

## THE INFLUENCE OF FIRM ATTRIBUTES ON FINANCIAL PERFORMANCE OF LISTED NIGERIA CONSUMER GOODS FIRMS: A MODERATING EFFECT OF LEVERAGE

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### Abstract

*This study examined moderating effects of leverage on the nexus between firm attributes and financial performance. The study period ranges from 2013 to 2021. Fourteen (14) out of twenty-one (21) listed Nigerian consumer goods firms were purposefully chosen. This study used panel regression, correlation analysis, and descriptive statistics for the data estimation. The results indicate that board independence and firm size positively and significantly affect return on assets, while board gender diversity does not significantly impact ROA. Also, the study found that leverage has a noteworthy and positive moderating effect on the relationship between board independence, board gender diversity, firm size, and ROA evidenced by t-statistics and p-values of (2.23, 2.08, 2.12) and (0.026, 0.038, 0.034) respectively. In conclusion, this research suggests that leverage moderates the relationship between firm attributes and financial performance, and it also recommends that companies should strike a balance in their financing strategies to avoid excessive debt risk. They should also, diversify their boards, and exercise caution in the use of debt financing, regardless of their size and age.*

**Keywords:** Board Independence, Gender Diversity, Firm Size, Financial Performance, Leverage,

### 1. Introduction

Firm financial performance represents how well a company is faring in terms of its financial outcomes. This encompasses various facets of the company's financial well-being, including its capability to meet its financial obligations, maintain liquidity, generate profits, achieve favourable market valuation, foster growth, and operate efficiently. In essence, it serves as a comprehensive assessment of a business's overall financial health (Yahaya, 2022). The relationship between firm attributes and financial performance pertains to the correlation between the distinctive characteristics of a company and its financial outcomes. These attributes can include factors such as company size, industry, the quality of management, and levels of innovation. Examining this connection aids investors, researchers, and analysts in understanding how different aspects of a firm impact its financial success, encompassing areas like profitability, growth, and stability (Ng, Lau, Rahim, & Shanmugaretnam (2020). Saddam (2021) reported that robust financial

performance is vital for the survival, sustainability, and resilience of any business. Conversely, poor financial performance can lead to the downfall of a business, eroding the investments, interests, capital, and expected returns of stakeholders, as noted by Enyi (2021). Even in an era marked by disruptive technologies, innovations, and inventions in the business world, strong corporate financial performance remains vital in preventing business failure (Enyi & Ajibade, 2021). Firm attributes are a critical factor that can either enhance or hinder a company's success. A company with well-defined and robust specific attributes is more likely to outperform one with haphazardly defined attributes, as emphasized by Jubril & Idris (2022). The utilization of these attributes allows firms to maintain both internal and external competencies, sustain their strategic positioning, and drive their financial performance, as highlighted by Kabue & Kilika (2016).

Phan et al. (2013) suggested that numerous studies conducted in various countries, including Pakistan, South Africa, Kenya, Malaysia, and Nigeria, have demonstrated that firm characteristics can be assessed by factors such as the size of the board, firm size, leverage, firm age, liquidity, board independence, gender diversity, ownership structure, and so on. Rizvi et al. (2023) mentioned that enhancing board diversity, including gender diversity, in the selection of board members can improve decision-making processes, enhance risk management, and lead to superior performance outcomes. The size of the board is also a critical consideration, as a smaller board can be more effective in decision-making and communication, while a larger board can bring in a broader range of expertise and offer increased representation. Moreover, the ownership of significant blocks of shares or large shareholders can significantly influence the company's direction. Akenroye et al. (2022) also argued that the improper utilization of a company's internal attributes can lead to a decrease in net profit margin and a decline in the performance of capital employed for listed firms in Nigeria.

