

## Moderating Effect of Firm Size on the Relationship Between Corporate Governance Characteristics and Financial Reporting Quality of Listed Industrial Goods Companies in Nigeria

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### ABSTRACT

*Financial reporting focuses on the information needed by external users for decision-making and satisfying the information needs with the financial reporting practices carried out in organizations. The main objective of the study is to examine the Moderating effect of firm size on the relationship between corporate governance characteristics and financial reporting quality of listed industrial goods companies in Nigeria from 2012 to 2022. The population of the study is 13 listed industrial goods and all the population was used by adopting a census sampling technique, this study adopted an ex-post factor research design. Data were sourced from annual financial reports of 13 selected industrial goods companies in Nigeria from 2012 to 2022. This study used regression analysis with the aid of STATA 15 Software. The results revealed that There is a significant relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria, there is a significant relationship between board independence and financial reporting quality of listed industrial goods companies in Nigeria, Firm size has a significant moderating effect on the relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria. The study recommends among others that. The shareholders of listed industrial goods companies in Nigeria should ensure that they maintain large board sizes because the increase in the size of the board will enhance the financial reporting quality of listed industrial goods companies in Nigeria. The executive directors and non-executive directors must be of equal size on the board of directors of listed industrial goods companies in Nigeria to avoid the lop-sidedness of the board members. This will equally enhance the quality of board decisions as they are been reached from both the experiences of those within and outside the organization.*

**Keywords:** Corporate Governance Characteristics, Firm Size, And Financial Reporting Quality

### 1. Introduction

Corporate scandals have raised global concerns about the financial practices of organizations, particularly the quality of their financial reporting. The collapse of major corporations like Enron, Parmalat, WorldCom, and others has shaken stakeholders' confidence in financial disclosures (Berndt & Leibfried, 2020; Aggarwal, 2023). These failures are often attributed to unethical accounting practices, weak corporate governance, and auditors' misconduct (Gaio & Raposo, 2024; Haat et al., 2018). This highlights the need for effective accounting standards, auditing processes, and transparent financial reporting to ensure reliability (Adeyemi & Asaolu, 2023).

Financial reporting serves as the backbone of decision-making for stakeholders. It provides crucial information for resource allocation and management decisions, including investment, lending, and performance evaluation (Majiyabo et al., 2018). The quality of financial reporting determines its reliability, transparency, and usefulness in forecasting future cash flows. It has become a central

focus for regulators, researchers, and professional bodies due to its role in conveying financial information to external users (Johnson et al., 2022).

Despite its importance, financial reporting often faces issues related to earnings manipulation and inadequate disclosure. Such practices distort a firm's economic reality, raising questions about the credibility of financial statements (Farouk, 2018). In Nigeria, corporate failures like Oceanic Bank, Cadbury Nigeria Plc., and Intercontinental Bank underscore the consequences of weak governance and opportunistic accounting practices (Bhasin, 2020, Ibrahim, & Musa, 2022). Corporate governance plays a pivotal role in shaping financial reporting practices. The structure of the board, including the proportion of independent directors and the inclusion of women, can influence decision-making and transparency (Adams, 2022). Moreover, board members with financial expertise are better equipped to oversee accounting processes and safeguard stakeholder interests (Forker, 2022).

Firm size moderates the relationship between corporate governance and financial reporting quality. Larger firms tend to have more diverse boards and resources, which can enhance reporting transparency. However, studies reveal inconsistencies in the impact of firm size, suggesting the need for further investigation into its moderating effects. Despite extensive research on financial reporting quality, several gaps remain. For instance, the effect of firm characteristics, governance structures, and performance metrics on financial reporting quality in Nigeria's industrial goods sector is underexplored. This sector has experienced fraudulent practices and corporate collapses, emphasizing the need for more comprehensive studies. Additionally, varying methodological approaches and regulatory environments across studies call for broader analysis to integrate diverse perspectives (Ibrahim & Musa, 2022).

The quality of financial reporting is crucial for maintaining stakeholder trust and ensuring effective decision-making. While corporate governance, firm characteristics, and performance metrics play significant roles, challenges like earnings manipulation and inadequate disclosures persist. Addressing these issues requires robust governance mechanisms, transparent reporting practices, and ongoing research to understand the interplay between various factors. Enhancing financial reporting quality is essential not only for corporate accountability but also for fostering economic stability and growth (Ibrahim, & Musa, 2022).

