

BOARD ATTRIBUTES AND FINANCIAL LEVERAGE OF LISTED COMMERCIAL BANKS IN NIGERIA

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ABSTRACT

This study ascertained the effect of board attributes on financial leverage of listed deposit money banks in Nigeria for the period of eleven (11) years spanning from 2012 to 2022. Gender diversity and age diversity were used to proxy board attributes while debt-to-equity ratio was used to measure financial leverage. In line with the objectives of the study, two hypotheses were formulated. Ex-Post facto research design was employed. Thirteen (13) listed deposit banks constituted the sample size of this study. Secondary data were extracted from the annual reports and accounts of the sampled firms and were analysed using E-Views 10.0 statistical software. The study employed both descriptive and inferential statistical. The inferential statistics was applied using Pearson correlation and Panel Least Square (PLS) regression analysis. Findings from the empirical analysis showed that gender diversity has a significant and positive effect on debt to equity ratio ($\beta_1 = 10.55505$; $P\text{-value} = 0.0000$); Age Diversity has a significant and positive effect on debt to equity ratio ($\beta_1 = 0.073849$; $P\text{-value} = 0.0136$). Conclusively, gender-diverse and age-diverse boards are better equipped to assess and manage financial risks, leading to more strategic and balanced decisions regarding capital structure and leverage. The study recommended that since gender-diverse boards influences the financial leverage of firms through better monitoring which is likely to increase confidence and encourage ownership by uninformed investors, hence, there is need for more female directors on the Board.

Key words: Age Diversity, Board Attributes, Debt-To-Equity Ratio, Financial Leverage, Gender Diversity

1. INTRODUCTION

In today's business corporations, employees and top management not only become increasingly diverse in terms of gender, age, and nationality, but also in terms of tenure, experience, educational background and socioeconomic status (Islam, French & Ali, 2022). A reason for this increased importance of diversification can be found in the area of corporate governance, stressing the importance of board diversity. Nowadays, stakeholders such as shareholders, investors and inquisitive readers will almost certainly find the heading 'corporate governance' in every annual report. Corporate governance "involves a set of relationships between a company's management, its board, its shareholders and other stakeholders (Affes & Jarboui, 2023). Political, social and business entities are increasingly

calling for demographically diversified boards. This caused developed countries like the United States, Australia and many European countries to take measures in order to influence corporate governance, focusing mainly on increasing diversity of the board. One prime example is the implementation of gender quota laws for boards by governments in order to change the level of diversity (Rixom, Jackson & Rixom, 2023). In 2003, Norway became the first country in the world to introduce a gender quota that at least 40% of the company board be composed of women (Garcia-Blandon, Argilés-Bosch, Ravenda & Rodríguez-Pérez, 2023). Also, Germany imposed a new law that requires women to hold 30% of the top board seats as of January 2016. The Netherlands has introduced a 'target quota' of 30% (Homan, 2022). There are no specific legal requirements for gender diversity in the Nigerian legal system except for regulations issued by the Central Bank of Nigeria (CBN), the Securities and Exchange Commission (SEC) Code of Corporate Governance, and the 2018 Nigerian Code of Corporate Governance (CCG). CBN regulations mandate a minimum of 30 percent female representation on boards of Nigerian commercial banks, the SEC Code recommends that publicly listed companies consider gender when selecting board members and the CCG encourages the board to set diversity goals and to be mindful of them when filling board vacancies. However, the SEC and CCG codes do not prescribe gender quotas (Musa, 2023).

In contemporary corporate governance discussions, the composition of corporate boards has garnered significant attention due to its potential impact on organizational performance and decision-making processes (Dawood, ur Rehman, Majeed & Idress, 2023). The diversity of board attributes, including gender diversity and age diversity, has emerged as a focal point of research interest, with scholars and practitioners alike exploring how these attributes influence various aspects of corporate behaviour and outcomes (Fernández-Temprano & Tejerina-Gaite, 2020). The governance structure of a firm, including the composition of its board of directors, plays a crucial role in shaping its strategic direction, risk management practices, and financial policies. Traditionally, corporate boards have been characterized by homogeneity, often comprising predominantly older male executives with similar backgrounds and perspectives. However, in recent years, there has been a growing recognition of the importance of diversity in boardrooms, both in terms of demographic attributes such as gender and age, as well as in terms of cognitive diversity arising from different professional experiences and cultural backgrounds (Samara, Nandakumar, O'Regan & Almoumani, 2023). Financial leverage, a fundamental concept in corporate finance, refers to the use of debt financing to supplement equity in funding a firm's operations and investments (Arhinful &

