

BOARD DIVERSITY AND DISCRETIONARY ACCRUALS: A COMPARISON BETWEEN NIGERIA AND GHANA FAMILY-OWNED LISTED FIRMS

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CITATION: Alade, M.E. (2025). Board diversity and discretionary accruals: a comparison between Nigeria and Ghana family-owned listed firms, *Journal of Global Accounting*, 11(2), 209 - 229. Available: <https://journals.unizik.edu.ng/joga>

ABSTRACT

It is now an established concern in academic and professional discourses that majority ownership in family-owned firms confiscate the interest of the minority ownership. Therefore, the study examined and compared the effect of board diversity on discretionary accruals between Nigeria and Ghana family-owned listed firms. Secondary data were sourced from the published annual financial reports of the concerned purposively selected 32 and four listed firms from the Nigerian Exchange Group and Ghana Stock Exchange market respectively. The study covered a seven-year period from 2017 to 2023. The inferential analysis was based on pooled ordinary least square and panel corrected standard error regression. The descriptive analysis results showed the presence of more discretionary accruals practices among listed family-owned firms in Ghana than in Nigeria. Based on inferential analysis, aside structural diversity (board independence) that presents similar effects on discretionary accrual in both countries, other two board traits such as female gender and educational background (financial expertise) present positive but different significant effects on discretionary accruals. Therefore, the study concluded that board peculiarities impact earnings quality (measured using discretionary accrual) among listed family-owned firms in Nigeria and Ghana. Thus, inclusion of more female gender in the board of listed family-owned firms should be done with caution for long time sustainability of listed family-owned firms, while inclusion of more finance and account professionals in the board of the firms should be prioritised as a matter of policy.

Key words: Board Diversity, Discretionary Accruals, Earnings Quality, Family Business, Financial Reporting Quality.

1. INTRODUCTION

Quality of reported earnings of corporate establishments are of utmost importance to the myriad of users of financial reports, whether in developed or developing economies. This is mainly because it informs the ability of investors, financial analysts and other users to make viable economic decision about the firm, and predict the future earnings of the organisation. Thus, preparers of the financial statements strive to meet this crucial need of financial information users. However, it has been established that agency conflict results to application

of discretion in managing corporate earnings through accruals which is capable of affecting corporate's earnings quality (Attia, et al., 2024). This could thereby threatens sustainability of a corporate entity. Whereas, earnings quality, or application of discretion in managing corporate earnings, could only be carried out and executed by the top management of an organisation, consistent with upper echelon theory (Altarawneh, 2022; Schumann et al. 2024). As a case, Hsieh et al. (2018) identified that characteristics of top management team have connection with the level of discretionary accruals among Taiwaness listed firms. The board of a corporate entity is an important established body saddled with the responsibility to make strategic decisions that impact the going-concern of a business. The board has enormous roles to play which could be financial and non-financial. However, in order to showcase their efforts in making good use of the available resources in the interest of all stakeholders, especially during economic downturn, board of directors could explore various accounting options to present an excellent financial performance (Schumann et al. 2024). This results to the use of discretion, particularly accrual reporting, in the application of accounting options, especially under a principle based International Financial Reporting Standards (IFRS). As such, this impacts the quality of earnings reported in the financial statement, thereby leading to changes in reliability and accuracy of the earnings.

For instance, based on data obtained from private manufacturing firms in Indian, Chatterjee (2020) stresses that it is not the independence of the board that reduces earnings management but board quality. According to Yousuf and Aldamen (2021), higher quality earnings are reported in gender diversified boards based on a cross-sectional sample of listed firms obtained from 46 nations. In addition, Tawfik et al. (2023) examined the influence of board mixture on financial reporting quality of 181 quoted companies in the GCC nations with special attention on how family directorship impacts the reporting quality. It was discovered that the presence of more financial expertise in the field of finance and accounting and independent directors in the board increase the financial reporting quality while board gender presents no significant effect as family ownership has antithetical effect on the financial reporting quality. This is a pointer that board dynamics have propensity to influence level of earnings quality of corporate establishments, particularly family-owned listed firms that is under the control of a few individuals. Family-owned firms are businesses of which major control and ownership are with a few individuals who are related by blood. In recent past, studies such as Hashim and Devi (2008), Kim and An (2019), Alhebri and Al-Duais (2020), Burghleh and Al-Okdeh (2020), Bansal (2021), Cherif et al. (2020), Helal (2022) and Purba et al. (2023) among others, have been extended to unearth quality of earnings reported by

