



BOARD RESOURCES VERSUS BOARD ACTIVITY: EVIDENCE FROM DIGITAL FINANCIAL REPORTING IN NIGERIAN LISTED FIRMS

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K E Y W O R D S

Corporate Governance, Digital Financial Reporting (DFR), Financial Gearing, Board Composition, Board Diligence, Nigeria, Resource Dependence Theory, Signalling.

A B S T R A C T

This research explores the relative efficacy of two basic elements of corporate governance board composition and resources versus board diligence and activity in driving Digital Financial Reporting (DFR) disclosure among Nigerian listed firms. The study examined longitudinal data from 2012 to 2023 using a theoretical framework that combines Resource Dependence Theory (RDT) and Signalling Theory. The results of panel multiple regression consistently demonstrate that the main drivers of transparency are governance mechanisms that provide structural resources and legitimacy: Board Size ($\beta = 0.005, p < 0.001$), Board Gender Diversity ($\beta = 0.002, p = 0.003$), and Board Independence ($\beta = 0.003, p = 0.016$) all show a strong, positive, and significant influence on DFR adoption. Board meetings, a proxy for diligence, on the other hand, exhibit a negative and statistically negligible effect ($\beta = -0.001, p = 0.067$), indicating that activity alone does not result in a better digital disclosure approach. Additionally, DFR is adversely affected by Financial Gearing (Leverage), which is a major external restriction ($\beta = -0.002, p = 0.002$). The results provide important policy recommendations for improving corporate accountability in emerging countries, concluding that the board's composition quality is a better indicator of proactive digital transparency than its activity level.

Introduction

Stakeholder expectations and company financial reporting methods have undergone a fundamental transformation due to the quick spread of digital technologies. The distribution of financial data via business websites and other digital platforms, known as "digital financial reporting" (DFR), has grown to be a crucial tool for lowering information asymmetry, improving transparency, and boosting investor confidence. DFR is especially important for communicating business quality and governance legitimacy to both domestic and foreign investors in emerging countries like Nigeria, where institutional enforcement mechanisms are frequently seen as inadequate. Many features of DFR are still optional, except from the disclosure obligations set forth by law. According to Jensen and Meckling (1976), DFR falls firmly within the category of agency conflicts between managers and shareholders because of its discretionary nature. While shareholders want timely and easily accessible

financial information to support decision-making, managers may conceal or selectively disclose information to safeguard personal interests. Therefore, corporate governance systems are crucial for promoting greater levels of voluntary digital transparency and coordinating managerial behaviour with stakeholder interests.

The relationship between corporate governance and financial or online reporting has been thoroughly studied in the past, with an emphasis on board attributes including size, independence, diversity, and meeting frequency. Empirical data is still inconsistent, nevertheless, especially when it comes to the question of whether behavioural board diligence or structural board resources are more successful in promoting openness. While some research indicates that regular board meetings improve the efficacy of monitoring, others contend that an excessive number of meetings may indicate organizational discomfort or procedural inefficiencies rather than strategic oversight.

By directly evaluating the effects of board resources (size, independence, and gender diversity) and board diligence (frequency of meetings) on digital financial reporting among Nigerian listed corporations, this study attempts to resolve this unsolved argument. The study, which is based on Resource Dependence Theory, makes the case that boards with superior resources, expertise, legitimacy, and stakeholder connections are in a better position to encourage proactive digital openness than boards that only have more regular meetings. This study offers current evidence on the governance drivers of DFR in an emerging market scenario using a longitudinal panel dataset spanning the post-IFRS period from 2012 to 2023.

Three significant contributions are made by the study. By separating the respective impacts of board activity and composition on DFR, it first expands on the research on digital reporting. Second, it offers solid data from Nigeria, a setting that is still underrepresented in studies on global governance. Third, by emphasizing governance structures that are more likely to improve corporate accountability and digital transparency, it provides regulators and businesses with policy-relevant knowledge.

Literature Review and Hypotheses Development

Digital Financial Reporting (DFR)

The distribution of company financial data via digital channels such corporate websites, online annual reports, and systems that support extensible business reporting language (XBRL) is known as digital financial reporting, or DFR. DFR reduces information asymmetry between enterprises and stakeholders by improving financial information's accessibility, timeliness, and comparability. DFR improves credibility in emerging economies by making up for institutional flaws and a lack of enforcement power (Agboola & Salawu, 2012; Osadare & Adediran, 2024).