However, leverage denotes the use of borrowed funds or financial instruments to magnify potential gains or losses in investments or business operations, as explained by Brealey, Myers, & Allen (2017). The extent of leverage a company employs can impact how various company characteristics influence financial performance. In the context of capital structure, Musa, Yusuf, and Muhammed (2016) emphasize that the choice of a company's capital mix significantly affects its profitability, which, in turn, has profound implications for shareholders' wealth maximization goals. Mazur (2007) suggests that the factors influencing a company's capital mix can vary from one country to another due to economic, technological, cultural, and environmental factors, which may also apply to companies across different sectors of the economy with unique attributes. Musa et al. (2016) found that firm attributes and performance can influence the level of financial leverage. It's important to note that leverage is often associated with increased financial risk. In cases involving companies with varying levels of leverage, a moderating effect may be observed when these companies respond differently to changes in their attributes. Highly leveraged firms might experience greater improvements in financial performance when certain attributes are favorable, but they could also face more significant declines in performance when conditions deteriorate. While Wahab et al. (2022) suggests that debt can enhance a company's profitability and that it's worth noting that debt is not the sole determinant of profitability.

Furthermore, a review of the literature concerning the impact of firm attributes on financial performance in both emerging and developed nations, including studies by Kwaltommai et al. (2019), Mustapha and Abdul-Qadir (2017), Jibril and Idris (2022), Obiekea and Ebiaghan (2023), Agboola, Abiodun, Onipe (2020), Odu et al. (2023), Akenroye et al. (2022), Rizvil et al. (2023),

Uzoka et al. (2020), Efuntade and Akinola (2020), Wahab et al. (2022), and Abubakar et al. (2022), revealed conflicting findings. These studies failed to reach a conclusive result regarding how firm attributes influence financial performance. The variations in national economies and the diverse characteristics of the firms involved contributed to this lack of consensus.

This study not only aim to review the relationship between firm attributes and financial performance, which has been a topic of interest to previous researchers, but it also examines the moderating role of leverage in the connection between firm attributes and financial performance, an aspect largely overlooked by past researchers. The failure of previous researchers to explore the moderating impact of leverage on firm attributes and financial performance has left a gap in research, which this study intends to address. The contribution to knowledge of this study lies in its potential to enhance existing theoretical literature and apply it to empirical investigations in this research field. The findings of this study are anticipated to offer valuable insights for consumer goods firms, investors, managers, researchers, and policymakers. The primary objective of this research is to investigate how leverage moderates the relationship between firm attributes and the financial performance of listed Nigerian consumer goods firms.

## 2. Literature Review

### Firm Attributes

Shehu (2012) suggested that firm characteristics encompass variables that significantly influence a company's decisions, both internally and externally. Akenroye et al. (2022) offered a different perspective, defining firm attributes as factors that can be either controllable or uncontrollable, internal or external, impacting a company's strategic choices. These attributes encompass aspects like the company's size, leverage, liquidity, board size, and institutional factors, among others. It's worth noting that firm attributes play a pivotal role in determining the success or failure of business operations, as highlighted by Irom et al. (2018). In this study, board independence, board diversity, and firm size were used as proxies for firm attributes. Board independence pertains to the extent to which a company's board of directors operates without conflicts of interest, enabling them to make impartial decisions in the best interests of the company and its shareholders. As Ebiaghan (2020) pointed out, the presence of independent directors, especially those with relevant financial expertise, promotes objectivity and enhances the effectiveness of financial oversight.

Board gender diversity refers to the inclusion of individuals from different genders on a corporate board, with a specific focus on ensuring both men and women are adequately represented in these leadership positions. According to Rizvi et al. (2023), the presence of females in top management roles serves as an incentive and signals to other employees that the organization is committed to diversity, providing minority employees with a greater opportunity for advancement into such positions. Gender diversity on a board aims to foster more balanced decision-making, incorporate diverse perspectives, and address gender inequality in leadership roles. On the other hand, firm size pertains to the measurement of a firm's scale, which can be determined by various factors like revenue, total assets, the number of employees, and market capitalization. As highlighted by Serrasqueiro et al. (2008), larger companies are more likely to take advantage of economies of scale and possess greater bargaining power in their relationships with clients and suppliers. Several

researchers, including Ebiaghan (2020), Foyeke et al. (2014), Irom et al. (2018), Jubril & Idris (2022), Oyelade (2019), and Rizvi et al. (2023), have utilized board independence, board diversity, and firm size as metrics for assessing firm attributes.