family-owned businesses, particularly with recourse to the influence of board composition or quality. For instance, according to Alhebri and Al-Duais (2020), earnings declared by listed family-owned firms in Saudi Arabia is less reliable contrary to the submissions of Andersen (2016) from Sweden, Cascino et al. (2010) from Italy, and Purba et al. (2023) from Indonesia who observed that family-owned listed firms announce earnings of higher quality than non-family counterparts. Furthermore, Duréndez and Madrid-Guijarro (2018) records that power dimension of family firms reduces financial reporting quality while experience enhances conservatism and earnings persistence as culture curbs earnings management among Spanish family small and medium firms. Since extant study has noted that interests of the minority are confiscated by the major shareholders, especially those who equally function at the board (Alhebri & Al-Duais, 2020), then a research quest to exhume the effect of board features on earnings quality disclosed by the family-owned firms is very necessary. This becomes very expedient since it has been confirmed that family businesses contribute immensely to national economic growth in terms of employment and gross domestic products as well as its capability to withstand economic shocks (Birdthistle & Hales, 2023; Moreno-Menéndez & Casillas, 2021).

In Nigeria and Ghana reporting climes, studies have been extended to unearth the nexus between discretionary accruals and top management team's characteristics in oil and gas, manufacturing, financial and non-financial sectors (Abubakar & Suleiman-Ahmed, 2024; Nagriwum et al., 2023; Naz et al., 2024; Okai, 2021; Ogbaisi et al., 2019; Oladapo et al., 2024; Shina et al., 2024; Toru & Ogoun, 2024). However, study is yet to be extended to unviel how board composition drives earnings manipulation among family-owned listed firms in Nigeria and Ghana, comparatively. Whereas, according to Ghazalat (2021), board of directors is not very effective in family-owned businesses. Since managerial opportunistic behaviour can be attenuated through application of effective corporate governance structure (Ghazalat, 2021), and the claim that major economic decisions in family businesses rest with few individuals related by blood, the study made attempt to examine and compare the effect of board diversity on discretionary accruals among selected family-owned listed firms in Nigeria and Ghana.

1.1 Objectives

The main objective of this study was to comparatively determine the effect of board diversity on the discretionary accruals family-owned listed firms in Nigeria and Ghana. Specifically, the was focused at:

1. Investigate the effect of Board gender diversity on discretionary accruals of family-owned listed firms in Nigeria and Ghana;
2. Determine the extent to which Board educational background affects discretionary accruals of family-owned listed firms in Nigeria and Ghana;
3. Ascertain the effect of Board structure (independence) on discretionary accruals of family-owned listed firms in Nigeria and Ghana.

1.2 Hypotheses

- H₀₁: Board gender diversity has no significant effect on discretionary accruals of family-owned listed firms in Nigeria and Ghana;
- H₀₂: Board educational background has no significant effect on discretionary accruals of family-owned listed firms in Nigeria and Ghana;
- H₀₃: Board structure (independence) has no significant effect on discretionary accruals of family-owned listed firms in Nigeria and Ghana.

The remaining sections of the paper are arranged to present conceptual clarifications and development of hypotheses, methods employed, results and discussion, conclusion and recommendations, in the same order.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Discretionary Accruals

Larson et al. (2018) describes accruals accounting as the difference between changes in non-cash assets (anticipated future benefits) and changes in liability (anticipated future obligation) during a reporting period, leading to net anticipated changes in benefits. Assumptions around the future anticipated benefits and obligations could be driven by management choices otherwise referred to as discretionary accrual (Francis et al. 2005). According to Dechow and Dichev (2002), there is potential noise or error of misstatement in accruals as a result of estimate and assumption about the future cash flows. In a bid to meet established corporate target, managements of corporate entities sometimes tend to involve in accounting adjustments based on their discretions (discretionary accruals), rather than normal objective

processing of transactions called non-discretionary accruals (Ghazalat, 2021). Principle-based accounting standards such as IFRS, and flexibility of generally acceptable accounting principles also provide ground for such discretionary accounting practice.