Radmehr, 2023). It is commonly measured as the ratio of debt to total capital employed by the firm. The decision to employ financial leverage involves a trade-off between the benefits of increased financial flexibility and the costs associated with higher debt obligations, including interest payments and the risk of financial distress (Olulu-Briggs, 2024). The composition of a corporate board, particularly in terms of gender and age diversity, can influence the firm's approach to financial leverage (Javer, 2020). Gender diversity on boards has been linked to enhanced decision-making processes and a broader range of perspectives. Iryanti, Mawardi, Muharam and Wahyudi (2023) suggests that companies with greater gender diversity on their boards may exhibit more cautious financial policies, including lower levels of financial leverage. This cautious approach may stem from a desire to mitigate risks and promote long-term sustainability, as diverse perspectives can lead to more thorough consideration of potential consequences.

Conversely, age diversity on boards introduces a mix of experiences, skills, and viewpoints, which can also impact financial decisions (Janahi, Millo & Voulgaris, 2023). Older board members may bring extensive industry knowledge and risk aversion, potentially leading to conservative financial strategies with lower leverage levels. In contrast, younger board members may advocate for more aggressive financial approaches, including higher leverage, to capitalize on growth opportunities and innovation (Abdullah & Ku Ismail, 2017). Thus, understanding how gender and age diversity on corporate boards influence financial decision-making is crucial for stakeholders seeking to optimize governance structures and enhance firm performance.

The main objective of this study is to ascertain the effect of board attributes on financial leverage of listed commercial banks in Nigeria. The specific objectives were to:

- i. determine the effect of gender diversity on debt to equity ratio of listed commercial banks in Nigeria.
- ii. evaluate the effect of age diversity on debt to equity ratio of listed commercial banks in Nigeria.

Based on the objectives of this study the following null hypotheses were tested:

- H_{01} : Gender diversity has no significant effect on debt to equity ratio of listed commercial banks in Nigeria
- H_{02} : Age diversity has no significant effect on debt to equity ratio of listed commercial banks in Nigeria.

2.1 LITERATURE REVIEW

2.1.1 Board Attributes

Board attributes refer to the characteristics, composition, and behaviors of corporate boards that contribute to effective governance and organizational performance (Mathew, Ibrahim & Archbold, 2016). The concept encompasses a broad range of factors, including the diversity of board members, their expertise, independence, leadership qualities, and decision-making processes. Understanding and optimizing board attributes are essential for enhancing board effectiveness, fostering accountability, and driving strategic decision-making within organizations (Emeka-Nwokeji, 2019). One key attribute of an effective board is diversity. Diversity in terms of gender, ethnicity, age, professional background, and skills can bring varied perspectives and insights to board discussions. Diverse boards are better equipped to understand and respond to complex business challenges, innovate, and make informed decisions (Oziegbe & Ogbodo, 2021). By incorporating diverse viewpoints, boards can mitigate groupthink, enhance creativity, and improve decision-making outcomes. Moreover, diverse boards are more representative of the stakeholders they serve, enhancing legitimacy and trust in the organization. Also, decision-making processes and governance practices are critical attributes that shape board effectiveness. Boards that adopt transparent, inclusive, and well-defined decision-making processes ensure that key issues are deliberated thoroughly and decisions are made in a timely manner.

Effective governance practices, such as regular board evaluations, succession planning, and risk oversight mechanisms, help boards identify areas for improvement, mitigate potential risks, and enhance board performance over time (Naseem, Xiaoming, Riaz & Rehman, 2017). Moreover, boards that embrace principles of good governance, such as integrity, accountability, and transparency, are able to build trust with stakeholders and sustain long-term value creation.