### **Financial performance**

According to, Jang and Park (2011) financial performance is an indicator of how efficiently a firm utilizes its resources to achieve its stated objectives, measured through metrics like ROA, ROI, ROE, and sales growth. Post and Byron (2015) noted that financial performance metrics analyze a firm's operational results and growth in monetary terms. In this study, financial performance was represented by ROA. Parker et al. (2018) opined that ROA is the ratio of a company's net income to its total assets, assessing the firm's ability to generate revenue from its assets. Sadalia et al. (2019) pointed out that the measurement of financial performance has the potential to reveal a company's overall health and status. In their research, Igbru and Onuora (2020) emphasized that an effective ROA indicates efficient utilization of a company's resources. ROA has been used in previous studies as a proxy for assessing financial performance by researchers such as Agboola et al. (2020), Parker et al. (2018), and Igbru and Onuora (2020).

### **Firm Attributes and Financial Performance**

The connection between firm characteristics and financial performance is intricate and can vary based on factors such as the industry, economic conditions, and other variables. The independence of a company's board of directors (BOD) can have either a positive or negative impact on the firm's financial efficiency, depending on the extensive experience of the BOD members. Mohapatra (2016) discovered that outside directors have a negligible effect on operating performance, while other researchers like Coles, McWilliams, and Sen (2001) identified a positive correlation between board independence and financial performance, specifically in terms of return on assets (ROA). Also, promoting gender diversity on the board is a means to foster more balanced decision-making, incorporate diverse perspectives, and address gender inequality in leadership roles. Rizvi et al. (2023) and Mahadeo et al. (2012) supported this by highlighting a significant positive connection between board diversity and firm performance. Additionally, Pearce and Robinson (2011) noted that larger firms possess more resources, allowing them to explore more investment opportunities and exhibit greater resilience in the face of industry fluctuations compared to smaller companies. Research by Foyeke et al. (2014) and Opeyemi (2019) found a significant positive association between firm attributes and financial performance. Conversely, Aza (2018) identified a negative significant effect on the connection between firm attributes and financial performance.

### **Moderating effect of leverage on the relationship between firm attributes and firm performance (FP)**

Firms often utilize their distinctive attributes to effectively manage a wide range of strategic resources, aiming to achieve robust financial performance by enhancing operational efficiency, optimizing growth, and creating value for all stakeholders, as observed by Margaretha and Supartika (2016). Leverage is a degree of how much a firm utilizes a combination of equity and debt to finance its assets. Syed (2013) highlighted the association between leverage and financial performance, a point supported by Ojo (2012), who noted that a firm's risk and financial leverage increase as its debt share rises. Substantial leverage can be beneficial during periods of high



profitability. Furthermore, leverage acts as a moderator, influencing and mitigating the effect of firm attributes on financial performance.

More so, the moderating effect of leverage on the relationship between firm attributes and financial performance relates to how a company's level of leverage can alter the strength and direction of this connection. The influence of factors such as board independence, board diversity, and firm size varies depending on whether a company is highly leveraged or has low leverage. Larger companies may have greater access to debt capital and, therefore, use higher leverage ratios compared to smaller firms, partly due to having more assets available as collateral and being viewed as less risky by lenders. On the other hand, more profitable firms may rely less on debt since they can generate funds internally. In contrast, less profitable firms may use more debt to support their operations and expansion. It's worth noting that poor financial performance can lead to business failure, eroding stakeholders' investments, interests, capital, and expected returns, as pointed out by Enyi (2021). Further, independent directors have a vital role in ensuring that decisions related to leverage are made in the best interests of the firm and its shareholders. They can serve as a counterbalance to the management's inclination towards more aggressive financing strategies, thus helping to mitigate the risk of excessive debt. The presence of a substantial number of independent directors on the board promotes strong corporate governance practices, which, in turn, makes it more feasible for the company to secure debt financing on favorable terms. In addition, board gender diversity brings a broader range of perspectives, skills, and experiences to decision-making process regarding leverage, ultimately leading to improved profitability. A diverse board also exercises caution when considering high levels of debt to manage financial risk effectively.