Succinctly, discretionary accruals is a financial reporting practice in which management uses its choices and judgement based on available accounting options to manage earnings towards an expected outcome. It is used to smooth earnings, achieve a specific financial target, or manipulate reported profit. Top management of a reporting entity engage in discretionary accruals practice for reasons such as meeting contractual agreement for incentive purpose, strive to meet revenue forecast, regulatory compliance, efforts to minimise tax liabilities among others. Several methods have been developed and employed to determine extent of discretionary accruals practice by a reporting entity such as Jones (1991) Model, Modified Jones (1995) Model, Dechow-Dichew (2002) Model, Kothari (2005) Model. Drawing from this concise conceptual clarification about discretionary accruals, it is very obvious that this measure of financial reporting quality can be used legitimately for accurate financial reporting or engage in financial fraud. This practice can only be carried out by the top management of a reporting entity, thus, it is a corporate governance concern. It becomes very worrisome if an entity is a family-owned business (Alhebri & Al-Duais, 2020). This is because the major control and ownership of such corporate entity is in the hands of people related by blood.

2.1.2 Board Diversity

Board diversity has been attracting stakeholders' attention especially the institutional investors and regulators (Firoozi et al., 2016). Diversity of the board refers to varieties in the composition of the board of director in various forms such as gender, expertise (educational and/or professional), size, independence, experience etc. Furthermore, board structure such as independence (structural diversity), expertise (education diversity), gender diversity, size, meeting, CEO duality have been identified in extant studies to be associated with discretionary accruals (Aryal et al., 2022; Salma & Bhuiyan, 2024; Sitienei, 2023).

2.1.2.1 Board Gender Diversity

One of the features of the board of a corporate entities is its gender diversity. This refers to the proportion of the board members that comprised of female gender compare to male gender. According to Hindasah and Harsono (2021), and Guedes et al. (2023), female gender in the board are more thorough, demonstrate more competence and very poised for business

growth and attainment of goals. On the contrary, Alvarado and Briones (2011) could not link female gender involvement in the board to business success. Also, Altarawneh et al. (2022) have noted that CEO's female gender reduce discretionary accruals based on 1,957 firm-year panel data drawn from Bursa Malaysia stock market for a period from 2012 to 2016. In addition, Khan et al. (2022) recorded negative association between discretionary accruals and female gender inclusion in the board based on data obtained from Pakistan non-financial listed firms, consistently with Hasan et al. (2023). Whereas, Yousuf and Aldamen (2021) recorded positive association between board gender diversity and discretionary accruals using 3,095 observations of listed firms from 46 countries. Furthermore, Aryal et al. (2022) found that female gender board presents no impact in controlling discretionary accruals. These confounding empirical findings confirm diverse effects of board gender on accruals quality. Thus, it could be inferred that gender composition of a family-owned listed firm has effect on discretionary accruals.

2.1.2.2 Board Educational Diversity

Educational background of the board members in terms of financial expertise is another board composition trait. It is the proportion of the board members that possess qualifications in the field of finance and accounting. These board members are professionals in financial matters and sometimes referred to as financial literate board members. They bring their financial expertise to the board to guide in the preparation and presentation of decision-useful financial statements. Although Altarawneh et al. (2022) have noted no association between board financial expertise and discretionary accruals, Adeyemi and Yahaya (2024) reported ability of the board's financial expertise to reduce earnings manipulation among listed firms in Nigeria, thereby suggesting that it enhance financial reporting quality. According to Lee et al. (2024), financial expertise board members improve the financial performance based on data drawn from traditional firms in Taiwan. As to accounting adjustments that are used to manipulate earnings, Khan et al. (2022) found that it has been reduced by the presence of the financial expertise in the board. Also, Oladapo et al. (2024) observed negative association between board financial expertise and financial reporting quality among listed manufacturing firms in Nigeria. However, Aifuwa and Embele (2019), Ogbaisi et al. (2019), and Hasan et al. (2023) found positive association between discretionary accruals and board financial expertise. These also presuppose that financial expertise of the board of family-owned listed could have effect on accruals quality of the firms.

2.1.2.3 Board Structural Diversity

Board independence is one of the key features of the board of a corporate entity. It is the proportion of the board members that are free from undue influence of the management or other dominating shareholders. Independent board members are expected to act in the best interest of the shareholders objectively. Oftentimes, they do not have financial or material stake in the firm, and they are expected to promote accountability, enhance corporate governance, and improve corporate decision-making. This group of directors is also referred to as non-executive or outside directors. They are expected to promote the growth of the firm through their individual wealth of experience and goodwill.