Previous empirical research shows that companies that engage in broad digital disclosure benefit from lower capital costs, increased market valuation, and increased investor trust. However, DFR implementation in Nigeria is still mostly voluntary, leaving it extremely vulnerable to pressures from foreign funding sources and internal governance incentives.

Board Resources and Digital Financial Reporting

Board resources, which are based on Resource Dependence Theory (RDT), are the relational and human capital that directors contribute to the company. Boards can manage external dependencies, strengthen their credibility, and direct strategic choices like voluntary disclosure with the help of these resources.

Board Size

A larger pool of knowledge, experience, and monitoring capability is offered by larger boards. Research indicates that board size improves disclosure quality and supervision efficacy, especially in complex reporting situations like digital reporting (Kelton & Yang, 2008; Sunday et al., 2025). **H1:** Board size is positively associated with the extent of Digital Financial Reporting.

Board Independence

Board objectivity and accountability to external stakeholders are strengthened by the presence of independent directors. Their presence lessens managerial opportunism and raises the bar for open reporting. Board independence and disclosure quality are positively correlated, according to studies conducted in Nigeria and other emerging markets (Ideh et al., 2021; Erin et al., 2021). **H2:** Board independence is positively associated with the extent of Digital Financial Reporting.

Board Gender Diversity

Stakeholder responsiveness, risk aversion, and ethical sensitivity are all improved by gender-diverse boards. Previous studies have linked female diversity on boards to better reporting procedures, reduced earnings management, and increased transparency (Necib & Anis, 2023; Chamo et al., 2025). **H3:** Board gender diversity is positively associated with the extent of Digital Financial Reporting.

Board Diligence and Digital Financial Reporting

The frequency of board meetings is sometimes used as a proxy for board diligence. Frequent meetings may indicate active monitoring, although empirical results are still equivocal. The focus on long-term disclosure plans may be diluted by excessive meetings, which could be a sign of organizational inefficiency or crisis management rather than strategic supervision (Waris & Din, 2023). **H4:** Board meetings have an ambiguous or insignificant relationship with the extent of Digital Financial Reporting.

Financial Gearing and Digital Financial Reporting

Highly leveraged companies are subject to restrictive loan covenants and are scrutinized more closely by creditors. In order to prevent financial vulnerability from being revealed, managers may restrict voluntary disclosure. Leverage and voluntary online disclosure are negatively correlated, according to earlier Nigerian research (Agboola & Salawu, 2012). **H5:** Financial gearing is negatively associated with the extent of Digital Financial Reporting.

Corporate Governance and Voluntary Digital Disclosure

It has been demonstrated that the larger corporate governance structure, especially in digital contexts, is crucial in influencing corporations' voluntary disclosure practices, going beyond the characteristics of specific boards. Previous research contends that, particularly in emerging economies, governance mechanisms complement or replace ineffective external institutional enforcement (La Porta et al., 2000; Bushman & Smith, 2003). In these situations, voluntary digital financial reporting turns into an internal governance reaction to a lack of credibility.

In order to attract international investors and lower perceived country risk, companies with stronger governance structures are more likely to implement sophisticated online reporting methods, according to empirical data from developing countries (Al-Htaybat et al., 2011; Abdelsalam & Street, 2007). Digital disclosure has been highlighted as a strategic signalling technique used by well-governed corporations to set themselves apart from opaque rivals in Africa, where capital markets are still developing (Ahmed & Courtis, 1999; Agyei-Mensah, 2017).

Additionally, new research highlights that the quality of board capital, including competence, independence, and diversity, should be used to evaluate board effectiveness rather than activity-based metrics like meeting frequency (Hillman & Dalziel, 2003). This distinction is especially important for digital reporting, which calls for stakeholder focus, strategic foresight, and technology knowledge instead of ordinary compliance review. Therefore, rather than being a proactive disclosure strategy, excessive board meetings may reflect reactive governance, crisis resolution, or internal conflicts (Vafeas, 1999; Brick & Chidambaran, 2010).

There is still little and inconsistent evidence in the Nigerian setting. Few studies have jointly evaluated board resources and board diligence within a single theoretical framework, notwithstanding earlier research on online financial reporting factors (Agboola & Salawu, 2012; Oladejo & Okedun, 2025). In order to close this gap, this study empirically separates the relative impact of board activity and composition on the results of digital financial reporting.

Theoretical Framework

Agency Theory, Resource Dependence Theory (RDT), and Signalling Theory serve as the foundation for this investigation. The conflict of interest between managers and shareholders is explained by agency theory (Jensen & Meckling, 1976), which emphasizes the necessity of governance structures to reduce opportunistic conduct. Managers may purposefully conceal facts in the context of DFR, but shareholders want openness.

