance of qualitative data, including, but not limited to, interviews with executives of SOEs, members of their boards of directors, and governmental regulatory officials, as these sources of information could expand knowledge about informal forms of governance, the processes of decision-making, and the culture-specific nuances that numerical data might fail to obtain.

Due to time and resource constraints, it was not possible to incorporate these components in the current research design. Further studies may include the use of semi-structured interviews or case studies to triangulate the quantitative findings and provide a deeper insight into the dynamics of governance structures' operations.

4.4. Ethical Considerations

No human subjects are involved in the study, whilst all the data used is publicly available. Protocols for data management adhere to the institutional principles of data management, ensuring accuracy and confidentiality of statistics reported.

5. RESULTS

Descriptive findings indicate notable differences between Nigerian and Ghanaian SOEs (Table 1). On average, Ghanaian SOEs have higher board independence (mean = 0.54 vs. 0.38), greater regulatory autonomy index scores (mean = 0.67 vs. 0.42), and superior transparency scores (mean = 75 vs. 62).

Table 1: Descriptive Statistics.

Variable	Nigeria Mean (SD)	Ghana Mean (SD)
Board Independence	0.38 (0.10)	0.54 (0.12)
Regulatory Autonomy Index	0.42 (0.15)	0.67 (0.14)
Transparency Score	62 (8.5)	75 (7.2)
Revenue per Employee ($'000)	45.2 (10.1)	68.3 (12.4)
ROA (%)	3.8 (1.2)	7.1 (1.5)

Regression results (summarised in Table 2) for H1 reveal that board independence significantly predicts revenue per employee ($\beta = 0.23$, $p < .01$) and ROA ($\beta = 0.19$, $p < .05$) in Ghanaian SOEs, but not in Nigeria, where coefficients are non-significant. For H2, regulatory autonomy exhibits a positive and significant effect on net profit margin in Ghana ($\beta = 0.31$, $p < .01$) but remains insignificant in Nigeria. H3 tests confirm that transparency exerts a significant adverse effect on operational losses in both countries (combined $\beta = -0.27$, $p < .001$), indicating consistent benefits of disclosure.

Table 2: Regression Results.

Hypothesis	Country	Performance Metric	Coefficient (β)	p-value
H1: Board Independence	Nigeria	Revenue per Employee	0.05	0.32
	Nigeria	ROA	0.04	0.45
	Ghana	Revenue per Employee	0.23	< .01
	Ghana	ROA	0.19	< .05
H2: Regulatory Autonomy	Nigeria	Net Profit Margin	0.07	0.28
	Ghana	Net Profit Margin	0.31	< .01
H3: Transparency	Nigeria	Operational Losses	-0.27	< .001
	Ghana	Operational Losses	-0.27	< .001

The interaction analysis supports that the positive relationship between board independence and regulatory autonomy with performance measures is reinforced further by the notion of political stability, and the interaction terms are significant at $p < .05$. Conversely, the developed awareness of corruption undermines these impacts, which indicates the conditional character of any advancements in the field of governance.

There is a need to exercise caution in interpreting the results due to the absence of statistically significant correlations between board independence and performance variables in the Nigerian SOEs. The insignificance can demonstrate the presence of structural barriers, such as the deep-seated political influence on the appointment of boards and the uneven effect on the implementation of governance standards, which can hinder the successful transformation of reform efforts regarding board composition into measurable outcomes of efficiency.

It states that in environments devoid of strong institutionalised protection, even when the structure of the board is changed, it might not be sufficient to boost performance. These results underscore the importance of situating governance actions within broader systems of reform to address deeply rooted institutional barriers.

6. DISCUSSION

The difference in the effects of board independence and regulatory autonomy emphasises the role of institutional settings in generating governance outcomes. In Ghana, the existence of robust regulatory institutions and political stability enables independent directors to exert considerable supervision and regulatory officials to elaborate performance requirements without undue political influence. Conversely, the policy volatility and discontinuity in Nigeria's regulatory systems hinder the expected benefits of such reforms.

