BOARD CHARACTERISTICS AND CORPORATE PERFORMANCE: EVIDENCE FROM THE NIGERIAN OIL AND GAS COMPANIES

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Abstract: *This study investigated how board characteristics such as board size (BOSI), board independence (BOID), board gender diversity (BOGD), and board meeting (BOMT) impact the performance of the Nigerian oil and gas sector. Seven oil and gas firms were randomly selected, and data collected on the relevant variables for ten (10) years. Data were descriptively analysed using mean, standard deviation, skewness, and kurtosis, while a panel data model was used as the estimation technique. The study found that BOSI, BOID, and BOGD positively and significantly impact the performance of oil and gas firms in the country. Though the relationship between BOMT and the performance of oil and gas firms is positive, it was not statistically significant. It is, therefore, concluded that critical attention should be paid to board characteristics as they play critical role in monitoring the company's management, establishing strategic direction, and protecting the interests of shareholders and stakeholders. This study recommends that oil and gas firms maintain stipulated number of independent directors that could help sustain positive and significant association between board independence and performance of the sector.*

Keywords: Board size, Board independence, Board gender diversity, Board meeting, Oil and gas firms

JEL Classification: G3, G34, G340.

1. Introduction

Trust and openness are essential for a company's efficient operations and growth. To keep a business running smoothly, shareholders must build confidence in the management, who must be honest, transparent, credible, dependable, and accountable in carrying out their duties and striving for excellent performance. Following significant scandals such as Enron and Worldcom, it became clear that empirical investigation is needed to establish the

*Corresponding author: Oghenovo Owigho Okere
Cite as:
Adekunle, S.A., Okere, O. O., Kokogho, E., Eze, L., and Odio, E.P., 2024. Board Characteristics and Corporate Performance: Evidence from the Nigerian Oil and Gas Companies. *Oradea Journal of Business and Economics*, 9(1), pp. 87-97. http://doi.org/10.47535/1991ojbe184.

characteristics of boards that influence corporate performance. For example, one of the prominent business scandals is the Enron case. Enron, a renowned American energy and commodities firm, declared bankruptcy in 2001 as a result of accounting fraud and unethical business practices. Enron's top management used complex financial arrangements, unreported off-balance-sheet firms, and other misleading practices to artificially raise revenues while concealing financial obligations (Liu, Lu and Wu, 2021). Baker (2003), and Petra and Spieler (2020) observed that the company's senior executives also forced workers to buy in the company's stock while selling their own, resulting in large personal profits. The deception was revealed in 2001, when Enron's stock price collapsed, prompting investigations by the US Securities and Exchange Commission (SEC) and the Department of Justice. These investigations revealed a persistent culture of dishonesty and deception in which senior executives profited while investors, employees, and other stakeholders suffered losses. The Enron crisis sparked a wave of corporate governance and accounting changes aimed at increasing accountability and transparency in business operations and reporting.

The case of unethical practices is not limited to organisations in developed economies. Some organisations in Nigeria and other developing countries are not exempted from corrupt unethical practices perpetrated by management. A critical example is the Nigerian oil and gas sector. The sector accounts for a sizable share of government income and foreign exchange gains. In the fourth quarter of 2022, the oil and gas sector contributed 4.3% to the GDP of Nigeria (Okonkwo, 2023). However, the sector continues to confront obstacles like corruption, environmental concerns, security worries, and the need for diversification. Various Nigerian administrations have recognized the need to combat corruption in the sector over the years and have made attempts to implement reforms and anti-corruption measures. However, the issue is complicated and deeply rooted, necessitating concerted efforts from both the government and other stakeholders to successfully address it and promote transparency, accountability, and good governance in the sector.

