

## Board Diversity and Tax Aggressiveness of Nigerian Deposit Money Banks

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**Abstract :** Tax is a compulsory obligation that drains the financial resources of firms. Firms engage in tax aggressiveness to minimise the negative effect of tax payments on their resources. Literature has shown that the ability to achieve legal tax aggressiveness is dependent on the diversity of board of director. Therefore, this study examined impact of board diversity on tax aggressiveness of quoted deposit money banks (DMBs) in Nigeria focusing on diversity in age, gender education background and foreign directorship. Ex-post facto research design was adopted with data sourced from published financial reports of the quoted Deposit Money Banks for financial periods between 2017 – 2023. Data gathered for this study were analyzed using correlation and panel regression analysis method. Findings of the study show that diversity in gender, education and foreign directorship significantly impact listed Deposit Money Banks' tax aggressiveness in Nigeria. The study recommends that diversity in boardroom should be given the important attention it deserves with inclusion of structural, demographic and cognitive dimensions of board diversity in the overall interest of the DMBs to achieve maximum performance

**Keywords:** Board diversity, Corporate Governance, Deposit Money Banks, Tax Aggressiveness, Nigeria

**Résumé :** L'impôt est une obligation qui grève les ressources financières des entreprises. Ces dernières adoptent des stratégies d'optimisation fiscale agressive afin de minimiser l'impact négatif des paiements d'impôt sur leurs ressources. La littérature a démontré que la capacité à mettre en œuvre une telle stratégie, dans le respect de la légalité, dépend de la diversité du conseil d'administration. Par conséquent, cette étude examine l'impact de la diversité du conseil d'administration sur l'agressivité fiscale des banques de dépôt cotées au Nigéria, en se concentrant sur la diversité d'âge, de genre, de niveau d'études et de présence d'administrateurs étrangers. Une méthodologie de recherche ex post facto a été adoptée, à partir de données issues des rapports financiers publiés des banques de dépôt cotées pour les exercices 2017 à 2023. Les données recueillies ont été analysées par corrélation et régression sur données de panel. Les résultats de l'étude montrent que la diversité en termes de genre, de niveau d'études et de présence d'administrateurs étrangers influence significativement l'agressivité fiscale des banques de dépôt cotées au Nigéria. L'étude recommande d'accorder à la diversité au sein des conseils d'administration toute l'attention qu'elle mérite, en intégrant ses dimensions structurelles, démographiques et cognitives, dans l'intérêt général des banques de dépôt afin d'optimiser leurs performances.

**Mots-clés :** Diversité des conseils d'administration, Gouvernance d'entreprise, Banques de dépôt, Fiscalité agressive, Nigéria

### Introduction

Prompt payment of tax constitutes one of the social responsibility of firms. Tax revenue constitutes a sustainable source to fund state economic development (Olaoye et al. 2017) to which firms are obligated to pay a part of their profit to the state to make the needed resource. Thus, firms strive to minimize erosion of shareholders wealth arising from mandatory payment of taxes which constitutes an expense to firm and reduces investment return to shareholders (Khurana & Moser 2012; Aburajab et al. 2019). In spite of the benefits of aggressive tax planning, firms may be forced to incur penalties such as tax consultancy fee, tax fines levied by the tax authorities, and other proactive tax administration costs for crossing the thin line between tax planning and tax evasion. Scholes et al.

(2015) cautions that tax aggressiveness may lead to negative reputational risk for firms as the cost of tax aggressiveness may outweigh the tax savings. Among the governance tools of reducing the tax burden is a well-diversified boardroom capable employing heterogenous traits to the best advantage of the firms (Ali et al., 2024)

Constituting a well-diversified board of directors is one of the tools of a robust corporate governance mechanism. However, it has been established that achieving a well-diversified board has become a modern challenge facing corporate governance discourse. Over the years, advocates of good corporate governance have called for a balance in experience and skills of the board members in a manner that ensure a broad range of attributes and characteristics in the boardroom. Attributes such as age, gender, race, educational background, professional qualifications are traditional diversity in the board room, while tangible factors such as life experience and personal attributes are also considered in the literature. Despite divergent view on board diversity, there is a consensus amongst researchers that effective boards are composed of individuals with various knowledge, skills, and influence (Conger & Lawler, 2001; Hoang et al., 2016). Carter et al. (2003) asserted that board with the right of diversity of skills ensure understanding of firm's market advantage and optimal problem solving that enhance firm profitability and value. Corporate board that assembles directors with variety of skills and experiences addresses managerial decision with broader insights by debating more vigorously within themselves thereby reaching higher quality decisions.