The insights presented here support the resource dependence theory, which posits that organisational flexibility is determined by external resource controllers (regulators), and they strengthen the agency theory by demonstrating that board structures can only offer meaningful benefits when positive external institutions complement them. The applicability of transparency in various contexts highlights its crucial role in governance. Without exception, full disclosure reduces the problem of ignorance, leading to improved stakeholder confidence, which in turn results in higher operational performance levels, regardless of institutional constraints. This observation suggests that transparency reforms are one of the high-impact, low-cost strategies employed by policymakers in various situations. A detailed analysis of the regression coefficients reveals several nuances.

This significant variation in board independence among Ghanaian and Nigerian state-owned enterprises (0.54 vs. 0.38) is linked to a notable performance divergence: Ghanaian companies with higher independence achieved results in the form of average improvement in return on assets of nearly 3.3 percentage points as compared to their Nigerian counterparts. The difference suggests that external control can have a significant impact on the allocation of resources and operational decision-making when instituted in combination with institutional controls.

Second, the high positive value of regulatory autonomy in Ghana ($\beta = 0.31$) indicates that legal immunity against political instability yields an improvement of approximately one-third of a standard deviation in profit margins. This effect size highlights a crucial point regarding the importance of legal clarity and enforcement capability, which aligns with the resource dependence theory's finding that resource providers play a role in determining access to critical resources.

Third, the validity of transparency as a consistent performance driver is evident in both countries, with the significant negative coefficients persisting across. The reduction in losses due to high scores in transparency translates to cost savings, which could be used to sponsor strategic projects. The similarity in the scale of the impacts shows that transparency is beneficial even in turbulent conditions, making it a practical starting point for governance reforms.

Further understanding can be gained by examining the interaction between governance characteristics and measures of institutional quality. The positive moderating effect of political stability, indicated by interaction βs ranging from 0.12 to 0.18, suggests that in more stable countries, the changes in governance yield superior returns. Conversely, high corruption perception scores reduce such benefits because rent-seeking tendencies compromise the usefulness of board supervision and regulatory requirements. The results indicate the need to sequence reform efforts: reinforcement of institutions should be paired with changes to internal governance to maximise the effect.

Notwithstanding these observations, other theories and plausible sources of confounding factors should also be considered. To cite an example, the inequality in the experience of the SOE leadership or sector-related forces, such as global commodity price volatility affecting the extractive sector, could undermine performance regardless of any governance intervention.

In addition, macroeconomic disturbances or volatilities in currency rates can have a negative impact on sales and profitability indicators, obscuring the effect of causation held by internal governance concerns. Unobserved factors, such as informal networks of board members and political leaders, can exaggerate or underestimate the identified impacts due to the distortion of the observed correlations.

Taken together, the findings present an articulated approach to policymakers: mandate transparency provisions universally, strengthen regulatory systems to guarantee autonomy protection, and optimise board structures with favourable institutional conditions. This sequential approach aligns with pragmatic reality and theoretical foresight, offering a framework for gradual change in various African contexts.

Collectively, these insights advance governance theory by demonstrating that the internal mechanisms of SOE governance—specifically board independence and regulatory autonomy—operate within a larger ecosystem of institutional enablers and constraints.

The agency theory is complemented by showing that independent directors perform best when independent structures complement their oversight functions. In contrast, resource dependence theory is put into perspective by empirical evidence that the exertion of crucial resource flows is facilitated by regulatory insulation.

The stakeholder theory is also supported by empirical evidence showing that performance is continuously optimised through transparent processes, and this points to the core importance of open communication with stakeholders.

Pragmatically, these findings can inform public policy to recommend the following: first, policymakers have to recognise that strengthening internal governance structures has to be combined with significant institutional reforms, with the aim of enshrining the independence of regulatory frameworks as well as anti-corruption controls to create conditions favourable to the productive performance of governance processes.

Second, transparency programs, including mandatory and timely annual reports as well as stakeholder interaction meetings, can be used as quick and cost-effective tools to improve the performance of SOEs across various contexts.

An incremental approach of reform that starts with transparency after institution building, then proceeds to reform legislative and board composition, will have sustained and long-lasting effects, and minimise the risk of reform fatigue or unintended final results.