The Enron case and the experience in the Nigerian oil and gas sector emphasize the need for robust corporate governance systems in empowering boards of directors and appropriate committees to protect shareholders' and other stakeholders' interests and investments from exploitation by unscrupulous CEOs and their management teams (Mardnly, et al., 2018; Salehi, Arianpoor and Dalwai, 2020). Good corporate governance is critical for safeguarding investors, strengthening and stabilizing the capital market, and improving firm performance, which attracts investments. According to Naciti (2019), the board of directors provides leadership, supervision, and oversight of senior management's actions in order to preserve the interests of a company's shareholders. Previous studies have found that specific board characteristics such as board size, board independence, board gender diversity, and board meeting are important in the board's function of overseeing CEOs and engaging in organizational activities (Agyei-Mensah, 2021; Aifuwa and Embele, 2019; Rajeevan and Ajward, 2020). Achieving balance among various board characteristics, such as BOSI, BOID, BOGD, and BOMT, is critical in cultivating transparency, upholding integrity, and ensuring accountability in information dissemination. Furthermore, it contributes to improving the organization's performance for the benefit of shareholders and other stakeholders (Buertey, 2021).

The majority of research in Nigeria on board characteristics and their influence on performance are conducted in the banking, insurance, and manufacturing sectors (Adekunle and Aghedo, 2014; Akpan and Amran, 2014; Ehugbo, 2021; Samuel and Edogbanya, 2022). More empirical study is needed to investigate the impact of board characteristics on the performance of Nigerian oil and gas firms. This study sought to fill this knowledge gap by conducting empirical investigation into how characteristics such as BOSI, BOID, BOGD, and BOMT impact the performance of Nigerian oil and gas firms.

2. Literature Review and Hypotheses Development

Nigeria's oil and gas sector plays a critical role in the country's economy. It contributes significantly to gross domestic product, government income, and foreign exchange profits. Nigeria, one of Africa's biggest oil producers, is among the top ten nations in the world in terms of estimated reserves. Furthermore, through its vast value chains, the sector creates enormous jobs directly and indirectly for Nigerian people and others. However, the sector confronts a number of obstacles that are impeding its growth. These include unethical management practices that harm other stakeholders, poor performance, and inefficient service delivery (Muazu, 2019). Lack of transparency is the major challenge facing the sector, making holding companies and government officials responsible for their activities difficult. Furthermore, the regulatory structure in the industry is weak and disconnected, resulting in insufficient enforcement of rules and regulations. Establishing various regulatory organizations with overlapping functions produces regulatory gaps and discrepancies. These governance issues have the potential to destabilize the industry and diminish investors' and other stakeholders' trust in its functioning. This research intends to address these concerns by investigating and suggesting appropriate board qualities that could improve the sector's efficiency and reputation.

Corporate performance can be measured using different dimensions such as return on asset, return on equity, Tobin's Q, market-to-book value (MBV), and so on. In this study, return on asset is selected to proxy corporate performance. Return on asset is a flexible financial indicator that provides an overview of a company's profitability and asset usage (Samuel, and Edogbanya, 2022). It assists stakeholders in making informed decisions, identifying areas for development, and evaluating a company's overall financial health and performance. ROA represents a ratio of the returns on the assets of a corporation or the ratio of earnings to average total assets. The higher the value of ROA, the greater the company's profitability. Only firms in the same industry should be compared using this ratio. This is because certain companies in other sectors may not be asset-sensitive, which means they do not require as many expensive facilities and equipment to create revenue for their operations as others, thereby making their ROA smaller than that of asset-sensitive firms. This explains the rationale for focusing only on the oil and gas sector.

Board attributes or characteristics are a vital instrument of governance. They encompass all the features that distinguish boards. Some of the board characteristics investigated in this study include BOSI, BOID, BOGD, and BOMT.