### **Theoretical Review**

The foundation of this study is anchored on the principles of agency theory, initially introduced by Berle and Means in 1932 and later expanded by Stephen Ross and Barry Mitnick in 1973. Jensen and Meckling (1976) played a significant role in popularizing this theory. Agency theory operates on the assumption that conflicts of interest arise between agents and principals due to their self-centered motivations, as noted by Payne and Petrenko (2019). Jubri and Idris (2022) pointed out that these conflicts can manifest between managers and shareholders as well as between creditors and shareholders. The agency problem emerges from the imperfect behavior of the agent. When debt levels increase, shareholders can compel managers to fulfill their debt obligations. Consequently, with higher debt levels, a significant portion of free cash flow must be allocated to servicing debt obligations. In such cases, shareholders or boards of directors effectively reduce free cash flow within the company, preventing managers from making suboptimal or excessive investments, as indicated by (Jang & Park, 2011). Also, board independence, board diversity, and firm size are crucial factors in mitigating agency problems.

### **Empirical Review**

Kok, Lau and Yip (2023) in their review of the connection between leverage and board independence of some selected quoted firms in Malaysia which covered a period of 5 years ranging from 2014-2018. The outcome of their study discovered that board independence has noteworthy impact on leverage of old or large firms while it has no effect on the leverage of small or young firms, their study further stated that the leverage of firms with low FP will be adversely affected

by the presence of independent directors but this negative effect decreases as firm profit of FP increases.

More so, the study of Akenroye et al. (2022) explored the influence of firm traits on the financial performance (FP) of 111 Nigeria firms which was selected out of population of 161 firms. 2011-2020 was the study period. Descriptive and multiple regression analyses were used to analysed the data gathered for this study. The outcomes from the study discovered that firm attributes had joint noteworthy effect on FP. Also, the study of Jubri and Idris (2022) on the influence of firm traits on FP in Nigeria with a time frame period of 2015-2021 discovered that firm size has a positive and noteworthy effect on FP while liquidity and leverage has a positive and negative insignificant effect respectively on FP.

Manurung (2022) in his study of the impact of firm attributes on the financial performance (FP) of 35 listed real estate companies in Indonesia within a time frame of 2015-2020. The result from the findings discovered that gender diversity, board and independent commissioners have insignificant effect on FP whereas leverage and board of directors have a notably significant effect on FP. The study of Nwaorgu and Iorombagah (2021) on the impact of board diversity on the FP of Nigeria listed firm within time frame period of 2014-2018. The findings from the study revealed that board gender diversity has no effect on FP.

Owolabi et al. (2021) investigated the effect of board diversity on financial performance (FP) of Nigeria firms. The result revealed that board independence, board diversity and the size of board have a positive impact on FP. Efuntade et al. (2020) also investigated the influence of firm attributes on FP of Nigeria manufacturing firms within a period of 14 years. Panel least square was used to test the study hypotheses. The findings from the study revealed that firm age, firm size, sales, growth, leverage and liquidity has a noteworthy connection with ROA.

Mboi et al. (2018) examined the moderating effect of firm traits on the connection between capital structure and financial performance (FP) of 60 large firms and 30 medium firms located in Kenya, the study time frame consisted of 6 years' period ranging from 2011-2016. Long term, short term debt and leverage are used as metrics of capital structure whereas firm size and firm age and size were used as proxy of firm attributes. Correlation and multiple regression were used to test the moderating effect whereas F-value and the critical F-value were used to test the hypothesis stated in the study. The outcome of the study revealed that a significant and positive moderating influence of firm attributes on the nexus between capital structure and FP. Further, the study established that increase in ROA and ROE will lead to change in firm size and age.

Almania (2016) reviewed the influence of board independence on financial leverage's absence of taxes; 122 listed firms in Saudi Arabia were used for this study within a time frame of 2012-2015. The findings of the study showed that board independence has a negative connection with leverage. The study of Musa et al. (2016) explored the effect of firm traits and leverage of 6 quoted conglomerate firms in Nigeria within a time frame of 2007 to 2014. OLS regression was used to analyse the data gathered for the study. The outcome of the study revealed that FP has a negative and significant connection with leverage while a positive and significant relationship was found between the volatility of earnings, firm age and leverage whereas business complexity has an insignificant relationship with leverage. More so, Oyewale et al. (2016) examined the effect of board independence on the financial performance (FP) of 34 quoted Nigeria. The outcome of their findings indicated that board independence has a positive connection with FP.