Drawing from this feature of the board structure, it is expected that independence of the board should reduce earnings manipulation through discretion of the management. However, Salma and Bhuiyan (2024) noted that the presence of advisory board members increases discretionary accrual based on secondary data obtained from listed Australian Stock Exchange for a period from 2001 and 2015 leading to 7,649 firm-year observation. Also, Chatterjee (2020) notes that it is not independence of the board that attenuates earnings manipulation but other board quality such as expertise, busy and domestic ownership. By using 915 firm-year observations drawn from 183 Vietnamese's non-financial listed firms for a period from 2016 to 2020, Tran et al. (2022) also found out that independence of the directors influence discretionary accruals consistent with Khan et al. (2022). Similar result was obtained by Sitienei (2023) based on 44 non-financial listed firms on the Nairobi stock exchange. Whereas, according to Aryal et al. (2022), board independence has impact in controlling discretionary accruals based on data obtained from FTSE350, United Kingdom. Usman et al. (2022) and Tawfik et al. (2023) further established that board independence enhances financial reporting quality through reduction in discretionary accruals.

Theoretically, theories such as agency, stakeholders, positive accounting and signalling theories have been employed in prior studies such as Tran et al. (2022), Altarawneh et al. (2022) to investigate the connect between corporate governance structure and financial reporting quality using discretionary accruals. This suggests that conflict of interest, efforts to meet stakeholders' expectations, and send positive signals to the market are theoretical ground for investigating the association between financial reporting quality and board diversity. Thus, the current study is hinged on the assumptions of these theories. Hence, drawing from conceptual clarifications, confounding empirical review, and theoretical

ground, the following hypotheses were advanced, and served as basis for inferential analysis performed.

3. MATERIALS AND METHOD

The study employed *ex-post facto* research design. The study focused on family-owned listed firms at the Nigerian Exchange Group (NGx) and Ghanaian stock exchange (GSE). The two capital markets have been experiencing steady growth in market capitalisation, among others, over the years owing to series of economic driven policies including enhanced listing requirements. The study examined and compared purposively selected thirty-two (32) and four (4) family-owned listed firms in Nigeria and Ghana stock markets respectively for a seven-year period from 2017 to 2023. Secondary data used were sourced from the publicly available annual reports and accounts of the firms, and MachameRatios database. The sample for each of the capital market was determined using selection criteria such as; firm with at least 5 percent ownership by an individual who involves actively in the management of the firm as one of the directors, the firm already listed before 2017, the firm was not delisted all through the period under investigation, and that the firm's accounting and board information are available all through the period under review. Thus, firms with missing required data were excluded from 154 and 32 listed firms in NGx and GSE as at December 31, 2023.

The study adapted model employed by Attia et al. (2024) in a study that investigates the influence of board (gender) diversity on accrual earnings of listed firms in Egypt, where board gender was modelled as a function of accrual and real earnings management together with other control variables. The current study expanded the model by including board financial expert (education) and independence (structure) in the model. Thus, the model employed is as presented in equation 1

$$DA_{it} = \beta_0 + \beta_1 GD_{it} + \beta_2 ED_{it} + \beta_3 SD_{it} + \epsilon_{it} \dots\dots\dots \text{Eqn 1.}$$

Where: DA = Discretionary accruals; GD = Gender diversity; ED = Educational diversity; SD = Structural diversity; $\beta_1 - \beta_3$ = coefficient of independent variables; ϵ_{it} = error terms of firm *i* and time *t*.

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he independent variable for the study is board diversity proxied with gender diversity (GD), educational diversity (ED) and structural diversity (SD), while the dependent variable is discretionary accrual, as one of the proxies of earnings quality, measured using modified

Jones scores consistent with Attia et al. (2024). The variables are measured as presented in Table 1.

Table 1: Measurement of variables

S/N	Variables	Measurement	Source
2	Gender diversity (GD)	The percentage of female director to total number of directors in the board	Saha and Kabra (2019)
3	Educational diversity (ED)	The percentage of directors with finance and account background to total number of directors in the board	Saha and Kabra, (2019)
4	Structural diversity (SD)	The percentage of independent directors to total number of directors in the board	Ephraim (2022)
4	Discretionary accrual (DA)	Measured using modified Jones scores	Andersen (2016), Okoye and James (2020), Attia et al. (2024)

Source: Author's compilation (2024)

In other to achieve the objective of the study, data collected were analysed using descriptive and inferential statistics. The descriptive statistics show the mean, median, maximum value, minimum value, skewness, kurtosis and Jarque-Bera of the variables. To test for stationarity condition of data used, unit root test was concluded. Correlation analysis was performed to unveil the forms of link between the variables. This step, together with the variance inflation factor test was used to check the existence of multicollinearity among variables. Based on balanced panel data used, inferential analysis was done using panel regression involving fixed and random effect tests. Panel Corrected Standard Error regression was later employed as a result of identified heteroscedasticity issue.

