

**INTEGRATED REPORTING: THE EFFECT OF BOARD CHARACTERISTICS ON
MULTIPLE CAPITAL DISCLOSURE BY LISTED DEPOSIT MONEY BANKS IN
NIGERIA**

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<https://doi.org/10.57233/gujaf.v7i1.04>

Abstract

The disclosure of multiple capitals is central to the idea of integrated reporting which is the latest development in the field of financial reporting. Board executives design strategies that affect the use of multiple capitals in the activities of the business as well as its disclosure to stakeholders of the business. As the disclosure of multiple capitals in integrated reports continues to attract increasing scholarly and regulatory attention, it becomes imperative to assess the role of the board of directors in shaping the level and quality of these disclosures. This study examines the extent to which the characteristics of the board affect the disclosure of these capitals in annual reports of listed deposit money banks in Nigeria. Using content analysis methodology, data was extracted from the annual reports of 14 listed banks covering a study period of 8 years from 2017 to 2024. The data was analyzed using generalized least square regression and the result reveal that while board gender and board independence have a significant positive effect on the disclosure of multiple capitals in annual reports, board size significantly and negatively affects the disclosure. Consequently, the study concludes that, the more number of independent executive directors and female directors present on the board, the higher the disclosure of the multiple capitals employed in the value creation process by firms. However, higher number of board members does not translate into increase in the disclosure of multiple capitals. The study therefore, recommends that policy makers ensure an adequate number of female directors and independent directors on the board while the size of the board should be maintained at an average number.

Keywords: Board activity, board gender, board independence, board size, multiple capital disclosure.

1.0 Introduction

Several high-profile corporate failures from Enron and WorldCom globally to Cadbury Nigeria locally have fundamentally challenged the adequacy of traditional corporate reporting. In response, international accounting bodies have championed reforms aimed at improving both the quality and relevance of corporate disclosures. The most significant of these reforms is Integrated Reporting (IR), which advocates for the disclosure of financial and non-financial information in a single, coherent report. Unlike conventional financial reports that largely ignore sustainability dimensions, the IR framework recognizes that the financial and non-financial activities of firms are deeply interconnected, and that stakeholders require a comprehensive account of how organizations create value across the short, medium, and long term.

Central to the IR framework is the disclosure of multiple capitals (financial, manufactured, intellectual, human, natural, and social and relational capital) which collectively capture the full range of inputs and outputs involved in a firm's value creation process (IIRC, 2013). By disclosing these capitals, firms are expected to provide stakeholders with a more transparent and holistic understanding of their business models and performance. In Nigeria, the relevance of this framework is underscored by the Central Bank of Nigeria's (CBN) mandatory requirement for listed deposit money banks to incorporate sustainability-related information in their annual reports information that closely mirrors the multiple capital disclosures prescribed by the IR framework.

Despite growing scholarly interest in integrated reporting, the literature has paid considerably less attention to what actually drives IR disclosure quality, particularly in developing country contexts. While studies such as Chouaibi et al. (2021) and Adelowotan and Udofia (2015) have explored how board characteristics influence IR-related disclosures, the specific question of which board attributes drive multiple capital disclosure as distinct from general IR disclosure remains insufficiently examined. This gap is significant, because multiple capital disclosure sits at the very heart of the IR framework; understanding its determinants is therefore critical to evaluating whether governance structures are aligned with the objectives of integrated reporting. Sobhan and Mia (2026) and Vitolla et al. (2020) have explicitly called for more empirical work in this area, a call that remains largely unanswered in the Nigerian banking context.

The board of directors occupies a pivotal position in this regard. As the organ ultimately responsible for the stewardship and strategic direction of the firm, the board determines what information is disclosed, to whom, and in what form (Nguyen et al., 2024). The Nigerian Stock Exchange (NSE) similarly acknowledges that the embedding of sustainable business practices and their disclosure alongside financial information is, to a considerable extent, a function of board oversight. It follows, therefore, that board characteristics including size, gender diversity, activity, and independence are likely to have a material bearing on the extent and quality of multiple capital disclosure in integrated reports.

