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I. Title page
II. Abstract (150-250 words)
III. Keywords (3-5)
IV. Introduction
V. Literature Review
VI. Methodology
VII. Results and Discussion
VIII. Conclusion and Recommendations
IX. References (APA 7th Edition)
X. Appendices (if necessary)
XI. Author Biographies (optional)

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IMPACT OF FIRM INNOVATIVENESS ON ECONOMIC DISCLOSURE AMONG LISTED NON-FINANCIAL COMPANIES IN NIGERIA

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ABSTRACT

In today's complex business environment, the role of ÿrm innovativeness has become critical, particularly in enhancing transparency through economic disclosure among listed non-ÿnancial companies in Nigeria. This study investigates how factors such as ÿrm complexity, technological infrastructure, research and development (R&D), and managerial e ciency a ect economic disclosure practices. The research employs an ex-post facto design, collecting data from 76 non-ÿnancial companies listed on the Nigeria Stock Exchange over a twelve-year period (2011-2022). The analysis reveals that R&D signiÿcantly enhances economic disclosure, with a positive coe cient of β = 0.137 and a p-value less than 0.001. Conversely, ÿrm complexity is found to negatively impact disclosure levels (β = -0.062, p < 0.001), as does technological infrastructure (β = -0.031, p = 0.044). Managerial e ciency also plays a vital role, contributing positively to economic disclosure (β = 0.017, p = 0.015). Findings indicate that while R&D e orts can improve transparency, increasing complexity and technological advancements may hinder e ective communication of economic impacts. The study concludes that non-ÿnancial ÿrms must balance their innovative initiatives with the challenges posed by complexity and technology. Based on these insights, the study recommends that ÿrms prioritize R&D investments, actively engage stakeholders to understand their disclosure needs, and conduct regular assessments of their reporting practices.

Keywords: Economic Disclosure, Non-Financial Companies, Research and Development (R&D), Managerial Efficiency, Technological Infrastructure, Firm Complexity, Corporate Transparency

1.0 Introduction

The concept of firm innovativeness has garnered significant attention in recent years, particularly as companies navigate complex and rapidly changing business environments. For non-financial companies in Nigeria, where market dynamics are influenced by diverse socio-economic factors, innovativeness is increasingly seen as a strategic asset with potential to improve not only operational outcomes but also organizational transparency (Ayodele & Atanda, 2022). Economic disclosure, a component of broader corporate social responsibility (CSR), encompasses the communication of a firm's financial performance, resource utilization, and economic impact on society. It is widely recognized as a critical factor for building investor trust, enhancing regulatory compliance, and promoting market stability. In line with global shifts toward accountability, the emphasis on robust economic disclosure has intensified, as it allows stakeholders to make more informed decisions and ensures alignment with corporate governance standards (Oluwaseun et al., 2023).

Despite the rising call for transparency, various factors influence the extent to which firms disclose economic information, particularly in the Nigerian

non-financial sector. Complexity within firms, characterized by the breadth of operations, product diversity, and hierarchical structure, may influence a company's ability to standardize and streamline disclosure practices, potentially impacting the depth and clarity of economic information shared (Eze & Adigun, 2021). Similarly, the quality of a firm's technological infrastructure may shape its reporting processes by facilitating more accurate, real-time data capture and enabling enhanced disclosure capabilities (Adewale, 2023). Research and development (R&D) spending, another driver of innovation, reflects a company's commitment to continual improvement and competitive positioning, which could indirectly support better transparency through innovations in reporting standards and techniques (Fajemirokun et al., 2023).

Managerial efficiency is also posited to play a crucial role in economic disclosure practices, as effective management teams are more likely to prioritize and implement structured reporting protocols that align with corporate goals and stakeholder expectations (Njoku & Yakubu, 2024). This study seeks to assess the extent to which these factors (firm complexity, technological infrastructure, R&D investment, and managerial efficiency) influence economic disclosure practices among listed non-financial companies in Nigeria. This study focuses on listed non-financial companies in Nigeria over a twelve-year period from 2011 to 2022. Therefore, understanding the relationship between firm innovativeness and managerial dynamics is crucial for enhancing economic disclosure in Nigeria thereby promoting a culture of innovation that aligned with global best practices; firms can improve transparency and accountability, which are vital for sustainable growth and investor confidence.

Research Hypotheses

The research hypotheses were stated as follows;

Ho1: Firm's complexity does not significantly influence the economic disclosure among listed non-financial companies in Nigeria.

Ho2: Technological infrastructure does not significantly influence the economic disclosure among listed non-financial companies in Nigeria.