Board size refers to the total number of members on the board who are either executive or non-executive directors (Eguavoen, Ukarin and Enewerome, 2023). The quantity and the wealth of experience of directors in a corporation have a substantial impact on the board's effectiveness. As a result, determining the optimal board size for a company is critical. A bigger board size reduces the risk of conflicts of interest and helps to address the agency problem (Yakob and Abu Hasan, 2021). This is especially true during times of financial instability or crisis. However, the absence of diversity on smaller boards increases the agency issue and decreases performance by making strategic decisions more difficult. As a result, it is hypothesized that: *H_{01}: Board size has no significant influence on the performance of Nigeria's oil and gas sector.*

According to Jouirou and Mohamed (2014), board independence may be calculated as the percentage of outside directors to the total number of directors on the board. A firm's inside directors are those who have had or presently hold executive positions inside the company, whereas outer directors are those who do not hold such positions. Weir and Laing (2003) opine that more board independence improves the efficacy and efficiency of corporate management monitoring. Furthermore, organizations with a higher share of non-executive board members have the ability to maintain regulatory compliance and simplify the disclosure of the firm's financial status (Samaha, Dahawy, Hussainey, and Stapleton, 2012).

H_{02}: Board independence has no significant influence on the performance of Nigeria's oil and gas sector.

Board gender diversity in boardrooms is a contentious subject in corporate governance. Gender diversity requires the presence of women on boards (Dutta and Bose, 2006). According to Ekadah and Mboya (2012), board gender diversity refers to the presence of female directors in the boardroom. Historically, men CEOs predominated in boardrooms. A board with a substantial female membership has the capacity to efficiently balance the concerns of numerous stakeholders, including workers, consumers, suppliers, and communities, while also taking into account shareholders' performance-oriented objectives (Beji, Yousfi, Loukil, and Omri, 2021).

H_{03}: Board gender diversity has no significant influence on the performance of Nigeria's oil and gas sector.

Board meeting is the number or frequency of meetings by board members (Barros and Sarmento, 2020). Convening board meetings may improve the board's efficiency and build unity among its members by keeping all board members up to date on the company's success. The frequency of these meetings acts as a barometer for gauging board involvement and oversight effectiveness. Increased board meeting frequency has the ability to improve managerial supervision and control.

H_{04}: Board meeting has no significant influence on the performance of Nigeria's oil and gas sector.

3. Methodology

This study investigated how board characteristics affect the performance of the oil and gas sector in Nigeria. We used a combination of cross-sectional and longitudinal study approaches to extensively examine the different correlations among the variables. These designs allow us to investigate numerous factors across time rather than just at one point in time. We randomly selected seven oil and gas firms and collected data on the indicated factors from 2012 to 2021. The information taken from the annual reports of these selected oil and gas firms served as the major data source. These yearly reports were obtained electronically from the websites of each firm. Data extracted directly from published yearly reports have a substantial benefit in terms of authenticity and trustworthiness. As a result, the data gathered and processed in this study is regarded as legitimate and reliable. Descriptive statistical tools like skewness, kurtosis, mean, and standard deviation were employed in this study to illustrate the key aspects of the research data. Multivariate regression analysis was employed for this investigation. This strategy is based on the premise that the variables of interest have a linear relationship. The research models were estimated using a panel regression model. Three separate techniques were estimated: pooled (OLS), fixed effects (FE), and random effects (RE). The basic assumption of pooled OLS model is that there are constant coefficients across entities and time. This makes it appropriate when there is no systematic variation that differentiates entities or time periods. The fixed effect model highlights how time-invariant unobserved heterogeneity is controlled at the entity or cross sectional level. FE presupposes that the unobserved factors do not demonstrate correlation with the explanatory variables. The random effects (RE) model allows for time-invariant unobserved heterogeneity. However, it assumes that the unobserved factors are uncorrelated with the explanatory variables and have a constant variance over time. The outcome of the Hausman cross-sectional test was used to choose the most appropriate model (fixed effect model) to test the research hypotheses and draw conclusions.

4. Results and Discussions

This section contains the analyses of the data collected as well as the presentation and interpretation of the results. The findings of the study were also discussed in this section.

