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Dynamic Effect of Board Characteristics on Corporate Disclosures in Annual Report of Listed Industrial Goods Firms in Nigeria

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Abstract

This study examined the effect of board characteristics on corporate disclosures in annual reports of listed industrial goods firms in Nigeria. The study adopted 'ex-post facto research designs. The population of the study comprised all the 13 quoted industrial goods firms on the Nigeria Stock Exchange Group Limited as of 31st December 2022 on which filters were employed to arrive at an adjusted population of 10 firms. Panel data were extracted from the annual financial statements of the firms for the period 2013 – 2022 to examine the effect of board size, board expertise, presence of independent directors, and board gender diversity on the corporate disclosures of the firms. The panel data were using dynamic panel regression or the Generalized Method of Moment. The findings of the study show that board size and board expertise have a significant positive effect on the corporate disclosures of listed industrial goods firms in Nigeria. While the presence of independent directors and board gender diversity has a positive insignificant effect on corporate disclosures. In line with the findings and conclusions, the study recommends that the regulatory authorities and corporate governance bodies in Nigeria such as the Financial Reporting Council of Nigeria (FRCN) should encourage listed industrial goods firms to increase their board size to improve corporate disclosures.

Keywords: *Board size, board expertise, presence of independent directors, board gender diversity, corporate disclosures*

1. Introduction

The significance of disclosure and transparency in corporate annual reports has grown significantly in developed and developing economies, including Nigeria. This heightened importance can be directly attributed to prominent corporate scandals involving multinational corporations, such as Enron and WorldCom, and recent cases like the Volkswagen emissions scandal (Ibrahim & Musa, 2022). These high-profile incidents have had far-reaching consequences that resonate globally, highlighting the wide-ranging impacts of corporate misconduct and inadequate disclosures. The impacts of these scandals extend beyond investors, affecting employees and the broader economy. Moreover, these scandals have drawn attention to the existence of weak corporate governance practices, (Ibrahim, & Musa, 2022)

In response to these scandals, governments and regulatory bodies in both developed and developing economies have introduced or strengthened regulations to enhance corporate transparency, accountability, and disclosure requirements. In Nigeria, for instance, the Nigerian Code of Corporate Governance was revised in 2018 to align with international best practices, emphasizing transparency and disclosure, (Ibrahim, & Musa, 2022).

However, a recent debate among academics has centered on the relationship between corporate governance mechanisms and financial information disclosure, examining whether good corporate governance characteristics can encourage corporate disclosures   Nonetheless, the majority of these studies (Hasan et al., 2013; Raithatha & Bapat, 2014; hman & Lundberg, 2015; Hau & Danh, 2017; Mohammadi, 2017; Alqahtani, 2019; Boateng et al., 2022) have concentrated on developed and Asian economies. To the best of our knowledge, despite these considerations, few scholars have analyzed the dynamic impact of this topic in Nigeria. This study focuses on the effect of board size, board expertise, the presence of independent directors, and the presence of female directors as proxies for board characteristics on the corporate disclosures of listed industrial goods firms in Nigeria.

2. Literature Review

Board Size

Board size and financial reporting disclosure are two important aspects of corporate governance and reporting that are interrelated. A board of directors with a larger size may bring greater diversity in perspectives and experience, but it may also slow down the decision-making process due to the need for more extensive discussions and negotiations (Nursimloo et al., 2020) These ingredients are necessary for increasing the quality of financial reporting disclosure (García-Sánchez & Noguera-Gámez, 2018; Zouari & Dhifi, 2021), (Ibrahim, et al., 2022).

Studies on the interaction between board size and financial disclosure have revealed inconclusive results. Raithatha and Bapat (2014) examined the impact of corporate governance on financial disclosures of listed Indian companies for the period of 2009 to 2010. With the aid of OLS regression. The study revealed that board size has a positive significant effect on financial disclosure. Similarly, Asmar, et al (2018) examined the relationship between corporate governance mechanisms and disclosure quality for the companies listed in Palestine Exchange covering the period from 2005 to 2016. A Generalized Method of Moment (GMM) was used to analyses the data. The study found that board size has a significant positive effect on financial disclosure. Furthermore, Alqahtani, (2019) studied the interaction between corporate governance and corporate disclosure in Saudi Arabia, using a sample of 120 non-financial listed firms from 2015 to 2017. ordinary least square and censored regression (Tobit) was used as a technique of data analysis. The study establishes a significant relationship between board size and corporate disclosure Boateng, et al (2022) examined the effect of corporate governance and corporate voluntary disclosures using a sample of 22 non-financial firms for the period between 2017-2021. Panel regression was employed to analyze the data. The outcome shows that board size has a positive significant effect on corporate disclosure. Conversely, Hau and Danh, (2017) examined the factors affecting corporate disclosure in financial statements of Vietnamese listed firms for 2013. With a sample of 198 non-financial listed on Ho Chi Minh stock exchange, with the help of regression, the study documents a negative and insignificant relationship between board size and corporate disclosures This study was conducted in Vietnam, a country that is inclined to the communist system of government is expected to have a different corporate governance mechanism and economic structure from that of Nigeria. Past research findings remain inconclusive thereby leading to the hypothesis below:

Ho1: Board Size has no significant effect on corporate disclosures annual reports of listed Industrial Goods firms in Nigeria.