2.1.2 Gender Diversity

Gender diversity is equitable or fair representation of people of different genders. It most commonly refers to an equitable ratio of men and women (Naveed, Voinea, Ali, Rauf & Fratostiteanu, 2021). Gender diversity is the proportion of male and female in companies or institutions. Gender diversity focuses on the percentage and number of women on boards (Beji, Yousfi, Loukil & Omri, 2020). Board gender diversity stems from the presence of women on board to the percentage representation of women on the board of a corporate

organization (Boukattaya & Omri, 2021). A board with female members is more able to integrate the interest of multiple stakeholders, including employees, customers, suppliers and the communities with the performance-based interests of shareholders (Harakeh, El-Gammal & Matar, 2019). Gender diversity is advantageous to firms as women are generally risk-averse and help mitigate uncalculated risks male dominated boards might be skewed to take.

Marinova, Plantenga and Remery, (2016) showed that as female representation on boards increased, the level of corruption in their sample companies declined. It also increases the boards' ability to monitor management more objectively as women ask hard questions that their male counterparts might not be comfortable to ask. A gender-diverse workforce provides easier access to resources, such as various sources of credit, multiple sources of information, and wider industry knowledge. Gender diversity helps companies attract and retain talented women (Yaseen, Iskandrani, Ajina & Hamad, 2019).

2.1.3 Age Diversity

Age diversity is the acceptance of employees of different ages in the workplace (Oleksandr, Shuxing & Mao, 2018). Age diversity is an acceptance of different ages in a professional environment. Companies can take measures to adjust to an aging population and prevent ageism in the workplace. By creating an age diverse workplace, employers encourage a productive and inclusive work culture (Wu, Triana & Richard, 2021). The implementation of age-diversity practices requires the organization to assume a proactive stance in hiring, promoting, and retaining workers of all ages, and also educating managers about leading age diverse workforces (Rego, Vitória, Cunha, Tupinambá & Leal, 2017). Age diversity practices are designed to create an environment where all workers, regardless of their age, can fit it and be accepted, which makes the organization attractive to future candidates. Due to their flexibility, these practices can cope with the great complexity of the different needs and goals of an age-diverse workforce, as well as remove potential age barriers (Elgadi & Ghardallou, 2021). Talavera, Yin and Zhang (2018) evidenced that the benefit of age diversity is that it enables workers of different ages to collaborate, share knowledge and support each other in complementary ways. Age diversity has the potential to make a firm's productivity greater than what the sum of its workers' individual productivities would suggest.

2.1.4 Financial Leverage

Financial leverage, in the realm of corporate finance, refers to the use of debt financing alongside equity financing to fund a company's operations and investments (Nworie & Mba,

2022). It represents the extent to which a firm relies on debt to finance its assets and operations compared to its use of equity. Financial leverage is often measured using various ratios, such as the debt-to-equity ratio, debt-to-assets ratio, or the interest coverage ratio. These ratios provide insights into the proportion of a company's capital structure that is financed by debt relative to equity (Ramalho & da Silva, 2013). While debt can offer advantages such as tax deductibility of interest payments and amplification of returns on equity, it also brings certain risks. High levels of financial leverage can increase a company's financial risk and susceptibility to economic downturns or changes in interest rates. Excessive debt obligations can also strain cash flows and hinder financial flexibility, potentially leading to financial distress or bankruptcy if not managed prudently. Therefore, the decision to utilize financial leverage involves a trade-off between the benefits of increased financial flexibility and the costs associated with higher debt obligations and risk (Nworie, Obi, Anaike & Uchechukwu-Obi, 2022). Firms must carefully evaluate their capital structure using debt ratios and consider factors such as their risk tolerance, growth prospects, and the prevailing economic environment when determining the appropriate level of financial leverage to optimize their financial performance and sustainability (Ramalho & da Silva, 2013).