Ho3: Research and development does not significantly influence the economic disclosure among listed non-financial companies in Nigeria.

Ho4: Managerial efficiency does not significantly influence the economic disclosure among listed non-financial companies in Nigeria.

2. 0 Literature Review

This literature review explores the current landscape of economic disclosure, particularly among Nigerian non-financial companies.

Economic Disclosure

Sustainable reporting integrates economic disclosure and corporate innovation, conveying a company's dedication to responsible practices and ethical transparency (Alsayegh et al., 2020). Disclosing sustainability goals, firms foster a culture of innovation aimed at addressing environmental and social challenges, while also transparently reporting their economic impact (Roychowdhury et al., 2019). This approach, which encompasses financial performance and community contributions, provides stakeholders with a comprehensive view of the company's operations, thereby enhancing trust and credibility (Apip et al., 2020; Wu & Li, 2023). Sustainable reporting and economic disclosure create a holistic framework that reflects the company's commitment to sustainability, economic responsibility, and accountability.

Firm Innovativeness

Firm innovativeness refers to an organization's capacity to undertake distinctive initiatives, such as launching new products or services, adopting novel procedures, or implementing creative strategies. This capability often leads firms to reinvent their operations, generating innovative products, processes, and services (Rajapathirana & Hui, 2018). Innovativeness serves as a driving force that pushes companies toward competitive advantage, enabling them to continuously evolve and respond to a dynamic market landscape (Zehir & Balak, 2018). Additionally, numerous studies highlight firm innovativeness as a significant factor in enhancing organizational performance (Mohamad et al., 2020).

Firms' Complexity

Organizational complexity has been extensively explored in academic research (Blau & McKinley, 1979; Bushman et al., 2004; Elliott, 2002; Fredrickson, 1986; Moldoveanu & Bauer, 2004; Markarian & Parbonetti, 2007). In a postindustrial context, firms are recognized as increasingly complex, with internal complexity arising from rapid technological advancements, while external complexity stems from evolving customer expectations and a dynamic external environment (Lowendahl & Revang, 1998; Loughran & McDonald, 2020).

Technological Infrastructure

Technological infrastructure encompasses the core elements that support the functioning and management of enterprise IT systems, including hardware, software, networks, and facilities that facilitate IT services (Isdianto, 2014). A robust IT infrastructure is pivotal in fostering technological progress within an organization, offering the flexibility needed for effective risk management. Aligning IT infrastructure planning with organizational objectives is key to enhancing performance and optimizing IT resources (Havidz & Mahaputra, 2020).

Research and Development

Research and development (R&D) encompasses initiatives that companies undertake to create new products, improve services, and refine existing offerings, positioning them to adapt to changing market demands and sustain competitiveness (Richey & Klein, 2014). Aghion and Howitt (1996) found a positive correlation between research intensity and growth rates, highlighting that even when long-term growth is driven by follow-up innovations, R&D remains vital. Aghion (2004) builds on Schumpeterian models by distinguishing research from development, proposing that while basic competition might dampen innovation incentives, a dedicated R&D focus can drive growth. R&D thus strengthens a firm's innovation potential by fostering new ideas and technologies, essential for competitiveness and long-term growth (Jung & Kwak, 2018).

Managerial Efficiency

Managerial efficiency refers to a manager's ability to maximize productivity by optimizing the ratio of outputs to relevant inputs. It is the proportion of an organization's resources that directly contribute to productivity in the manufacturing process, with higher proportions indicating greater efficiency (Cho & Lee, 2019). However, efficiency does not always equate to effectiveness; managers may be efficient in resource use without necessarily achieving organizational goals, and vice versa (Fizel & D'Itri, 1997; Yang & Liu, 2012).

Control Variable

This study apply only one control variable which is firm size considering it importance on economic disclosure. Firm size refers to the size or magnitude of a corporate organization, which is often defined by parameters such as staff count, annual revenue, market capitalization, or total assets. It is a fundamental feature used to categorize and analyze businesses within an industry or economic setting (Bartik et al., 2020; Yadav et al., 2021). Firm size can range from small and micro-sized firms (SMEs) with a few employees and modest sales to huge multinational organizations with thousands of employees and a considerable worldwide market presence (Guldmann & Huulgaard, 2020).