Board Expertise

Board financial expertise refers to the knowledge and skills of board members related to financial matters such as accounting, finance, and auditing. This expertise can be beneficial in various aspects of financial reporting, including understanding complex financial transactions, assessing the adequacy of financial controls, and identifying and mitigating financial risks, (Moses, et al 2022). Linck et al (2008) found that firms with more financial experts on their boards have higher financial reporting disclosure and lower incidences of financial restatements. According to Jeanjean and Stolowy (2009), the presence of financial experts on the board of directors should facilitate the company's access to all financial resources and provide trust for creditors. They also claim that financial expertise is assessed based on criteria related to the capacity to carry out the tasks and functions incumbent on a board of directors. Moreover, members of the board with more experience in the field of accounting or finance are more able to discover problems in annual financial reports (Kroll et al., 2008; Agrawal & Chadha, 2005). Board expertise and knowledge can contribute to overall cognitive resources and to improving the scope and quality of the board's decisions and their effectiveness (Zaitul, 2010). According to Fama and Jensen (1983), the board of directors, with expertise and knowledge, such as accounting, finance, information technology, and others would reduce the agency costs as well as agency problems.

Using data on listed firms in the Bangladeshi financial sector, from 2012 to 2016. Masud, et al (2019) investigated the relationship between the presence of external experts on a board and corporate disclosure, as well as the moderating effect of political connections. The results of a multiple regression analysis indicate that accounting experts have a positive significant influence on corporate disclosure. Also, Alshirah, et al (2020) examined the level of corporate disclosure practices and the effect of four board of directors' characteristics (board size, board meetings, CEO duality, and board expertise) on these practices in the Jordanian context. Using 376 annual reports of the sampled firms over four years from 2014 to 2017 were used. The regression results show board financial expertise has a positive significant effect on corporate disclosure (Moses, et al., 2018, Ejura, et al., 2023 Oginni, et al. 2014).

Agubata, et al (2021) investigated the effect of corporate governance on the financial disclosure of banks listed on the Nigerian Exchange limited from 2010 to 2019. Descriptive statistics, correlation analysis, and regression analysis of ordinary least squares were employed for data analysis. The result there from indicated that board size and board expertise are the major drivers of financial disclosure in the banks sampled. Thus, based on the above findings, this study presents the following hypothesis:

Ho2: Board financial expertise has no significant effect on corporate disclosures in annual reports of listed industrial Goods firms in Nigeria.

Presence of Independence Director

The presence of independent directors can also affect corporate disclosures by bringing a fresh perspective, objectivity, and independence to the board's decision-making process. Independent directors are not affiliated with the company or its management, and they do not have a financial interest in the company (Fama & Jensen, 1983). This independence allows them to provide an objective and impartial view of the company's performance and prospects. Moreover, independent directors can help to improve the accountability and transparency of corporate reporting by ensuring that the information disclosed is accurate, relevant, and reliable (Ibrahim & Angelidis 2014).

Previous studies have documented contradictory results regarding the effect of independent directors on financial reporting disclosure Alhazaimeh, et al (2014) investigated the relationship between corporate governance and ownership structure on voluntary disclosure, with a particular focus on variables affecting in voluntary disclosure of listed companies in the Amman Stock Exchange. Using a dynamic panel system GMM estimation for the period 2002-2011, this study of 72 Jordanians finds that the listed companies. The study found that independent director has positive significant corporate disclosure. Also, Alhazaimeh (2014) studied the related corporate governance and financial information disclosure in a developing country. Data were obtained from the annual report of 915 listed companies in the Iranian stock market from 2010-2015. A dynamic panel generalized method of moments (GMM). Findings revealed that independent directors has positive effects on some independent variables that are a leading cause of increasing disclosure level. Furthermore, Bosi, et al (2020) determine the extent of qualitative characteristics of IFR across Malaysian listed companies by examining the relationship between board characteristics and corporate disclosure, moderated by the effectiveness of the Internal Audit Function. The data were analysed using Partial Least Squares Structural Equation Modelling. The results prove that board size, independence of directors, and female directors significantly improve corporate disclosure. Likewise, Alyousef and Alsughayer (2021) studied the relationship between corporate governance and corporate disclosure: The Role of Boards of Directors and Audit Committees. The study considers the content analysis of 22 Saudi listed companies from 2015 to 2019. The researchers use ordinary least squares (OLS) regression. The results indicate a statistically significant relationship between the number of non-executive directors and board size and the level of corporate disclosure. The present study hypothesizes that

Ho3: independent director has no significant effect on the corporate disclosures in annual reports of listed industrial Goods firms in Nigeria.