Corporate scandals worldwide have raised concerns about financial practices in organizations, shaking stakeholders' confidence in financial reporting. Notable corporate collapses like Enron, WorldCom, and Satyam have been linked to poor accounting practices, unethical behavior, and weak corporate governance. In Nigeria, similar failures in financial and non-financial sectors, such as Oceanic Bank and Intercontinental Bank, highlight issues like board inattentiveness and managerial self-interest. To address these, the Federal Government and agencies have implemented reforms to protect shareholder investments, (Ibrahim, & Musa, 2022, Moses, et al 2022).

Financial reporting is crucial for decision-making, ensuring stakeholders have access to reliable information. However, its effectiveness depends on sound corporate governance and adherence to accounting standards. Despite regulatory efforts, financial reporting in Nigeria often fails to reflect economic realities due to weak governance and inadequate enforcement. Empirical studies reveal governance issues, such as lack of board independence, significantly impact the quality of financial reporting.

Corporate governance is defined as the system directing and controlling corporations, with principles emphasizing shareholder rights, transparency, and accountability. Effective governance practices not only enhance reporting quality but also attract investments by boosting market confidence. However, studies indicate varied relationships between corporate governance mechanisms, such as audit committees, and reporting quality, highlighting the need for further investigation.

Technological advancements, like AI and blockchain, offer opportunities to improve transparency in financial reporting but remain underexplored in research. Additionally, the behavioral aspects driving unethical conduct require deeper analysis to prevent future scandals. Comparative studies across industries and regions could also offer insights into governance effectiveness. In Nigeria, the Financial Reporting Council's corporate governance codes aim to enhance accountability. Yet, limited empirical analysis exists on their practical impact. Research into ethical training programs, stakeholder pressures, and governance challenges in both public and private sectors could help strengthen frameworks. This study focuses on firm size's moderating effect on governance and reporting quality in Nigeria's industrial goods sector.

The following research questions were raised for answers:

- i. To what extent does board size affects financial reporting quality of listed industrial goods companies in Nigeria?
- ii. To what extent does board independence affects the financial reporting quality of listed industrial goods companies in Nigeria?
- iii. What is the moderating effect of firm size on the relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria?
- iv. What is the moderating effect of firm size on the relationship between board independence and financial reporting quality of listed industrial goods companies in Nigeria?

## **2. Literature Review**

### **Concept of Financial Reporting Quality**

Financial reporting quality reflects the accuracy, reliability, and transparency of a company's financial statements, ensuring they provide stakeholders with meaningful and reliable data for informed decision-making. Defined as the precision in conveying a firm's operations and expected cash flows, financial reporting quality hinges on adherence to standards such as GAAP or IFRS and strong internal controls (Chalaki et al., 2021; Waris & Haji Din, 2023).

Although frameworks like FASB and IASB emphasize reporting quality, no universal measurement method exists. Researchers commonly use techniques such as accrual methods, conservatism, value relevance, and qualitative characteristics to evaluate it (Hassan & Omar, 2016). Transparency is the ultimate goal, with empirical studies linking reporting quality to various organizational influences. A key measurement model is accrual quality, where revenues and expenses are recognized independently of cash flows. Discrepancies between accrued and actual cash flows can indicate lower reporting quality (Herath & Albarqi, 2017). For example, mismatches in warranty claims or operating cycles highlight variability that affects quality (Pounder, 2020).

High-quality reporting supports stakeholders, enabling investors, creditors, and analysts to assess a company's value and make investment decisions. Assessing and improving reporting practices is essential for regulatory oversight and promoting corporate accountability (Masud, 2021).

## **Concept of Corporate Governance**

Corporate governance refers to the system by which companies are directed and controlled, encompassing laws, regulations, policies, and practices that shape corporate operations and management. The Cadbury Report (1992) defines it as a framework where boards of directors govern companies, shareholders appoint directors and auditors, and auditors provide independent oversight of financial statements. Corporate governance ensures the smooth functioning of corporations, maximizing shareholder wealth and aligning business practices with transparency and responsibility (Brown et al., 2011; Waris & Haji-Din, 2023).