2.1.7 Debt-to-Equity Ratio

The debt to equity ratio is a fundamental financial metric used by investors, analysts, and managers to assess a company's capital structure and financial health. It provides useful hints about the extent to which a company relies on debt financing compared to equity financing to fund its operations and investments (Aggreh, Nworie & Abiahu, 2022). Total debt typically includes long-term debt, short-term debt, and any other liabilities that require regular interest payments. Total equity encompasses shareholders' equity, including common stock, retained earnings, and additional paid-in capital. A high debt to equity ratio indicates that a company relies heavily on debt financing, which may increase financial risk due to higher interest payments and potential liquidity constraints. Conversely, a low debt to equity ratio suggests a conservative capital structure with a greater reliance on equity financing, which may offer greater financial stability but could limit growth opportunities (Aggreh, Nworie & Abiahu, 2022).

2.2 Theoretical Framework

2.2.1 Agency Theory

Agency theory, propounded in the 1970s by economists Michael C. Jensen and William H. Meckling, emerged as a seminal framework for understanding the principal-agent relationship within organizations (McColgan, 2001). Initially developed in the context of corporate governance and executive compensation, agency theory has since been applied across various disciplines, including finance, management, and organizational behavior. Agency theory posits that conflicts of interest arise between principals (owners or shareholders) and agents (managers or executives) due to divergent goals, information asymmetry, and agency costs. The theory delineates the principal-agent relationship as a contractual arrangement wherein principals delegate decision-making authority to agents to act on their behalf. However, agents may prioritize their self-interests over those of the principals, leading to agency problems and inefficiencies (McColgan, 2001).

In line with agency theory, gender and age diversity on corporate boards introduce additional layers of complexity to the principal-agent relationship by diversifying the composition of decision-makers and potentially altering the dynamics of power and influence within organizations. The presence of diverse perspectives stemming from gender and age diversity may influence the behaviour of corporate boards in mitigating agency problems and optimizing financial decisions, including those related to financial leverage (Hindasah & Harsono, 2021). Gender-diverse boards tend to exhibit greater diligence in risk management and governance practices, potentially leading to more conservative financial policies and lower levels of financial leverage to safeguard shareholder interests (Chen, Ni & Tong, 2016). Similarly, age-diverse boards may bring a range of experiences and risk preferences, which could shape the board's approach to financial leverage, balancing the pursuit of growth opportunities with prudent risk management practices.

2.3 Empirical Review

Bazhair (2023) determined whether board gender diversity influence capital structure decisions of Saudi firms. Generalized method of moments framework (GMM) was applied on a balanced panel of 100 Saudi non-financial listed firms covering the period from 2010 to 2019. The research found that inclusion of women on the board does not significantly affect the firms' debt ratio.

Ezeani, Kwabi, Salem, Usman, Alqatamin and Kostov (2023) examined the effect of female directorship on debt to asset ratio among firms in UK, Germany and France. Using 2690 firm-year observations for 2009–2018, the regression analysis showed that proportion of women directors negatively affects capital structure decisions of the firms.

Iryanti, Mawardi, Muharam and Wahyudi (2023) examined the relationships between gender diversity in the boardroom and debt. The research was conducted based on panel data from non-financial enterprise listed on the Indonesia Stock Exchange for the 2015-2020 period. The study results propose that board gender diversity has a negative impact on capital structure.

Jerg (2022) analyzed the effect of board gender diversity on capital structure and the impact of a change in CEO gender on leverage. Thus, S&P1500 companies are analyzed with a panel regression and difference-in-difference analysis considering complementary propositions of gender theories. The results show a positive relation between board gender diversity and leverage ratio.

Amin, Rehman, Ali and Mohd Said (2022) investigated the effect of corporate governance on capital structure using a sample of 2062 firm-year observations of 226 non-financial firms listed on the Pakistan Stock Exchange (PSX) from 2008 to 2019. Multiple regression analysis was conducted which revealed that board gender diversity is positively associated with firm's leverage.

Aljughaiman, Albarrak, Cao and Trinh (2022) examined the role of female directors on firm cost of equity in the context of US-listed firms. Using a dataset of 4619 non-financial firm-year observations covering the period of 2008–2019, it was found that firms with female directors on boards are likely to exhibit a lower cost of equity, through relying on a less risky financing decision.

Ben Saad and Belkacem (2022) conducted a study to explore the indirect relationship between board gender diversity and capital structure decisions of French non-financial listed companies spanning the period from 2006 to 2019. Structural equations modeling conducted revealed that gender diversity on the board reduces capital structure through its negative influence on risk-taking behaviour.