Ujumwa, Nwakoby and Ugbam (2012) explored the effect of board diversity and firm performance (FP) of 122 quoted firms in Nigeria within a study period of 1991 to 2008. The outcome of the study revealed that board gender diversity has a negative and significant relationship with FP.

### 3. Methodology

This research employed a causal research design, focusing on 14 out of the 21 listed consumer goods firms on the Nigerian Exchange Group (NGX). The sample size was selected using purposive sampling. The study covered a decade, spanning from 2013 to 2021, and utilized data extracted from the annual reports of these firms. The study's data was analysed using descriptive statistics, correlation analysis, and panel regression analysis. Firm attributes in this study were quantified using board independence, board gender diversity, and firm size. The dependent variable, firm size, was measured by ROA, expressed as the ratio of the firm's net income to its total assets. Leverage was employed as the moderating variable. Additionally, the control variable in this research was firm age. Board independence was assessed based on the proportion of non-executive directors to the total number of board members. Board gender diversity was expressed as the proportion of female board members to the number of board members in a year. The moderating variable, leverage, was measured as the percentage of total debt to total assets. Firm size was measured using the natural logarithm of total assets, while the control variable, firm age, was measured by the number of years since the firm's incorporation.

### Model Specification

The model shows the moderating effect of leverage on the relationship between firm attributes and financial performance.

$ROA_{it} = F(BID, BGD, FS, BID*LEV, BGD*LEV, FS*LEV, FA)$

$$ROA_{it} = \beta_0 + \beta_1 BID_{it} + \beta_2 BGD_{it} + \beta_3 FS_{it} + \beta_4 BID * LEV_{it} + \beta_5 BGD * LEV_{it} + \beta_6 FS * LEV_{it} + \beta_7 AGE_{it} + \mu_{it} \dots \dots \dots 1$$

ROA= Return on Assets

BID= Board Independence

BGD=Board Gender Diversity

FS= Firm Size

LEV = Leverage

AGE=Age of firm

$\beta_0 - \beta_7$  estimated parameters

$\mu_t$  – stochastic error term

### 4. Results and Discussions

**Table 1: Descriptive Statistics**

	ROA	BID	BGD	FS	LEV	FAG
Mean	0.245	10.849	6.444	7.665	0.650	31.786
Median	0.115	11	6	7.702	0.762	37
Maximum	3.718	17	16	7.702	0.7623	37
Minimum	-0.198	4	0	5.507	-12.550	3
Stand Dev.	0.5013	2.882	2.358	0.9012	1.355	14.379
Observation	126	126	126	126	126	126

**Source: Authors' Computation (2023)**

The results from the descriptive statistics indicate that the ROA has an average value of 0.245, a median of 0.115, a max. of 3.718, and a min. of -0.198. As regards the independent variables, BIN and BGD exhibit mean, median, maxi., and min. values of 10.849, 11, 17, and 4, respectively. The max. and min. values for FS and LEV were found to be (7.702, 5.507) and (0.762, -12.55) respectively. Whereas their mean and median values are (7.665, 0.650) and (7.702, 0.762) correspondingly. The control variable FAG has a mean, median, max and min. values of (31.786, 37, 37 and 3) respectively.

**Correlation Analysis**

**Table 3: Correlation and test of Multi-collinearity**

	<b>ROA (1)</b>	<b>BID (2)</b>	<b>BGD (3)</b>	<b>FS (4)</b>	<b>LEV (5)</b>	<b>FAG (6)</b>	<b>VIF</b>	<b>1/VIF</b>
(1)	1.000							
(2)	-0.0317	1.000					2.62	0.381
(3)	0.0764	0.5281	1.000				1.69	0.591
(4)	0.2152	0.5167	0.1615	1.000			1.68	0.597
(5)	0.2483	0.2297	0.0719	0.3356	1.000		1.30	0.771
(6)	-0.0109	0.4057	0.0848	0.3385	0.0880	1.000	1.06	0.941

**Source: Authors' Computation (2023)**

The correlation analysis table's results revealed a slight negative relationship between BIN and ROA, as indicated by a coefficient of -0.0317. Conversely, BGD exhibited a weak positive correlation of 0.0764 with ROA. Furthermore, FS and LEV showed a positive connection with ROA, reflected in coefficient values of 0.2152 and 0.2483. The control variable, FAG, demonstrated a minor negative correlation with ROA, represented by a coefficient value of -0.0109. These findings suggest that there is no significant multicollinearity among the explanatory variables, allowing for the isolation of each variable's impact in the regression equation. The VIF values in the table, ranging from 1.06 to 2.62, confirm the absence of multicollinearity among the factors under examination.