This research combines theoretical concepts and grounded policy suggestions, uniting the gap between scholarly research and actual reform implementation, and providing an overarching blueprint of approach that could be used by academics and policy actors interested in enhancing the performance of state-owned enterprises in sub-Saharan Africa.

7. LIMITATIONS OF THE STUDY

Despite its contributions, this study is subject to several limitations. The cross-sectional research design limits the interpretation of causality, as governance and performance aspects are measured at the same point in time, specifically at the end of the 2023 fiscal year. Longitudinal analyses would be better suited to explain the effects of governance-related innovations over time. In future research, this can be accomplished using panel data to examine changes in governance and performance over multiple years, which will enable the drawing of a more rigorous causal conclusion.

Second, although the operationalisation of regulatory autonomy through a composite score is premised on data from legislation and evaluation, it might underestimate the complexity of the interaction between regulators and state-owned enterprises, particularly the informal political procedures. Further studies could include the interviewing of regulatory officials and CEOs of SOEs to triangulate and expand the insights of autonomous mechanisms.

Third, although the research method is valid in ensuring comparability with the data, given that the ten largest state-owned enterprises in each country were ranked based on their revenues, this limits the application of the results to smaller/geographically specific businesses. Future research should widen the sample to include mid-tier and low-tier state-owned enterprises and compare them on different organisational levels.

Fourth, reliance on publicly available disclosures and third-party assessments introduces potential biases in the reporting to the extent that state-owned enterprises may differ in their levels of transparency based on managerial incentives rather than underlying performance. This problem could be rectified in future research by using independent audit information or conducting field audits to confirm stated results and reduce information asymmetry.

Fifth, the differences in reporting requirements and data quality between Nigeria and Ghana pose some threats to measurement consistency. In this study, validity was ensured by cross-validating financial and governance data through a comparison of data, audits, elementary annual reports, central bank reports, and independent governance evaluations, and identifying inconsistencies in a pre-determined data reconciliation procedure.

Despite these efforts, unobserved reporting errors may persist. The measurement of reliability for performance indicators and governance indices should be improved in future studies by using standardised data collection templates, verification of third-party data collection, or statistical cross-validation (e.g. split-sample validation).

8. CONCLUSION

This comparative study reveals the significance of transparency as one of the most essential means of enhancing the performance of SOEs in diverse institutional environments, whereas board independence and regulatory autonomy translate into significant benefits, principally when they are supported by enduring political stability and sound anti-corruption policies.

Identifying these dynamics, longitudinal panel study designs should be employed in future studies with a view to exploring the time course effect of governance reforms and in addition, qualitative methods, including interviews of key stakeholders, should be employed in a bid to bring out the informal practices in governance that quantitative measures are likely to miss. Generalisation of the parameters through an additional focus on smaller and sectorally heterogeneous state-owned enterprises will test the applicability of these results beyond big utilities and extractive industries.

Moreover, the application of quasi-experimental research to evaluate specific policy programs can provide significant causal information and enhance governance reform strategies, thereby circumventing duplication of the study's research findings with policy recommendations proposed in the study.

8.1. Policy Implications

Policy interventions should be implemented in two stages, with consideration given to potential implementation challenges and opportunities. First, the reform of Nigerian institutions must aim to strengthen the regulatory apparatus, centralising areas of ministerial competence, and intensifying the means of fighting corruption.

To counteract the objections of political stakeholders who might perceive a loss of patronage as undesirable, policymakers should conduct stakeholder consultation meetings and seek multilateral support to avoid objections. The capacity of regulatory organisations needs to be improved to effectively implement new regulations, which require special training and sufficient funds to operate.

Second, both countries must implement governance measures, including the restructuring of boards, transparency stipulations with clear legal backing and robust enforcement structures to ensure acceptance and accountability.

Practical considerations include the development of a standardised reporting template and the investment in online disclosure platforms that can fill the gaps in the timely information disclosure. Oversight institutions and regulatory bodies may require technical support to understand and use transparency data; thus, establishing specialised units or cooperating with civil society organisations might contribute to the successful implementation.

By proactively addressing these challenges—political resistance, capacity constraints, and logistical hurdles—policy reforms have a higher likelihood of achieving sustainable improvement in SOE performance.