4. RESULT AND DISCUSSIONS

Table 2: Descriptive Statistics

	Ghana				Nigeria				Combined			
	DA	GD	ED	SD	DA	GD	ED	SD	DA	GD	ED	SD
Mean	0.214	24.599	7.821	9.607	-0.082	14.770	6.013	8.536	-	15.863	6.214	8.655
Median	0.280	18.180	8.000	9.000	-0.155	12.500	6.000	8.000	0.125	12.500	6.000	9.000
Maximum	1.100	53.340	12.000	15.000	2.170	66.660	14.000	17.000	2.170	66.660	14.000	17.00
Minimum	-0.840	1.290	2.000	3.000	-1.630	0.000	1.000	1.000	1.630	0.000	1.000	1.000
Std. Dev.	0.584	15.121	2.465	2.998	0.635	12.689	2.045	2.607	0.635	13.312	2.167	2.668
Skewness	-0.244	0.271	-0.561	-0.335	0.551	0.876	0.269	0.430	0.451	0.822	0.248	0.343
Kurtosis	2.052	1.667	2.855	2.650	3.086	3.691	3.361	3.602	2.864	3.297	3.070	3.336
Jarque-Bera	1.326	2.416	1.494	0.667	11.388	33.117	3.912	10.266	8.740	29.289	2.635	6.111
Probability	0.515	0.299	0.474	0.717	0.003	0.000	0.141	0.006	0.013	0.000	0.268	0.047
Observations	28	28	28	28	224	224	224	224	252	252	252	252

Source: Author's computation (2024)

The descriptive statistics revealed an average 0.214 discretionary accrual among Ghana family-owned listed firms with a minimum and a maximum -0.840 and 1.100 values respectively. Standard deviation of 0.584, which is higher than mean discretionary accrual, suggests a wide dispersion among the sampled family-owned firms, although the data present normal distribution. On the other hand, mean discretionary accrual of -0.082 was recorded for the period under investigation among the Nigerian family-owned listed firms which is far less than 0.214 obtained for Ghana. Minimum and maximum discretionary accrual values among Nigerian firms are 2.170 and -1.630 respectively with a very wide dispersion among the firms as revealed by 0.635 standard deviation score, but not normally distributed unlike Ghana counterparts. Concisely, Nigerian family-owned listed firms has less discretionary accrual practice compare to Ghanaian counterparts. Thus, indifference in the mean scores between the two countries is a reflection of peculiarities of the two distinct stock markets and accounting information prepared under different regulatory frameworks.

Regarding board diversity proxies, Ghanaian family-owned listed firms are more represented by female gender in the board with about 25 percent female board members compare to the Nigerian counterparts with 15 percent. However, the Nigerian family-owned listed firms has the highest involvement of female in the board with about 67 percent maximum value compare to 53 percent in Ghana. Furthermore, concerning financial knowledge of the board

members on the average, Ghanaian family-owned listed firms are more represented with 7.82 mean compare to 6.01 among family-owned firms in Nigeria.

Just like gender involvement, Nigerian family-owned firms has slightly higher board members with finance and account background (maximum value = 14) than Ghanaian firms (Maximum value = 12). As to structural diversity, the mean statistics show that Ghanaian firms has more independent board members (about 10) compare to approximately 9 among family-owned listed firms in Nigeria. Nevertheless, there are more independent board members in some family-owned listed firms in Nigeria (maximum = 17) than Ghana (Maximum = 15). Generally, distribution of the Ghana based family-owned firms' data is normal unlike Nigeria's. Comparison in the descriptive statistics between the two economies is advised to be interpreted with caution because of the inherent limitation as the study captured more family-owned listed firms in Nigeria than in Ghana.