It is against this background that this study examines the effect of board size, board gender diversity, board activity, and board independence on multiple capital disclosure among listed deposit money banks in Nigeria. Beyond filling the identified gap in the literature, the findings

are expected to offer regulators and policymakers evidence-based insights into the governance conditions that are most conducive to maximizing the benefits of integrated reporting, as its adoption continues to gain momentum in Nigeria.

The scope of the covers the effect of board characteristics on the disclosure of multiple capitals by listed banks in Nigeria. It is limited to the board characteristics of size, gender, activity and independence. It covers a study period of 8 years spanning 2017-2024. The study contributes to the emerging literature on integrated reporting which advocates for the disclosure of multiple capital disclosure in annual reports. Moreso, as Nigeria continue to make moves on the adoption of the reporting framework, the findings of the study will provide evidence to policy makers on the relevant board characteristics to strengthen to ensure continued disclosure of vital information on multiple capitals used in the value creation process.

2.0 Literature Review and Theoretical Framework

The conceptual framework of this study is anchored on the relationship between board characteristics and multiple capital disclosure. Integrated reporting broadens corporate disclosure to include multiple capitals such as human, social, intellectual, and natural capital, offering a more complete view of value creation. The effectiveness of this disclosure is largely shaped by board characteristics. Drawing on agency theory, the board of directors serves as the primary internal mechanism for reducing information asymmetry between management and stakeholders, and its characteristics size, gender diversity, activity, and independence are expected to shape the extent and quality of information disclosed in corporate reports. The framework positions multiple capital disclosure, comprising the six integrated reporting capitals prescribed by the IIRC (2013), as the outcome variable, with the four board characteristics serving as explanatory variables. Board size contributes by bringing diverse expertise that enhances the scope of reporting, with studies showing a positive relationship between board size and integrated reporting quality (Sobhan & Mia, 2024; Akanni et al., 2025; Oben et al., 2026). Board gender diversity also plays a key role, as female directors tend to promote ethical awareness and stakeholder-oriented transparency, thereby improving non-financial and multi-capital disclosures (Sobhan & Mia, 2024; Butar-Butar et al., 2024; Oben et al., 2026).

Board activity, reflected in frequent meetings, strengthens oversight and encourages more comprehensive disclosure of sustainability and value creation issues (Akanni et al., 2025; Butar-Butar et al., 2024). Similarly, board independence enhances objectivity and accountability, leading to more transparent and stakeholder-focused reporting practices (Sobhan & Mia, 2024; Sarioglu et al., 2025). Overall, the literature consistently shows that these board attributes work together to improve multiple capital disclosure within integrated reporting, although evidence from emerging economies like Nigeria remains limited.

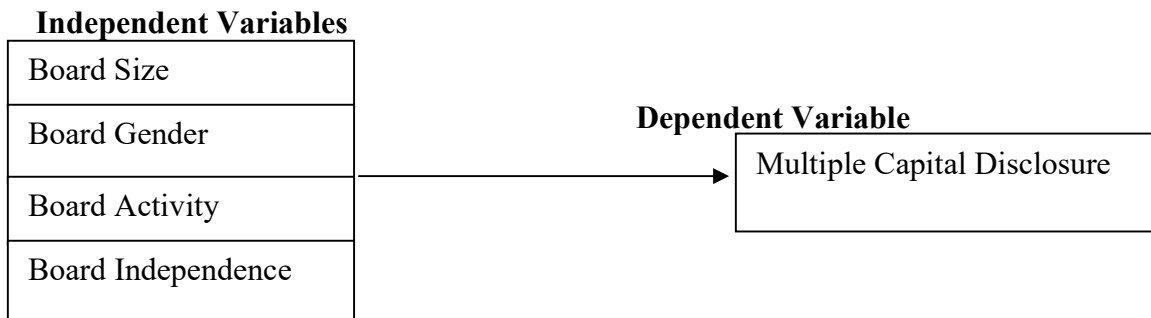
The relationship between board characteristics and integrated reporting disclosure is explained by agency theory, which highlights conflicts between managers and shareholders due to separation of ownership and control. These conflicts create information asymmetry, which the board of directors helps to reduce through monitoring and supervision of management. Effective boards lower agency costs by aligning managerial actions with shareholders' interests (Fama & Jensen, 1983). Beyond financial oversight, boards also influence the quality and extent of

corporate disclosures, as stronger governance has been shown to improve reporting decisions (Gerwanski et al., 2019). In the context of integrated reporting, this means that board characteristics such as size, independence, composition, and activity determine not only whether firms disclose multiple capitals, but also the depth and transparency of such disclosures. In line with this, corporate governance frameworks emphasize that sustainable reporting practices are largely driven by effective board-level oversight