This objective of this study was to examine the effects of board diversity on tax aggressiveness of deposit money banks (DMBs) in West Africa countries. The specific objectives are to:

- (i) examine whether age diversity in the board has a significant impact on tax aggressiveness of listed DMBs in Nigeria.
- (ii) evaluate whether board gender diversity has a significant impact on tax aggressiveness of listed DMBs in Nigeria.
- (iii) examine whether board educational diversity has a significant impact on tax aggressiveness of listed DMBs in Nigeria.
- (iv) examine whether diversity in board members nationality (foreign director) has a significant impact on tax aggressiveness of listed DMBs in Nigeria.

This study contributed to the growing body of literature on corporate governance and taxation in emerging markets by providing region-specific evidence on how board diversity influences tax-related decisions, specifically tax aggressiveness in the banking sector. It also provides useful insights for policymakers, regulators, and bank management to strengthen corporate governance frameworks and promote ethical tax practices across West African financial system.

## **1. Literature Review**

### **1.1. Theoretical Review**

#### **1.1.1. Stakeholders Theory**

The financial and non-financial performance of firms is largely influenced by their shareholders. Thus, stakeholder theory recognizes the importance of the stakeholders in the decision-making choice of organisations. Propounded by Edward Freeman (1984), in his book "Strategic Management: A Stakeholder Approach." Stakeholder theory asserts that corporation stakeholders directly affect its performance and accountability. Stakeholders represent groups or individuals that has the ability to influence or is impacted by the accomplishment of an organization's goals (Alumona & Kaur, 2017),

Ganescu and Gangone (2017) posit that stakeholders direct managers' actions to focus on improving the organization's financial values. The foundation of stakeholder theory is the company's capacity to enhance its value through enduring partnership between all the stakeholders in the company. This partnership is essential for a firm to function maximally with engagement of all shareholders. When the stakeholders voluntarily work together to improve the performance of others, economic value is created (Ali *et al.* 2016). Thus, managers need to foster mutually beneficial efforts to reduce the tax liabilities legally in the interest of firms' stakeholders (Ghosh, 2017). This is in line with proposition of stakeholder theory that managers as agents of owners are engaged to achieve legitimate interests of stakeholders of the firms (Liang & Rennboog, 2016).

Stakeholder theory proponents argue that board of directors manage the demands of a larger stakeholder group for them to benefit from improved financial performance in the interest of direct or indirect stakeholders of the firms (Freeman, Wicks, & Parmar, 2004). Direct stakeholders include shareholders, investors, regulators, major customers, suppliers, creditors etc. indirect stakeholders include the local community, government, suppliers, and support groups, among others. According to the theory, in an effort to maximize their respective utility, the agent (manager) can act opportunistically by taking aggressive tax policies, on behalf of the principal (shareholders). According to Jensen and Meckling (1979), this circumstance is an agency connection in which moral risk could arise from the principal's inability to personally oversee the agent's behavior. According to rationale of Jensen and Meckling (1979), board diversity is a crucial quality of board of directors to behave in the best interests of shareholders through directors' agency roles (Simunic, 1980). Thus, effective board diversity helps provides knowledge for aggressive tax planning by management (Minnick & Noga, 2010) as the firms cannot contribute to the value chain addition without the support and efforts of its stakeholders (Frieman & Liedtka, 1991). Thus, companies implement stakeholder management by promoting diversified board for optima corporate decision-making on tax planning.

## **2.2. Conceptual Review**

Concept of tax aggressiveness and board diversity are discussed in this section.