For the combined data, descriptive statistics show -0.049 mean discretionary accrual with minimum and maximum values of -1.630 and 2.170 respectively. A standard deviation of 0.635 suggests that discretionary accrual in each firm is not widely dispersed from the mean despite the fact that the samples were not drawn from the same reporting clime and sector. The distribution is slightly positively skewed (skewness = 0.451) and has a kurtosis of 2.8643, indicating a moderate degree of peakedness. The Jarque-Bera test suggests a departure from normality (p-value = 0.013)

4.2 Pre-Estimation Test

4.2.1 Pairwise Correlation

Pairwise correlation test among the variables was examined. The results are as contained in Table 3. The results reveal -0.002 correlation coefficient between discretionary accrual and gender diversity of the boards. Also, correlation coefficient between discretionary accrual and education diversity is 0.255 which is positive and not significant. The correlation coefficient between discretionary accrual and structural diversity is 0.410, showing positive and significant relationship. Between gender and education diversities, a positive and insignificant relationship of 0.101 was obtained. Also, between board gender and structural diversities, negative and insignificant correlation coefficient of -0.062 was recorded. Lastly, a strong positive and significant correlation coefficient of 0.805 was noted between education and structural diversities. Succinctly, outcomes of the correlation test unveil absence of systematic change in one variable as a result of change in the other variable as the results generally reveal

weak association among the variable under investigation except between education and structural diversity. However, the method of regression analysis used is expected to have addressed possible implication of the identified strong correlation.

Table 3: Correlation Matrix

Corr. Prob.	AQ	GD	ED	SD
DA	1.000			
GD	-0.002 (0.970)	1.000 -----		
ED	0.275 (0.000)	0.101 (0.112)	1.000 -----	
SD	0.410 (0.000)	-0.062 (0.3240)	0.805 (0.000)	1.000 -----

Source: Author's computation (2024)

4.2.2 Unit Root Test

Having described the-nature of the data series, unit root test at individual intercept was conducted. Result of the test using the Augmented Dickey Fuller (ADF) as presented in Table 4 shows that-all the selected data series are stationary at level, as all the null-hypotheses of unit root process were rejected given that each series' probability value consistently yield a value less than 5%.

Table 4: Unit Root Test

Variable	T-Statistics	P-Value	Order of Integration	Decision
DA	-7.709109	0.0000	I(0)	Stationary
GD	-6.39335	0.0000	I(0)	Stationary
ED	-7.082304	0.0000	I(0)	Stationary
SD	-7.164043	0.0000	I(0)	Stationary

Source: Author's computation (2024)

4.2.3 Multicollinearity Test

The study employed variance inflation factor (VIF) to check for multicollinearity among the dataset, as multicollinearity problem can negatively impact the model's consistency and efficiency. The results as contained in Table 5 suggest that all variables have a VIF below 10, indicating that the degree of multicollinearity is manageable.

Table 5: Variance Inflation Factor

Variable	Variance	VIF	VIF
GD	8.1E-06	2.6E+00	1.1E+00
ED	8.7E-04	2.8E+01	3.0E+00
SD	5.7E-04	3.5E+01	3.0E+00
C	1.8E-02	1.4E+01	NA

Source: Author's computation (2024)

4.3 Model Estimation

Tables 6 and 7 show the regression results of the-effect of board diversity on discretionary accrual of listed family-owned firms in Nigeria and Ghana respectively. The Hausman-specification test compares the estimates of the fixed-and random estimators; with a null hypothesis of-random effect model and an alternative-hypothesis of fixed effect. The test helps to decide the appropriate model to use for the-study. From the Hausman test shown in Table 6, the fixed effect is more appropriate since p-value of the test is less than 5%. However, as shown in Table 7, the model estimate for Ghana firms shows that the random effect is more appropriate since p-value of the test is greater than 5%.

The outcome of an estimate is not complete without assessing the quality of the model residual. In panel least square modelling, it is expected that the residual must be consistent and efficient. Moreover, in order to be consistent and efficient, assumptions such as no serial correlation and homoscedasticity must be ascertained. Thus, serial correlation and Panel Cross-section Heteroscedasticity test were carried out to ascertain the level of robustness of the model. For Nigerian firms, the result of the heteroscedasticity test shown in Table 6 suggests that the model is not free from the problem of Heteroscedasticity and serial correlation since it reports a p-value less than 0.05. Hence, the regression-analysis was subjected to an in-depth test where panel corrected standard error (PCSE) regression was run in order to take care of the heteroscedasticity problem, and the outcome of the regression was found suitable for analysis. Furthermore, for Ghanaian firms, the result of the heteroscedasticity test shown in Table 7 shows that the model is free from the problem of Heteroscedasticity and serial correlation since it reports a p-value greater than 0.05.