Thus, the following hypotheses are formulated for the study:

- H₀₁:** Board size has no significant effect on multiple capital disclosure among listed deposit money banks in Nigeria.
- H₀₂:** Board gender diversity has no significant effect on multiple capital disclosure among listed deposit money banks in Nigeria.
- H₀₃:** Board activity has no significant effect on multiple capital disclosure among listed deposit money banks in Nigeria.
- H₀₄:** Board independence has no significant effect on multiple capital disclosure among listed deposit money banks in Nigeria.

The relationship between the dependent and independent variables is represented thus:



Having established the conceptual relationships between board characteristics and multiple capital disclosure within integrated reporting, it is important to examine how these relationships have been tested in previous empirical studies. The relationship between board size and IR disclosure quality has generated genuinely divergent empirical findings. The prevailing argument is that larger boards bring broader expertise, richer deliberation, and stronger advocacy for comprehensive disclosure (Frías-Aceituno et al., 2013; Kachouri & Jaboui, 2017). Fasan and Mio (2017) and Akanni et al (2025) further argued that larger boards reduce the risk of CEO domination, while Vitolla et al. (2019) reported a significant positive effect of board size on IR quality across 134 international firms. Salim et al. (2021) found similar results for 253 listed European firms, and Chouaibi et al. (2022) confirmed the positive association using linear regression. Sobhan and Mia (2026), Suttipum and Bomlai (2009) and Quaderi et al. (2022) reported consistent findings in Asian contexts, while in the Nigerian context, Orshi et al. (2019) found that board size positively and significantly determined integrated reporting quality among listed oil and gas firms.

Contrary evidence, however, is well documented. Fasan and Mio (2017) acknowledged that large boards are prone to coordination failures and divergent opinions that can undermine decisiveness, a concern echoed by Kılıç and Kuzey (2018), who found board size to be an insignificant determinant of forward-looking IR disclosures. This contradiction suggests that the relationship between board size and disclosure is neither universal nor linear, and may be moderated by sector-specific governance norms and regulatory environments factors that have rarely been disentangled in the Nigerian banking literature, where board size is partly prescribed by regulatory requirement rather than driven purely by governance need.

The evidence on board gender diversity and IR disclosure is more consistently positive, though important qualifications remain. Female directors are widely regarded as more ethically sensitive, more socially conscious, and more attentive to the information needs of a broader range of stakeholders (Buitendag et al., 2017; Fayad et al., 2022). Buitendag et al. (2017) found that firms with more female directors on the Johannesburg Stock Exchange produced significantly better-quality integrated reports, while Dey (2020) reported a significant positive effect of gender diversity on IR adoption among Bangladeshi banks. Chouaibi et al. (2022) and Vitolla et al. (2019) both confirmed positive associations between female board representation and IR quality in European contexts, and Fayad et al. (2022) replicated these findings in Malaysia. Quaderi et al. (2022) and Sun and Gu (2023) reported similar findings for listed firms in Bursa Malaysia and heavily polluting firms in China respectively.

A contrasting strand of evidence, however, tempers these conclusions. Songini et al. (2022) found that gender diversity negatively affected IR quality when board members' educational levels were controlled for, suggesting that the benefit of female representation may be contingent on human capital composition rather than gender per se. Kılıç and Kuzey (2018) found gender diversity to be a significant predictor of forward-looking IR disclosures specifically but not of overall IR quality, pointing to the possibility that the effect of gender diversity varies across different dimensions of disclosure. This heterogeneity in findings underscores the need for context-specific examination rather than the uncritical extrapolation of results from other settings to Nigeria.