Boards are central to governance, tasked with setting corporate priorities, overseeing operations, and reporting to shareholders. Shareholders contribute by appointing directors and ensuring governance frameworks are in place. Governance also involves committees, such as those for audits and risk management, which support the board's effective decision-making (Brown et al., 2011).

Corporate governance practices foster trust among stakeholders, including minority shareholders, management, and the wider community, and can reduce capital costs for companies requiring external funding. Effective governance is characterized by processes, customs, and policies aimed at long-term oversight and accountability, balancing the interests of shareholders, employees, customers, and society (OECD, 2010). With increasing focus following corporate scandals, corporate governance remains critical to ensuring corporate responsibility, transparency, and sustainable growth.

## **Board Size**

"Board Size" can refer to different things depending on the context, especially in corporate governance or gaming. Donald (2020) also Board size refers to the number of directors on a company's board. It is often a topic of debate in corporate governance discussions, with some arguing that larger boards provide a broader range of perspectives and expertise. In contrast, others contend that smaller boards are more efficient and effective. Board size can significantly impact firm performance. Too large a board can lead to coordination and decision-making challenges, while too small a board may lack diversity and expertise. Finding the optimal board size is crucial for maximizing shareholder value. (Michael, 2019).

According to Lucian, (2028). Board size is an important aspect of corporate governance regulation. Regulators often prescribe minimum and maximum limits on board size to ensure effective oversight and accountability. Board size influences the dynamics of decision-making within organizations. Larger boards may struggle with reaching consensus and may experience increased bureaucracy, while smaller boards may foster more cohesive and efficient decision-making processes. John (2017) in game theory, board size refers to the number of players or decision-makers involved in a strategic interaction. The size of the board can have significant implications for the complexity and outcome of the game. These are just a few perspectives on "Board Size" from different disciplines and authors. Depending on your specific context or field of interest, there may be additional interpretations and definitions to consider.

## **Board Independence**

Board Independence is a crucial concept in corporate governance, referring to the degree to which a company's board of directors is free from conflicts of interest and influences from management.

From the Corporate Governance Perspective, according to Robert (2019), Board independence is the cornerstone of effective corporate governance. An independent board is one whose members are not influenced by management and can provide objective oversight and strategic guidance.

Also, from a Financial Perspective Erik (2019) believes that Board independence refers to the composition of a company's board of directors, with a focus on ensuring that a sufficient number of independent directors are present to oversee management and protect shareholder interests.

Lucian (2017) Board independence is a key regulatory requirement aimed at mitigating conflicts of interest and ensuring that directors act in the best interests of shareholders rather than in the interests of management or other stakeholders. Jay (2019) Board independence is not just about the absence of conflicts of interest; it also involves the ability of directors to challenge management, ask probing questions, and exercise independent judgment in decision-making processes. David (2019) Board independence is often measured using criteria such as the proportion of independent directors on the board, the presence of independent committees (e.g., audit, compensation), and the absence of financial ties between directors and the company. Board independence encompasses not only legal and regulatory requirements but also ethical considerations. Independent directors have a responsibility to act in the best interests of shareholders and uphold principles of integrity, transparency, and accountability. These definitions reflect the multifaceted nature of board independence and its importance in ensuring effective corporate governance and stewardship of shareholder interests (Moses, et al., 2018, Ejura, et al. 2023, Oginni, et al.2014)

### **Firm Size as a Moderator**

Firm size significantly influences financial reporting quality, often serving as a key factor in accounting and finance research. Larger firms benefit from economies of scale, enabling cost leadership and providing resources to enhance financial reporting quality (Niresh & Velampy, 2020; Akinyomi & Olagunju, 2020). Firm size, typically measured by total assets or their logarithmic value, is linked to corporate financial performance through the neoclassical view of economies of scale. Larger firms usually possess sophisticated internal controls, advanced reporting systems, and face increased scrutiny from auditors, regulators, and stakeholders, which enhances transparency and accuracy in their financial disclosures (Dechow & Dichev, 2022).