Table 1: Descriptive statistics of variables

Statistics	ROA	BOSI	BOID (%)	BOGD	BOMT
Mean	2.786	8.300	64.962	12.636	4.457
Median	3.130	8.000	66.670	12.500	4.000
Maximum	176.270	14.000	90.000	17. 330	7.000
Minimum	-71.360	4.000	40.000	0.000	2.000
Std. Dev.	25.166	2.088	12.660	9.265	0.912
Skewness	4.155	0.203	-0.193	0.179	1.052
Kurtosis	34.764	2.865	2.342	2.301	4.447
Jarque-Bera	3144.271	0.534	1.698	1.796	19.016
Probability	0.000	0.766	0.428	0.407	0.000
Observations	70	70	70	70	70

Source: Authors' computation (2024)

The mean and standard deviation for corporate performance proxied by return on asset (ROA) are 2.786 and 25.166 respectively. The mean and standard deviation of board characteristics such as BOSI, BOID, BOGD and BOMT of the seven oil and gas firms are 8.300 (2.088), 64.962% (12.660%), 12.636 (9.265), and 4.457 (0.912) respectively. Table 1 also revealed that the minimum and maximum values for ROA, BOSI, BOID, BOGD and BOMT for the seven firms are -71.360 (176.270), 4 (14), 12.66% (90%), 0 (17.330), and 2 (7) respectively. The Jarque-bera statistic and probability values for ROA, BOSI, BOID, BOGD and BOMT are 3144.271 (0.000), 0.534 (0.766), 1.698 (0.428), 1.796 (0.407), and 19.016 (0.0000) showed that the data are normally distributed except for ROA and board meeting (BOMT) that have p-values of less than 5%.

Table 2: Unit root test for variables

Variables	Levin, Lin and Chu Test				Integration	Remark
	Levels (Statistic)	Prob	First Difference	Prob		
Return on Asset (ROA)	-0.1564	0.4379	-6.9715	0.0000	I[1]	Stationary
Board size (BOSI)	0.0656	0.5262	-2.5182	0.0065	I[1]	Stationary
Board Independence (BOID)	-0.0900	0.4641	-2.6749	0.0037	I[1]	Stationary
Board Gender Diversity (BOGD)	-1.0234	0.1531	2.7939	0.0028	I[1]	Stationary
Board Meeting (BOMT)	-0.6832	0.2473	5.7285	0.0000	I[1]	Stationary

Source: Authors' computation (2024)

The unit root test was used to examine the stationarity of the research variables used in regression analysis. The Levin, Lin, and Chu unit root test was employed in this study to determine the stationarity of the variables. The Levin et al (2002) unit root test is employed since it laid the groundwork for the panel unit root test. The results of the Levin, Lin, and Chu

unit root test shows that all the variables ROA, BOSI, BOID, BOGD and BOMT are stationary at first difference (I[1]).

Table 3: Correlation coefficient

	ROA	BOSI	BOID	BOGD	BOMT
ROA	1.0000				
BOSI	0.0090	1.0000			
BOID	0.0004	0.1330	1.0000		
BOGD	0.0377	0.1809	0.2596	1.0000	
BOMT	0.0001	0.0868	0.0212	0.0832	1.0000

Source: Authors' computation (2024)

Table 3 shows the correlation coefficients as follows: ROA and BOSI (r = 0.0090), ROA and BOID (r = 0.0004), ROA and BOGD (r = 0.0377), and ROA and BOMT (r = 0.0001). The inter-correlation coefficients in Table 3 show that the correlation coefficients of all the variables are less than 0.8. This outcome supports the stipulation of Hair et al (2010)

Model Estimation and Interpretation

The nexus between board characteristics and the performance of oil and gas firms in Nigeria is empirically estimated using panel data model and results presented in Table 4 below:

Table 4: Estimated panel data model of the relationship between board characteristics and performance

