Abstract. This study examines the impact of board composition on the degree of financial reporting quality of consumer goods companies listed on the Nigerian Stock Exchange between 2016 and 2021. Samples of thirteen businesses were selected after using two filters. The study employed an ex post facto methodology, and secondary data were extracted from the population's annual reports and accounts. Regression utilising the Ordinary Least Square Model was used to test the hypotheses. An increase in the number of specialists on the board will help consumer goods companies' financial reporting because it was discovered that board expertise is essential and positively correlated with financial reporting quality.

On the other hand, it was discovered that board diversity and independence were unimportant and irrelevant to the accuracy of financial reporting. The study concludes that board attributes, particularly board expertise, influence the quality of financial reporting. Accordingly, listed consumer goods firms should prioritise board expertise by increasing the number of non-executive members on the board who are knowledgeable about accounting, have professional certifications, and have a wealth of work experience to reduce management manipulations and halt fraud in the company.

Keywords: Board Attributes; Board Independent; Board Diversity; Board Expertise; Financial Reporting Quality; Discretionary Accruals.

INTRODUCTION
The aforementioned financial crises and scandals, including those involving Andersen, Enron, WorldCom, Parmalat, Xerox, Ocean Bank Nigeria Plc and the financial misconducts of some companies like Cadbury Nigeria Plc, Unilever Nigeria Plc, to mention but a few, have significantly impacted the accounting industry and the public's trust in financial accounts on a global scale. These episodes revealed dishonest business practices, false economic statistics, and governance flaws in the company, which eroded stakeholders' trust [1, 2, 3].

New laws and regulations were passed in reaction to these occurrences on both the international and national levels to address the flaws in financial reporting and improve its accuracy. One significant example is the Sarbanes-Oxley Act, which was approved in 2002 in the US. This law aimed to improve corporate governance and financial disclosure in response to the Enron and WorldCom scandals. The Sarbanes-Oxley Act established several measures to enhance the reliability and accuracy of financial reporting. It increased the accountability of business executives and board members by introducing stiffer penalties for misrepresenting, altering, or destroying economic evidence during investigations. The Act also established the Public Company Accounting Oversight Board to oversee public companies' accounting practices and set auditing standards. The financial crises and scandals have also spurred international efforts to raise the bar for financial reporting requirements and advance transparency. International organisations collaborated to create accounting standards that will be acknowledged globally, like the International Financial Reporting Standards (IFRS) and the International Accounting Standards Board (IASB). By implementing these standards, financial
statements should be more reliable and comparable across national borders.

In actuality, several steps to improve the accuracy and dependability of financial reporting were incorporated in the Sarbanes-Oxley Act (SOX). The Enron and WorldCom financial catastrophes in the early 2000s, which significantly lowered public confidence in the accounting profession and financial reporting, prompted the passage of the Act. One of the most significant aspects of the Sarbanes-Oxley Act is the increased accountability standards for company executives and board members. The Act sets harsher sanctions for those who falsify, modify, or destroy financial records during investigations. This heightened responsibility discourages fraud and encourages more accurate and trustworthy financial reporting. The Sarbanes-Oxley Act established the Public Company Accounting Oversight Board (PCAOB), another crucial element. The PCAOB is an impartial regulatory agency regulating the auditing industry and setting auditing standards for publicly traded firms. Its goal is to raise the bar of audits and encourage investor faith in the accuracy of financial statements.

In the case of French businesses, elements like board size, independence, ownership concentration, and institutional ownership affect the quality of financial reporting. This study used the modified Jones model to evaluate the financial reporting standard for listed consumer product companies in Nigeria. It was built on the work [4, 5]. Despite the studies on this subject listed above, there isn't any contemporary research on businesses that produce consumer goods.

This study's primary goal is to assess how board attributes influence the quality of financial reporting for Nigerian consumer goods companies that are publicly traded. Additional study goals in detail include:

1. How board independence affects quoted Nigerian consumer goods companies' financial reporting quality.
2. Examine the impacts of board diversity on the financial reporting quality of consumer goods companies listed in Nigeria.
3. Determine how board expertise affects the Nigerian consumer goods companies listed in financial reporting quality.