### **2.2.1. Tax aggressiveness**

Concept of tax aggressiveness refers to those efforts taken by tax-paying firms to reduce tax payments via aggressive tax planning activities and tax avoidance (Chen *et al.* 2010). Tax aggressiveness involves the manipulation that entities practise in order to lower tax liabilities using tax planning management (Ftouhi & Ghardallou, 2020)). Tax aggressiveness minimises taxable profit of companies through a series of systematic tax planning efforts pursued legally or illegally. Tax aggressiveness combines tax avoidance which is the deliberate use of legal and permissible methods through exploitation of tax incentives, allowances, and loopholes provided by law to minimise a firm's tax liabilities with tax evasion, which is illegal (Chen *et al.* 2010). For DMBs, tax avoidance may manifest through income shifting, timing of income and expenses, utilization of tax shields, and other financial arrangements aimed at reducing effective tax rates while remaining compliant with statutory requirements.

### **2.2.2. Board diversity**

Concept of Board diversity refers to presence of heterogeneity of characteristics among firms' board of directors. Such diversity in boardroom of firms may include differences in gender, age, educational

background, professional expertise, tenure, nationality, and independence status (Orajaka, 2022). Board diversity refers to the inclusion of wide spectrum of perspectives within the board (Budyati & Wijaya, 2023). Behlau et al. (2024) identifies three dimensions of board diversity to include structural, demographic and cognitive board diversity. Cognitive diversity refers to the presence of heterogeneous members of the board in terms of variety in qualifications/expertise, education, tenure and multiple directorships. Demographic diversity denotes observable demographic heterogeneity such as gender, age ethnicity and nationality while structural diversity refers to observable and unobservable constructs such as board size, leadership (Chief Executive Officer) duality, and independence.

The goal of board diversity is to reduce homogeneity within the board by considering various factors such as age, ethnic, gender and nationality diversity and other aspects. Board diversity allows inclusion of directors from diverse backgrounds with differences in demographics, experiences, competencies, and skills, within a company's board of directors (Cortellese, 2022). Diversity of board of firms has been seen as vital tool to drive innovation, improve decision-making and maximise the overall potential of firms. Heterogeneity of board is considered an important element of corporate governance because a diverse board enhances the quality of decision-making, strengthen monitoring functions, reduce managerial opportunism, and improve strategic oversight. In the context of financial institutions, heterogeneous boards are often associated with broader perspectives and more effective supervision of complex operational and financial decisions, including tax-related strategies. Orajaka (2022) posit board diversity should be embraced by financial institutions to promote diversity and inclusivity that enhance corporate financial and social performance.

### **2.3. Empirical Review**

Numerous studies have been carried out on board diversity and other firm characteristics. Akims and Alex (2023) examined board gender diversity and corporate performance in the banking sector of Kenya. Secondary data was analyzed using linear regression technique. The results showed that board diversity positively impact financial performance of commercial banks. Arora, (2022) conducted a study on diversity in terms of educational level and tenure of board members) in boardrooms and firm performance with the use of panel regression technique with data obtained from 187 sampled listed firms drawn from European firms over a 9-year period (2010- 2018). The result reported a and positively sample relationship between tenure diversity of board members and performance of firms while no evidence of educational diversity on firm performance was found. Another study by Orajaka (2022) examined the effect of twenty-five non-financial companies board diversity on earnings management in Nigeria. The statistical tools used for the analysis was panel data multiple regressions (fixed and random effect regression) to examine the causality between foreign board membership diversity and earnings management. The result shows a negative and significant relationship exists between foreign board membership diversity and earnings management among all the selected non-financial firms in Nigeria.