Board Gender

As part of a well-functioning corporate governance system, the board must constantly watch and evaluate the company's management to ensure it is serving the interests of shareholders. Therefore, having women on boards is a tool for good governance and a sign of diversity. Thus, it has been argued that diversity could enhance the efficacy of the board, and it is recommended that professional women serve on corporate boards. Due to their broader professional experiences, women board members are regarded to bring valuable information and insight to the table. As a result, a greater number of women are encouraged to serve on corporate boards. Srinidhi et al (2011). Adams and Ferreira (2009) indicate that organizations with gender-diverse boards have innovative and high-quality decision-making processes. Consequently, these businesses face superior problem-solving, effective leadership, a better awareness of the business industry, and the benefits of global ties. (Adams & Funk 2012).

Alfraih (2016) investigated the relationship between the characteristics of the board of directors and mandatory disclosure compliance in 2010. Using 134 non-financial firms. The regression results show that gender diversity has a positive significant effect on corporate disclosure. Similarly, Kim (2022) examines the effect of a female director on corporate voluntary disclosure for the period of 2014 to 2020. Using a sample of 9406 firm-year observations and regression analysis shows that the higher the proportion of female executives, the higher the frequency of voluntary disclosure. Furthermore, Reguera-Alvarado and Bravo-Urquiza, (2020) studied the effect of board gender on corporate disclosure. The partial least squares (PLS) technique is used, and a sample of the manufacturing firms listed in Standard and Poor's 500 for 2009 is studied. Concerning board diversity, two specific characteristics are considered, namely, gender diversity and ethnic diversity.

Content analysis techniques are used to measure risk disclosures. The results show that there is a positive association between board gender diversity and corporate disclosure

On the contrary, Hashmi, et al (2022) investigated whether effective audit committees, gender-diverse boards, and corruption controls affect the level of voluntary disclosures The study uses data for listed commercial banks operating in six Asian countries, i.e., China, India, Pakistan, Malaysia, Hong Kong, and Singapore, for the period 2016 to 2020. The regression shows that board gender diversity has a negative significant effect on corporate financial disclosure.

Ho4: Board gender diversity has no significant effect on corporate disclosures in annual reports of listed industrial Goods firms in Nigeria.

Theoretical Framework

Agency theory

Agency theory is the main theoretical basis for this study. Propounded by Jensen and Meckling (1976). Agency theory suggests that there may be a misalignment of interests between the owners of a company (the principals) and its managers (the agents), with managers acting in their self-interest rather than in the best interests of the company and its shareholders. Financial reporting disclosure can help to address this potential misalignment by providing a more complete picture of the company's performance (Jensen & Meckling 1976) In an agency theory framework, information disclosure promoted by corporate governance structures in firms is considered essential to overcome agency problems. Some potential drivers of financial reporting disclosure can be found in varying corporate governance mechanisms. Effective corporate governance mechanisms are likely to have a positive effect on corporate disclosure (Hamad, et al 2020).

3. METHODOLOGY

The study adopted ‘an ex-post facto research design. The study’s population consists of all 13 industrial goods firms quoted on the Nigerian Stock Exchange Group Limited (NGX) as at 31st December 2022. These include Austin Laz & Company Plc, Berger Paints Nigeria Plc, Beta Glass & co. Plc, Portland Paints & Products Nigeria Plc, Chemical and Allied Products Plc, Curtix Plc, Dangote Cement Plc, Dn Meyer Plc, Grief Nigeria Plc, Lafarge Cement Wapco Nigeria Plc, Premier Paints Plc, BUA and Notore Chemical Ind Plc.

To obtain the sample, attention was focused on firms that were quoted on the NGX for the period of this study (2013 to 2022) and whose data for the study period is available. Thus, 10 firms were selected to make 90 firm-year observations. This number was arrived at through the use of filters, as follows; (a) Sample firms must have complete data for the number of years under consideration. (b) Only firms listed as of 2013 were included. Thus, (BUA, Notore Chemical Ind Plc and, Portland Paints & Products Nigeria Plc) were dropped because the companies do not have complete financial statements within the period of the study. The study used a secondary source of data collection. The data was collected from the annual reports and accounts of the sampled companies. The study also employed the dynamic panel regression or Generalized Method of Moment has a technique as a technique of data analysis. The research instruments used in this study involve diagnostic tests for GMM validity which are tests of the non-existence of serial correlation of the error terms using the first and second-order serial correlation, test for homogeneity of instruments that ensures the consistency of estimates using the Sargan tests.