The results presented in Table 6 indicate that the explanatory variables jointly explained 19.7% of the total variations in discretionary accrual of listed family-owned businesses in

Nigeria. Furthermore, the result in Table 7 showed that the explanatory variables jointly explained 57.1% of the total variations in discretionary accrual practice among listed family-owned businesses in Ghana. However, the effect of individual parameter is as discussed in the ensuing paragraphs.

As shown in Table 6, it is obvious that board female gender diversity has a positive and insignificant effect on discretionary accrual of listed family-owned firms in Nigeria ($t = 1.8706$, $p > 0.05$). But in the case of Ghana, results in Table 7 showed that board female gender diversity has a positive and significant effect on discretionary accrual of listed family-owned businesses in Ghana ($t = 6.1718$, $p < 0.05$). These results imply that an increase in the involvement of female gender in the board will lead to an increase in discretionary accrual practice of family-owned businesses in Nigeria and Ghana. However, the effect is statistically insignificant and weak among family-owned businesses in Nigeria. That is, increase in female gender in the boardroom of family-owned listed firms would result to an increase in management discretion applied on earnings' determination which is capable of affecting future cash flows. The implication of the result is that the presence of more female gender in the board leads to a rise in inability of these reporting entities to convert accounting earnings into cash flows in both Ghana and Nigeria but more pronounced among listed family-owned firms in Ghana than in Nigeria. This finding has implications to the managers and shareholders of these listed firms, and the regulators at large.

Results presented in Table 6 equally reveal that educational diversity has a negative and significant effect on discretionary accrual of listed family-owned businesses in Nigeria ($t = -2.9079$, $p < 0.05$). On the contrary, educational diversity has a positive and significant effect on accruals quality of listed family-owned business in Ghana ($t = 2.6207$, $p < 0.05$) as shown in Table 7. The results suggest that among family-owned businesses in Nigeria, diversity in terms of the presence of finance and account experts in the board results to a decrease in discretionary accrual. However, among family-owned businesses in Ghana, an increase in educational diversity within the board results to an increase in discretionary accrual. The implication is that inclusion of more finance and account professionals in the board leads to a reduction in discretionary accrual among listed family-owned firms in Nigeria but increase in discretionary accrual of similar firms in Ghana. These discoveries suggest that involvement of finance and account professionals at the 'upper echelon' have the capability to reduce or increase discretionary accrual practice among family-owned listed firms. These findings corroborate less mean discretionary accrual value obtained based on Nigerian family-owned

firms compare to that of their Ghanaian counterparts. It equally means that managerial discretion in the determination of earnings among Nigerian listed firms is reduced as a result of inclusion of more finance and account experts in the Nigeria reporting environment. This has propensity to enhance sustainability of listed family-owned firms.

Furthermore, results presented in Table 6 also show that structural diversity has a positive and significant effect on discretionary accrual of listed family-owned business in Nigeria ($t = 7.5615$, $p < 0.05$) and in Ghana ($t = 4.4249$, $p < 0.05$). The implication is that as structure of the board (in terms of inclusion of more non-executive directors in the board) improves, then there would be an increase in discretionary accrual of family-owned listed firms. This unique findings suggest that inclusion of more non-executive directors does not translate to any reduction in discretion accrual in family-owned firms. It also implies that more non-executive directors in the board would result to a rise in inability of family-owned reporting entities to convert accounting earnings into cash flows in both Ghana and Nigeria. This finding is at variance with the ideology that presence of more independent executives in the board enhances firm performance and financial reporting quality. Concisely, the findings provide basis for a submission that board diversity present diverse implications on discretionary accruals based on the population scope of this study.

Table 6: Nigeria family-owned listed firms' regression results

	Pooled OLS	Fixed Effect	Random Effect	PCSE
<i>Dep. Var:</i>	DA	DA	DA	DA
GD	1.789 (0.075)	-79.602 (0.621)	-0.412 (0.684)	1.871 (0.061)
ED	-0.619 (0.537)	-4.168 (0.631)	0.662 (0.514)	-2.908* (0.004)
SD	5.363 (0.000)	8.961 (0.374)	2.387 (0.025)	7.562* (0.000)
C	-11.679 (0.000)	126.381 (0.032)	-4.119 (0.000)	-9.071* (0.000)
<i>Observations:</i>	252	252	252	252
<i>R-squared:</i>	0.2692	0.1665	0.0736	0.1978
<i>Adjusted R-Squared</i>	0.259	0.0443	0.0522	0.1128
<i>F-statistic:</i>	27.012	1.3629	3.4426	84.9258
<i>Prob(F-stat):</i>	0.000	0.168	0.0188	0.0000
<i>Hausman test</i>	12.003($p=0.0074$)			
Heteroskedasticity LR Test	136.843 ($p=0.000$)			
Autocorrelation test	10.127 ($p=0.0000$)			