Board meeting frequency, as a proxy for board diligence and engagement, has received relatively less empirical attention in the IR literature, and the available evidence is mixed. Drawing on agency theory, more regular board meetings are expected to strengthen the monitoring and advisory function of the board, increasing the likelihood that management will be held accountable for the comprehensiveness of its disclosures (Akanni et al., 2025, Gyapong et al., 2019). Vitolla et al. (2019) and Fayad et al. (2022) both reported significant positive associations between board activity and IR quality, consistent with this expectation. Orshi et al. (2019) found a positive but statistically insignificant effect of board diligence on IR quality in Nigeria's oil and gas sector.

Contrary to these findings, Omran et al. (2021) reported a negative relationship between board activity and the IR index for 50 listed Australian firms, raising the possibility that high meeting frequency may reflect reactive crisis management rather than proactive governance — a distinction with important implications for how board activity is interpreted as a disclosure

predictor. This contradiction has not been adequately examined in the Nigerian banking context, where the regulatory intensity of the CBN may independently drive meeting frequency irrespective of genuine governance commitment.

The positive relationship between board independence and corporate disclosure is among the most consistently supported findings in the governance literature. Independent directors, by virtue of their distance from the day-to-day management of the firm, are better positioned to evaluate management's disclosure decisions objectively and to advocate for more comprehensive reporting on behalf of shareholders and other stakeholders (Vitolla et al., 2019; Cooray & Senaratne, 2020). Buitendag et al. (2017) found that firms with fewer executive directors produced better quality integrated reports, implicitly affirming the value of independent oversight. Vitolla et al. (2019), Chouaibi et al. (2022), and Salim et al. (2021) all reported significant positive associations between board independence and IR quality, while Li and Richard (2021) demonstrated that independent non-executive directors specifically drive the disclosure of relational and structural capital. In the Nigerian context, Orshi et al. (2019) confirmed that board independence positively and significantly determined IR quality among listed oil and gas firms.

The dissenting evidence is more limited but noteworthy. Fayad et al. (2022) found board independence to have an insignificant positive impact on IR quality in Malaysia, suggesting that the formal presence of independent directors does not automatically translate into stronger disclosure where governance norms do not enforce genuine independence. Rezaee et al. (2021) similarly found that independence did not significantly moderate the relationship between risk and environmental disclosure in Iran, pointing to context-specific variation in how independence functions as a governance mechanism. This concern is particularly pertinent in Nigeria, where CBN approval of board appointments may not guarantee the substantive independence that the agency-theoretic argument assumes.

3.0 Methodology

This study adopts a quantitative research design, drawing on secondary data extracted from the annual reports of listed deposit money banks in Nigeria through content analysis a methodology widely considered appropriate for measuring non-financial information disclosure in corporate reports (Salvi et al., 2020; Anifowose et al., 2019; Vitolla et al., 2019). The study population comprises all 14 listed deposit money banks holding national banking licences in Nigeria as at December 2022. Given the small and clearly defined population, a census sampling approach was adopted, ensuring that the findings reflect the full picture of multiple capital disclosure practice across the sector without the risk of sampling bias.

The study covers an eight-year period from 2017 to 2024, chosen because it captures the years following the CBN's sustainability disclosure directive, provides sufficient panel variation for reliable regression estimates, and represents a period of relative regulatory stability for Nigerian deposit money banks. To ensure the validity of the content analysis, the disclosure index was anchored in the capital disclosure elements prescribed by the IIRC framework (2013; 2021) and operationalized following Anifowose (2017) and Salvi et al. (2020). Each of the six capitals was disaggregated into its constituent disclosure elements and scored on a graduated rubric zero for

no disclosure, one for general disclosure, two for specific numeric information, and three for detailed monetary disclosure capturing disclosure depth rather than merely its presence or absence. To ensure reliability, a coding manual with clear operational definitions and worked examples was developed prior to data collection, and a pilot exercise was conducted on two banks outside the final sample. Inter-coder reliability was assessed by having an independent coder apply the same instrument to approximately 20 percent of the sample, with agreement measured using Cohen's Kappa coefficient and a threshold of 0.80 adopted as the benchmark for acceptable reliability (Krippendorff, 2004). Discrepancies were resolved through discussion and reference to the coding manual.