**Table 3: Model Regression Diagnostic and Specification Test Results**

<b>Test</b>	<b>P-value</b>	<b>Remarks</b>
F-test	0.0002	Panel regression is preferred to pooled OLS
Breusch pagan Heteroscedasticity test	0.3639	There is no heteroscedasticity

**Source: Authors' Computation (2023)**

**Panel Regression Result**

**Hypothesis:** Leverage does not moderate the relationship between firm attributes and financial performance of Nigeria listed consumer goods firms.

**Table 5: Estimated Panel Regression Analysis Results**



Variables	Coefficient	Std. Error	T-statistics	Prob.
C	0.632	0.6861	0.92	0.358
BID	0.265	0.2123	2.12	0.034
BGD	0.036	0.0332	1.09	0.276
FS	0.367	0.2211	2.03	0.042
LEV	-0.108	0.0327	-3.30	0.0009
LEV*BID	0.453	0.324	2.23	0.026
LEV*BGD	0.262	0.105	2.08	0.038
LEV*FS	0.2201	0.115	2.12	0.034
FAG	-0.00083	0.0033	-0.25	0.803
R-square	0.62			
F-Statistics	7.54			
Prob>F	0.000			

**Source: Authors' Computation (2023)**

The panel regression table presents the results of the analysis regarding the moderating effect of leverage on the relationship between firm attributes and the financial performance (FP) of listed Nigerian consumer goods firms. The analysis revealed that BID and FS exhibit a positive and statistically significant relationship with ROA, as indicated by the t-statistics and p-values of (2.12, 0.034) and (2.03, 0.042), respectively. This suggests that a higher number of independent board members in the company and a larger firm size are connected with improved FP in consumer goods firms. Conversely, BGD was found to have no significant connection with ROA, with a t-statistic and p-value of (1.09, 0.276). This implies that gender diversity does not necessarily guarantee enhanced financial performance. Furthermore, LEV was identified to have a negative and significant effect on ROA, with a t-statistic and p-value of (-3.30, 0.0009). This suggests that lower levels of leverage used to finance a firm are associated with higher financial performance, and vice versa. The control variable, FAG, showed no significant relationship with ROA.

The outcomes also indicate that leverage has a positive and significant moderating effect on the relationship between BIN, BGD, FS, and ROA, as reflected in the t-statistics and p-values of (2.23, 0.026), (2.08, 0.038), and (2.12, 0.034). Therefore, leverage exerts a positive moderating impact on the connection between firm attributes and financial performance. This implies that improved firm attributes influence the organization's decisions on leverage, subsequently enhancing firm performance.

## Discussion of Findings

The extent of leverage within a firm can influence how various firm attributes impact its financial performance. In this research, it was determined that board independence exhibited a positive and significant connection with financial performance. Ebiaghan (2020) supported these findings by noting that the presence of independent directors, especially those with relevant financial expertise, fosters objectivity and enhances the effectiveness of financial oversight. This aligns with the results of studies conducted by Coles et al. (2001), Oyewale et al. (2016), and Owolabi et al. (2021), while Mohapatra (2016) found that outside directors had an insignificant impact on financial performance. On the other hand, Almanian (2016) identified a negative relationship between board independence and financial performance. In addition, it was observed that board gender diversity had no significant effect on financial performance. This suggests that the gender

diversity of the board does not inherently lead to improved firm performance. This finding is consistent with the research conducted by Manurung (2022) and in contrary Ujumwa, Nwakoby, and Ugbam (2012) found a negative influence on the connection between board gender diversity and ROA. However, it's important to note that Rizvi et al. (2023) contradicted these findings by asserting that board gender diversity can enhance decision-making processes, improve risk management, and lead to better performance outcomes.