Model Specification

$CDit= \alpha 0 + \gamma CD_{it-1}+\beta_1 BS_{it}+\beta_2 PIND_{it}+\beta_3 BGD_{it}+\beta_4 ROA_{it}+ \beta_5 FL_{it} +\mu_{it}+ \varepsilon_{it}$

Where:

CD= corporate disclosure

β0= Intercept

γCDit −1 indicates one lag of the dependent variable CD (previous year corporate disclosure

β1to β5 = coefficient of slop or regression coefficient

BS= Board Size

BEXP= Board Expertise

BI= Independent Directors

FDIR= Female Directors

FL= Financial leverage

PROF= Profitability

ε = error term

it = i cross-sectional t time

Table 1 Variable Measurement

VARIABLE	MEASUREMENT	SOURCES
Dependent Variable		
Corporate Disclosures	The checklist is made up of 45 items. A score of one is allocated if an item on the checklist is available and 0 if not. The total score obtained is divided by the maximum score obtainable.	Hasan, et al 2012;
Independent Variables		
Board Size	Total number of board members	Samaha et al. (2015) Busco et al. 2019
Board Expertise	Board expertise in the board were measured by the percentage of total members of the board with accounting and finance knowledge	Al-Shaer and Zaman (2018); Masud, et al (2019
Presence of Independent Directors	Dummy variable that equals 1 if independent directors are present on the board and 0 otherwise	Benkraiem, (2009). Sener (2014)
Board Gender Diversity	The percentage of female directors of the total number of directors on the board of a company	Ben-Amar and McIlkenny (2015); Halil (2016); Kiliç & Kuzey, 2018
Control Variable		
Financial leverage	total debt divided by the total equity.	Vitolla et al. 2020; Roman et al. 2019).
Profitability	Net income divided by the total asset	(Ali & Iman, 2011); Dada. & Adeniji,(2022)

4. Result and Discussions

Table 2: Descriptive Statistics

Variable	Mean	Std. dev.	Min	Max
CD	.716092	.1723789	.2068966	.9655172
BS	8.655556	3.069096	4	17
BEXP	.1355376	.083374	0	.5
PIND	.5888889	.4947919	0	1
BGD	.1355376	.083374	0	.5
ROA	.0481154	.2123771	-.9520929	.5102394
FL	.7116606	.8729826	.0306414	4.530235

Source: Stata Output, 2024

Table 3 provides information on financial reporting disclosure (FRD) in the annual reports of listed industrial goods firms in Nigeria. The mean CD value for these companies is .716092, indicating that they provide a relatively high level of financial reporting disclosure on average. However, the standard deviation of .1723789 suggests that there is variation in the level of financial reporting disclosure across companies, with some providing more and others less disclosure. The minimum FRD value of .2068966 indicates that some companies provide a low level of financial reporting disclosure, while the maximum value of .9655172 suggests that some companies provide a very high level of financial reporting disclosure.
Board size has a mean score of 8.655556, which implies that the average total number of directors of the sampled firms in the industry is 8. It further shows a standard deviation of 3.069096, indicating that there is variability in the board sizes among the industrial goods firms in Nigeria, with some firms having larger or smaller boards than others. The result also shows a minimum value of 4. This implies that some industrial goods firms in Nigeria have relatively small boards with limited representation. The maximum value of 17, implies that some industrial goods firms in Nigeria have relatively large boards with diverse representation. From the table, the Board expertise has a mean of .1355376, a minimum of 0, and a maximum of 0.5000. This indicates that in each board of the sampled companies, there is at least one board member with qualifications in accounting and/or finance.

The mean value of .5888889 indicates that, on average, nearly 59% of the directors in these firms are independent, meaning they are not affiliated with the company in any other capacity beyond serving on the board. This suggests that the firms have a reasonable level of independent oversight, which can help to ensure that board decisions are made in the best interests of the company and its stakeholders. The standard deviation of .4947919 indicates that there is a fair amount of variation in the level of independent directorship across the firms. Some firms may have a relatively high proportion of independent directors, while others may have very few. The minimum value of 0 and the maximum value of 1 indicate that all firms in the sample have at least some independent directors, with some firms having all of their directors classified as independent.

From the table, we can see that the proportion of women on the boards ranges from a minimum of 0.0000 to a maximum of .5555556 and a mean of .1541458 with a Std. dev of .1625447" refers to the statistics related to gender diversity on company boards in the sample. The minimum value of 0.0000 means that there are some companies in the sample where there are no women on the board, while the maximum value of .5555556 suggests that there are some companies where more than half of the board members are women. The mean value of .1541458 indicates that, on average, women

make up roughly 15% of the board members across the sample. The standard deviation of .1625447 tells us that there is a fair amount of variation in gender diversity across the sample.
The mean score of .0481154 indicates that, on average, the firms in the sample are earning a return on their assets of approximately 4.8%. The standard deviation of .2123771 suggests that there is relatively little variation in ROA across the sample, with most firms clustered around the mean. This means that the majority of firms are earning a similar level of return on their assets. The minimum value of -.9520929 indicates that at least one firm in the sample has a negative ROA, meaning they are losing money on their assets. The maximum value of .5102394 indicates that at least one firm in the sample is earning a relatively high return on their assets. Finally, the average financial leverage score in this dataset is 0.7116606, with a standard deviation of 0.8729826. Additionally, the dataset includes the minimum and maximum values of financial leverage, which are 0.306414 and 4.530235, respectively. This means that the financial leverage scores in the dataset range from a low of 0.306414 to a high of 4.530235.