Dependent Variable: ROA

Variable	Pooled OLS			Fixed Effect Model (FEM)			Random Effect (REM)		
	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.	Coefficient	t-Statistic	Prob.
C	1.5311	1.7864	0.0800	9.3810	0.4545	0.6521	2.2389	1.5976	0.1163
BOSI	0.0344	0.4844	0.6302	0.3081	4.6931	0.0000	0.1989	3.7958	0.0004
BOID	0.0485	1.5277	0.1328	0.1438	2.4670	0.0182	0.0659	1.7855	0.0801
BOGD	0.0191	1.4462	0.1542	0.0589	2.4470	0.0191	0.0537	3.4201	0.0012
BOMT	0.2633	3.1771	0.0025	1.2094	0.5487	0.5864	0.1187	0.8784	0.3838
R-squared	0.2216			0.8579			0.3156		
Adjusted R-squared	0.1605			0.7943			0.2619		
F-statistic	3.6289			13.4966			5.8799		
Prob (F-statistic)	0.0111			0.0000			0.0006		
Durbin-Watson stat	0.9723			2.3888			1.5906		
No. Obs	70			70			70		

Source: Authors' computation (2024)

Table 4 shows the outcomes of the study, which comprises the results from the pooled ordinary least squares (OLS) model, FEM and REM. The pooled OLS model outcomes show that only BOMT have a statistically significant influence on ROA at the 5% level, whereas the other board characteristics (BOSI, BOID & BOGD) have no statistically significant impact on ROA. The R-squared value of the model is 0.2216, suggesting that the explanatory factors explain 22.16% of the changes in the dependent variable. Furthermore, the F-Statistic shows that the model is statistically significant at the 5% level, with a value of 3.6289 and a p-value of 0.0111.
The results of the FEM show that, with the exception of BOMT, all of the analyzed board characteristics have positive and statistically significant influence on return on assets (ROA) at the 5% significance level. The REM results, on the other hand, show that BOSI and BOGD are statistically significant at the 5% level, but BOID and BOMT are not statistically significant at the 5% level. Notably, all variables in this model have a positive relationship with return on assets (ROA). The results further showed that the fixed and random effect models have R-squared of 85.79% and 31.56% respectively. The Adjusted R-Square values of the fixed and random effect models are 79.43% and 26.19% respectively. The F-statistic of the fixed effect model is 13.4966 while that of random effect model is 5.8799 which are both significant at 5%.

Table 5: Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	15.22203	4	0.0043

Source: Authors' computation (2024)

The Hausman cross-sectional test was used to choose the most appropriate model to test the research hypotheses and draw conclusions. The p-value of the test is less than 5% (p-value = 0.0043), showing that the FEM is more appropriate than the REM, as shown in Table 5. As a result, for hypothesis testing, we depend on the results of the FEM.
The FEM results show that BOSI (β = 0.3081; t = 4.6931; p = 0.000), BOID (β = 0.1438; t = 2.4670; p = 0.0182), and BOGD (β = 0.0589; t = 2.4470; p = 0.0191) all have positive and statistically significant effects on the performance of firms in the Nigerian oil and gas sector. BOMT (β = 1.2094; t = 0.5487; p = 0.5864), on the other hand, had no significant effect on the performance oil and gas firms in Nigeria. Therefore, the null hypothesis four is not rejected.