* signifies significant at 0.01 level, *p*-value in parenthesis

Source: Author's computation (2024)

Table 7: Ghana Family-owned listed firms' regression results

<i>Eq Name:</i>	Pooled OLS	Fixed Effect	Random Effect
<i>Dep. Var:</i>	DA	DA	DA
GD	-0.412 (0.684)	-0.391 (0.669)	6.172* (0.000)
ED	0.662 (0.051)	-0.041 (0.968)	2.621** (0.015)
SD	2.387 (0.000)	-0.507 (0.613)	4.425* (0.000)
C	-4.119 (0.000)	0.428 (0.062)	-11.953* (0.000)
<i>Observations:</i>	28	28	28
<i>R-squared:</i>	0.561	0.727999	0.5717
<i>Adjusted R-Squared</i>	0.522	0.679067	0.5617
<i>F-statistic:</i>	37.102	14.87793	10.6778
<i>Prob(F-stat):</i>	0.000	0.000	0.000
<i>Hausman test</i>	165.441 (p=0.9670)		
Heteroskedasticity LR Test	24.456 (p>0.05)		
Autocorrelation test	0.2694 (p>0.05)		

*** signifies significant at 0.01 and 0.05 levels respectively, *p*-value in parenthesis.

Source: Author's computation (2024)

5. CONCLUSION AND RECOMMENDATIONS

The study examined the influence of board uniqueness in terms of female gender inclusion, financial expertise and board independence on discretionary accruals reported by listed family-owned firms in Nigeria and Ghana. This was based on the controversy in academic and professional discourses that majority ownership in family-owned firms confiscate the interest of the minority ownership. Therefore, the study made an attempt to extend empirical investigation by exhuming how gender, education and structural diversity drive discretionary accruals reported by listed family-owned firms in the selected West Africa countries. Succinctly, the comparative analysis between Nigeria and Ghana is very crucial to understand regional variations and the potential influence of cultural, regulatory, and institutional factors on the effect of board dynamics on discretionary accruals, specifically among the listed

family-owned firms. Based on the descriptive statistics, the results reveal more discretionary accruals practices among the management of listed family-owned firms in Ghana than Nigeria. This suggests that higher earnings quality is reported by the preparers of the financial reports of family-owned firms in Nigeria than that of Ghana. That is, the management of family-owned firms in Ghana engage in discretionary accruals than that of the Nigerian listed firms. Furthermore, based on inferential analysis, aside structural diversity that present similar effects on discretionary accrual among family-owned listed firms in both Nigeria and Ghana, other two board dynamic proxies considered in the study showed positive but different significant effects.

Therefore, the study concludes that board peculiarities impact earnings quality (measured using discretionary accrual) among listed family-owned firms based on the scope of this study. Thus, inclusion of more female gender in the board of listed family-owned firms should be done with caution in order not to escalate discretionary accrual that is capable of reducing the interest of potential investors and other users in the firms. That is, advocacy for inclusion of more female gender in the board may not be appropriate for long time sustainability of listed family-owned firms. Regarding educational diversity at the boardrooms, the finding provide basis to recommend inclusion of more finance and account professionals in the board of listed family-owned firms. This would not only help to make the financial reports of the firms more attractive to investors and other users, it would also help to ensure future cash flows capable of enhancing sustainability of the firms at the capital markets.

Also, listed family-owned firms should take sound caution in including more independent directors in their board to enhance the firms' financial reporting quality, based on the findings. This unique finding suggests that inclusion of more independent director in the board of listed family firms has no improving effect on earnings quality which could present bad signals to the investors. This could threaten sustainable performance of the firms. Capital market regulators are encouraged to reel out a policy that ensure inclusion of more finance and account experts in the boardroom of the listed firms. This would strengthen and enhance the trust of diverse users of financial reports about the listed firms' reported earnings. The study has some inherent limitations including the population scope, time scope, capital market examined. Thus, readers are advised to interpret findings of the study with caution. Also, this emerging capital market based study is recommended to be expanded through future studies by considering more capital markets, extend the time scope, consider more board dynamics and extend the study to capture non-listed family-owned firms.

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