Table 3 Correlation Matrix

Variable	CD	BS	BEXP	PIND	BGD	ROA	FL
CD	1.0000						
BS	0.5642	1.0000					
BEXP	0.1333	0.3311	1.0000				
PIND	0.3330	-0.0209	-0.1342	1.0000			
BGD	0.1558	0.1636	0.2265	0.0274	1.0000		
ROA	0.1918	-0.0162	-0.1454	0.0898	-0.4183	1.0000	
FL	-0.4807	0.2866	0.2538	-0.1766	0.2392	-0.3341	1.0000

Source: Stata Output, 2024

The correlation coefficients for board size, (0.5642) board expertise, (0.1333) presence of independent directors (0.1558) board gender diversity (0.3330) and profitability (0.1918) are all positive, indicating that these variables move in the same direction. As one variable increases, the other variable also tends to increase. On the other hand, the correlation coefficient (-0.4807) for financial leverage and corporate disclosure is negative, indicating that these variables move in opposite directions. As financial leverage increases, corporate disclosure tends to decrease.

Table 5 Summary GMM Result

	Coeff	std. err	z	P>|z|
CD L1.	.4025309	.1918529	2.10	0.036
BS	.0296591	.0118838	2.50	0.013
BEXP	.4647134	.2234921	2.08	0.038
PIND	.1834983	.2473553	0.74	0.458
BGD	.0169055	.0128422	1.32	0.188
ROA	.0430007	.0170103	2.53	0.011
FL	-.0017005	.0112708	-0.15	0.880
Wald chi2(9) = 53.47				0.0000

Source: Stata Output, 2024

The result shows that Wald chi2 is 53.47 significant at 5% level. This implies that the board characteristic variables investigated in the study have a significant combined impact on financial reporting disclosure of listed industrial goods firms in Nigeria during the period under review (2013-2021). It also suggests the fitness of the model. According to the results ρ value of lagged dependent variable (corporate disclosure) is significant. The fact that the ρ value of the lagged dependent variable is significant suggests that there is a strong relationship between corporate disclosure in the current period and financial reporting disclosure in the previous period. The significance of the ρ value also indicates that controlling for the lagged dependent variable as an instrument is necessary for obtaining accurate and reliable estimates of the coefficients of the other independent variables in the model.

The result of the regression analysis indicates that an increase in board size is associated with an increase in corporate disclosure in listed industrial goods firms in Nigeria. This finding suggests that a larger board size could be beneficial in improving the quality and transparency of financial reporting. The positive coefficient value of 0.0296591 and the significant value of 0.013 confirm that this relationship is statistically significant. The positive impact of board size on corporate disclosure is consistent with the predictions of agency theory, which posits that a larger board can provide better monitoring and oversight of the financial reporting process. This finding is also in line with the results of a recent study by Boateng et al. (2022), who found a positive relationship between board size and corporate disclosure. However, it contradicts the findings of Hau and Danh (2017), who found that board size decreases corporate disclosures.

The coefficient of board financial expertise is given as 0.4647134 with a probability value of 0.038, indicating that the relationship between board financial expertise and corporate disclosure is statistically significant. The positive coefficient of board financial expertise suggests that a board with more financial expertise is associated with higher corporate disclosures This finding is consistent with the agency theory that financial expertise on the board is essential for effective monitoring of financial reporting processes, as it enables board members to identify and address financial reporting issues promptly. Furthermore, the finding supports the view of. Masud, et al (2019) that the presence of board members with financial expertise enhances the credibility of financial statements and reinforces investor confidence in the firm.

The coefficient for the presence of independent directors was found to be 0.1834983, with an insignificant probability value of 0.458. This implies that the presence of independent directors has an insignificant effect on corporate disclosure in these firms. This finding may suggest that the presence of independent directors alone may not be sufficient to improve financial reporting practices in listed industrial goods firms in Nigeria. It is possible that other factors, such as the qualifications and expertise of independent directors, as well as their level of engagement and involvement in the financial reporting process, may play a more critical role in enhancing corporate disclosures The findings did not support agency. Also contradicted the findings of disclosure Alhazaimeh, et al (2014) Alyousef and Alsughayer (2021) who found positive significant effect of independent director on corporate disclosures

The regression results additionally reveal that board gender diversity (BGD) has positive and insignificant impact corporate disclosure of listed industrial goods firms in Nigeria. This can also be observed from the statistical coefficient of .0169055 with probability value of 0.188. This finding implies that the presence of female directors on the board may not have a significant impact on the financial reporting disclosure of listed industrial goods firms in Nigeria. The findings not line with agency theory and the findings of Kim (2022) who found a positive significant effect on female directors on corporate disclosure.