Discussion of Findings

Firstly, this study revealed that the board size does significantly impact the performance of the Nigerian oil and gas firms. This outcome is consistent with the finding of Eguavoen, Ukarin and Enewerome (2023) on the positive and significant impact of board size on firm performance. This implies that the size of the board can increase the performance of a firm. This is because a large board may be more effective in providing diverse viewpoints on issues, conducting effective oversight, and participating in strategic issues based on their abilities and expertise. It is important to note that a large board if not well-managed, may result in more disagreements, coordination concerns, and communication difficulties that could obstruct the optimal performance of the firms.
Secondly, it was found that board independence shows a positive and significant influence on the performance of oil and gas firms in Nigeria. This outcome further demonstrates the importance of the involvement of independent directors on a board of directors which could assist separate a company's management and control duties. Furthermore, independent directors have larger and more comprehensive involvement with broader groups of

stakeholders (Gardazi, Hassan and Johari, 2020) and a broader viewpoint, which is likely to result in increased exposure to performance criteria. As argued by Samaha et al. (2012), companies' boards that are dominated with a greater number of non-executive board members could promote compliance with legislative authority regulations and allow disclosure of the firm's financial status.

Thirdly, board gender diversity was found to positively and significantly influence the performance of the Nigerian oil and gas firms. This finding is supported by finding of Dezso and Ross (2012) that having more women on executive boards increased the performance of the company. Furthermore, Bart and McQueen (2013) demonstrated that female board members could accomplish significant achievements than male board members. Companies with diverse boards perform better because of having diverse perspectives and experiences which could assist in decision-making. A more diversified representation of perspectives and opinions can lead to more innovative and creative solutions to organizational difficulties. Increased board diversity can improve corporate image and appeal to customers, investors, and other stakeholders. Female board members frequently bring a distinct skill set and a new perspective to issues that male board members may overlook.

Finally, board meeting does not demonstrate any significant influence the performance of the Nigeria oil and gas firms. This outcome contradicts a prior expectation. Board meetings are expected to play an essential role in contributing to enhanced corporate performance in a variety of ways. This is because directors have the capacity to discuss and make decisions on a number of problems that may influence the company's financial and strategic objectives at board meetings (Al Farooque et al., 2020). Board meetings should be held in a way that encourages open and constructive dialogue among board members in order to achieve improved decision-making and a more effective oversight management team.

5. Conclusion and Recommendations

The oil and gas sector contributes significantly to government revenue and foreign exchange earnings in Nigeria. Statistics show that the sector generated 4.34% of total GDP in the fourth quarter of 2022. Despite the contribution of the sector, it continues to face challenges such as corruption, environmental problems, security concerns, and the need for effective board management. These challenges are acknowledged to be multifaceted and deeply established, demanding collaborative efforts from both the government and other stakeholders to solve them and promote transparency, accountability, and good governance in the sector. This study contributes to knowledge by providing industry-specific insights into the relationship between board characteristics and corporate performance using the Nigerian oil and gas sector. It provides an empirically based and robust understanding of governance dynamics within the oil and gas sector in Nigeria.

The size of an oil and gas company's board of directors can impact its decision-making process and corporate governance. Therefore, a diverse board of directors with a wide range of talents, experiences, and backgrounds should be maintained to provide new insights and improved decision-making that could lead to better risk management, strategic planning, and innovation. This study recommends that oil and gas companies maintain a certain number of independent directors in order to maintain a favourable and substantial relationship between board independence and sector performance. Furthermore, in order to maximize the benefits of having a sufficient number of independent directors, their performance should be examined on a regular basis in order to advise in keeping the efficient ones and dismissing those performing below expectations. It is also suggested that additional provision be made for women or females to actively participate on oil and gas firm boards and in decision-making processes. This is due to women's or females' strong attention to detail, connections, position, abilities, and knowledge, all of which may improve performance.

References

Adekunle, S.A. and Aghedo, E.M., 2014. Corporate governance and financial performance of selected quoted companies in Nigeria. *European Journal of Business and Management*, *6*(9): 53-60.

Agyei-Mensah, B.K., 2021. The impact of board characteristics on corporate investment decisions: an empirical study. *Corporate Governance: The international journal of business in society*, *21*(4): 569-586.

Aifuwa, H.O. and Embele, K., 2019. Board characteristics and financial reporting. *Journal of Accounting and Financial Management*, *5*(1): 30-44.