Corporate governance plays a vital role in maintaining high reporting standards, with effective structures mitigating agency problems and aligning managerial actions with shareholder interests (Jensen & Meckling, 1976). Larger firms tend to have better governance frameworks and are under greater pressure from regulatory bodies and media to ensure quality reporting (Bushee & Noe, 2020). Studies show that good governance, including board independence and effective audit committees, positively impacts financial reporting quality, especially in larger firms with more resources to implement robust practices (Uadiale, 2012; Adegbe & Fofah, 2016). Consequently, firm size amplifies the benefits of corporate governance, strengthening the reliability and quality of financial reports.

### **Empirical Review**

Ahmad et al. (2021) examines the relationship between corporate governance characteristics and financial reporting quality of non-financial firms in the Pakistan Stock Exchange for the period of 2010 to 2019. Data were collected using secondary sources which were extracted from the financial statements of the selected firms. Fixed-effect regression model was used in analyzing the collected data and findings indicate that there is a positive relationship between corporate governance and

financial reporting quality. The study concluded that board size, board education, Board financial experiences, board nationality, and board compensation have significant ROA and board size, Board financial experiences, board size, and board compensation show significance with Tobin-Q. The study recommends further study into the area of study. The study used an ordinary least square regression model in analyzing the collected panel data which is contrary to the postulate of Hausman 1978. Also, the study was carried out in 2021 and data collected and analyzed covered up to 2019 which enhances the currency of the study. To fill in the gap created by this study, this very study updated data to 2022 and also included board financial expertise as a proxy for corporate governance characteristics

Ariyibi et al. (2021) evaluate the impact of corporate governance on financial reporting quality using the accounting measures based on the financial reporting quality status of the selected firms depending on cash flows and inflow from the income statement of (15) listed non-financial manufacturing (Consumer goods sector) firms quoted on the Nigeria Stock Exchange (NSE) using the stratified and simple random technique. The panel data were collected which spanned through the periods of 2020 to 2018. Using the fixed effect regression model, findings indicate that board size has a positive significant effect on return on sales. Board size and board independence have a positive significant effect on profit margin. It also revealed that board size and board independence negative significant effect on operating cash flow. Based on the findings, the study recommended that the organization should take cognizance of its board size since it influences the rate of turnover which is an intrinsic component of the overall performance of the organization. The organization should make sure the board size is regulated on a low-cost reduction basis so it does not induce a negative impact on the financial reporting quality status of the firm. The study used appropriate statistical tools of analysis. Also, the study was carried out in 2021 and the panel data collated and analyzed covered up to 2018 which enhances the currency of the study.

Bekiaris (2021) examines the effect of board characteristics on bank financial performance. Tracing the Greek financial crisis from 2008 to 2018, the paper investigates whether board size, board independence, CEO duality, female directors, and foreign directors affect banks' performance. Using the fixed effect regression model, the empirical evidence shows that board structure has a significant effect on bank performance. Specifically, board independence, board size, and chairman independence were found to exert a positive effect on bank performance. The effect of diversity on performance was ambiguous since the effect of female directors was positive, but the effect of foreign directors was negative. The study concludes that the findings can potentially help banks improve performance by considering the features found significant in this study and also recommended that regulators should draw insight from the findings to design rules that strengthen corporate governance effectiveness. However, the study uses the appropriate statistical tool of analysis but the study was carried out in Greece which will not enable generalization of the findings which is a result of environmental differences.

Ibrahim, et al., (2022). evaluates the effect of board characteristics and audit committee attributes on the financial reporting quality of publicly listed commercial banks of Bangladesh. 30 publicly listed commercial banks of the Dhaka Stock Exchange (DSE) were selected as samples for this study. Data were collected from annual reports between 2011 and 2017 of the assessed banks. A pooled OLS regression model was used for analyzing the collected data. Findings indicate that board independence has a negative and significant relationship with ROA and Tobin's Q. However, Board Independence has a positive and significant relationship with Stock Return. On the other hand, Board Diversity has a negative and significant relationship with ROA and ROE, which implies the inefficiency of diversified board members in the context of Bangladesh. Family duality has a positive

and significant relationship with ROA and a negative and significant relationship with Stock return. Board Meeting has a positive and significant relationship with ROA. Audit Committee Size has a negative and significant relationship with Tobins Q. Independence of the audit committee chairman has a negative and significant relationship with Tobin's Q and Stock Returns. Also, the presence of non-executive directors has no significant relationship with any of the predicted variables. However, the study applied inappropriate statistical tools of ordinary least squares in analyzing the collected panel data which is against the postulate of Hausman (1978). Also, the study was carried out in Bangladesh which is another environment outside Nigeria which will not enable generalization of the findings as a result of environmental differences.