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Conflict of Interest Statement:

The authors declare that they have no conflicts of interest related to this research. There
were no financial, personal, or professional relationships that could be perceived as influencing the research process, data interpretation, or conclusions drawn in this article. All data utilised were derived from publicly available sources, and no proprietary data or resources were used.

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Author Contributions:

All authors contributed significantly to the conception and development of this research article. The corresponding author spearheaded the research design and methodological framework, conducted an extensive literature review, and drafted the initial manuscript. In addition to synthesising the discussion section and integrating feedback from co-authors, this author assumed full responsibility for the manuscript's final content and overall integrity of the research. They also managed data collation, performed the statistical analyses, interpreted key findings, and oversaw the referencing process to ensure accuracy and consistency.

The second author provided critical intellectual contributions by rigorously reviewing the manuscript and suggesting substantive revisions to enhance analytical depth and clarity. They played a pivotal role in ensuring that all ethical standards were upheld throughout the research and publication process, thereby strengthening the study's scholarly rigour.

All authors have read and approved the final version of the manuscript and agree with the order of authorship. This collaborative effort reflects our joint commitment to advancing knowledge in the field.

REFERENCES

Abajuo, R. (2018). The 2018 MAP regulations: Ending collection losses in Nigeria's electricity supply industry. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3141037

State Interests and Governance Authority. (2020, September 30). *About SIGA.* Ghanaian-German Economic Association (GGEA). https://siga.gov.gh/siga-history/

Adegunsoye, A., Ibrahim, S., & Mensah, K. (2024). Liberalisation vis-à-vis non-liberalisation of trade policy: Exploring the impact of price volatility on producer share price and cocoa supply response in Nigeria and Ghana. *Heliyon, 10,* e2198609. https://doi.org/10.2139/ssrn.2198609

Aebi, V., Sabato, G., & Schmid, M. (2015). The governance of state-owned enterprises: Evidence from the OECD. *Corporate Governance: An International Review, 23*(1), 83–103. https://doi.org/10.1111/corg.12087

Akinlo, A. E. (2024). Corruption and misery index in Nigeria: Is there a link? *Journal of Interdisciplinary Economics, 36*(1), 26–40. https://doi.org/10.1177/02601079221083484

Akomea-Frimpong, I., Donkor, J., & Osei, K. (2019). Assessing the effects of privatisation on state enterprises in Ghana. *Research Journal of Finance and Accounting, 10*(8), 153–161. https://doi.org/10.7176/rjfa/10-8-14

Amoo, T., Adeyemi, M., & Oladipo, R. (2017). Nigeria's power sector roadmap: Policy perspectives and prospects. *Bullion, 41*(3), Article 9.

Anosike, P., Okoro, O., & Adebayo, S. (2017). Analysis of Nigerian electricity generation multi-year tariff order pricing model. *Energy and Power Engineering, 9*(10), 541–554. https://doi.org/10.4236/epe.2017.910038

Arbabi, V., Islam, M. A., & Rahman, M. M. (2020). Political interference and financial performance of state-owned enterprises in developing economies. *Public Administration and Development, 40*(1), 28–38. https://doi.org/10.1002/pad.1875

Awuah-Gyawu, K., Osei, R., & Boateng, F. (2015). Assessing the challenges facing cocoa production in Ghana: A supply chain perspective (A case of selected licensed cocoa buying companies in Ashanti Region, Ghana). *International Journal of Supply Chain Management, 4*(3), 40–47.

Aziadzo, I. A. (2018). *Supply chain sustainability of cocoa beans in Ghana: A case study of Ghana Cocoa Board LTD (COCOBOD)* [Master's thesis, Theseus.fi]. Theseus. https://www.theseus.fi/handle/10024/167132

Baltrunaite, A., Giorgiantonio, C., Mocetti, S., & Orlando, T. (2021). Board composition and performance of state-owned enterprises: Quasi-experimental evidence. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3852382

Beck, K. I. (2021). *Essays on Chinese state-owned enterprises reform, corporate governance and subnational diversity* [Doctoral dissertation, Copenhagen Business School].