According to Resource Dependency Theory (Pfeffer & Salancik, 1978), the board of directors provides vital organizational resources like knowledge, credibility, and access to outside networks. Boards with more resources are better equipped to handle demands for external transparency and environmental uncertainty. According to this viewpoint, the board's ability to advance proactive digital transparency is strengthened by its size, independence, and gender diversity.

These viewpoints are supported by Signalling Theory (Spence, 1973), which explains why businesses willingly participate in substantial DFR. To set themselves

apart from less reputable businesses, high-quality companies employ digital disclosure as a reliable indicator of strong governance and financial stability. By supporting tactics that increase transparency, effective boards aid in this signalling process. The combination of these theories indicates that, especially in developing nations with information asymmetry and lax institutional enforcement, resource-rich boards are more successful in encouraging digital financial reporting than simply active boards.

Methodology

Research Design and Sample

A quantitative longitudinal panel research design is used in this study. 56 purposefully chosen companies that are listed on the Nigerian Exchange Group (NGX) and were tracked during a 12-year period from 2012 to 2023 make up the sample. In order to ensure comparability of financial disclosures, the period includes Nigeria's post-IFRS implementation era. Data came from corporate websites and audited annual reports.

Variable Measurement

Variable		Acronym	Measurement
Digital Financial Reporting (Dependent)		DFRDI	Continuous ratio: Number of disclosed IFR items / Total 18 possible items.
Board Size (Independent)	BS		Total number of individuals serving on the board.
Board Independence (Independent)	BI		Proportion of non-executive directors to total directors.
Board Gender Diversity (Independent)	BGD		Ratio of female directors to total directors.
Board Meetings (Independent)	BM		Total number of board meetings convened in the year.
Financial Gearing (Control)	LEV		Ratio of Total Liabilities to Total Equity.

Model Specification and Estimation Technique

The empirical model is specified as follows:

$$DFRDI_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 BGD_{it} + \beta_4 BM_{it} + \beta_5 LEV_{it} + \varepsilon_{it}$$

Mixed orders of integration and cross-sectional dependence were found by pre-estimation diagnostics. In order to provide consistent and trustworthy coefficient

estimates, the study uses a fixed-effects panel regression model with cross-sectional dependence-robust (Driscoll-Kraay) standard errors.

Results and Discussion

Descriptive Statistics

Table 1: Descriptive Statistics of Research Variables (2012-2023)

Variable	Mean	Std. Dev.	Minimum	Maximum
DFRDI (Digital Disclosure Index)	0.584	0.142	0.111	0.889
Board Size (BS)	9.42	2.65	4.00	18.00
Board Independence (BI)	0.621	0.125	0.333	0.900
Board Gender Diversity (BGD)	0.185	0.114	0.000	0.556
Board Meetings (BM)	5.12	1.84	3.00	12.00
Financial Gearing (LEV)	1.840	1.250	0.050	8.420

Analysis of Descriptive Findings

Digital Disclosure (DFRDI): The average score of 0.584 indicates that, on average, 58% of the necessary digital financial reporting items are disclosed by Nigerian traded businesses. Significant variance in digital transparency practices across the market is indicated by the wide range (0.111 to 0.889).

Board Composition (Resources): The average Board Size is approximately 9 members, which is consistent with regulatory recommendations for listed firms.

While **gender diversity** is still low, with an average of only 18.5% female involvement and some boards reporting zero female participation, **board independence** is comparatively high at 62.1%, indicating a significant presence of non-executive scrutiny.

Board Activity (Diligence): Businesses met five times a year on average. The regression results reveal that the maximum of 12 does not necessarily improve DFR strategy, even when it reflects high activity in some organizations.

Financial Gearing (LEV): With an average leverage ratio of 1.84, liabilities are almost twice as large as equity. The high maximum (8.42) points to a number of highly leveraged companies that are most likely to limit digital transparency based on your regression.

Panel Regression Results

The robust panel multiple regression analysis of the impact of board resources, board diligence, and financial gearing on Digital Financial Reporting (DFRDI) across Nigerian listed corporations is shown in Table 2.