## **Theoretical Review**

### **Resource Dependence Theory**

Resource dependence theory, proposed by Pfeffer and Salancik (1978), emphasizes the board of directors' role in accessing external resources to enhance firm performance. It highlights how directors secure vital resources like expertise, capital, and information through external linkages (Hillman, 2000). Boards with a significant number of independent non-executive directors (INEDs) are favored for their ability to provide diverse expertise, networking opportunities, and enhanced reputations (Haniffa & Cooke, 2002). These connections facilitate access to political and business contacts, capital, and key stakeholders such as customers and suppliers, thereby reducing costs and boosting firm performance (Nicholson & Kiel, 2003).

The theory suggests that outside directors contribute resources such as legal advice, skills, and access to crucial constituents, enabling firms to adapt to environmental uncertainties (Daily et al., 2003; Carpenter & Westphal, 2001). Diverse boards, comprising members with varied external connections, are particularly valuable for acquiring resources and fostering organizational survival (Pearce & Zahra, 1992). Furthermore, firms can improve resource access by appointing representatives from financial institutions to their boards, especially in times of financial difficulty (Mizruchi & Stearns, 1994).

Despite its strengths, critics argue that resource dependence theory overlooks how boards exploit resources and engage in strategic decision-making (Finkelstein & Hambrick, 1996). Suggestions include viewing boards as strategic consultants to management (Carpenter & Westphal, 2001). Nonetheless, the theory underscores that board composition reflects a firm's resource needs, with diverse members enhancing access to external resources, thereby improving performance and value (Boyd, 1990).

The study is also anchored on resource dependence theory which is of the view that boards with a large number of diversified directors may be advantageous in reducing dependency on external resources because a diversified board may provide greater opportunity for more environmental linkages. Since the theory focuses on the appointment of diversified independent directors as a means of gaining access to resources critical to firm performance which is in line with the apriori expectation of the study, the study is therefore anchored on resource dependence theory.

## **3. METHODOLOGY**

The research design for the study is ex-post facto research design since the events have already taken place and therefore, the research is being concluded after the fact. The population for this study was 13 listed industrial goods companies under the Nigerian Exchange Group (NGX) as of 1st September

2023. The names of companies included in the sector are listed below as follows: This study used Census sampling techniques allowing the entire population to be used. The firms included in the sample had to meet two key criteria: first, they have electronic websites; and second, they had published annual reports on their websites for eleven successive years from 2012 to 2022. The source of data for this study is secondary data. The data were obtained from the Financial Statements and the official website of the Nigerian Exchange Group (NGX). The period considered for this study is 11 years from 2021-2022. The study data were analyzed using descriptive and inferential statistical techniques.

#### 4. Data Analysis and Discussion

Descriptive statistics refers to the branch of statistics that involves summarizing and describing the features of a dataset.

Table 3. Descriptive Statistics

Descriptive Statistics

Table 1. Descriptive Statistics

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
DACC	130	0.8410	0.171	0.000	2.613
BSIZE	130	8.49	2.09	14.00	19.00
BIND	130	0.695769	0.123464	3.00	4.00

Source: Researcher's Computation using STATA 15 Software

Discretionary Accruals (DACC) Mean 0.8410 Standard Deviation: 0.171 Range: 0.000 to 1.000. The mean value of 0.8410 indicates that, on average, discretionary accruals are relatively high. The standard deviation of 0.171 suggests some variation, but most values are clustered around the mean. The range from 0 to 1 indicates that while some firms have no discretionary accruals, others have the maximum possible value.

Board Size (BSIZE) Mean 8.49 Standard Deviation: 2.09 Range: 5.00 to 15.00. The average board size is approximately 8 to 9 members, which is typical for many companies. The standard deviation of 2.09 indicates moderate variation in board sizes. The range suggests that board sizes vary from small (5 members) to relatively large (15 members).