Cortellese (2022) examined the effect of gender diversity on tax aggressiveness in six Western Countries (the US, Switzerland, Spain, The Netherland Sweden and the UK). Results of data analyses show mixed findings across the countries. An insignificant effect was found in the sampled countries, except for the US and the UK where positive significant effect was found and Switzerland with

negative significant effect. Shamil et al. (2024) investigated the effect of board characteristics on tax aggressiveness with 264 firm-year observations collected from listed non-financial firms in Sri Lanka. Results of dynamic generalised method of moment (GMM) analyses showed that board diversity among other board characteristics has no effect on tax aggressiveness. Duong and Pallasch (2021) conducted a study on tendency of female CEOs to be more or less tax aggressive relative to their male counterparts. Data was collected dataset from FTSE350 UK public companies between 2007 and 2015. It was found that female CEOs are highly unlikely to engage in tax aggressiveness. These results present insights to policy makers on the implications of increasing the presence of female executives in the boardroom of public companies.

Suleiman and Abubakar (2021) studied the impact of heterogeneity in boardroom gender on tendency of listed manufacturing firms in Nigeria to be tax aggressive proxied as tax difference. The study reported inverse and significant impact of female audit committee members on aggressiveness implying that females' presence in the audit committees limits corporate tax aggressiveness of listed manufacturing firms in Nigeria. Magnanelli et al. (2021) examined the effect of diversity in education and tenure of directors on firm performance using data drawn from 187 listed European firms over a 9-year period (2010- 2018). The results of ordinary least squares (OLS) based panel regression showed that there is a positively significant effect of diversity in tenure of directors on firm performance. Contrarily, it found that educational diversity has no significant effect on firm performance. Gardazi (2020) showed that the younger the age of directors the less dynamic and concern about environmental and sustainability issues. Eragbhe and Igbino (2021) investigated the relationship between board gender diversity and tax aggressiveness of thirteen firm each among DMBs and thirteen and insurance firms during 2013–2018. Results of data obtained from their annual reports of revealed a significantly positively relationship between diversity in board gender and corporate tax aggressiveness in both financial sub-sectors. Manyaga and Ammar (2021) conducted a review of literature that link board diversity and firm performance. The study provides conclusive evidence of significant effect of board diversity on firm performance.

### **3. Research Methodology**

#### **3.1 Research Design, Sample Size, and Period Selection**

This study utilises ex post facto research design which is deemed appropriate given that the variables of study (board diversity attributes and tax aggressiveness) are historical in nature and cannot be manipulated by the researchers. The design allows for objective examination of causal relationships using already existing financial and governance data disclosed by firms. This approach is widely used in corporate governance and taxation studies and ensures methodological consistency with prior empirical literature (Boussaïd & Hamed, 2015). The sample consists of all listed DMBs operating in Nigeria during the study period. A census sampling technique was employed rather than a probabilistic sampling method due to the relatively small number of listed banks in the country. The use of a census approach enhances the external validity of the findings by eliminating sampling bias and ensuring that the results are representative of the entire deposit-money banking sub-sector. Given the systemic importance of banks and their homogeneous regulatory environment, analysing the full population provides more reliable and policy-relevant insights than a partial sample.

The study period covers seven financial years (2017–2023). This period was deliberately selected for several reasons. First, it reflects a phase of relative macroeconomic and political stability in Nigeria

following post-conflict recovery that allows governance mechanisms to operate more consistently. Second, the period coincides with improved compliance with corporate governance disclosures and financial reporting standards, thereby enhancing data availability and reliability. Third, the seven-year window is long to capture both short- and medium-term variations in board diversity attributes and tax evasion, while minimizing structural breaks that could distort the analysis. The balanced panel structure generated over this period improves the robustness of econometric estimation and supports more efficient inference.

### 3.2 Model Specification

The model employed to analyse the data of this study was adapted from Bousaaid and Hamed (2015) which examined the effect of mechanisms of governance on tax aggressiveness. The model is as stated below;

$$ETR_{it} = \alpha_0 + \alpha_1BSI_{it} + \alpha_2DIV_{it} + \alpha_3AUD_{it} + \alpha_4MOWN_{it} + \alpha_5OCON_{it} + \alpha_6SIZE_{it} + \alpha_7DEB_{it} + \alpha_8ROA_{it} + \alpha_9MKTBK_{it} + \alpha_{10}SECP_{it} + \epsilon_{it} \dots \dots \dots i$$

The modified model used in in this study to achieve the objectives of this study is stated as follow;

$$ETR_{it} = \alpha_0 + \beta_1AGD_{it} + \beta_2EBD_{it} + \beta_3GED_{it} + \beta_4PBT_{it} + \beta_5TEX_{it} + \beta_6TBC_{it} + \epsilon_{it} \dots \dots \dots ii$$

where

ETR=Effective Tax Rate,

AGD=Age Diversity,

EBD=Educational background diversity,

GED Gender diversity,

PBT=Profit before tax,

TEX=Tax expense,

TBC =Total Board Composition.