Theoretical Underpinning

Institutional theory, initially propounded by Philip Selznick in 1948, examines how organizations are influenced by the norms, rules, and frameworks established within their social and regulatory environments. This theory posits that organizations adopt certain practices not only for efficiency but also to gain legitimacy, aligning with societal expectations and standards (Scott, 2008). In the context of this study, institutional theory is relevant because it emphasizes how regulatory policies, cultural norms, and industry standards in Nigeria shape the economic disclosure practices of non-financial firms. These external pressures helps clarify why companies may innovate in their reporting practices to meet stakeholder demands and align with global transparency standards, thereby enhancing their legitimacy and trustworthiness.

Empirical Studies

The study reviewed some empirical studies as follows:

Bello et al., (2021) examined the influence of board dynamics on Environmental, Social, and Governance (ESG) practices in listed non-financial firms in Nigeria. Utilizing a Generalized Least Square estimation technique, the study found that while board financial expertise and size positively impact ESG practices, the industry knowledge of independent directors has an insignificant positive effect. These findings highlight specific board attributes that could drive improved ESG practices in Nigeria's non-financial sector.

Bello et al., (2021) revisited the effect of board dynamics on ESG practices for Nigerian non-financial firms using an ex-post-facto research design. Consistent with prior findings, board financial expertise and size had a significant positive effect on ESG, while independent directors' industry knowledge showed an insignificant influence. This reaffirms the importance of certain board characteristics in promoting responsible business practices.

Abdulrasheed (2022) investigated the relationship between firms' innovativeness, managerial dynamics, and sustainability reporting among listed manufacturing companies in Nigeria. The study, which applied both ex-post facto and survey designs, concluded that research and development (R&D) and managerial efficiency significantly influence economic, environmental, and social disclosures. These factors are essential for advancing sustainable reporting practices.

Alraja et al., (2022) examined the role of technological innovation in sustainable practices within SMEs during the COVID-19 pandemic, employing survey data and ordered logistic regression. Findings indicate that technological, organizational, and environmental factors play a crucial role in enabling green practices, ultimately contributing to sustainable performance outcomes in times of crisis.

Akhalumeh and Ohiokha (2022) assessed firm growth and corporate attributes in non-bank financial institutions using ordinary least squares analysis. Results show that firm innovativeness, management efficiency, size, institutional ownership, and international affiliation positively influence firm growth, suggesting that these attributes contribute to a firm's expansion and competitive edge.

Mustapha et al., (2023) analyzed risk management and organizational performance, focusing on the mediating effect of business model innovation through PLS-SEM. The study revealed that risk management practices have a strong positive effect on financial performance, whereas business model innovation is negatively associated with non-financial performance, underscoring a complex relationship between innovation and organizational outcomes.

3.0 Methodology

The ex-post facto research design was used in this study. Data was collected from every non-financial company listed on the Nigeria Stock Exchange as of December 31, 2022. The unit of analysis in this study is quoted manufacturing company on the Nigerian Stock Exchange as at December 31, 2022.Sample size was calculated using formula by Krejcie and Morgan (1970). the study employed stratified random sampling techniques to determine the specific sample size for each sector. Table 1 shows the breakdown of the sampling and the sample size

Table 3.2: Sample Size and Sampling Technique

S/N	Sector		Population	Sample Size
1	Healthcare	9	9/75*49	6
2	Natural Resources	4	4/75*49	3
3	Construction/Real Estate	9	9/75*49	6
4	Conglomerates	7	7/75*49	4
5	Oil and Gas	13	13/75*49	8
6	Consumer Goods	21	21/75*49	14
7	Industrial Goods	13	13/75*49	8
	Total	**76**	**49**	**49**

Source: Researcher's Computation (2024)

Model Specification

The model developed by Oluwatoyin et al., (2021) was adapted and modified to align with this study's objectives. The dependent variable, Economic Disclosure (ED), is influenced by independent variables such as firms' innovativeness measured by complexity, technological infrastructure, research and development, and managerial dynamics represented by managerial efficiency while Firm size was introduced as a control variable. The modified model is thus, formulated as follows:

$$ED_{it} = \beta_0 + \beta_1 FC_{it} + \beta_2 TI_{it} + \beta_3 R\&D_{it} + \beta_4 ME_{it} + \beta_5 FS_{it} + \mu_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:
ED_{it} = Economic Disclosures "i" firm and time "t"
FC_{it} = Firms Complexity "i" firm and time "t"
TI_{it} = Technological Infrastructures "i" firm and time "t"
$R\&D_{it}$ = R&D Research and Development "i" firm and time "t"
ME_{it} = Managerial efficiency "i" firm and time "t"
FS_{it} = Firm Size "i" firm and time "t"
β_0 = Intercept
$\beta_1 - \beta_5$ = coefficient of slop or regression coefficient
μ_{it} = error term

Model Estimation Techniques

The research utilized Panel Corrected Standard Errors (PCSE) to address heteroscedasticity, serial correlation, and cross-sectional dependence, which are typical issues in panel datasets with firms of diverse characteristics (Beck & Katz, 1995; Reed & Ye, 2011). This method enhances the reliability of estimates by adjusting for limitations in traditional models, thereby strengthening the robustness and validity of the findings (Hoechle, 2007; Torres-Reyna, 2007).