**Hypothesis Of The Study**

The following null hypothesis(s) were created to guide the investigation and are consistent with its objectives:

- **H₁**: In Nigeria, the integrity of consumer goods companies' financial reporting is not significantly impacted by board independence;
- **H₂**: The gender diversity of the board of Nigeria's publicly traded consumer goods companies does not significantly affect the accuracy of the financial reporting.
- **H₃**: The accuracy of financial reporting for publicly traded consumer products businesses in Nigeria is significantly unaffected by the board experience.

**Literature Review**

*Financial reporting quality concept. Authors [6] state that clear and complete financial reporting strives to keep readers from being misled or deceived. According to this viewpoint, it is crucial to disclose financial data that is accurate, open, and devoid of manipulation or deliberate deception. The integrity and reliability of the information being reported are the primary concerns. On the other hand, the author [7] highlights the function of financial reports in providing details on a company's operations, particularly cash movement. According to this viewpoint, the effectiveness of financial statements offering equity owners or investors pertinent and helpful information determines the quality of financial reporting. The main points of attention are the usefulness and relevance of the presented information in assisting stakeholders in making informed decisions. These differing definitions highlight the multifaceted nature of financial reporting quality and the various aspects that can be considered when evaluating it. Other factors contributing to financial reporting quality may include the clarity of presentation, compliance with accounting standards, disclosure of relevant information, and comparability of financial statements over time and across companies.*

*Board Attributes. The Nigerian Securities and Exchange Commission occasionally refers to the governing body as the board [8]. The study focuses on how the board's proficiency, independence, and diversity affect listed Nigerian consum-
er products businesses' financial reporting quality. The study examined these characteristics in light of prior research and demonstrated how they impacted the financial reporting standard.

**Board Diversity and Financial Reporting Quality.** Studies that link a varied board composition to more robust financial reporting are mentioned [9, 10, 11]. These studies strongly support the assumption that having a diverse board of directors increases the bar for financial reporting. It is important to remember that other research, such as that cited by [3, 12, 13], has indicated a tenuous or insignificant correlation between the level of financial reporting standards and board diversity. Because the research in this area seems to yield conflicting outcomes, more studies may be required to fully comprehend the relationship between board diversity and financial reporting quality.

Authors [11, 14] discovered that gender diversity on boards is considerably and positively connected with the standard of financial reporting when considering accounting conservatism as a criterion. These studies demonstrate the connection between increased gender diversity on boards and more precise financial reporting.

**Board Independence and Financial Reporting Quality.** Previous research has examined the relationship between financial reporting requirements and board independence. The author [15] advises that concerns about the board's independence and makeup, notably the executive-to-non-executive directors' ratio, should be voiced. The relationship between board independence and financial reporting quality is tenuous, according to studies by [3, 16]. Authors [10, 17] discovered a favourable association between the board's independence and the financial reporting norm.

The contradictory results of this research demonstrate how context and board membership, particularly diversity and independence, affect the level of financial reporting quality. While evaluating this relationship, it is essential to consider various variables, including the specific industry, nation, and governance laws. More research is required to completely comprehend the dynamics and underlying mechanisms between board characteristics and financial reporting standards.

**Board Expertise and the Quality of Financial Reporting.** This suggests that having knowledgeable and experienced board members, particularly in finance, accounting, and auditing, may enhance the accuracy of financial reporting. However, it acknowledges that several theories in the literature about how board experience influences the standard of financial reporting exist.

**Theoretical Framework**

The effect of corporate governance structures on organisations' financial reporting quality is explained from various theoretical angles. The sources of these theories span a wide range of academic fields, including accounting, economics, finance, and law. As a result, previous investigations have incorporated many theoretical stances. The agency, resource dependence, management signalling, legitimacy, organisational, political costs, stakeholder, stewardship, and transaction cost economies theories are frequent among them.

Agency theory has formed the foundation for most earlier research on corporate governance procedures. As a result, agency theory is chosen as the leading underlying theory.