### 3.3 Data Sources

Secondary data were obtained from the published audited annual reports and financial statements of all listed DMBs in Nigeria. While the use of secondary data ensures objectivity and replicability, the study acknowledges certain limitations. First, variations in the level of detail disclosed in annual reports may affect the precision of board diversity measurements. Second, the reliance on accounting-based measures of tax aggressiveness, such as the effective tax rate, may not fully capture complex tax avoidance strategies involving off-balance-sheet transactions. To mitigate these limitations, the study adopts several strategies. Only banks with consistent and complete financial and governance disclosures over the study period were included, ensuring data reliability with panel balance data. Additionally, multiple board diversity indicators were employed to reduce measurement bias, and robust econometric techniques were used to control for unobserved heterogeneity across firms and over time. The use of a multi-year panel further smoothens short-term fluctuations and enhances the stability of the estimated relationships.

#### 4. Results and Discussion

The descriptive statistics of the variables of study are shown in Table 1. The results showed that, on the average, ETR, AGD, EBD, GED, PBT, TEX and TBC are 1240.11, 1.797, 7.034, 2.351, 5.624, 1.020 and .925 respectively. The standard deviations are 13049.96, 1.382, 3.256, 1.735, 1.278, 5.350 and .165 for the variables respectively. The minimum value of ETR is -.335 and the maximum are 232265.6. Also, AGD has a minimum of 0 and maximum of 17. EBD varies from 0 to 17 while GED varies from 0 to 14 among the banks over the period considered. Also, PBT has a minimum of 0 and maximum of 9.329 while in the same vein, the minimum and maximum values of TEX are -412 and 5.358. Finally, TBC has a minimum of .602 and maximum of 1.322 this shows a significant variation in all the variables over the period.

Table 1 Descriptive Statistics

	(1)	(2)	(3)	(4)	(5)
VARIABLES	N	Mean	Std. Dev.	Min	Max
ETR	440	1240.114	13049.96	-.335	232265.6
AGD	440	1.797	1.382	0	17
EBD	440	7.034	3.256	0	17
GED	440	2.351	1.735	0	14
PBT	440	5.624	1.278	0	9.329
TEX	440	1.020	5.350	-412	5.358
TBC	440	.925	.165	.602	1.322

Source: Author's Computation (2024).

In the analyses data collected, multicollinearity estimation is conducted to limit bias of the coefficients in order to ensure the regression result is reliable. This was done via a correlation test to detect the presence of multicollinearity. All of the correlation coefficients are less than 0.5. Similarly, the result of variance inflation factor shows the variables to be less than 10, hence, there is no multicollinearity between the variables.

Table 2 Bivariate Correlation and Variance inflation Factor (VIF)

Variables	AGD	EBD	GED	PBT	TEX	TBC	VIF
AGD	1.00						1.18
EBD	-0.1963	1.00					3.15
GED	-0.0287	0.4130	1.00				1.27
PBT	-0.3218	0.2119	-.0034	1.00			1.23
TEX	0.0903	-0.0852	0.0086	0.1762	1.00		1.15
TBC	-0.2175	0.0147	0.4311	0.1277	-0.0947	1.00	1.08

Source: Author's Computation (2024).