Sun, Ahmad, Tahir and Zafar (2022) explored the role of gender diversity in debt financing choices among Chinese listed firms. The study used the Chinese listed firm's data from 1991 to 2022 from the Chinese Stock Market return. The study used the fixed effect regression analysis and revealed that gender diversity positively affects debt financing among Chinese firms.

García and Herrero (2021) examine whether the gender diversity of the board affects firms' capital structure and likelihood of bankruptcy. For a sample of European firms over the period 2002 to 2019, it was found that the percentage of women directors is negatively related to leverage.

In their study, Ehikioya, Omarkhanlen, Omodero and Isibor (2021) investigated the impact of board gender diversity on the capital structure of companies listed on the Nigerian Stock Exchange from 2015 to 2019. They employed the fixed effects regression method to analyze panel data from 93 randomly selected quoted firms in Nigeria. The empirical analysis revealed a positive correlation between board composition and CEO duality with the capital structure of the quoted firms in Nigeria.

3. METHODOLOGY

This research employed an Ex-post Facto research design to investigate the factors associated with certain occurrences, conditions, events, or behaviors by analyzing past events or existing data for potential causal factors (Brooks, 2019; Nworie, Okafor & John-Akamelu, 2022). Specifically, this study relied on secondary data obtained from publications of the Nigerian Exchange (NGX) Group, fact books, and the annual reports and accounts of selected listed commercial banks. To determine the age of the directors, their birth year was calculated by subtracting the year of the annual report from the year of their birth. The directors' birth year information was sourced from the corporate affairs commission (CAC 7) form, specifically the appointment of director section.

The study population comprised fourteen (14) listed commercial banks in Nigeria as of December 31, 2022. These banks included Access Bank Plc, Eco Bank Plc, FCMB Bank Plc, Fidelity Bank Plc, First Bank Plc, Guaranty Trust Bank Plc, Jaiz Bank, Stanbic IBTC Plc, Sterling Bank Plc, Union Bank Plc, United Bank of Africa Plc, Wema Bank Plc, Zenith International Plc, and Unity Bank Plc. Purposive sampling technique was utilized to select

commercial banks with up-to-date and complete annual reports and accounts for the study period (2012-2022). Consequently, the sample size comprised thirteen (13) listed commercial banks that were continuously listed and actively trading on the floor of the Nigerian Exchange (NGX) Group from January 1, 2012, to December 31, 2022, and whose financial statements were consistently submitted to NGX for the study period. These banks included Access Bank Plc, Eco Bank Plc, FCMB Bank Plc, Fidelity Bank Plc, First Bank Plc, Guaranty Trust Bank Plc, Stanbic IBTC Plc, Sterling Bank Plc, Union Bank Plc, United Bank of Africa Plc, Wema Bank Plc, Zenith International Plc, and Unity Bank Plc.

This study adapted and modified the model of Borlea, Achim and Mare (2017):

$$ROCE = \beta_0 + \beta_1 BDS_{it} + \beta_2 FD_{it} + \beta_3 GDV_{it} + \mu_{it} \quad \text{equ (i)}$$

Where:

BDS = Board Size

FD = Foreign Directorship

GDV = Gender Diversity

ROCE = Return on Capital Employed

In line with the adapted model, the following equations were formulated:

$$DER_{it} = \beta_0 + \beta_1 GDV_{it} + \mu_{it} \quad \text{Eqn 1.}$$

$$DER_{it} = \beta_0 + \beta_1 AGD_{it} + \mu_{it} \quad \text{Eqn 2.}$$

Where:

β_0 = Constant term (intercept)

β_{it} = Coefficients of Board Diversity for bank i in period t

μ_{it} = Error term/unexplained variable(s) of bank i in period t

DER_{it} = Debt to Equity Ratio of bank i in period t

GDV_{it} = Gender Diversity of bank i in period t

AGD_{it} = Age Diversity of bank i in period t

i = individual banks (1,2,...13)

t = time periods (1,2,3,... 11)

In this study, Descriptive Statistics were utilized to succinctly present the mean, median, kurtosis, skewness, maximum, and minimum values of the variables. Additionally, Inferential Statistics were employed with the assistance of E-Views 10.0. Panel Least Square (PLS) regression analysis was utilized to forecast the value of the dependent variable based on the independent variable's value.