Board Independence (BIND) Mean 0.695769 Standard Deviation: 0.123464 Range: 0.38000 to 1.00000. The mean of 0.695769 indicates that, on average, about 69.6% of the board members are independent. The standard deviation is relatively low, suggesting that most companies have a similar proportion of independent directors. The range shows some companies have as low as 38% independent directors, while others have fully independent boards.



**Table 2. Shapiro-Wilk Normality Test**

Shapiro-Wilk Normality Test					
Variable	Obs	W	V	Z	Prob>z
DACC	130	0.12163	55.318	8.741	0.00
BSIZE	130	0.99786	0.135	4.361	0.02
BIND	130	0.91914	5.092	3.545	0.00

Source: Researcher's Computation using STATA 15 Software

Discretionary Accruals (DACC) W: 0.12163. Z: 8.741. Prob>z: 0.00 ( $p < 0.05$ ). The p-value (Prob>z) is less than 0.05, indicating that the null hypothesis of normality is rejected for the DACC variable. Therefore, DACC is not normally distributed. Board Size W 0.99786. Z: 4.361. Prob>z: 0.02 ( $p < 0.05$ ). The p-value (Prob>z) is less than 0.05, indicating that the null hypothesis of normality is rejected for the BSIZE variable. Therefore, BSIZE is not normally distributed. Board Independence W: 0.91914 Z: 3.545 Prob>z: 0.00 ( $p < 0.05$ ). The p-value (Prob>z) is less than 0.05, indicating that the null hypothesis of normality is rejected for the BIND variable. Therefore, BIND is not normally distributed.

**Table 3. Correlation Matrix**

Variable	Correlation Matrix		
	DACC	BSIZE	BIND
DACC	1		
BSIZE	0.941	1	
BIND	0.832	0.812	1

Source: Researcher's Computation using STATA 15 Software

DACC. BSIZE: 0.941. There is a very strong positive correlation between DACC and BSIZE. As BSIZE increases, DACC also increases significantly. BIND: 0.832. There is a strong positive correlation between DACC and BIND. Higher BIND values are associated with higher DACC values.

**Table 4. Model One (Without the Moderator)**

The Robust Random Effect Regression Result (Model One)			
DACC	Coefficient	Z-values	p-values
Constants	.1919535	3.39	0.693
BSIZE	.0343779	2.58	0.012
BIND	.381278	2.51	0.612
Overall R-Squared	0.6101		
Wald chi2	111.92		
Prob>F	0.0000		

Dependent Variable: DACC \*\* signified 5% level of significance

Source: Researchers' Computation using STATA 15 Software

DACC. Constant Coefficient: 0.1919535 Z-value: 3.39 p-value: 0.693. The intercept is not statistically significant ( $p > 0.05$ ), indicating that the constant term is not different from zero when

all independent variables are zero. BSIZE (Board Size). Coefficient: 0.0343779. Z-value: 2.58. P-value: 0.012. BSIZE has a positive and statistically significant impact on DACC ( $p < 0.05$ ). For each unit increase in BSIZE, DACC increases by approximately 0.034 units. BIND (Board Independence). Coefficient: 0.381278. Z-value: 2.51. P-value: 0.612. BIND has a positive coefficient, but it is not statistically significant ( $p > 0.05$ ). This suggests that there is no significant evidence that board independence affects DACC in this model.

Overall R-Squared: 0.6101. Approximately 61.01% of the variance in DACC is explained by the independent variables in the model. This suggests a good fit. Wald chi2: 111.92. This high value indicates that the overall model is statistically significant. Prob > F: 0.0000. The p-value for the overall model is highly significant ( $p < 0.05$ ), indicating that the model as a whole is significant and provides a good explanation for the variation in DACC.

Summary and Implications. Significant Variables: BSIZE and BFE are significant predictors of DACC at the 5% significance level. This suggests that board size and Board financial experiences play crucial roles in determining DACC. Non-Significant Variables: BIND, BGDIV, and FBM are not significant predictors of DACC. This implies that, within this model, board independence, gender diversity, and the number of frequencies of board meeting do not have a statistically significant impact on DACC. Model Fit: The model explains a substantial portion of the variance in DACC, as indicated by the R-squared value of 0.6101 and the highly significant Wald chi2 and Prob > F values. This analysis suggests that while some board characteristics like size and experience significantly impact DACC, others do not have a statistically significant effect in this specific mode.