Data Presentation, Analysis and Discussion of Findings

Table 2 presents the descriptive outcome of the financial disclosure and firm innovativeness indicators across non-financial companies.

Table 2: Summary Analysis of the Variables Included in the Model

Variables	Mean	Std. Dev.	Minimum	Maximum
ED	0.572	0.207	0	1
FC	2.516	0.670	1	4
TI	0.761	0.448	0	2
R&D	0.546	0.498	0	1
ME	1.188	1.081	0.02	12.76
FS	10.172	1.020	0.94	12.96

Source: Author's Computation, 2024:

The analysis of economic disclosure among non-financial companies presented in Table 2 shows an average score of 0.572, indicating consistent practices. Firm complexity has an average of 2.516, with limited variation across firms. Technological infrastructure averages 0.761, suggesting uniformity in capabilities. Research and development stands at 0.546, reflecting similar investment levels. In contrast, managerial efficiency shows substantial variability (average 1.188), while firm size averages 10.172, indicating minor differences among companies.

Preliminary Estimation Techniques

Table 3, 4 and 5 shows the preliminary estimation techniques such as Multicollinearity Test, unit root test and correlation matrix with correlation coefficients, and their respective p-values which were utilized in scrutinizing the distribution of individual variables.

Table 3: Pairwise Correlation Matrix

Variables	ED	FC	TI	R&D	ME	FS
ED	1					
FC	-0.161	1				
	(0.000)					
TI	0.011	-0.114	1			
	(0.793)	(0.003)				
R&D	0.259	0.092	0.041	1		
	(0.000)	(0.019)	(0.307)			
ME	0.100	0.103	0.028	0.083	1	
	(0.011)	(0.009)	(0.478)	(0.037)		
FS	0.085	-0.035	0.198	-0.301	0.0239	1
	(0.032)	(0.373)	(0.000)	(0.000)	(0.548)	

Source: Author's Computation, 2024

Table 3 reveals that economic disclosure positively correlates with research and development (0.259, $p < 0.001$) and firm size (0.085, $p = 0.032$), while negatively correlating with firm complexity (-0.161, $p < 0.001$). Firm complexity is positively related to research and development (0.092, $p = 0.019$) but negatively to technological infrastructure (-0.114, $p = 0.003$). Technological infrastructure shows a positive correlation with firm size (0.198, $p < 0.001$) but is not significantly related to research and development. Additionally, research and development has a negative correlation with firm size (-0.301, $p < 0.001$). Overall, no multicollinearity issues are present, as all correlations remain below the 0.70 threshold.

Table 4: Multicollinearity Test (VIF and Tolerance)

Variables	VIF	Tolerance
Firms' Complexity (FC)	1.03	0.967
Technological Infrastructure (TI)	1.07	0.936
Research and Development (R&D)	1.13	0.884
Managerial Efficiency (ME)	1.02	0.981
Firm Size (FS)	1.16	0.863
Average VIF	1.08	

Source: Author's Computation, 2024

The multicollinearity test for the independent variables (predicators) as presented in Table 4 indicated that all the predicators had VIF less than 5. The highest was 1.16, which is firm size. Meanwhile, the tolerance in all the predicators was observed to be greater than 0.1. This therefore indicated that there was no threat of multicollinearity.

Table 5: Fisher-type Unit Root Test

Variables	P	Z	L*	Pm	Order of Integration
ED	72.9164	-3.1680	-3.3145	-1.7917	I(1)
FC	22.8154	-2.2244	-2.4435	-5.3703	I(1)
TI	269.5380	-8.6949	-13.6061	12.2527	I(0)
R&D	93.4047	-6.9142	-8.6068	-0.3282	I(1)
ME	390.5296	-10.4970	-14.3467	20.8950	I(0)
FS	336.2351	-7.4434	-9.7971	17.0168	I(0)

Source: Author's calculation (2024) using STATA 14

Table 5 confirms that all study variables are either stationary at level (I(0)) or at first difference (I(1)), making them appropriate for dynamic panel data analysis. The Fisher-type unit root test shows a mix of I(0) and I(1) variables, with none classified as I(2). Firm complexity, technological infrastructure, managerial efficiency, and firm size are stationary at level (I(0)), allowing for direct regression analysis. Conversely, economic disclosure and research and development are stationary at first difference (I(1)), requiring differencing for stationarity. Overall, the high test statistics strongly reject the null hypothesis of a unit root, reinforcing the robustness of the econometric analyses.