**Theory of Agency.** Barry Mitnick and Stephen Ross each put up a different Agency Theory concept in 1973. Since then, it has become widely recognised as one of the most compelling theories for understanding organisational behaviour. Agency theory is a conceptual framework that examines how interactions occur between principals, such as shareholders or owners, within a company and agents, such as managers or executives. The possibility for conflicts of interest that may arise when agents' and principals' interests are not entirely congruent is highlighted.

According to the theory, agents make decisions out of self-interest and may not always choose a course of action that maximises the organisation's value for the principals. This conflict of interests can result in agency issues like moral hazard and adverse selection, where agents may act opportunistically or neglect their duties, hurting the interests of the principals.

Delegating power from the principals to the agents to make choices and act on their behalf distinguishes a principal-agent relationship. The agents are given access to resources and the ability to make decisions, but they may not have the same objectives, risk tolerances, or knowledge as the principals. The potential for conflicting goals...
and the knowledge asymmetry makes strategies to reduce agency issues necessary.

Various methods and strategies are frequently used to address agency difficulties. These consist of:

1. Monitoring and control measures: Principals may use performance reviews, audits, and reporting requirements as monitoring and control measures to monitor agents’ conduct. These strategies are designed to lower agency costs brought on by information asymmetry and better match the agents’ behaviour with the principals’ interests.

2. Incentive systems: Principals can create incentive plans, like CEO compensation packages, that relate agents’ pay to their accomplishments and the success of the company as a whole. These incentives can motivate agents to behave in the principals’ best interests by aligning their interests with their goals.

3. Contractual agreements: Principals and agents can document the conditions and expectations of their relationship through contracts and agreements. These contracts frequently outline the agents’ obligations, performance standards, and penalties for falling short of objectives. Clear contractual agreements can provide a foundation for matching incentives and minimising conflicts. However, given the complex nature of corporate governance, and in line with both prior studies, as well as recent calls for the adoption of a multi-theoretical approach to corporate governance research, where applicable, agency theory is complemented with resource dependence theories. This gives the study a double-theoretical orientation.

**Resource Dependency Theory.** Resource Dependency Theory (RDT), a sociological and organisational theory, describes how organisations depend on outside resources to achieve their goals and stay afloat. It implies that businesses need various resources to run effectively, including information, cash, technology, skills, and social ties. The idea was developed in opposition to the famous viewpoint at the time, which focused on internal variables as the main influences on organisational behaviour.

RDT contends that stakeholders, social institutions, and other organisations comprise an organisation’s external environment. Organisations work to acquire and maintain control of the resources they need to endure and flourish in this environment.

The theory of agency, which is frequently used in corporate governance, sheds light on the difficulties and methods involved in coordinating the interests of principals and agents. Understanding how firms may create processes and frameworks to reduce agency issues, support efficient decision-making, and foster value creation is helpful.

**METHODOLOGY**

The ex-post facto design was employed in the investigation. This strategy is considered appropriate because the study uses data from historical events. The analysis uses historical data spanning the six years from 2016 to 2021. The study employs panel data analysis to examine the annual reports and financial statements of companies providing consumer goods in Nigeria. Still, its main focus is on the relationship between the financial reporting standard and board qualifications. Twenty firms are in the study’s population. 13 businesses were chosen as a sample using the census method. Two filters, including the requirements that the criteria used to minimise this sample were that the company be listed for the length of the study and have access to the relevant study data. Statistical techniques, including Pearson Moment Correlation, Multiple Regression, and Descriptive Statistics, were employed as analytical tools. Twenty listed consumer goods companies in Nigeria comprise the study’s population, and the researcher used thirteen of these firms as the sample size for this work. International Breweries PLC, Guinness Nigeria PLC, MC Nichols PLC, Nascon Allied Industries, Nestle Nigeria PLC, Northern Nigeria Flour Mills PLC, Cadbury Nigeria PLC, Vita Foam PLC, Pz Cussons Nigeria PLC, Unilever Nigerian PLC, Dangote Sugar PLC, Nigeria Enamelware PLC, and Champion Breweries PLC are the businesses that make up the chosen sample.