The Generalized Least Squares regression technique was used to analyse the panel data. Both fixed and random effects models were estimated, and the Hausman specification test returned a chi-square value of 4.29, which was not significant, informing the selection of the random effects model. The Lagrangian Multiplier test result of 40.36, significant at 1 percent, further confirmed this choice. The random effects result was subsequently corrected for heteroskedasticity before analysis. The model is specified as follows:

$$MCD_{it} = \alpha_0 + b_1B_size_{it} + b_2B_gnd_{it} + b_3B_acty_{it} + b_4B_ind_{it} + e_{it}$$

Where:

Variable	Measurement	Source
Multiple capital Disclosure	Disclosure of financial, manufactured, natural, intellectual, human and social and relational capitals. For each of the capitals, score of “0” is assigned in the absence of a disclosure, a score of “1” is given in the case of general/discursive disclosure, and a score of “2” is assigned in the presence of specific / numeric information and a score of “3” for detailed explanations containing monetary figures. The total score for each capital is total score obtained/total score obtainable. The MCD score is equal to the addition of the total score for each capital	Anifowose, 2017 and Salvi et al (2020)
Board size	Total number of directors on the boards	Fasan and Mio (2017)
Board Gender	The ratio of female directors to total number of directors	Quaderi et al (2022)
Board Activity	The total number of meetings held by the board within a financial year	Gyapong et al., (2019)
Board independence	The ratio of independent non-executive directors to total number of directors on the board	Vitolla et al (2019)

Source: Author’s Computation (2026).

MCD = Multiple capital disclosure, Bsize is board size, Bgndis board gender, Bacty is board activity, B_ind is board independence, b₁, b₂, b₃, b₄ are coefficients of the independent variable, “it” is Firm ‘i’ at time ‘t’ and e is the error term

The measurements of the dependent and independent variables are stated in the table below:
Table 3.1

4.0 Result and Discussion

This section contains the presentation of data, discussion of results and test of hypothesis

Table .1
Descriptive Statistics

Variables	min	max	mean	Std deviation	kurtosis
MCD	3.42	5.36	4.64875	0.427	3.034
Bsize	6	19	13	2.791	2.558
B_gnd	0	0.5	0.236	0.116	2.653
B_acty	1	16	6.25	2.244	6.219
B_ind	0.07	2.33	0.204	0.213	88.97

Source:

Author's Computation (2026).

The minimum value for multiple capital disclosure is 3.42 while the maximum is 5.36. this means that the highest score for the multiple capital disclosure among the banks is 3.42 and the maximum is 5.36. The mean score is approximately 4.65 which shows a high-level disclosure among the sampled firms. This is not surprising the banking sector is highly regulated and characterized by high level of compliance. Board size has a minimum value of 6 and a maximum value of 16. This indicates that for the period under study, the bank with the smallest board size had 6 members while the bank with the largest board size had 16 members. The average board size for the period is 13. Board gender has a minimum value of 0 and a maximum value of 0.5 this indicates that some board(s) had no female board member during the period under study while the board with the board with highest number of females had 50% of its board members as females. The minimum and maximum values of board independence are .07 and 2.33 respectively. The values imply that the board with lowest number of independent directors had only 7% of the board members as independent directors while the board with highest number of independent directors had 23.3% of the board members as independent directors. The result shows a minimum value of 1 and a maximum value of 16 for board activity. This indicates that the least number of times board meeting held during a financial year for the sampled firms was once while the highest number of times was 16. On the average, the number of times board meeting was held in a financial year was 6 times.

Table 2
Correlation Matrix

	Mcd	Bsize	Bgnd	Bacty	B ind
Mcd	1.0000				
B_size	0.0228	1.0000			
B_gnd	0.4197***	-0.1317	1.0000		
B_acty	0.0239	0.1420	0.0840	1.0000	
B_ind	0.1643*	-0.1944**	0.1218	0.1662*	1.0000

Source: Author's Computation (2026).

The correlation analysis shows the relationship between the dependent and independent variables and the relationship that exist among the independent variable. The dependent variable has a significant positive relationship with board gender and board independence. Board independence has a significant negative relationship with board size and a significant positive relationship with board activity. However, none of the correlation coefficient between any of the independent variable exceeds 0.8. This suggests the absence of severe multi-collinearity (Field, 2018).