Table 1 Variables Definition and Measurement Units

Variable Type	Indicators	Variable Symbols	Definition and Measurement
Independent Variable (Board Diversity)			
	Gender Diversity	GDV	$\frac{\text{Number of Women on Board}}{\text{Total Number of Directors on Board}}$
	Age Diversity	AGD	$\frac{\text{No. of Directors} \leq 50 \text{ years}}{\text{Total Number of Board Members}}$
Dependent Variable			
	Debt to Equity Ratio	DER	$\frac{\text{Total Debt}}{\text{Total Shareholders' Equity}}$

Source: Aurelian, Dumitrescu, Micu, and Lobda (2022); Woschkowiak and Visser, G. (2018)

4. RESULT AND DISCUSSIONS

4.1 Descriptive Analysis

Table 2 Descriptive Statistics of Study Variables

	DER	GDV	AGD
Mean	0.306364	0.022727	0.432727
Median	0.240000	0.020000	0.430000
Maximum	0.650000	0.040000	0.700000
Minimum	0.090000	0.010000	0.310000
Std. Dev.	0.176311	0.009045	0.022401
Skewness	0.712404	0.295146	0.034698
Kurtosis	2.253810	2.467407	1.522251
Jarque-Bera	1.185652	0.289712	1.003089
Probability	0.552763	0.865147	0.605595
Sum	3.370000	0.250000	0.360000
Sum Sq. Dev.	0.310855	0.000818	0.005018
Observations	143	143	143

Source: E-Views 10.0 Descriptive Output, 2024

This study considered descriptive statistics (mean, standard deviation, minimum and maximum) for the panels for 143 observations (that is, 13 banks x 11 years). Table 2 depicts DER of an average of 30.64% with a minimum of 9%, a maximum of 65% and at a standard deviation of 0.176311. Similarly, on GDV, the results showed that on the average the mean value is approximately 2.27%, with a standard deviation of 0.009. The maximum value of GDV for the sample banks is approximately 4% while the minimum is 1%. Averagely, the

mean value of AGD is 43.27% with a maximum value of 43%, minimum of 31% while the standard deviation remain at 0.0224.

4.2 Test of Hypotheses

4.2.1 Hypotheses One

H₀₁: Gender diversity has no significant effect on debt to equity ratio of listed commercial banks in Nigeria

Table 2: Panel Least Square Regression Analysis for Hypothesis I

Dependent Variable: DER

Method: Panel Least Squares

Date: 01/08/24 Time: 13:44

Sample: 2012 2022

Periods included: 11

Cross-sections included: 13

Total panel (balanced) observations: 143

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.057701	0.030623	1.884249	0.0616
GDV	10.55505	1.203560	8.769856	0.0000
R-squared	0.352945	Mean dependent var		0.306675
Adjusted R-squared	0.348356	S.D. dependent var		0.170050
S.E. of regression	0.137272	Akaike info criterion		-1.119823
Sum squared resid	2.656933	Schwarz criterion		-1.078385
Log likelihood	82.06735	Hannan-Quinn criter.		-1.102984
F-statistic	76.91037	Durbin-Watson stat		1.767883
Prob(F-statistic)	0.000000			

Source: E-Views 10.0 Regression Output, 2024

The implication of the regression model is that a unit increase in GDV will cause DER to increase by 10.56 units. Table 2 also shows that GDV is positively and significantly related with the DER of listed commercial banks in Nigeria. The beta coefficient of the variable; β_1 is 10.55505. The slope coefficients indicate that $X_1 = 0.0000 < 0.05$. Thus, a significant and

positive relationship exists between GDV and DER. As evident in table 2, the R^2 is 0.352945. This means that approximately 35.30% of the variations in the sampled commercial banks' debt to equity ratio can be explained by GDV.

4.2.1.1 Decision

The overall regression result with P-value = 0.000000 provides a basis for accepting the alternative hypothesis, which states that gender diversity has significant and positive effect on debt to equity ratio of listed commercial banks in Nigeria at 5% level of significance.