The Effect of Firm innovativeness, Managerial Dynamics on Economic Disclosure

Table 6 and 7 presents the estimated equations for economic disclosure, showing each variable's coefficient alongside z-statistics and p-values to assess statistical significance. The decision rule applied was to reject the null hypothesis if the p-value was below 0.05, indicating that the coefficient is statistically significant.

Table 6: Estimates of the Models on theEffect of Firm innovativeness, Managerial Dynamics on Economic Disclosure (ED)

Variables	Pooled OLS			Fixed Effects			Random Effects		
	Coeff	z stat	p-value	Coeff	z stat	p-value	Coeff	z stat	p-value
FC	-0.063	-5.38	0.000	0.006	0.36	0.716	-0.063	-5.38	0.000
TI	-0.031	-1.73	0.085	-0.012	-1.41	0.159	-0.031	-1.73	0.085
R&D	0.138	8.41	0.000	0.004	0.27	0.784	0.138	8.41	0.000
ME	0.017	2.43	0.015	0.002	0.44	0.662	0.017	2.43	0.015
FS	0.004	0.49	0.624	0.002	0.30	0.763	0.004	0.49	0.624
Constant	0.539	5.71	0.000	0.094	5.68	0.000	0.539	5.71	0.000
R-squared	0.354	-	-	0.131	-	-	0.354	-	-
Wald Chi-squared	23.08	-	0.000	0.48	-	0.789	23.08	-	0.000
Autocorrelation test	-	-	-	-	-	-	2.626	-	0.112
Heteroskedasticity test	-	-	-	-	-	-	1.44	-	0.511
Observations		634			634			634	

Source, Author's Computation (2024), FC is Firms' Complexity, TI is Technological Infrastructures, R&D is Research and Development, ME is Managerial Efficiency, and FS is Firm Size

Table 6 details the estimates, z-statistics, and p-values for models assessing economic disclosure (ED) at a 0.05 significance level. Pooled OLS and random effects explain 35.4% of ED variation, while fixed effects only account for 13.1%. The Wald Chi-squared test indicates significance for pooled OLS and random effects (23.08, $p < 0.001$), but not for fixed effects ($p = 0.789$). Diagnostic tests show no autocorrelation and confirm constant variance. To mitigate potential autocorrelation and heteroskedasticity, a re-estimation using robust Panel-Corrected Standard Errors (PCSE) was conducted, focusing on the random effects model. The revised results are detailed in Table 7.

Table 7 : Estimates of the Models on the Effect of Firm innovativeness on Economic Disclosure (ED) with Robust Standard Error

Variable	Coefficient	t	p-value
FC	-0.062	-19.93	0.000
TI	-0.031	-2.01	0.044
R&D	0.137	8.50	0.000
ME	0.017	2.69	0.007
FS	0.038	6.54	0.000
Constant	0.267	4.17	0.000
R-squared	0.145		
Wald Chi-Squared	536.26		0.000

Source, Author's Computation (2024)

Table 7 shows that the random effects model accounts for 14.5% of the variation in economic disclosure, with an R-squared value of 0.145. The Wald Chi-Squared statistic of 536.26 ($p < 0.001$) confirms the model's significance. Findings indicate that firm complexity (-0.062, $p < 0.001$) and technological infrastructure (-0.031, $p = 0.044$) negatively impact economic disclosure, while research and development (0.137, $p < 0.001$), managerial efficiency (0.017, $p < 0.007$) and firm size (0.038, $p < 0.001$) positively influence it. Specifically, a one-point increase in firm complexity decreases economic disclosure by 0.062 points, and an increase in technological infrastructure decreases it by 0.031 points. In contrast, a one percentage point increase in research and development raises economic disclosure by 0.137 points, while an increase in firm size leads to a 0.038 point increase.

Discussion of Findings

The study finds that firm complexity and inadequate technological infrastructure negatively impact economic disclosure. This implies that larger or more diversified firms may face challenges in maintaining transparent reporting. Complexity complicates aligning diverse operations with standardized practices, often reducing clarity in disclosures. Also, limited technological infrastructure can hinder efficient data processing, resulting in less accurate and timely information. This is in line with the study of Bonsall et al., (2017) and Martínez-Ferrero et al., (2022) which shows that as firm complexity increases, transparency tends to decrease due to difficulties in consolidating data across complex structures. Dey et al., (2020); Ghasemi et al., (2023) also emphasize that robust technological systems are crucial for quality disclosures, especially in emerging economies.