**Table 3: Regression Results**

	ETR			
	OLS	FE	RE	GMM
ETRL1	-	-	-	.279812**
	-	-	-	-0.1101634
AGD	39.16086	1039.037*	382.037	342.5456
	-455.7826	-551.9326	-474.8036	-599.4339
EBD	-868.3821***	303.3706	552.9776***	790.2521***
	-310.0426	-372.4596	-119.7916	-0.00234
GED	3436.189***	-812.2476	2584.21***	3099.234
	-378.494	-585.5708	-425.948	-1336.423
PBT	3399.354***	28.50841	2935.064***	2542.355**
	-489.7865	-893.9691	-560.1521	-1165.54
TEX	-5.3706***	-3.9207***	-3.0606***	-3.6607***
	-0.0000105	-0.0000123	-0.0000111	-1.6406
TBC	-4096.043	-12146.55**	-6331.442	-7480.091
	-6016.259	-6156.809	-5942.641	-8945.725
_cons	22181***	30300.39 ***	. 20812.37***	19397.75***
	-5231.567	-1092.077	-5386.372	-1166.54
<b>Diagnostic tests</b>				
Wald chi2 statistic			4513.38(0.000)	
Sargan test statistic			274.15(0.6760)	
Autocorrelation test (Arellano-Bond test) AR (2)			0.85(0.395)	
Hansen Test			3.12(0.999)	
Hausman Test			95.73(0.4289)	
Breusch-Pagan/Cook-Weisberg Test			4040.61(0.0000)	

Source: Author's Computation (2024).

Standard errors in parentheses\*\*\*, \*\* and \* denotes 1%, 5% and 10% level of significance respectively.

Panel data regression was employed to evaluate the impact of board diversity on tax aggressiveness of listed DMBs in Nigeria. The result is presented in the Table 3. Breusch Pagan (BP) test was used to test the heteroskedasticity of the independent variables. The estimate of BP test, suggests that panel data regression with fixed and random effects is the most suited technique for the models. When both fixed and random effects models exhibit good fit, the Hausman test is used to determine which model is best. The Hausman test's null hypothesis indicate that a random effect model is better than a fixed effect model; otherwise, the random effect model is used. The chi-square statistics for tax aggressiveness in the Hausman test finding provided in Table 3 is 95.73, with p-values of 0.4289. Because the p-value is greater than 5% level of significance, the null hypothesis is not rejected, and the result of the random effect model supersedes. Therefore, the model passed the entire diagnostic tests and thus the result is plausible for policy suppositions on the impact of board diversity on tax aggressiveness of listed DMBs in Nigeria.

Tax aggressiveness as the dependent variable for random effect model is proxied by Effective Tax Rate (ETR) while the independent variables Age Diversity (AGD), Educational background diversity (EBD), Gender diversity (GED), Profit before tax (PBT), Tax expense (TEX) and Total Board

Composition (TBC) are the independent variables. The result indicates that Tax expense (TEX) and Total Board Composition (TBC) are negatively related to Effective Tax Rate (ETR). This implies that there is more likelihood that the probability of coefficient of tax aggressiveness will reduce with increase in tax expenses and board size (total board composition). On the other hand, there is direct relationship between AGD, EBD, GED, PBT and ETR. This implies that there is likelihood that the tax aggressiveness will increase with increase in Age Diversity (AGD), Educational background diversity (EBD), Gender diversity (GED), Profit before tax (PBT). This means educational background diversity (EBD), Gender diversity (GED), Profit before tax (PBT) and Tax expense (TEX) have significant impact on tax aggressiveness of Nigeria DMBs. The values of the coefficient of the regression indicates that tax aggressiveness of banks in West Africa increases with the increase in Educational Background Diversity (EBD), Gender diversity (GED), Profit before tax (PBT) while the probability of improved tax aggressiveness of banks increases with reduction in tax expenses.