5. Conclusion And Recommendations

This study aimed to investigate the effect of board characteristics on corporate disclosure in annual reports of listed industrial goods firms in Nigeria. Findings revealed that board size has a positive significant effect on corporate disclosure for listed industrial goods firms in Nigeria, it can be concluded that having a larger board size in these companies may lead to better disclosure practices. Therefore, increasing the number of board members may be a potential strategy to improve the financial reporting transparency of these firms.

The study also revealed that board expertise has a positive significant effect on corporate disclosure in annual reports of listed industrial goods firms in Nigeria. therefore, it can be concluded that having board members with financial expertise is beneficial for enhancing the transparency and accuracy of financial reporting practices.

Based on the results that indicate a positive but insignificant effect of the presence of independent directors and board gender diversity with corporate disclosure for listed industrial goods firms in Nigeria, it can be concluded that these factors may not have a significant impact on the financial reporting practices of these firms. Therefore, it is possible that other factors such as board size and financial expertise may be more crucial in determining the quality and accuracy of financial reporting in the industrial goods sector of Nigeria.

Based on the findings of this study, the following recommendations are proffered:

i. The regulatory authorities and corporate governance bodies in Nigeria such as Financial Reporting Council of Nigeria (FRCN) should encourage listed industrial goods firms to increase their board size to improve corporate disclosures This can be achieved by amending the corporate governance codes to require listed firms to have a certain minimum number of directors on their boards.
ii. It is also recommended that firms should prioritize the appointment of board members with financial expertise to improve corporate disclosure and transparency.
iii. Based on the finding that the presence of independent directors has an insignificant effect on financial reporting disclosure of listed industrial goods firms in Nigeria,
iv. it is recommended that companies do not solely rely on independent directors to improve their corporate disclosure Companies should also strive to ensure that the selection of directors is based on merit and qualifications, rather than gender or other demographic factors. This will help to ensure that the board is composed of individuals with the necessary skills and experience to effectively oversee the financial reporting process and make informed decisions.

References

Aghamolla, C., & Thakor, R. T. (2022). Do mandatory disclosure requirements for private firms increase the propensity of going public? *Journal of Accounting Research*, *60*(3), 755-804.

Agubata, N. S., Igbru, O., & Udezo, N. O. (2021). Effect Of Corporate Governance on Financial Risk Disclosure of Banks In Nigeria.

Ahmed, F. (2021). Corporate boards, audit committees and voluntary disclosure: a case analysis on Bangladeshi listed companies. *European Journal of Business and Management Research*, *6*(2), 153-155.

Aier, J. K., Chen, L., & Jiang, L. (2018). Financial leverage and financial reporting transparency. *Journal of Accounting and Economics*, 65(1), 173-202.

Alam, M. J. (2007). *Financial disclosure in developing countries with special reference to Bangladesh* (Doctoral dissertation, Ghent University).

Albassam, W. (2014). *Corporate governance, voluntary disclosure and financial performance: an empirical analysis of Saudi listed firms using a mixed-methods research design* (Doctoral dissertation, University of Glasgow).

Alfraih, M. M. (2016). The effectiveness of board of directors' characteristics in mandatory disclosure compliance. *Journal of Financial Regulation and Compliance*.

Alhazaimeh, A., Palaniappan, R., & Almsafir, M. (2014). The impact of corporate governance and ownership structure on voluntary disclosure in annual reports among listed Jordanian companies. *Procedia-Social and Behavioral Sciences*, *129*, 341-348.

Ali, A., Chen, T. Y., & Radhakrishnan, S. (2017). Financial statement comparability and expected crash risk. *The Accounting Review*, 92(1), 81-108.

Alqahtani, A. S. H. (2019). *Accounting Disclosure and Corporate Governance Mechanisms in Kingdom of Saudi Arabia* (Doctoral dissertation, Victoria University).

Al-Shaer, H., & Zaman, M. (2018). Credibility of sustainability reports: The contribution of audit committees. *Business strategy and the environment*, *27*(7), 973-986.

Alshirah, M. H., Rahman, A. A., & Mustapa, I. R. (2020). Board of directors' characteristics and corporate risk disclosure: the moderating role of family ownership. *EuroMed Journal of Business*, *15*(2), 219-252.

Alyousef, L., & Alsughayer, S. (2021). The relationship between corporate governance and voluntary disclosure: The role of boards of directors and audit committees. *Univers. J. Account. Financ*, *9*, 678-692.

