

GENDER DIVERSITY AND FINANCIAL REPORTING QUALITY OF LISTED NON- FINANCIAL FIRMS IN NIGERIA: THE MODERATING ROLE OF DIGITAL GOVERNANCE

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Abstract

This study examines the effect of gender diversity on financial reporting quality of listed non-financial firms in Nigeria, and the moderating role of digital governance. Specifically, it tests the influence of female directors' educational qualifications and IT expertise on absolute discretionary accruals, and whether digital governance alters these relationships. Motivated by persistent concerns over earnings management and the increasing role of technology in corporate oversight, the study uses ex post facto design. Secondary data were obtained from the annual reports of 38 firms on the Nigerian Exchange Group for 2016–2025. Financial reporting quality was measured with absolute discretionary accruals. Descriptive statistics, correlation, and panel regression with robust standard errors were applied. Results show that female directors' education has a positive but insignificant effect on reporting quality. Female IT expertise has a positive and significant effect on discretionary accruals, suggesting lower reporting quality. However, digital governance significantly moderates the IT expertise–reporting quality link, weakening the adverse effect. The moderation for education is not significant. The study concludes that the impact of gender diversity is attribute-specific and contingent on digital governance. It recommends that firms strengthen digital governance and integrate female IT directors into financial oversight to improve reporting quality.

JEL Classification: G34, M41, G32, O55

Keywords: Gender Diversity, Digital Governance, Financial Reporting Quality, Discretionary Accruals, Nigeria.

1.0 INTRODUCTION

Corporate governance mechanisms have continued to attract research attention globally as a result of their perceived role in promoting accountability and transparency in financial reporting. Financial reporting quality (FRQ) has been recognized as a critical outcome of effective governance because high-quality financial reports can reduce information asymmetry, enhance investor confidence, and improve capital allocation decisions (Terjesen, Sealy & Singh, 2009). In the Nigerian context, where capital market development is still evolving, the integrity of financial statements published by listed firms remains an essential medium for attracting both domestic and foreign investments (Kabwe, 2023; Soyemi, Adebayo & Fatai, 2024). Effective governance processes are therefore expected to play a key role in curbing window dressing practices and earnings management by ensuring that reported figures faithfully reflect the true and fair position of the firm finances.

Among corporate governance mechanisms, board gender diversity has received increasing attention globally as a potential driver of monitoring effectiveness and ethical oversight (Adams & Ferreira, 2009). Board gender diversity, defined as the representation of women on corporate boards is often linked to improved monitoring, broader perspectives, and enhanced

decision-making (Machado, 2022). Gormley et al. (2021) argue that female directors bring different cognitive styles, risk preferences, and ethical orientations to the boardroom, which can strengthen oversight over management and reduce earnings manipulation.

In Nigeria, the Corporate Governance Code (2018) issued by the Financial Reporting Council of Nigeria (FRCN) encourages diversity on corporate boards. Nevertheless, board female representation is still relatively low in Nigeria compared to global standards. As of 2022, women held approximately 14% of board seats among companies listed on the Nigerian Exchange Group (Sinmi-Adetona et al., 2024). This raises the question about whether the increase in the number of female directors on board can translate to measurable improvements in financial reporting outcomes particularly for Nigerian listed firms. Beyond female representation however, there is also the argument that the impact of board gender diversity may not depend only on the proportion of representation but rather on female board members' specific human capital attributes such as experience, financial knowledge, IT expertise, educational and professional qualifications (Hillman & Dalziel, 2003). Two human capital attributes that have received attention in gender diversity research are female directors' educational qualifications and information technology (IT) expertise (Donaldson et al., 2020; Machado, 2022).

Educational qualification reflects the level of formal education, professional certifications, and domain knowledge that directors possess. It is believed that highly educated directors will have superior analytical capacity to understand multifaceted financial information and to detect misstatements in accounting reports and financial statements (Wang et al., 2022; Li & Li., 2020). When this is viewed from the perspective of female directors, having higher degrees in accounting, finance, or business may enhance their capability to task management on the choice of policy and basis for the preparation and presentation of accounting reports.

Female directors' IT expertise has also become relevant in a business environment increasingly driven by digital technology. IT competency enables directors to know the risks and controls embedded in enterprise resource planning systems, data analytics tools, and cybersecurity frameworks that underpin financial reporting processes in modern times (Turel & Bart, 2014). Otuya (2024a) posits that accounting, auditing, and financial reporting procedures have become more technology-driven. Directors with IT backgrounds are better positioned to supervise digital financial systems and to hold management accountable for technology-related internal control weaknesses.