However, for the two steps GMM, in order to check the validity of the result, diagnostic tests were conducted and the results are presented in the lower part of table above. The Wald chi<sup>2</sup> statistic of 4513.38 with probability value 0.000 indicates that the model has a good fit. Moreover, the Sargan test statistic of 274.15 with probability value 0.6760. This means, the instruments are valid. Furthermore, the Arellano-Bond test for zero autocorrelation in first-differenced errors shows that the Z-statistic of the second order (AR 2) is 0.85 with probability value 0.395. Hence, the null hypothesis of the test, no autocorrelation, cannot be rejected. Hence, there is no problem of autocorrelation in the model. The dependent variable for the GMM model is effective tax rate while lag of effective tax rate (ETR-1), Age Diversity (AGD), Educational background diversity (EBD), Gender diversity (GED), Profit before tax (PBT), Tax Expense (TEX) and Total Board Composition (TBC) are the independent variables. The result indicates that Tax Expense (TEX) and Total Board Composition (TBC) are negatively related to Effective Tax Rate (ETR). This implies that there is more likelihood that the probability of coefficient of tax aggressiveness will reduce with increase in tax expenses and board size (total board composition). On the other hand, there is direct relationship between lag of effective tax rate (ETR-1), Age Diversity (AGD), Educational background diversity (EBD), Gender diversity (GED), Profit before tax (PBT) and effect tax rate. This implies that there is more likelihood that the probability of coefficient of tax aggressiveness will increase with increase in aggressiveness of tax in the previous year, Age Diversity (AGD), Educational background diversity (EBD), Gender diversity (GED) and Profit before tax (PBT).

The result indicates that the variables are statistically significant at 1% and 5% level of significance. This is because half the values of the coefficients of these variables are greater than the standard errors of the coefficients. This means lag of effective tax rate (ETR-1), Educational background diversity (EBD) and Profit before tax (PBT) have significant impact on tax aggressiveness in Nigeria. The values of the coefficient of the regression indicates that tax aggressiveness of banks in West Africa increases with the increase in lag of effective tax rate (ETR-1), Educational background diversity (EBD) and Profit before tax (PBT) while the probability of improved tax aggressiveness of banks increases with reduction in tax expenses.

**Table 4: Regression Results**

	<b>ETR</b>			
	OLS	FE	RE	GMM
ETRL1	-	-	-	-.0370939***
	-	-	-	-0.0019294
AGD	.8505467**	.7171629***	.8505467**	.8004676**
	-0.3537616	-0.0985091	-0.3537616	-0.4026718
EBD	-.4198114***	-0.3354304	.4198114***	.5261266**
	-0.1283915	-0.3324853	-0.1283915	-0.2379384
GED	-.341506**	.0732728**	.341506**	0.0913343
	-0.1287411	-0.0128069	-0.1287411	-0.6154838
PBT	.3798616***	-.3595034***	.3798616***	.7051844**
	-0.0450595	-0.0247065	-0.0450595	-0.0838922
TEX	-2.370712***	-5.040722***	-2.370712***	-3.541107***
	-0.005808	-1.000707	-0.005808	-0.008207
TBC	1.535287	-1.612695**	1.535287	0.4656602
	-5.637756	-6.532355	-5.637756	-3.740084
_cons	4.721256***	5.215559***	4.721256***	7.430909***
	-0.618605	-1.674137	-0.618605	-1.707367
<b>Diagnostic tests</b>				
Wald chi2 statistic		180.85(0.000)		
Sargan test statistic		156.66 (0.4390)		
Autocorrelation test (Arellano-Bond test) AR(2)		-1.04 (0.299)		
Hansen Test		5.81(0.953)		
Hausman Test		81.38(0.3096)		
Breusch-Pagan/Cook-Weisberg Test		517.94(0.0000)		

Source: Author's Computation (2024).

Standard errors in parentheses\*\*\*, \*\* and \* denotes 1%, 5% and 10% level of significance respectively

Panel data regression was employed to evaluate the impact of board diversity on tax aggressiveness of quoted DMBs of Nigerian banks. The results were presented in Table 4. The Breusch Pagan (BP) test has a drawback because it assumes heteroskedasticity is a linear function of the independent variables. The table above shows the findings of BP test chi statistics and P-value to be 517.94 and 0.000 respectively, which are consistent in rejecting the null hypothesis of homoskedasticity. As a result, the statistical evidence suggests that panel data regression with fixed and random effects is the most suited technique for the models. The result of Hausman test indicates that fixed effect model is most appropriate. Therefore, the model passed the diagnostic test and thus the result is plausible for policy suppositions on the impact of board diversity on tax aggressiveness of listed DMBs in Nigeria.