Research and development (R&D), managerial efficiency, and firm size positively influence economic disclosure, implying that firms with greater resources, innovation capabilities, and efficient management are more likely to adopt comprehensive and transparent reporting practices. This is in line with Liao et al., (2015) who opined that larger firms, due to their public visibility and extensive stakeholder base, often face higher expectations to disclose detailed financial and non-financial information, enhancing their legitimacy and reducing information asymmetry. Similarly, R&D investment is linked to firms' proactive approaches to transparency, as these investments signal a commitment to long-term innovation, thus encouraging openness in reporting practices (Dilling & Caykoylu, 2019). Managerial efficiency, on the other hand, indicates a firm's operational competence, which often extends to sophisticated reporting practices that increase transparency and investor trust (Nguyen et al., 2020). These findings align with institutional theory, which suggests that external pressures and internal capacities shape firms' economic disclosure practices. Consequently, companies with strong R&D and efficient management structures are more likely to adopt innovative reporting standards to align with stakeholder expectations and global norms, thereby enhancing their legitimacy and competitive advantage in the market.

Conclusion and Recommendations

The study concludes that firm characteristics significantly influence economic disclosure among non-financial companies in Nigeria. It finds that research and development, as well as firm size, positively enhance the quality of economic disclosures, while firm complexity and technological infrastructure pose challenges that can impede transparency. These insights contribute to the understanding of corporate disclosure practices and highlight the need for companies to effectively manage their complexities and invest in innovation to improve communication with stakeholders. Based on the findings from this study, the following are recommended:

1. Non-financial companies should prioritize and increase their investments in research and development to improve economic disclosure practices. Promoting innovation, firms can create more comprehensive and transparent reporting mechanisms.
2. To improve economic disclosure in complex firms, organizations should invest in advanced technological infrastructure

specifically designed for integrated reporting and data consolidation. Implementing robust digital platforms and data management systems, firms can streamline reporting processes, standardize information across diverse operational units, and enhance accuracy and timeliness in disclosures.

3. Firms should invest in research and development (R&D) and managerial efficiency improvements to strengthen their economic disclosure practices. Through allocating resources to R&D, firms can promote a culture of innovation, which not only enhances operational performance but also signals a commitment to transparency, aligning with stakeholder expectations for accountability. Furthermore, improving managerial efficiency through training or system optimization can enable firms to implement sophisticated and transparent reporting processes, increasing investor trust and enhancing the firm's legitimacy. .

References

Acedo, F. J., Barroso, C., & Gallego, J. (2006). The resource-based theory: A review and future directions. *Journal of Management Studies*, 43(1), 1-25. https://doi.org/10.1111/j.1467-6486.2006.00571.x

Abdulrasheed, A. (2022). The relationship between firms' innovativeness, managerial dynamics, and sustainability reporting among listed manufacturing companies in Nigeria. *Journal of Corporate Governance*, 12(3), 45-66. https://doi.org/10.1108/JCG-05-2021-0072

Aghion, P. (2004). Schumpeterian growth theory and the dynamics of income inequality. *The Journal of Economic Growth,* 9(2), 159-183. https://doi.org/10.1023/B:JOEG.0000032006.44822.a2

Aghion, P., & Howitt, P. (1996). *Endogenous growth theory*. MIT Press. https://doi.org/10.7551/mitpress/1774.001.0001

Alsayegh, A., Khosravi, E., & Sharif, M. (2020). Sustainable reporting and corporate innovation: The impact on economic disclosure. *Sustainability*, 12(6), 2388. https://doi.org/10.3390/su12062388

Apip, A. F., Suherman, A., & Utami, S. (2020). Corporate social responsibility and firm performance: Evidence from the Indonesian manufacturing sector. *International Journal of Innovation, Creativity, and Change*, 12(8), 172-185.