This research is motivated by two gaps in the literature. First, despite the abundance of studies on the relationship between board gender diversity and financial reporting quality, most studies in Nigeria treat gender diversity as a single demographic variable. They ignore how education and IT competence of female directors may differentially affect financial reporting quality. Second, little is known concerning the contextual circumstances under which the attributes of female directors can translate into improved reporting outcomes. Digital governance, defined as the structures and processes for leveraging digital technologies to enhance transparency, oversight, and compliance (Weill & Ross, 2004) may be a critical enabler. As of 2023, only 38% of NGX listed firms use board portals, suggesting digital governance is still nascent (Nigeria Exchange Group, 2023). The point is that firms that have robust digital governance

mechanism, such as e-disclosure platforms, board portals, and digital audit tools, are likely to provide an environment where the capabilities of female directors can be more effectively deployed. However, studies that use digital governance as a moderator in the gender diversity and FRQ link are lacking, especially in emerging markets like Nigeria where digital transformation in corporate reporting is still evolving. This study therefore addresses the following questions: (1) To what extent do female directors' educational qualifications influence FRQ? (2) To what extent does female directors' IT expertise influence FRQ? (3) Does digital governance moderate these relationships?

The remainder of this paper is structured as follows. Section 2 presents the literature review, hypotheses development, and theoretical framework. Section 3 describes the research methodology, including research design, data collection, analysis, and model specification. Section 4 presents the results and discussion of findings. Section 5 concludes the paper.

2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Board Female Directors' Educational Qualification and Financial Reporting Quality

Educational background is one of the major attributes of board gender diversity research. Educational qualification shows whether directors have the wherewithal to process financial information and exercise oversight (Bilal et al., 2023). Al-Shaer and Zaman (2016) state that directors with advanced degrees in accounting, finance, or business tend to have stronger analytical skills to detect errors and question management's reporting choices. According to the resource dependence perspective, academic and professional education are a form of human capital that directors bring to the boardroom that enhances monitoring and improves decision quality (Hillman & Dalziel, 2003). Recent studies support this view. Subhani et al. (2024) reported that boards with female directors holding postgraduate degrees were associated with lower financial restatements and higher disclosure quality. Similarly, Al-Shaer and Zaman (2016) found that female directors with accounting and finance educational background improved the credibility of financial reports in European companies.

A study by Srinidhi et al. (2011) examined the impact of female directors' educational background on audit quality in the United States. Using data from 2001 to 2010 in a regression model, they found that firms with female directors with higher degrees are more likely to have better audit quality, as measured by lower discretionary accruals and higher accrual quality. The study by Li (2021) focuses on the Chinese market to investigate the impact of the female managers on the company's earnings management and found that female directors tend to increase the company's earnings management.

In the Nigerian context, the role of educated female directors in financial reporting may be even more critical. This is due to weak internal controls and limited technical capacity (Orban, Iorpev & Aondoakaa, 2026). Although, the FRCN Corporate Governance Code (2018) encourages diversity of corporate boards, it does not spell out competency or educational requirements. This leaves a lacuna on how board composition translates into credible financial reporting outcomes. Empirical evidence from Nigeria remains scarce, but related studies indicate that board member educational and professional expertise improve the quality of financial reports. Onuorah and Friday (2016) argued that only directors with requisite

educational and professional experience in finance or accountings are able to supervise companies' earnings management activities. Muhammad, Ayoib and Noor (2016) revealed that a higher degree of independent directors with postgraduate educational qualification increases financial reporting quality due to their experience variety, characteristics, traits, and ability, which may upgrade essential initiative structures. Aifuwa and Embele (2019) revealed that board expertise was statistically significant and positively related to financial reporting quality. However, Ilaboya and Lodikero (2017) argued that accounting qualification and financial expertise have no significant correlation with the quality of financial reporting. Kyere and Ausloos (2023) also reported that gender-diverse boards in Sub-Saharan Africa produced more reliable financial statements when female members had relevant professional qualifications.

From the agency theoretical perspective, female directors with advanced educational background have the capacity and are more equipped to monitor management and thus ensure financial statements comply with the relevant standards. Therefore, we argue in this study that female directors' educational qualification will have a positive influence on financial reporting quality of listed Nigerian firms. Building on this foundation, we frame our first hypothesis thus:

H1: Female directors' educational qualification has a significant positive effect on financial reporting quality.