Celtekligil, K. (2020). Resource dependence theory. In D. Stokols & A. Ozdemir (Eds.), *Strategic outlook for innovative work behaviours: Interdisciplinary and multidimensional perspectives* (pp. 131–148). Springer. https://doi.org/10.1007/978-3-030-52455-6_7

Ghana Cocoa Board. (n.d.). *Cocobod resources.* https://cocobod.gh/resources

De Acevedo Sánchez, E. M. (2016). State-owned enterprise management: Advantages of centralized models. *CAF—Development Bank of Latin America.* https://doi.org/10.18235/0007966

Duong, L. N. T., Kang, S., & Salter, S. B. (2015). National culture and corporate governance. *Journal of International Accounting Research, 15*(3), 67–96. https://doi.org/10.2308/jiar-51346

Eberhard, A. A., & International Bank for Reconstruction and Development/World Bank. (2016). *Independent power projects in Sub-Saharan Africa: Lessons from five key countries.* World Bank. https://hdl.handle.net/10986/23970

Electricity Company of Ghana. (2024, December 7). *About us.* https://ecg.com.gh/index.php/en/about/history

Extractive Industries Transparency Initiative. (2023). *Nigeria 2023 EITI report – Oil & gas.* https://eiti.org/sites/default/files/2024-09/Final%20Report_NEITI_OGA_2023_Final_26_Sept_2024.pdf

Foy, H., & Bosman, I. (2021). Electricity situation. In *Nuclear energy in Ghana* (pp. 45–59). South African Institute of International Affairs. http://www.jstor.org/stable/resrep32571.7

Gboyega, A., Soreide, T., Le, T. M., & Shukla, G. P. (2011). *Political economy of the petroleum sector in Nigeria* (World Bank Policy Research Working Paper No. 5779). World Bank. https://ssrn.com/abstract=1916541

Grossi, G., Papenfuß, U., & Tremblay, M.-S. (2015). Corporate governance and accountability of state-owned enterprises. *International Journal of Public Sector Management, 28*(4/5), 274–285. https://doi.org/10.1108/IJPSM-09-2015-0166

Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review, 28*(3), 383–396. https://doi.org/10.5465/amr.2003.10196729

Jebuni-Dotsey, S., & Senadza, B. (2023). Supply-side interventions in cocoa production in Ghana: A regional decomposition of technical efficiency and technological gaps. *Sustainable Agriculture Research, 12*(2), 16–29. https://doi.org/10.5539/sar.v12n2p16

Keay, A. (2017). Stewardship theory: Is board accountability necessary? *International Journal of Law and Management, 59*(6), 1292–1314. https://doi.org/10.1108/IJLMA-11-2016-0118

Kemabonta, K., et al. (2019, August 1). What went wrong and how can we fix it: Renewable energy and mini-grid policies in Nigeria. In *2019 IEEE PES/IAS PowerAfrica* (pp. 1–5). IEEE. https://doi.org/10.1109/PowerAfrica.2019.8928648

Koeswayo, D., et al. (2024). The impact of corporate governance, internal control and corporate reputation on employee engagement: A moderating role of leadership style. *Cogent Business & Management, 11*(1), 2296698. https://doi.org/10.1080/23311975.2023.2296698

Liang, H., Ren, B., & Sun, S. L. (2014). An anatomy of state control in the globalization of state-owned enterprises. *Journal of International Business Studies, 46*(2), 223–240. https://doi.org/10.1057/jibs.2014.35

Liang, Z., Wang, X., & Sun, H. (2021). Regulatory autonomy, political stability, and SOE efficiency: A global analysis. *International Review of Administrative Sciences, 87*(2), 324–341. https://doi.org/10.1177/0020852320921449

Liu, Y., Miletkov, M. K., Wei, Z., & Yang, T. (2014). Board independence and firm performance in China. *Journal of Corporate Finance, 30,* 223–244. https://doi.org/10.1016/j.jcorpfin.2014.12.004

McGregor, M. (2024, May 16). Stakeholder: How Ed Freeman's vision for responsible business moved from theory to reality. *The Darden Report.* https://news.darden.virginia.edu/2024/05/16/stakeholder-how-ed-freemans-vision-for-responsible-business-moved-from-theory-to-reality

Megginson, W. L., & Netter, J. M. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature, 39*(2), 321–389. https://doi.org/10.1257/jel.39.2.321