**Information about Models.** Discretionary accruals (DA), which served as a proxy for financial reporting quality (FRQ), whilst board independence (BI), board diversity (BDV), and board expertise (BE) represented board attributes. To test the given hypotheses, the subsequent multiple regression model is used:

\[
FRQ_i = \beta_0 + \beta_1 BDV_i + \beta_2 BI_i + \beta_3 BE_i + \beta_4 FS_i + \varepsilon_i
\]
where FRQ(DA\text{it}) – Financial Reporting Quality (Discretionary Accruals); \( \beta_0 \) – Constant; BDV – Board Diversity; BI – Board Independent; BE – Board Expertise; FS – Firm Size; \( \varepsilon_i \) – Error Term; i-Time Series – Cross-sectional (Companies).

A prior prediction that is consistent with the body of existing literature \( \beta_1, \beta_2, \beta_3 > 0 \).

### Variable Measurements

BI – the percentage of non-executive directors on the board as a whole; BDV – Female board members as a percentage of all board members; BE – the ratio of the overall number of board members to the total number of experts on the board (for example, those with a background in accounting and at least ten years of experience); FS – Natural Log of All Assets; FRQ – measuring the integrity of financial reporting using discretionary accruals as a proxy (i.e. DA\text{it} = TA\text{it} - NDA\text{it}, where TA\text{it} = EBT\text{it} - CFO\text{it}).

### Models of Financial Reporting Quality Measurement

The Modified Jones model is stated as follows:

\[
N_{\text{di}} = P:\text{PE}_{\text{it}} + A_{\text{it}-1} + (\text{REV}_{\text{it}} - \text{AR}_{\text{it}}),
\]

NDA\text{it} – a company’s non-discretionary accruals \( i \) in year \( t \);

\( A_{\text{it}-1} \) – lagged (one year) total assets;

\( \Delta\text{REV}_{\text{it}} \) – change in the company’s revenues \( i \) in year \( t \);

\( \Delta\text{AR}_{\text{it}} \) – Change in the Company’s Net Receivables \( i \) in year \( t \);

PPE\text{it} – property, a plant, and business equipment \( i \) in year \( t \).

The discretionary accruals (DA\text{it}) are then calculated as DA\text{it} = TA\text{it} - NDA\text{it}. However, total accruals (TA\text{it}) in this study will be calculated as income before taxes and extraordinary ordinary items (EBX\text{it}) less net cash flow from operating (CFO\text{it}), as follows: TA\text{it} = EBT\text{it}X\text{it} - CFO\text{it}.

### Results and Discussions

The information from the chosen companies’ annual reports and financial statements is presented in this part. The following is a list of the descriptive statistics, correlations, and regressions; Analytical Statistics. Table 3 presents the period’s descriptive statistics for the study’s variables from 2016 to 2021. It represents the variables of the sampled consumer products companies.

### Table 3 – Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRQ(DA)</td>
<td>65</td>
<td>-1.45</td>
<td>2.25</td>
<td>-1.16</td>
<td>6781</td>
</tr>
<tr>
<td>BDV</td>
<td>65</td>
<td>0.1906</td>
<td>0.1157</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>BI</td>
<td>65</td>
<td>0.7176</td>
<td>0.1294</td>
<td>0.5</td>
<td>0.9167</td>
</tr>
<tr>
<td>BE</td>
<td>65</td>
<td>0.2585</td>
<td>0.1132</td>
<td>0.0909</td>
<td>0.5455</td>
</tr>
<tr>
<td>FS</td>
<td>65</td>
<td>16.5382</td>
<td>0.4265</td>
<td>13.398</td>
<td>18.407</td>
</tr>
</tbody>
</table>

Table 3 shows that the number of observations is 65 and a descriptive statistic for each of the study’s variables. Results from the listed consumer goods companies under investigation for discretionary accruals show a high and above-average standard deviation of 2.2508, indicating that the quality of financial statements of companies that manufacture consumer goods is very variable, with a mean value of 1.4508 and minimum and maximum values of 1.1609 and 6781, respectively. The average number of independent (non-executive) directors in the evaluation boardroom was 72%, according to the mean of board independence (BI), equivalent to 0.7176. The board independence of the consumer goods companies under study varied significantly, as shown by the standard deviation, which is tiny and below the mean at 0.1294. The last and most significant significance figures are 0.5 and 0.9167, respectively. By the board diversity index (BDV), which has a standard of 0.19 and a range of 0% to 40%, there are 19% on average female directors in boardrooms.