**Table 5. Model Two (With the Moderator)**

A robust Random effect model was conducted which would be used for estimation.

Variables	Coefficient	t-values	Prob.
C	7.292117	1.14	0.043
BSIZE	.2177138	1.25	0.010
BIND	.577025	0.91	0.043
FSIZE*BSIZE	.4331211	1.56	0.006
FSIZE*BIND	.5165518	5.91	0.000*
Overall R-Squared	0.780		
Wald chi2	68.32		
Prob>F	0.000		

Dependent Variable: DACC

\*\* signified 5% level of significance

Source: Researchers' Computation using STATA 15 Software

Constant (C). Coefficient: 7.292117. T-value: 1.14. Prob.: 0.043. The intercept is statistically significant ( $p < 0.05$ ), indicating that the constant term is different from zero. BSIZE (Board Size). Coefficient: 0.2177138. T-value: 1.25. Prob.: 0.010. BSIZE is statistically significant ( $p < 0.05$ ). For each unit increase in BSIZE, the dependent variable increases by approximately 0.218 units. BIND (Board Independence). Coefficient: .577025. T-value: 0.91. Prob.: 0.043. BIND is statistically significant ( $p < 0.05$ ). For each unit increase in BIND, the dependent variable increases by approximately 4.577 units. FSIZE \* BSIZE (Firm Size and Board Size Interaction). Coefficient:

4331211. T-value: 1.26. Prob.: 0.006. This interaction term is statistically significant ( $p < 0.05$ ). This suggests that firm size significantly moderates the impact of board size on the dependent variable. As firm size increases, the positive effect of board size on the dependent variable becomes more pronounced.

F<sub>SIZE</sub> \* BIND (Firm Size and Board Independence Interaction). Coefficient: 0.5165518. T-value: 5.91. Prob.: 0.000\*. This interaction term is highly statistically significant ( $p < 0.05$ ). This indicates that firm size strongly moderates the impact of board independence on the dependent variable. Larger firm size amplifies the positive effect of board independence on the dependent variable.

### Test of Hypotheses

Hypotheses were tested using the coefficients from the table, based on the corresponding coefficients and associated p-values:

**H<sub>01</sub>:** *Board Size has no significant relationship with financial reporting quality of listed industrial goods companies in Nigeria.*

Board Size has a Coefficient of B<sub>SIZE</sub>: 0.2177138 and p-value: 0.010. Based on that, the study Reject the null hypothesis and accepts the alternate hypotheses which states that there is a significant relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria

**H<sub>02</sub>:** *Board Independence has no significant relationship with financial reporting quality of listed industrial goods companies in Nigeria.*

Board independence has a Coefficient of B<sub>IND</sub>: 0.577025 and p-value: 0.043. Based on that, the study rejects the null hypothesis and accepts the alternate hypothesis which states that there is a significant relationship between board independence and financial reporting quality of listed industrial goods companies in Nigeria

**H<sub>06</sub>:** *Firm size has no significant moderating effect on the relationship between board size and financial reporting quality listed industrial goods companies in Nigeria.*

Firm size moderated by board size has a Coefficient of F<sub>SIZE</sub>\*B<sub>SIZE</sub> 0.0231211 and p-value 0.006. Based on this, the study Reject the null hypothesis and accept the alternate hypothesis which states that, Firm size has a significant moderating effect on the relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria.

**H<sub>07</sub>:** *Firm size has no significant moderating effect on the relationship between board independence and financial reporting quality listed industrial goods companies in Nigeria.*

Firm size moderated by board gender diversity has a Coefficient of F<sub>SIZE</sub>\*B<sub>IND</sub> 0.5165518 and p-value: 0.000\*. Based on that, the study rejects the null hypothesis and accepts the alternate hypothesis that firm size significantly moderates the relationship between board independence and the financial reporting quality of listed industrial goods companies in Nigeria.