Regression analysis

The data used is panel data. Therefore, fixed and random effect tests were conducted. The hausman specification test result with a chi-square value of 4.29 was not significant. This informed the choice of the random effect result. The Lagrangian Multiplier test was conducted to choose between random effect and OLS. The result with a chibar-square value of 40.36 significant at 1% informed the selection of random effect result. The random effect result was further subjected to test for heteroskedasticity in panel data. The random effect result was further improved and is presented below for analysis.

Table 3
Random Effect GLS Regression Result

Mcd	Coefficient	Z value	P value
B_size	-0.0312106	-2.02	0.043
B_gnd	0.102699	2.31	0.021
B_acty	0.0065186	0.49	0.621
B_ind	0.1054056	5.54	0.000
Constant	4.455541	19.66	0.000
R-square within	11.99		
R-square between	48.76		
R-square overall	32		

Source: Author's Computation (2026).

Result Discussion and Test of Hypotheses

H₀₁: Board Size and Multiple Capital Disclosure

The coefficient of board size is -0.031 and is significant at the 5 percent level ($p = 0.043$), indicating a significant negative relationship between board size and multiple capital disclosure. This finding means that as the size of the board increases, the level of multiple capital disclosure by bank management tends to decline. This result that runs counter to the conventional theoretical expectation that larger boards, by virtue of their broader expertise and stronger monitoring capacity, should drive higher disclosure quality.

This contradiction deserves careful consideration rather than dismissal. In the Nigerian banking context, several factors may explain why larger boards are associated with lower multiple capital disclosure. First, large boards in Nigerian banks are not necessarily composed of directors with diverse expertise in sustainability or non-financial reporting. The CBN's corporate governance framework prescribes minimum board sizes, meaning that many banks maintain large boards primarily to satisfy regulatory requirements rather than because additional directors bring meaningful governance capacity. Where board growth is compliance-driven rather than competence-driven, the expected disclosure benefit of a larger board may not materialize. Second, coordination challenges are well documented in large boards (Fasan & Mio, 2017), and in the Nigerian context, where board meetings average just six times per year, the opportunity for large boards to reach the level of deliberative consensus needed to champion comprehensive non-financial disclosure may be structurally limited. Third, it is possible that in the Nigerian banking environment, larger boards create more room for the dilution of accountability, where individual directors feel less personal responsibility for driving disclosure quality precisely because responsibility is diffused across more members. This finding is consistent with Kılıç and Kuzey (2018), who also found board size to be an insignificant or negative predictor of certain IR disclosures, and it underscores the importance of examining governance-disclosure relationships within their specific institutional contexts rather than assuming the universal applicability of findings from other settings. On the basis of this result, the null hypothesis that board size has no significant effect on multiple capital disclosure is rejected.

H₀₂: Board Gender Diversity and Multiple Capital Disclosure

Board gender diversity has a coefficient of 0.1, significant at the 5 percent level, indicating that an increase in the proportion of female directors on the board is associated with a 0.1 unit increase in the multiple capital disclosure index. This finding is consistent with agency theory and with the broader argument in the governance literature that female directors tend to be more socially conscious, more attentive to stakeholder needs, and more inclined to advocate for comprehensive non-financial disclosure (Buitendag et al., 2017; Dey, 2020).

In the Nigerian banking context, this finding carries a particularly important practical implication. Given that the descriptive statistics revealed that some boards had no female representation at all during the study period, the positive and significant coefficient on gender diversity suggests that the current underrepresentation of women on Nigerian bank boards is not merely a diversity concern in the abstract, it has measurable consequences for the quality of

information disclosed to stakeholders. Boards that make deliberate efforts to increase female representation are, on the evidence of this study, likely to produce more comprehensive multiple capital disclosures. This aligns with the regulatory push in Nigeria toward more inclusive corporate governance and reinforces the case for gender diversity targets in the banking sector. The null hypothesis that board gender diversity has no significant effect on multiple capital disclosure is accordingly rejected.

H₀₃: Board Activity and Multiple Capital Disclosure

The coefficient of board activity is 0.006, but the result is not statistically significant at any of the conventional levels of significance. While the positive sign of the coefficient is theoretically consistent with the expectation that more frequent board meetings enhance managerial oversight and information demand, the absence of statistical significance means that this study cannot establish a meaningful relationship between board meeting frequency and multiple capital disclosure among Nigerian deposit money banks.