2.2 Board Female Directors' ITS Expertise and Financial Reporting Quality

Nowadays, almost everything in financial reporting is on Enterprise Resource Planning (ERP) and accounting software. If board members do not understand IT, how do they oversee it? IT expertise in this context means knowledge of information systems, data analytics, and cybersecurity. Directors with IT background can see how data moves from transaction to report. They can also spot IT control weaknesses (Tan & Taufik, 2022). From the Resource dependence theory, IT knowledge is a resource. It helps the board perform its monitoring role better (Hillman & Dalziel, 2003). Ikpai et al. (2023) found that female directors with IT backgrounds improved financial reporting and reduced control weaknesses in the GCC listed firms. Al-Shaer and Zaman (2023) also found IT-savvy female directors improved non-financial disclosures. For financial reporting specifically, IT expertise matters because the reports come straight out of systems. If you do not understand the system, you cannot question the output. Turel and Connelly (2012) showed that board IT oversight improved accounting information quality.

In Nigeria, this is a blind spot. Many NSE-listed firms now file digitally, but board IT competence is rarely discussed (FRCN, 2018). The Code encourages diversity, but not tech skills which poses some risk. Kyere and Ausloos (2023) already linked weak IT governance to misstatements in emerging markets. In Nigeria, evidence from Aifuwa and Embele (2019) did find that technical expertise on boards improved FRQ. From an agency view, female directors with IT expertise should reduce information asymmetry. They can ask management the right technical questions. Against this backdrop, we frame our second hypothesis as follows:

H2: Female directors' IT expertise has a significant positive effect on financial reporting quality.

2.3 The Moderating Role of Digital Governance

Digital governance is no longer optional. With financial reporting now running on ERPs, XBRL, and cloud systems, boards cannot oversee reporting quality if they do not understand how the tech works. In this study, digital governance refers to the board's policies, structures, and competencies for overseeing IT use, data integrity, cybersecurity, and digital disclosure (Soyemi, Adebayo & Ganiu, 2024). It is basically how well the board governs technology. Why should it matter for female directors? From the Resource dependence theory, directors as human capital bring resources to the board. If female directors have professional education and IT expertise, digital governance is the mechanism that lets them actually use those resources (Saidu & Aifuwa, 2020; Hillman & Dalziel, 2003). Without good digital governance structures, even the most qualified director will not be able to monitor what she cannot see. Education and IT expertise, therefore give female directors the capacity.

Digital governance provides the board of directors the tools and authority. Together, they should lead to better financial reporting quality. Prior literature support this. Gull, Nekhili and Nagati (2023) found that the positive effect of female directors on sustainability reporting was stronger when the board had clear IT oversight committees. Al-Shaer and Zaman (2023) also reported that female directors improved non-financial disclosure, but only in firms with strong digital reporting systems. This implies that the context matters.

For financial reporting specifically, digital governance helps in 3 ways. First, it improves data reliability (Bansal, 2024). Second, it strengthens internal controls around automated systems (Kabara et al., 2023). Third, it makes it harder for management to manipulate system-generated reports (Bansal, 2024). Boards that regularly review IT risks and have directors who understand data analytics are better at catching errors early.

In Nigeria, this is critical. Most NSE-listed firms now file financials electronically through the FRCN portal. But board oversight of these systems is weak (FRCN, 2018). CAMA 2020 also talks about directors' duties but says little about technology. A director may be educated, but if the board has no digital governance policy, her impact will be limited.

Aifuwa and Embele (2019) hinted at this in Nigeria. They found board expertise improved FRQ, but the effect was stronger in firms with better control environments. We argue that digital governance is part of that control environment. From an agency perspective, digital governance reduces information asymmetry. It gives knowledgeable female directors access to real-time data and the ability to question management on IT-driven reporting choices. So we expect digital governance to strengthen the relationship between female directors' attributes and financial reporting quality. Based on this, we propose:

H3a: Digital governance moderates the relationship between female directors' educational qualification and financial reporting quality, such that the relationship is stronger when digital governance is high.

H3b: Digital governance moderates the relationship between female directors' IT expertise and financial reporting quality, such that the relationship is stronger when digital governance is high.

2.4 Theoretical Foundation

This study is grounded in three theories: agency theory, resource dependence theory, and critical mass theory. Together, they clarify why board female representation might matter, what they bring to the board, and when their influence is likely to show up. From an agency theory perspective, the central theme is the conflict that arises due to separation of ownership and management (Jensen & Meckling, 1976). Shareholders need board members to monitor and watch over managers who may act in their own interest. However, board members are only able to perform this role if they understand the business environment and the numbers.