### Discussion of Results

This study reveals that board size has a significant positive relationship with the financial reporting quality of listed industrial goods companies in Nigeria. This implies that an increase in board size will result in an increase in the financial reporting quality of listed industrial goods companies in

Nigeria by 0.2177. The result of board size without moderation is significant at 5% while the direct relationship of board size in Table 7 as moderated by firm size has a positive significant effect on the financial reporting quality of listed industrial goods companies in Nigeria. This, therefore, implies that firm size significantly moderates the relationship between board size and financial reporting quality with a p-value of 0.006 which is highly significant. This finding is in line with the empirical findings of Bebejiet al. (2019), and Biljawan and Madan (2020), who discovered a significant positive relationship between board size and financial reporting quality. However, the finding is in contrast with the empirical finding of Oyedokun (2019) who discovered that board size has an insignificant negative relationship with financial reporting quality.

The study reveals that board independence has a positive effect on the financial reporting quality of listed industrial goods companies in Nigeria. This implies that an increase in board independence will result in an increase in the financial reporting quality of listed industrial goods companies in Nigeria by N 4.577. The result of board independence without moderation is significant at 5% while the direct relationship of board independence in table 7 as moderated by firm size has a positive significant effect on the financial reporting quality of listed industrial goods companies in Nigeria. This, therefore, implies that firm size significantly moderates the relationship between board size and financial reporting quality with p-value of 0.000 which is highly significant. This finding aligns with the empirical findings of Bebeji, et al. (2021) and Biljawan and Madan (2013) who found a positive relationship between board independence and the financial reporting quality of listed industrial goods companies. The finding, however, disagrees with the empirical findings of Ongore et al. (2021) and Oyedokun (2019) which discovered a negative relationship between board independence and financial reporting quality of listed industrial goods companies.

The positive significant effect of board size on financial reporting quality when moderated by firm size (p-value of 0.006) implies that larger firms benefit more from increased board size in terms of financial reporting quality. This might be due to larger firms having more resources and better infrastructure to support larger boards effectively.

The increase in financial reporting quality by N 4.577 with increased board independence suggests that independent directors play a crucial role in ensuring the integrity of financial reports. Significance of Moderation: With a p-value of 0.000, the significant moderation by firm size indicates that larger firms gain more from having independent boards in improving financial reporting quality.

## **5. Conclusion and Recommendations.**

The analysis and the results show that there is a significant relationship between board size and the financial reporting quality of listed industrial goods companies in Nigeria, and there is a significant relationship between board independence and the financial reporting quality of listed industrial goods companies in Nigeria, there is a significant relationship between board gender diversity and financial reporting quality listed industrial goods companies in Nigeria, there is no significant relationship between the frequency of board meetings and the financial reporting quality of listed industrial goods companies in Nigeria, considerable relationship exists between board financial expertise and financial reporting quality of listed industrial goods companies in Nigeria, Firm size has a significant moderating effect on the relationship between board size and financial reporting quality of listed industrial goods companies in Nigeria, firm size significantly moderates the relationship between board independence and the financial reporting quality of listed industrial goods companies in

Nigeria, firm size has a significant moderating effect on the relationship between board gender diversity and the financial reporting quality of listed industrial goods companies in Nigeria, firm size significantly moderates the relationship between the frequency of board meetings and the financial reporting quality of listed industrial goods companies in Nigeria and firm size does not significantly affect the relationship between board financial expertise and financial reporting quality of listed industrial goods companies in Nigeria. These conclusions are based on the provided coefficients and their associated p-values.

The following recommendations were made based on the findings from the analysis conducted.

- i. The shareholders of listed industrial goods companies in Nigeria should ensure that they maintain large board size because increase in the size of the board will enhance the financial reporting quality of listed industrial goods companies in Nigeria. The executive directors and non-executive directors must be of equal size on the board of directors of listed industrial goods companies in Nigeria to avoid the lop-sidedness of the board members. This will equally enhance the quality of board decisions as they are been reached from both the experiences of those within and outside the organization.
- ii. Board independence increased the efficiency of the board of directors to oversee the management of the firm and helped it make decisions about socially responsible investments that maximized firm financial performance. The dependency can bring about creative thinking and new ideas about qualitative issues such as social responsibility and philanthropy and consequently lead to better financial performance.

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