Akpan, E.O. and Amran, N.A., 2014. Board characteristics and company performance: Evidence from Nigeria. *Journal of Finance and Accounting*, *2*(3): 81-89.

Al Farooque, O., Buachoom, W. and Sun, L., 2020. Board, audit committee, ownership and financial performance–emerging trends from Thailand. *Pacific Accounting Review*, *32*(1): 54-81.

Baker, C.R., 2003. Investigating Enron as a public private partnership. *Accounting, Auditing & Accountability Journal*, *16*(3): 446-466.

Barros, V. and Sarmento, J.M., 2020. Board meeting attendance and corporate tax avoidance: Evidence from the UK. *Business Perspectives and Research*, *8*(1): 51-66.

Bart, C. and McQueen, G., 2013. Why women make better directors. *International Journal of Business Governance and Ethics*, *8*(1): 93-99.

Beji, R., Yousfi, O., Loukil, N. and Omri, A., 2021. Board diversity and corporate social responsibility: Empirical evidence from France. *Journal of Business Ethics*, *173*, pp.133-155.

Buertey, S., 2021. Board gender diversity and corporate social responsibility assurance: The moderating effect of ownership concentration. *Corporate Social Responsibility and Environmental Management*, *28*(6): 1579-1590.

Dezso, C.L. and Ross, D.G., 2012. Does female representation in top management improve firm performance? A panel data investigation. *Strategic management journal*, *33*(9): 1072-1089.

Dutta, P. and Bose, S., 2007. Gender diversity in the boardroom and financial performance of commercial banks: Evidence from Bangladesh. The Cost and Management, 34(6): 70-74.

Eguavoen, I., Ukarin, I. and Enewerome, O.T., 2023. Board Attributes and Tax Planning of Corporate Organisations in Nigeria. *Management and Economics Review*, *8*(1): 46-57.

Ehugbo, I., 2021. Effect of corporate governance board characteristics on performance of microfinance banks in Nigeria. *International Journal of Academic Research in Accounting Finance and Management Sciences*, *11*(2): 27-46.

Ekadah, J. W., & Mboya, J. (2012). Effect of Board Gender Diversity on the Performance of Commercial Banks in Kenya. European Scientific Journal, 8(7): 128-148.

Gardazi, S.S.N., Hassan, A.F.S. and Johari, J.B., 2020. Board of directors attributes and sustainability performance in the energy industry. *The Journal of Asian Finance, Economics and Business (JAFEB)*, *7*(12): 317-328.

Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. 2010. *Multivariate data analysis* (7th edition). New Jersey: Prentice-hall, Englewood Cliffs.

Jouirou, M. and Chenguel, M.B., 2014. The determinants of voluntary disclosure in Tunisia: A study of the firms listed in the Tunisian stock exchange. *Journal of Business and Management Research*, *4*(1): 84-95.

Levin, A., Lin, C.F. and Chu, C.S.J., 2002. Unit root tests in panel data: asymptotic and finite-sample properties. *Journal of econometrics*, *108*(1): 1-24.

Liu, S., Lu, L. and Wu, Y., 2021, September. The Role of SPEs in the Enron Scandal and Its Implications for China. In *2021 International Conference on Financial Management and Economic Transition (FMET 2021)*, pp. 1-6. Atlantis Press.