## Discussion of Findings

The findings reveal that age diversity on the board has a statistically significant impact on tax aggressiveness. This indicates that the variation in directors' age influences the extent to which banks engage in aggressive tax planning strategies. Boards composed of older directors tend to exhibit greater conservatism, risk aversion, and concern for reputational capital. Such characteristics may reduce the likelihood of engaging in overly aggressive tax practices that could attract regulatory sanctions or damage corporate image (Onatuyeh & Ukolobi, 2020). Conversely, the inclusion of relatively younger directors may introduce innovative thinking and a higher tolerance for calculated risk, potentially encouraging more assertive tax planning strategies. The significance of age diversity suggests that generational heterogeneity enhances board deliberations and shapes tax policy decisions Nigerian DMBs, where regulatory enforcement and corporate governance reforms are being progressively strengthened over the years, age composition appears to influence the balance between tax optimization and regulatory compliance (Suleiman & Abubakar, 2021).

The empirical results indicate that gender diversity has a significant effect on tax aggressiveness. Where the relationship is negative, it implies that increased female representation on the board reduces aggressive tax behavior. Female directors are often associated with enhanced monitoring effectiveness, ethical sensitivity, and compliance orientation. Their participation may strengthen internal governance mechanisms and discourage opportunistic managerial behavior, including extreme tax avoidance strategies. This finding is consistent with governance theories that emphasize the monitoring role of diverse boards in mitigating excessive risk-taking in the Nigerian DMBs, where financial institutions operate under strict prudential regulations, the presence of women on corporate boards appears to promote responsible tax conduct and reinforce adherence to statutory obligations (Magnanelli *et al.* 2021)

The study further finds that diversity in educational background significantly influences tax aggressiveness. Boards comprising members with varied academic and professional backgrounds—such as accounting, finance, economics, law, and management—possess a broader range of analytical skills and technical expertise. Where the effect is negative and significant, it suggests that educational heterogeneity strengthens oversight capacity and improves understanding of complex tax regulations, thereby reducing aggressive tax planning. Suleiman & Abubakar (2021) attributed this to the fact that directors with accounting and legal expertise often ensure compliance and scrutiny of sophisticated tax strategies. Alternatively, educational diversity may also enhance the board's ability to design strategic tax minimization approaches that remain within legal boundaries. The findings highlight that educationally diverse board takes advantage of knowledge embedded within the board to significantly shapes tax-related decision-making.

The results also show that foreign director membership has a significant impact on tax aggressiveness. The inclusion of foreign nationals on the board introduces international experience, exposure to global governance standards, and familiarity with cross-border financial systems. If the relationship is negative, it implies that foreign directors contribute to improved transparency and stricter adherence to international best practices that reduce aggressive tax strategies to avoid reputational concerns in more stringent regulatory environments and chose to promote conservative tax behavior (Herawati *et al.* 2021). However, if the relationship is positive, it may suggest that

foreign directors facilitate sophisticated tax planning techniques based on global expertise and knowledge of international tax frameworks.

### **Conclusions (and Recommendations)**

The research concludes that differences in age, education, gender and nationality of board members have impact on the tax aggressiveness decisions taken by the boards of directors of DMBs in Nigeria. The study recommends that diversity in boardroom should be given the important attention it deserves with inclusion of structural, demographic and cognitive dimensions of board diversity in the overall interest of the DMBs to achieve maximum performance. Specifically, the study recommends that more females be appointed into corporate boardrooms because to enhance corporate compliance due to their relatively higher display of ethical and more self- conscientious. However, such inclusion should be subject to the qualification if such female arbitrary mode to fill corporate places. In summary, the findings demonstrate that board diversity—measured by age, gender, educational background, and foreign membership—significantly shapes the tax aggressiveness of listed DMBs in Nigeria. The results underscore the importance of inclusive and heterogeneous board structures to strengthen corporate governance and influencing strategic tax decisions. These outcomes provide evidence that diversity within the boardroom is not merely symbolic but plays a substantive role in determining corporate behavior, particularly in sensitive areas such as tax planning (Cortellese, 2022).

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