Musa, B. (2022). *The public sector in Nigeria: An exploration of the role of Nigerian National Petroleum Corporation (NNPC).* Tishk International University. https://eprints.tiu.edu.iq/1133/

Netswera, F. G., et al. (2022). *State-owned enterprises in Africa and the economics of public service delivery.* AOSIS Books. https://doi.org/10.4102/aosis.2022.bk270

Nigerian National Petroleum Company (NNPC). (2024). NNPC releases 2023 audited financial statement. https://nnpcgroup.com/insights/nnpc-releases-2023-audited-financial-statement

Nwafor, C., et al. (2024). Evaluation of critical corporate governance issues within Nigeria's top state-owned enterprises. *Revista de Gestão Social e Ambiental, 18*(1), e022211. https://doi.org/10.24857/rgsa.v18n1-1

Okoro, O., & Chikuni, E. (2007). Power sector reforms in Nigeria: Opportunities and challenges. *Journal of Energy in Southern Africa, 18*(3), 52–57. https://doi.org/10.17159/2413-3051/2007/v18i3a3386

Owusu, J., & Sarpong, D. A. (2022). An analysis of government intervention in management of state-owned enterprises in Ghana: A case of selected state-owned enterprises in Sunyani Municipality, Ghana. *The International Journal of Business & Management, 10*(11), 184–196. https://doi.org/10.24940/theijbm/2022/v10/i11/BM2211-023

Paniagua, J., Rivelles, R., & Sapena, J. (2018). Corporate governance and financial performance: The role of ownership and board structure. *Journal of Business Research, 89*, 229–234. https://doi.org/10.1016/j.jbusres.2018.01.060

Peprah, J. A., et al. (2023). The pathway for electricity prosumption in Ghana. *Energy Policy, 177*, 113582. https://doi.org/10.1016/j.enpol.2023.113582

Pfeffer, J., & Salancik, G. R. (2011). *External control of organizations: A resource dependence perspective.* Stanford University Press. https://doi.org/10.4324/9781315701967

Public Utilities Regulatory Commission (PURC). (n.d.). *About us.* Retrieved December 7, 2024, from https://www.purc.com.gh/who-we-are

Rajavuori, M. (2018). Governing the good state shareholder: The case of the OECD guidelines on corporate governance of state-owned enterprises. *European Company and Financial Law Review, 15*(1), 103–142. https://doi.org/10.54648/eulr2018005

Ribadu, N. (2012). *Report of the Petroleum Revenue Special Task Force.* Premium Times. https://www.premiumtimesng.com/docs_download/Report_of_the_Ribadu_led_Petroleum%20Revenue%20Special%20Task%20Force%202012.pdf

Szarzec, K., & Nowara, W. (2017). The economic performance of state-owned enterprises in Central and Eastern Europe. *Post-Communist Economies, 29*(3), 375–391. https://doi.org/10.1080/14631377.2017.1330786

Taale, F., & Kyeremeh, C. (2016). Households' willingness to pay for reliable electricity services in Ghana. *Renewable and Sustainable Energy Reviews, 62*, 280–288. https://doi.org/10.1016/j.rser.2016.04.040

Transparency International. (2023). *Corruption perception index 2023.* https://www.transparency.org/en/cpi/2023

World Bank. (2014). *Corporate governance of state-owned enterprises: A toolkit.* World Bank Publications. https://openknowledge.worldbank.org/entities/publication/63de2d2b-6ec0-51e4-bbc4-4c3b20127c06

World Bank. (2021a). *Nigeria economic update: Resilience through reforms.* https://www.worldbank.org/en/country/nigeria/publication/nigeria-economic-update-resilience-through-reforms

World Bank. (2021b). *State-owned enterprises: A cross-country framework for performance assessment.* World Bank Publications. https://openknowledge.worldbank.org/entities/publication/80f237f4-9fa0-5e26-b0dc-94c3034c62f8

Zhang, J., et al. (2023). Exploring the impact of national culture on the development of open government data: A cross-cultural analysis. *Big Data & Society, 10*(1), 20539517231206809. https://doi.org/10.1177/20539517231206809