This finding is similar to that of Omran et al. (2021) and warrants reflection rather than simple acceptance. Several contextual factors may explain the insignificance. First, as the descriptive statistics reveal, board meeting frequency varies enormously across the sample from one meeting to sixteen per year. This suggests that the number of meetings alone is a poor proxy for the quality of board engagement, since a board that meets sixteen times reactively may exercise less meaningful oversight than one that meets six times with a well-structured agenda that includes non-financial reporting matters. Second, in the Nigerian banking sector, where the CBN's supervisory framework imposes its own external monitoring discipline on banks, board meetings may be driven more by regulatory compliance than by internal governance initiative. If meetings are convened primarily to satisfy external requirements rather than to deliberate substantively on disclosure strategy, it is unsurprising that meeting frequency does not translate into higher disclosure quality. Third, cultural and institutional factors may play a role in environments where board discussions are characterised by deference to executive leadership rather than robust challenge, the frequency of meetings matters less than the power dynamics within them. Future research would benefit from examining not just how often boards meet, but what they deliberate on and whether non-financial reporting is a standing agenda item. The null hypothesis that board activity has no significant effect on multiple capital disclosure is therefore not rejected.

H₀₄: Board Independence and Multiple Capital Disclosure

The coefficient of board independence is 0.105 and is significant at the 1 percent level, indicating a strong positive relationship between the proportion of independent non-executive directors and multiple capital disclosure. This means that a unit increase in the ratio of independent directors is associated with a 0.105 unit increase in the multiple capital disclosure index the largest effect size among the board characteristics examined in this study.

This finding is theoretically intuitive and practically significant. Independent non-executive directors, by virtue of their distance from the day-to-day management of the bank, are better positioned to evaluate management's disclosure decisions objectively and to demand more comprehensive reporting on behalf of shareholders and other stakeholders. Their independence

from executive influence reduces the risk that disclosure decisions are shaped by management's self-interest in limiting the release of sensitive non-financial information. This result is consistent with the findings of Vitolla et al. (2019) and Chouaibi et al. (2021), and reinforces the agency-theoretic argument that board independence is one of the more reliable governance mechanisms for driving disclosure quality.

It is worth noting, however, that the descriptive statistics showed board independence to be relatively low across the sample, with even the most independent board having only 23.3 percent of its members classified as independent directors. The significant positive coefficient therefore suggests that even modest increases in independent director representation can produce measurable improvements in multiple capital disclosure, a finding with direct implications for the CBN's corporate governance guidelines and for any regulatory effort to strengthen the non-financial reporting environment in the Nigerian banking sector. The null hypothesis that board independence has no significant effect on multiple capital disclosure is accordingly rejected.

5.0 Conclusion, Recommendations and Contributions

This study examined the effect of board size, board gender diversity, board activity, and board independence on multiple capital disclosure among listed deposit money banks in Nigeria over an eight-year period from 2015 to 2022. The findings establish that board size has a significant negative effect on multiple capital disclosure, while board gender diversity and board independence have significant positive effects. Board activity produced no statistically significant effect.

The negative effect of board size reflects the coordination challenges and diffused accountability that characterize large boards in the Nigerian banking context, where board growth is largely compliance-driven rather than competence-driven. The positive effects of gender diversity and independence confirm that disclosure quality is determined less by how many directors sit on a board than by who they are and how independently they function. The insignificance of board activity suggests that meeting frequency is a poor substitute for the quality of board engagement with non-financial reporting matters.

On the basis of these findings, the study recommends that the CBN and SEC reorient their corporate governance guidelines toward board quality rather than board size, establish minimum gender diversity thresholds for bank boards, and strengthen criteria for verifying genuine director independence. Bank boards are equally encouraged to treat multiple capital disclosure as a substantive governance responsibility rather than a regulatory afterthought. Future research should examine board meeting quality rather than frequency, investigate non-linear board size effects, and extend the analysis to other sectors of the Nigerian economy.

The study contributes empirical evidence on the governance determinants of multiple capital disclosure in an underrepresented developing country context, extends the application of agency theory to the integrated reporting literature, and offers a graduated disclosure measurement approach that future studies can build on.

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