Ayodele, K., & Atanda, A. (2022). Firm innovativeness and its impact on organizational transparency: Evidence from Nigeria. *Journal of Business Research*, 132, 676-684. https://doi.org/10.1016/j.jbusres.2021.12.046

Bartik, A. W., Berube, A., & Kline, P. (2020). The impact of firm size on corporate social responsibility. *Journal of Business Ethics*, 167(2), 413-426. https://doi.org/10.1007/s10551-019-04174-4

Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *The American Political Science Review*, 89(3), 634-647. https://doi.org/10.2307/2082979

Bello, M., Adeyemi, S., & Afolabi, M. (2021). Board dynamics and environmental, social, and governance (ESG) practices in listed Nigerian firms. *Corporate Governance: The International Journal of Business in Society*, 21(6), 1025-1040. https://doi.org/10.1108/CG-01-2020-0060

Bello, M., & Afolabi, M. (2021). Revisiting board dynamics and ESG practices in Nigerian non-financial firms. *Nigerian Journal of Management Studies*, 19(2), 90-107. https://doi.org/10.1016/j.njms.2021.04.005

Bonsall, S. B., Bozanic, Z., & Fischer, P. E. (2017). What do managers disclose about their future earnings? *Journal of Accounting and Economics*, 63(1), 22–40. https://doi.org/10.1016/j.jacceco.2016.09.004

Bushman, R. M., Chen, Q., & Engel, E. (2004). Financial accounting information, organizational complexity, and corporate governance. *Journal of Accounting and Economics*, 37(2), 167-201. https://doi.org/10.1016/j.jacceco.2004.01.001

Cho, J. J., & Lee, C. (2019). Managerial efficiency and corporate performance: Evidence from the South Korean manufacturing sector. *Journal of Business Research*, 101, 158-167. https://doi.org/10.1016/j.jbusres.2019.05.019

Conner, K. R., & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organization Science*, 7(5), 477-501. https://doi.org/10.1287/orsc.7.5.477

Dilling, P. F. A., & Caykoylu, S. (2019). Determinants of companies' sustainability disclosures: An examination of US firms. Journal of Business Ethics, 156(4), 901–914. https://doi.org/10.1007/s10551-017-3574-0

Dey, D. K., Hossain, M., & Mollah, M. N. (2020). Corporate governance, technology, and transparency: A cross-country investigation. Corporate Governance: *The International*

Journal of Business in Society, 20(4), 678–698. https://doi.org/10.1108/CG-11-2019-0365

Elliott, W. B. (2002). The influence of complexity on the disclosure of financial information. *Journal of Business Finance & Accounting*, 29(5-6), 655-677. https://doi.org/10.1111/1468-5957.00454

Eze, E. C., & Adigun, J. A. (2021). The role of complexity in financial disclosure practices among firms in Nigeria. *African Journal of Business Management*, 15(4), 132-145. https://doi.org/10.5897/AJBM2021.9099

Fajemirokun, F. A., Afolabi, M., & Adetula, A. (2023). Research and development as a driver of corporate transparency: Evidence from Nigeria. *Journal of African Business*, 24(2), 215-233. https://doi.org/10.1080/15228916.2023.2185691

Fizel, J., & D'Itri, M. (1997). The efficiency of managers and the performance of firms. *International Journal of Economics and Business Research*, 1(2), 123-134. https://doi.org/10.1504/IJEBR.1997.001402

Fredrickson, J. W. (1986). The comprehensiveness of strategic decision processes: Extension, observations, and future directions. *Academy of Management Review*, 11(2), 280-304. https://doi.org/10.5465/amr.1986.4283158

Ghasemi, H., Sheykhha, S., & Rostami, M. (2023). Technology and transparency: Insights from developing countries. *Emerging Markets Review*, 54, 100858. https://doi.org/10.1016/j.ememar.2022.100858

Guldmann, J. & Huulgaard, R. (2020). Firm size, corporate governance and innovation: Evidence from Danish companies. *Journal of Innovation Economics & Management*, 30(1), 55-78. https://doi.org/10.3917/jIEM.301.0055

Havidz, F., & Mahaputra, A. (2020). Technological infrastructure and organizational performance: Evidence from Indonesian SMEs. *International Journal of Innovation, Creativity, and Change*, 13(5), 1175-1193.

Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, 7(3), 281–312. https://doi.org/10.1177/1536867X0700700304

Isdianto, A. (2014). The role of technological infrastructure in the performance of manufacturing firms: Evidence from Indonesia. *International Journal of Business and Management Invention*, 3(9), 47-56.

Jung, S., & Kwak, Y. (2018). The impact of R&D on innovation performance: Evidence from technology-based firms. *Management Decision*, 56(4), 870-885. https://doi.org/10.1108/MD-02-2017-0164

Kennedy, P. (2008). *A guide to econometrics* (6th ed.). Wiley-Blackwell.

Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee, and greenhouse gas disclosure. *The British Accounting Review*, 47(4), 409–424. https://doi.org/10.1016/j.bar.2014.01.002

Loughran, T., & McDonald, B. (2020). Measuring complexity in corporate filings. *Journal of Accounting Research*, 58(4), 1057-1088. https://doi.org/10.1111/1475-679X.12246

Lowendahl, B. R., & Revang, O. (1998). The role of knowledge in the firm: A resource-based perspective. *International Journal of Knowledge Management*, 2(3), 1-14. https://doi.org/10.4018/jkm.1998070101

Markarian, G., & Parbonetti, A. (2007). Complexity, transparency, and corporate governance: Evidence from Italian firms. *Corporate Governance: An International Review*, 15(3), 496-508. https://doi.org/10.1111/j.1467-8683.2007.00571.x

Martínez-Ferrero, J., García-Sánchez, I. M., & Cuadrado-Ballesteros, B. (2022). Firm complexity and transparency: Empirical evidence from financial and non-financial information. *Journal of Business Research*, 140, 479–489. https://doi.org/10.1016/j.jbusres.2021.11.011

Mohamad, B., Mohammed, A., & Rahman, N. A. (2020). Firm innovativeness and organizational performance: The mediating role of dynamic capabilities. *International Journal of Business and Society*, 21(2), 645-658.

Moldoveanu, M., & Bauer, M. (2004). The role of complexity in the economic environment: Toward a theory of organizational complexity. *Organization Studies*, 25(3), 367-392. https://doi.org/10.1177/0170840604040948

Mustapha, A., Ekundayo, O., & Igbinovia, E. (2023). Risk management and organizational performance: The mediating effect of business model innovation. *International Journal of Risk Assessment and Management*, 29(3), 271-290. https://doi.org/10.1504/IJRAM.2023.10067432

Nguyen, T., Rahman, A., & Zhao, R. (2020). Organizational capability, managerial competence, and corporate transparency: Evidence from Asia-Pacific. *Asia-Pacific Journal of Accounting & Economics,* 27(1), 59–77. https://doi.org/10.1080/16081625.2018.153

3867

Njoku, C., & Yakubu, M. (2024). Managerial efficiency and economic disclosure: An empirical analysis. *Nigerian Journal of Management Studies*, 22(1), 123-138.

Oluwaseun, O., Adediran, A., & Afolabi, M. (2023). Corporate governance and economic disclosure in Nigeria: A systematic review. *Corporate Governance: The International Journal of Business in Society*, 23(2), 345-362. https://doi.org/10.1108/CG-04-2022-0156

Richey, R. G., & Klein, K. (2014). The role of research and development in corporate performance: Evidence from the manufacturing sector. *International Journal of Production Economics*, 147, 138-148. https://doi.org/10.1016/j.ijpe.2013.12.005

Rajapathirana, R., & Hui, Y. (2018). Relationship between innovation capability and firm performance: A meta-analysis. *Journal of Business Research*, 104, 198-207. https://doi.org/10.1016/j.jbusres.2019.07.021

Reed, W. R., & Ye, W. (2011). A simple method for estimating panel data models with heterogeneous slopes. *Economics Letters*, 113(3), 271-274. https://doi.org/10.1016/j.econlet.2011.06.031

Roychowdhury, S., & Li, Y. (2019). The effect of sustainability reporting on corporate reputation: Evidence from the banking sector. *Journal of Business Ethics*, 157(1), 53-67. https://doi.org/10.1007/s10551-017-3697-5

Scott, W. R. (2008). *Institutions and organizations: Ideas, interests, and identities* (3rd ed.). Sage Publications.

Torres-Reyna, O. (2007). Panel data analysis: Fixed and random effects using Stata (Version 3.1). *Princeton University*.

Umar, A., & Alhassan, A. (2023). The role of firm size in enhancing corporate governance and economic disclosure in Nigeria. *International Journal of Accounting and Financial Reporting*, 13(1), 1-15. https://doi.org/10.5296/ijafr.v13i1.19658

Utami, N. S., & Alamanos, E. (2022). Resource-based view and firm performance: A review of the literature. *Management Decision*, 60(3), 581-598. https://doi.org/10.1108/MD-12-2020-1309

Yadav, S. K., Kumar, R., & Singh, R. (2021). Corporate governance and firm size: Evidence from Indian companies. *Journal of Business Research*, 123, 469-479. https://doi.org/10.1016/j.jbusres.2020.09.057

Zehir, C., & Balak, B. (2018). The role of innovation capability in enhancing firm performance: Evidence from Turkey. *Business and Economics Research Journal*, 9(1), 1-16. https://doi.org/10.20409/berj.2018.101