Asmar, M., Alia, M. A., & Ali, F. H. (2018). The impact of corporate governance mechanisms on disclosure quality: evidence from companies listed in the Palestine exchange. *International Journal of Economics, Commerce and Management*, *4*, 401-417.

Bako, M. A. (2018). The impact of corporate governance on the quality of financial reporting in the Nigerian Chemical and Paint industry. *Research Journal of Finance and Accounting*, *9*(7), 42-59.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443–465.

Bédard, J., & Gendron, Y. (2010). Strengthening the financial reporting system: Can audit committees deliver? Journal of Business Ethics, 90(3), 377-391.

Benkraiem, R. (2009). Does the presence of independent directors influence accruals management?. *Journal of Applied Business Research (JABR)*, *25*(6).

Beshi, T. D., & Kaur, R. (2020). Public trust in local government: Explaining the role of good governance practices. *Public Organization Review*, *20*, 337-350.

Boateng, R. N., Tawiah, V., & Tackie, G. (2022). Corporate governance and voluntary disclosures in annual reports: a post-International Financial Reporting Standard adoption evidence from an emerging capital market. *International Journal of Accounting & Information Management*, *30*(2), 252-276.

Bosi, M. K., Khan, M. A. A., Lajuni, N., & Riyard, A. K. (2020). The effect of board characteristics on internet financial reporting quality: Evidence from Malaysia. *Sciences*, *10*(3), 81-96.

Brown, L. D., Call, A. C., Clement, M. B., & Sharp, N. Y. (2019). Managing the narrative: Investor relations officers and corporate disclosure☆. *Journal of Accounting and Economics*, *67*(1), 58-79.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2010). Corporate governance, board diversity, and firm value. Financial Review, 45(2), 217-233.

Charumathi, B., & Ramesh, L. (2020). Impact of voluntary disclosure on valuation of firms: Evidence from Indian companies. *Vision*, *24*(2), 194-203.

Chen, C. R., Huang, Y. H., & Liao, H. C. (2019). The impact of profitability on financial statement fraud. *Journal of Business Research*, 99, 65-76.

Cheung, Y. L., Jiang, P., & Tan, W. (2010). A transparency disclosure index measuring disclosures: Chinese listed companies. *Journal of Accounting and Public Policy*, *29*(3), 259-280.

Clatworthy, M., & Jones, M. J. (2001). The effect of thematic structure on the variability of annual report readability. *Accounting, Auditing & Accountability Journal*, *14*(3), 311-326.

Ejura, S.,.B., Musa, S., J., Karim, M.,I., Victoria, M., & Mubarak, A., D., L. (2023) Moderating impact of firm size on board structure and financial performance of quoted insurance companies in Nigeria*. Journal of Data Acquisition and Processing 38 (3), 2534*

Flammer, C., Toffel, M. W., & Viswanathan, K. (2021). Shareholder activism and firms' voluntary disclosure of climate change risks. *Strategic Management Journal*, *42*(10), 1850-1879.

Frenkel, S., Guttman, I., & Kremer, I. (2020). The effect of exogenous information on voluntary disclosure and market quality. *Journal of Financial Economics*, *138*(1), 176-192.

Hasan, A., Aly, D., & Hussainey, K. (2022). Corporate governance and financial reporting quality: a comparative study. *Corporate Governance: The International Journal of Business in Society*, (ahead-of-print).

Hasan, M. S., Hossain, S. Z., & Swieringa, R. J. (2013). Corporate governance and financial disclosures: Bangladesh perspective. *Corporate Governance*, *4*(1), 109-119.

Hashmi, M. A., Abdullah, Brahmana, R. K., Ansari, T., & Hasan, M. A. (2022). Do effective audit committees, gender-diverse boards, and corruption controls influence the voluntary disclosures of Asian banks? The moderating role of directors' experience. *Cogent Business & Management*, *9*(1), 2135205.

Hassan, S. U., & Ahmed, A. (2012). Ownership structure and oppurtunistic accounting: A Case of listed food and beverage firms in Nigeria. *International journal of physical and social sciences*, *2*(7), 236-256.

Hau, .L., & Danh, L. C(2017) . Determinants of Corporate Disclosure in Financial Statements: Evidence from Vietnamese Listed Firms. *International Journal of Advanced Engineering, Management and Science*, *3*(5), 239840.

Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? Strategic Management Journal, 22(2), 125-139.