Furthermore, it was determined that firm size has a positive and significant influence on ROA. This indicates that larger firms are more likely to capitalize on economies of scale, gaining increased negotiating power with their clients and suppliers, ultimately leading to better performance. This aligns with the results of Colombelli et al. (2014), Efuntade et al. (2020), Foyeke et al. (2014), Mboi et al. (2018), Jubri and Idris (2022), Serrasqueiro et al. (2008), and Ulil et al. (2013). In contrast, the research by Wahab et al. (2022) found no noteworthy relationship between firm size and financial performance. Aza (2018) discovered a negative impact on the connection between FSZ and FP. Moreover, the study's results revealed that firm age does not exert any significant effect on ROA. This aligns with the findings of Wahab et al. (2022), while, in contrast, Colombelli et al. (2014) asserted that firm age has an adverse effect on FP. Mboi et al. (2018) found that firm age has a positive and significant effect on FP.

However, the findings regarding the moderating impact of leverage on the relationship between firm attributes and the financial performance of listed consumer goods firms in Nigeria revealed that leverage exerts a positive and significant moderating influence on the connection between board independence, board gender diversity, firm size, and ROA. This indicates that leverage has a constructive and substantial effect on the relationship between firm attributes and FP. In this context, highly leveraged firms may experience varying effects of firm attributes on financial performance when compared to firms with lower levels of leverage. When certain attributes are favourable, highly leveraged firms may see greater improvements in financial performance, but they may also encounter more significant declines in performance during adverse conditions. Also, independent directors play a pivotal role in ensuring that the management team makes decisions related to leverage in the best interests of the firm and its shareholders, ultimately enhancing overall firm performance. More so, board gender diversity introduces a wider range of perspectives, skills, and experience into decision-making processes regarding leverage, which, in turn, can lead to improved profitability. It's worth noting that larger companies, due to their greater asset base and perceived lower risk, may have increased access to debt capital and might employ higher leverage ratios compared to smaller firms.

The results obtained in this study find support from the research of Kamal et al. (2022), Mboi et al. (2018), and Musa et al. (2016), all of which highlighted the impact of firm attributes on financial performance and their potential influence on financial leverage. In contrast, Kok, Lau, and Yip (2023) uncovered that the leverage of firms with low financial performance (FP) is negatively affected by the existence of independent directors. Nevertheless, this negative effect reduces as firm profits or financial performance (FP) increase.

## 5. Conclusion and Recommendations

The connection between firm attributes and financial performance refers to the link between various characteristics of a firm and its financial outcomes. This research examined how leverage

moderates this relationship in the context of listed consumer goods firms in Nigeria. Firm attributes play a pivotal role in determining the success or failure of a company. A company with strong and well-managed specific attributes is more likely to perform better than one with haphazard attributes, as emphasized by Jibril and Idris (2022). Robust firm attributes not only enhance financial performance but also ensure that decisions regarding leverage are made in the best interests of the company and its shareholders. The findings of this study suggest that firm attributes indeed have the tendency to influence the FP of the listed selected firms in Nigeria. Specifically, board independence (BIN) and firm size (FS) were found to have a significant positive impact on ROA, while board gender diversity (BGD) is an important firm attribute that can influence financial performance (FP), although it was not statistically significant in relation to ROA.

In addition, this study revealed that leverage has the potential to positively moderate the relationship between firm attributes and financial performance. The study therefore concludes that firm attributes have a noteworthy influence on financial performance and it also concludes that leverage have a significant moderating effect on the connection between firm attributes and financial performance. In light of these findings, the following recommendations were offer by this study:

- i. Firms should aim to have a significant number of independent directors on their boards. These independent directors are better equipped to make decisions regarding leverage that are in the best interest of the company. They can also serve as a counterbalance to the management's inclination for more aggressive financing strategies, thereby helping to mitigate the risk of excessive debts.
- ii. It is advisable for firms to promote diversity on their boards. This diversity can bring a broader range of perspectives, skills, and experience to decision-making processes related to leverage, ultimately leading to improved profitability.
- iii. Firms regardless of their size and age, should exercise caution when utilizing debt financing. Prudent debt management is crucial to ensure the sustainable financial health of the firm.

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