The lack of clustering around the mean is shown by the low standard deviation of 0.12, which also indicates the unequal presence of female directors in the boardroom. The lack of clustering around the mean is shown by the low standard deviation of 0.12, which also shows the unequal presence of female directors in the boardroom – indicating that 26% of the board’s directors have academic and professional credentials. At least ten years of relevant employment experience in financial problems, the mean board expertise (BE) for the inquiry periods is consistently 0.2585 with a standard deviation of 0.1133. A recently proposed control variable is firm size (FS). The enterprises’ average firm size (FS) under examination ranges from 13.380 to 18.4070,
with a standard deviation of 1.4265, and is above N17 billion.

Table 4 presents the correlation matrix of the variables of the study.

Table 4 – Correlation Matrix of the Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>FRQ</th>
<th>BDV</th>
<th>BI</th>
<th>BE</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRQ</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDV</td>
<td>-0.1049</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>0.0618</td>
<td>0.0737</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>0.0947</td>
<td>-0.0494</td>
<td>0.0410</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>0.6308</td>
<td>0.3897</td>
<td>0.0144</td>
<td>0.1354</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 4 above correlation matrix results illustrate the relationship between the independent variables and the dependence and independence variables. Any correlation coefficients less than 0.80 are not highly correlated and, therefore, considered safe for inclusion in the same regression model. The correlation matrix showed that multicollinearity-related issues did not impact the predictor variables because the correlation between the variables was extremely weak and was below the cutoff value of 0.80 [18].

Table 5 – Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDV</td>
<td>1.20</td>
<td>0.83</td>
</tr>
<tr>
<td>BI</td>
<td>1.01</td>
<td>0.99</td>
</tr>
<tr>
<td>BE</td>
<td>1.03</td>
<td>0.97</td>
</tr>
<tr>
<td>FS</td>
<td>1.21</td>
<td>0.82</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.11</td>
<td></td>
</tr>
</tbody>
</table>

A high correlation does not automatically imply the demand for multicollinearity and vice versa. This is accurate despite potential multicollinearity between independence variables being identified using the correlation matrix. The values of explanatory variables crucial to the model, the Variance Inflation Factor (VIF), were determined to investigate the multicollinearity and remedy this issue. The author [18] states multicollinearity is present in the VIF above 10. The results above can be used to estimate the average VIF value, 1.11, is much less than benchmark 10, which is 10. This exhibits the model’s lack of multicollinearity.

The model’s adjusted R² is 0.43, which suggests that it accounts for almost 43% of the variation in discretionary accruals, according to the regression results in Table 6. The high probability value of the model, 0.00, showed that its statistical validity was more than 99.99%.

Table 6 – Regression Result

| Variables | Coef. | Std. Err | t    | P>|t| | 95% Conf. Interval |
|-----------|-------|----------|------|-------|-------------------|
| BDV       | 3.6320 | 1.8008   | -4.06 | 7.67  |                   |
| BI        | 8.7716 | 0.536    | -2.43 | 4.18  |                   |
| BE        | 4.0019 | 2.0904   | 1.73  | 0.04  |                   |
| FS        | -1.1616 | -7.02    | -1.48 | -8.26 |                   |
| CONS      | 1.5328 | 5.41     | 9.64  | 2.10  |                   |

Notes: Number obs 65; F(4,60)=12.99; Prob>F =0.0000; R² =0.4640; Adj R² =0.4283; Root MSE =1.7e+08

The regression model in Table 6 indicated that Board independence (BI) and financial reporting quality have a statistically small but positive relationship (p/v=0.60). This demonstrates a minimal probability that the financial reporting standard will fall by 8.77 log units for every unit increase in board independence.