4.2.2 Hypotheses Two

H_{02} : Age diversity has no significant effect on debt to equity ratio of listed commercial banks in Nigeria.

Table 3: Panel Least Square Regression Analysis for Hypothesis IV

Dependent Variable: DER

Method: Panel Least Squares

Date: 01/08/24 Time: 14:30

Sample: 2012 2022

Periods included: 11

Cross-sections included: 13

Total panel (balanced) observations: 143

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011540	0.014061	0.820695	0.4132
AGD	0.073849	0.029563	2.498036	0.0136
R-squared	0.142381	Mean dependent var		0.043716
Adjusted R-squared	0.135589	S.D. dependent var		0.068658
S.E. of regression	0.067425	Akaike info criterion		-2.541720
Sum squared resid	0.641001	Schwarz criterion		-2.500282
Log likelihood	183.7330	Hannan-Quinn criter.		-2.524882
F-statistic	6.240184	Durbin-Watson stat		1.721626
Prob(F-statistic)	0.013637			

Source: E-Views 10.0 Regression Output, 2024

The implication of the regression model is that a unit increase in AGD will cause DER to increase by 7.38%. Table 5 also shows that AGD is positively and significantly related with the DER of listed commercial banks in Nigeria. The beta coefficient of the variable; β_1 is 0.073849. The slope coefficients indicate that $X_1 = 0.0136 < 0.05$. Thus, a significant and positive relationship exists between AGD and DER. As evident in table 5, the R^2 is 0.142381. This means that approximately 14.24% of the variations in the sampled commercial banks' debt to equity ratio can be explained by AGD.

4.2.2.1 Decision

The overall regression result with P-value = 0.013637 provides a basis for accepting the alternative hypothesis, which states that age diversity has a significant and positive effect on debt to equity ratio of listed commercial banks in Nigeria at 5% level of significance.

CONCLUSION AND RECOMMENDATIONS

The effect of board attributes, particularly gender diversity and age diversity, on financial leverage has become a subject of increasing interest in corporate governance research. This study explored how these attributes influence the debt to equity ratio, a key financial metric indicating a company's reliance on debt financing relative to equity financing. The findings of this study revealed that gender-diverse boards are associated with higher levels of debt relative to equity in a company's capital structure. This result may be attributed to the diverse perspectives and experiences brought by gender-diverse board members. With a broader range of viewpoints and decision-making styles, gender-diverse boards may exhibit increased risk tolerance and a willingness to leverage debt as a strategic financial tool. Additionally, gender diversity on boards has been linked to improved governance practices and decision-making processes, which may contribute to more effective management of debt levels within companies.

Similarly, boards with a diverse range of ages among their members tend to have higher levels of debt relative to equity. This finding underscores the importance of varied experiences and perspectives in shaping financial decisions within organizations. Older board members may bring extensive industry knowledge and risk aversion, which could lead to more conservative financial policies and lower levels of leverage. However, younger board members may advocate for more aggressive financial strategies, including higher leverage, to capitalize on growth opportunities. The presence of age diversity on boards allows for a blend of risk preferences and strategic approaches, resulting in a balanced use of debt and equity financing.

The significant and positive effects of gender diversity and age diversity on the debt to equity ratio can be attributed to the complementary nature of diverse perspectives within corporate governance. Gender-diverse and age-diverse boards are better equipped to assess and manage financial risks, leading to more strategic and balanced decisions regarding capital structure and leverage. Furthermore, diverse boards are often associated with improved board dynamics, communication, and decision-making processes, which enhance the effectiveness of financial management practices.

On the premise of these study findings, the following recommendations were made:

- i. Since gender-diverse boards influences the financial leverage of firms through better monitoring which is likely to increase confidence and encourage ownership by uninformed investors, there is need for more female directors on the Board.
- ii. Sequel to the fact that age diversity positively influences financial leverage, firms should create an environment that will enable workers of different ages to collaborate, share knowledge and support each other in complementary ways, especially as diversity has the potential to make a firm's productivity greater than what the sum of its workers' individual productivities would suggest.

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