International Accounting Standards Board (IASB). (2018). Conceptual Framework for Financial Reporting. Retrieved from https://www.iasplus.com/en/publications/global/ifrs/2018/iasb-conceptual-framework-2018

Ibrahim, K., M. & Musa, S. J. (2022). Agency theory and corporate governance: A comparative study of Board diversity and financial performance in Nigeria. *Journal of Positive School psychology, 10364–10372-10364–10372.*

Ibrahim, K., M. & Musa, S. J. (2022). Agency theory and corporate governance: A comparative study of Board diversity and financial performance in Nigeria. *Journal of Positive School psychology, 10364–10372-10364–10372.*

Ibrahim, K., M. & Musa, S. J. (2022). Effect of corporate governance on risk management of selected deposit money banks in Nigeria. *International Journal of Health Sciences, 6 (S6), 6193–6203.*

Ibrahim, K., M. & Musa, S. J. (2022). Effect of leverage on profitability of information and communication technology companies listed on the Nigeria stock exchange. *Journal of positive School Psychology, 10386–10393-10386–10393.*

Ibrahim, K., M. & Musa, S. J. (2022). Moderating role of board expertise on the effect of working capital management on profitability of food and beverages companies quoted in Nigeria. *Journal of Positive School Psychology, 10373–10385-10373–10385*

Ibrahim, K., M., Success, B., E., & Musa, S. J. (2022). Moderating effect of audit quality on value relevance of accounting information of listed firms in Nigeria. *Neuro Quantology | 20 (7), 2639-2648*

Kim, E. (2022). The Effect of Female Personnel on the Voluntary Disclosure of Carbon Emissions Information. *International Journal of Environmental Research and Public Health*, *19*(20), 13247.

Linck, J. S., Netter, J. M., & Yang, T. (2008). The determinants of board structure. *Journal of financial economics*, *87*(2), 308-328.

Masud, M. A. K., Bae, S. M., Manzanares, J., & Kim, J. D. (2019). Board directors' expertise and corporate corruption disclosure: The moderating role of political connections. *Sustainability*, *11*(16), 4491.

Mohammed, Y. A., & Lode, N. A. (2015). The Value relevance of accounting disclosures among Nigerian financial institutions after the IFRS Adoption. *Mediterranean Journal of Social Sciences*, *6*(1), 409.

Moses, I., K., Jibrin, S., M., &Success, B., E., (2022) Investigating the entrepreneurial action of small-scale enterprises for sustainable development in Nigeria. *International Journal of health Sciences, 6 (s4), 11154–1116*

Moses, K., M., Haruna, R., A., & Udanwojo, A., A. (2018) Effect of corporate governance mechanisms on financial performance of listed foods and beverages companies in Nigeria. *Journal of Economics and Finance 2 (2), 67-79*

Nguyen, A. H., & Nguyen, L. H. (2020). Determinants of sustainability disclosure: Empirical evidence from Vietnam. *The Journal of Asian Finance, Economics and Business*, *7*(6), 73-84.

SO Oginni, J Gambo, KM Ibrahim (2014) Nexus of Gender Pay Gap and Economic Growth: evidence from Nigeria. *International Journal of Management Sciences and Business research 3 (4), 7-9*

O'Connell, V., & Cramer, N. (2010). The effect of communication quality on reactions to mandatory financial reporting. *Journal of Accounting Research*, 48(5), 1035-1064.

Popova, T., Georgakopoulos, G., Sotiropoulos, I., & Vasileiou, K. Z. (2013). Mandatory disclosure and its impact on the company value. *International business research*, *6*(5), 1.

Rahman, I. M. A., & Ismail, K. N. I. K. (2016). Do representation of women directors and their demographic characteristics affect CSR disclosure? Evidence from Malaysia. *Business, Management and Economics Research*, *2*(4), 81-89.

Raithatha, M., & Bapat, V. (2014). Impact of corporate governance on financial disclosures: Evidence from India. *Corporate Ownership and Control*, *12*(1), 874-889.

Reguera-Alvarado, N., & Bravo-Urquiza, F. (2020). The impact of board diversity and voluntary risk disclosure on financial outcomes. A case for the manufacturing industry. *Gender in Management: An International Journal*, *35*(5), 445-462.

Rouf, D., & Abdur, M. (2011). The corporate social responsibility disclosure: A study of listed companies in Bangladesh. *Business and Economics Research Journal*, *2*(3), 19-32.

Salehi, M., & Azary, Z. (2008). Fraud detection and audit expectation gap: Empirical evidence from Iranian bankers. *International Journal of Business and Management*, *3*(10), 65-77.

Sener, P. (2014). Influence of family ownership and management on firm performance: evidence from public firms in Turkey. *Revue de lEntrepreneuriat*, *13*(3), 143-169.

Shehata, N. F. (2014). Theories and determinants of voluntary disclosure. *Accounting and Finance Research (AFR)*, *3*(1).

Siyanbola, T. T., Fregene, O. O., & Ogbebor, P. I. (2019). The relationship between accounting information disclosures and investment decisions of listed firms in Nigeria. *International Journal of Accounting Finance*, *8*(1), 59-77.

Wang, D., & Ke, B. (2014). Board characteristics and financial reporting quality: Evidence from China. Journal of Business Research, 67(2), 146-156.

Wati, L. N. (2020). Does corporate governance affect financial reporting quality of politically connected firms?. *Entrepreneurship and Sustainability Issues*, *7*(3), 2126.