The finding results in accepting the null hypothesis, which claims that board independence has no discernible impact on the accuracy of financial reporting at a 5% significance level.

The level of financial reporting quality and board diversity have a positive, statistically insignificant connection (p/v=0.08). This demonstrates that a 1% increase in board diversity won’t boost the likelihood of accurate financial reporting by 3.63%. The study rejects the null hypothesis because, at the 5% significance level, board diversity has no observable effect on the accuracy of financial reporting. However, the statistically significant and favourable connection between financial reporting and Bo is that the financial reporting standard will decline by 8.77 log units for every unit rise in board independence.

The conclusion leads to the acceptance of the null hypothesis, which states that at a 5% significance level, board independence has no visible effect on the accuracy of financial reporting.

A positive, statistically insignificant relationship exists between the quality of financial reporting and board diversity (p/v=0.08). This illustrates that the likelihood of accurate financial reporting will not rise by 3.63% with a 1% increase in board diversity. The analysis rejects the null hy-
pothesis since board diversity has no discernible impact on the accuracy of financial reporting at the 5% significance level. However, the statistically significant and positive relationship between financial reporting and board expertise (BE), $P/V = 0.041$, points to the high calibre of the service. This suggests that the quality of financial reporting will most likely increase by 4.00 log odds for every unitard expertise (BE), $P/V=0.041$, implying that the service is of high quality. This means that for every unit increase in board experience, the quality of financial reporting will likely improve by 4.00 log odds.

In light of the findings, it was concluded that board competency has no appreciable impact on the accuracy of financial reporting at the 5% significance level. The control variable, firm size (FS), exhibits a strong positive link with financial reporting quality and a $p/v = 0.00$ combined with the explanatory variables. This illustrates how the control variable might help the Nigerian consumer goods companies under investigation to record their finances more accurately.

The study examined how publicly traded consumer goods businesses in Nigeria might have been influenced between 2016 and 2021 by board composition and financial reporting standards. The resource dependency theory, on which the study was founded, led to the specification of a model in which the independent variable is board qualities, with its measures, the independent variable is board independence, board diversity, and board knowledge, and the dependent variable is proxied by discretionary accruals. In this sense, the research revealed conflicting results and only partially agreed with the resource reliance theory put forth by [19]. The investigation revealed that only one of the three variables significantly influenced the calibre of financial disclosure.

**Board diversity and financial reporting quality.** It was shown that there was no statistically significant relationship between the board’s diversity and the calibre of financial reporting. This indicates that adding more female board members won’t raise the calibre of financial reporting for the businesses under consideration. Contrary to this finding, authors [9, 11] found that board diversity is positively and significantly associated with financial reporting quality. This result agrees with what [3] found.

**Board expertise and the quality of financial reporting.** Last but not least, the study also showed that board experience considerably and favourably influences the calibre of financial reporting. This is both realistic and true. However, directors’ competence can enhance the calibre of their companies’ financial reports, provided they have the necessary professional and academic credentials and a particular amount of work experience. Even so, this finding is at odds with results, which claimed that board expertise is significant but negatively affects the financial reporting standard. Instead, it is consistent with the positive connection indicated in the body of work by [3, 20].

**CONCLUSIONS**

The study concluded that board qualities, particularly board competency, affect the quality of financial reporting based on the analysis findings above. This resulted from a positive correlation between one of the three independent variables that was statistically significant at the 5% significance level and was used to proxy board attributes. Based on this research findings, board expertise was positive and meaningful to financial reporting quality. This was in line with [3, 21, 22], who support that board expertise significantly and positively impacts organisations’ economic reporting levels. They assert that board skill, as measured by earnings management, considerably and unfavourably affects how well financial reporting is done [3].

Nevertheless, in light of the study’s findings, the researcher recommends that the right individuals and an appropriate number of non-executive board members with accounting expertise
should be appointed to reduce management fraud and prevent it from happening in the com-
pany, which will reaffirm the trust of people who rely on financial statements.

REFERENCES