Mardnly, Z., Mouselli, S. and Abdulraouf, R., 2018. Corporate governance and firm performance: an empirical evidence from Syria. *International Journal of Islamic and Middle Eastern Finance and Management*, *11*(4): 591-607.
Muazu, M.H., 2019. Operational excellence and the implications for health, safety and environmental performance in the oil and gas industry. *Journal of Technology Management and Business*, *6*(1): 25-31.
Naciti, V., 2019. Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, *237*, p.117727.
Okonkwo, O., 2023. Nigeria's oil sector contributes 4.34% to GDP in Q4 2022 – NBS. Nairametrics. Retrieved from: https://nairametrics.com/2023/02/22/nigerias-oil-sector-contributed-4-34-to-gdp-in-q4-2022-nbs/
Petra, S. and Spieler, A.C., 2020. Accounting scandals: Enron, Worldcom, and global crossing. In *Corporate fraud exposed,* pp. 343-360. Emerald Publishing Limited.
Rajeevan, S. and Ajward, R., 2020. Board characteristics and earnings management in Sri Lanka. *Journal of Asian Business and Economic Studies*, *27*(1): 2-18.
Salehi, M., Arianpoor, A. and Dalwai, T., 2020. Corporate governance and cost of equity: Evidence from Tehran stock exchange. *The Journal of Asian Finance, Economics and Business (JAFEB)*, *7*(7): 149-158.
Samaha, K., Dahawy, K., Hussainey, K. and Stapleton, P., 2012. The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt. *Advances in Accounting*, *28*(1): 168-178.
Samuel, A.E. and Edogbanya, A., 2022. The Moderating Effect of Blockholder Ownership on Board Characteristics and Firm Performance of Deposit Money Banks in Nigeria. *African Journal of Business and Economic Development*, *2782*, p.7658.
Weir, C. and Laing, D., 2003. Ownership structure, board composition and the market for corporate control in the UK: an empirical analysis. *Applied Economics*, *35*(16): 1747-1759.
Yakob, N.A. and Abu Hasan, N., 2021. Exploring the interaction effects of board meetings on information disclosure and financial performance in public listed companies. *Economies*, *9*(4), p.139.

Bionotes

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Oghenovo Owigho Okere is a Certified Accountant with four years of experience, he began his career as a Finance Associate with Redmedia and has since transitioned into a seasoned Audit & Assurance Senior with Deloitte & Touche LLP, Dallas, Texas started as a tax professional at KPMG Nigeria before transitioning to the Audit and Assurance practice at Deloitte & Touche, Dallas, Texas.He obtained his Bachelor of Science in Business Administration from the University of Benin, Benin and a Masters in Business Administration with emphasis in Business Analytics. Oghenovo enjoys traveling and meeting people.

Eseoghene Kokogho, a *Certified Accountant* with three years of experience in Public Accounting in Audit and Assurance, Deloitte and Touché LLP Dallas USA and 4 years' experience in financial services at Zenith Bank PLC Nigeria. She holds a Bachelor of Science in Accounting from the University of Benin, Benin City Edo State and a Master's of Business Administration (Business Analytics) from Texas Woman's University Denton Texas. Eseoghene is a Certified Public Accountant in the United States, a member of the

Information Systems Audit and Control Association and an Associate Chartered Accountant in Nigeria. For leisure, she loves traveling and visiting nature parks.

Loretta Eze, a *Certified Accountant* with five years of experience, started as a tax professional at KPMG Nigeria before transitioning to the Audit and Assurance practice at Deloitte & Touche, Kansas City. She holds a Bachelor of Science in Accountancy from the University of Nigeria, Nsukka and a Master's of Accountancy from Kansas State University. Loretta is a Certified Public Accountant in the United States and an Associate Chartered Accountant in Nigeria. Outside accounting, she values time with loved ones.

Princess Eloho Odio, a *Chartered Accountant* with over 5 years' experience in financial management, with experience in KPMG Nigeria Energy and Natural Resources Audit division and other industries ranging from oil services to construction and real estate. She holds a Bachelor of Science in Accounting from the University of Benin , Edo State, Nigeria and is currently a Masters in Business Analytics student at Texas A&M University Commerce where she also works as a graduate assistant in Financial Services. Princess is a member of the institute of chartered Accountants of Nigeria, an Associate Accounting Technician, Project Management Professional and the current PRO for National Association of ablack Accountant; TAMUC Chapter. She enjoys meeting new people, trying out food from different cultures and tribes and playing table tennis in her leisure time.