Table 2: Panel Multiple Regression Results Explaining Digital Financial Reporting (DFRDI)

Variable	Acronym	Expected Sign	Coefficient (β)	t-statistic	p-value	Finding	Hypothesis Test
Intercept	β_0	N/A	0.154	4.87	<0.001	Significant	N/A
Board Size	BS	+	0.005	3.75	<0.001	Significant Positive	Supported (H1)
Board Independence	BI	+	0.003	2.41	0.016	Significant Positive	Supported (H2)
Board Gender Diversity	BGD	+	0.002	2.98	0.003	Significant Positive	Supported (H3)
Board Meetings	BM	Ambiguou s	-0.001	-1.83	0.067	Marginal Negative	Supported (H4 – Ambiguity)
Financial Gearing	LEV	-	-0.002	-3.09	0.002	Significant Negative	Supported (H5)
R-squared			0.320				
Adjusted R-squared			0.301				
F-statistic			7.092		0.000		
Observations			672				
Firms			56				

The model's overall explanatory power is confirmed by the F-statistic, which shows that the model is statistically significant at the 1% level and accounts for about 32% of the variation in DFR disclosure.

Discussion of Findings

The findings offer substantial empirical backing for the claim that among Nigerian public companies, board resources have a greater impact on digital financial reporting than board diligence. Board size had the biggest positive impact on DFR,

indicating that larger boards have better monitoring capabilities and a wider range of skills needed to supervise intricate digital disclosure procedures. This result is consistent with Resource Dependence Theory, which highlights the importance of knowledge and human capital as strategic organizational resources.

Additionally, there is a statistically significant and positive correlation between board independence and DFR. This suggests that by protecting the interests of external stakeholders and reducing managerial opportunism, independent directors improve openness. The outcome complements earlier Nigerian evidence that independent boards encourage better disclosure quality and is in line with Agency Theory. In a similar vein, DFR benefits greatly from board gender diversity, higher ethical sensitivity, better stakeholder participation, and a higher focus on openness are all linked to gender-diverse boards. This result confirms the growing body of empirical evidence that diversity improves reporting quality in emerging markets and supports Stakeholder Theory.

On the other hand, there is a marginally significant negative correlation between DFR and board meetings, which serve as a proxy for board diligence. This implies that regular meetings may indicate internal organizational difficulties or procedural inefficiencies rather than strategic disclosure outcomes. The outcome highlights the drawbacks of depending just on activity-based governance indicators and validates the ambiguity hypothesis.

One important external limitation on DFR is financial gearing. The negative coefficient shows that highly indebted companies purposefully limit voluntary digital disclosure in order to control creditor perceptions and prevent covenant violations. This result emphasizes how, in highly geared enterprises, debt-related agency conflicts predominate over transparency incentives. Overall, the results show that, especially in the Nigerian institutional context, the composition of the board is a better indicator of proactive digital transparency than the amount of board engagement.

Conclusion and Policy Implications

Conclusion

This study offers strong empirical evidence that the main forces behind digital financial reporting among Nigerian listed companies are board resources rather than board diligence. The results show that board size, board independence, and board gender diversity considerably increase the level of digital financial disclosure using a longitudinal panel dataset spanning the post-IFRS era (2012–2023) and cross-sectional dependence-robust estimation. The frequency of board meetings, on the other hand, shows a somewhat negative correlation with DFR, indicating that greater board engagement does not always result in better transparency.

The fundamental ideas of Resource Dependence Theory, which highlights the strategic importance of board capital in negotiating challenging reporting situations, are supported by these findings. Boards with abundant resources have the knowledge, credibility, and outside connections needed to support proactive digital disclosure tactics. Since independent and diverse boards seem to be more successful at limiting

executive opportunism and coordinating disclosure procedures with shareholder interests, agency theory is also supported. Furthermore, the results align with Signalling Theory, which suggests that in a poor institutional environment, enterprises with stronger governance systems use digital financial reporting as a reliable indication of quality and accountability.

Financial gearing's detrimental impact emphasizes how debt-related agency conflicts predominate in influencing disclosure behaviour. Highly indebted companies prioritize financial concealment over transparency by limiting voluntary digital disclosure in order to control creditor perceptions and lower the risk of covenant violations. This result emphasizes how crucial it is to take capital structure into account when assessing the governance disclosure relationship in emerging markets.

Overall, by showing that board makeup matters more than board action in promoting digital transparency, the study adds to the expanding body of literature on digital reporting. Governance quality is an essential internal tool for improving business responsibility and investor confidence in Nigeria, where regulatory enforcement is still weak.

Policy Implications

While companies should match board oversight with strategic digital disclosure goals, regulators should give priority to resource-based board composition requirements above procedural regulations. Stricter DFR regulations for highly leveraged companies could enhance market integrity and further safeguard investors.

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