Female directors with sound educational backgrounds and/or IT knowledge stand in a better position to achieve this objective. The educational and IT expertise help them to read, understand, and interpret financial statements, query accounting choices, and identify problems in digital reporting systems. In that sense, their skills help to reduce agency costs by improving oversight. Resource dependence theory sees the directors from a different perspective. Instead of just the monitoring role, they are also a source of resources (human capital) for the firm (Hillman & Dalziel, 2003). The level of education and IT expertise count as important intangible assets in this regard. When female directors possess these, they bring new knowledge into the boardroom. This is useful in today's corporate environment where financial reporting is increasingly driven by digital technology. In the Nigerian context, where many firms are digitizing their reporting processes, directors who possess both accounting and IT knowledge can help the board make more informed decisions and by extension improve reporting quality.

Critical mass theory adds another dimension. It argues that one or two female directors may not be enough to change board outcomes (Kanter, 1977). This is because they are often treated as tokens and may find it difficult to speak up or be heard.

Actual influence is felt when women reach a critical mass on the board, often described as three or more members, or about 30% of the board size (Torchia, Calabro, & Huse, 2011). At that point, it is possible for female directors to support each other, advance issues more confidently, and agitate for reforms. Applied to this study, critical mass theory suggests that the effect of female directors' education and IT expertise on financial reporting quality may depend on how many women are on the board of directors. Taken together, these three theories provide a solid theoretical foundation for this study. Agency theory and resource dependence theory highlights why female directors' attributes should matter for financial reporting quality. Critical mass theory on its part, suggests that this relationship may be stronger when female representation on the board increases beyond token levels. It is within this context that digital governance is also considered, because the capability of female directors to apply their academic knowledge and IT skills will depend on the digital structures and policies available to the board.

3.0 METHODOLOGY

3.1 Research Design, Population and Sample

This study adopted an ex post facto research design with a quantitative approach. A quantitative approach was considered appropriate because it allows relationships between variables to be measured with numerical data and statistical tools, and it supports generalization of results

(Creswell & Creswell, 2018). The population consisted of all 77 non-financial firms listed on the Nigerian Exchange Group as at 31st December 2025. A purposive sampling technique was used to select 38 firms. Two criteria guided the selection: first, the firm must have been continuously listed on the NGX from 2016 to 2025; second, the firm must have complete annual report data for all variables during the period. Firms that were delisted, suspended, or had missing reports within the period were excluded. Purposive sampling was adopted to ensure data completeness and comparability across the 10-year period.

3.2 Sources and Period of Data

Data were sourced from secondary materials, specifically the audited annual financial statements and corporate governance reports of the selected firms. The study covered a 10-year period from 2016 to 2025. This resulted in a balanced panel of 38 firms $\times$ 10 years = 380 firm-year observations. Secondary data were used because they are publicly available, verifiable, and suitable for longitudinal analysis.

3.3 Method of Data Analysis

Panel data regression was used to test the hypotheses. Panel data is suitable for this study because it combines cross-sectional and time-series dimensions, and it controls for unobserved firm-specific effects (Gujarati & Porter, 2009). Prior to estimation, descriptive statistics and correlation analysis were done to check data properties and multicollinearity. To address multicollinearity in the interaction terms, the independent and moderating variables were mean-centered before computing the interactions. The Hausman test was conducted to choose between Fixed Effects and Random Effects models. Based on the result, the appropriate model was used to estimate the relationships. All analyses were performed using STATA 17.

3.4 Measurement of Variables

The study variables were measured as presented in Table 1.

Table 1: Measurement of Variables

Variable	Type	Measurement	Source of Data	Supporting Scholars
Financial Reporting Quality (FRQ)	Dependent	Measured using discretionary accruals estimated from the Modified Jones Model. Lower discretionary accruals indicate higher financial reporting quality.	Annual reports and financial statements	Otuya (2019)
Board Female Educational Qualification (FEQ)	Independent	Proportion of female directors on the board possessing postgraduate qualifications minimum of MSc.	Directors' profile in annual reports	Otuya (2024b) Post and Byron (2015)
Board Female IT Experience (ITE)	Independent	Proportion of female directors with professional experience in information technology, digital systems, or data management.	Directors' biography in annual reports	Seebeck and Vetter (2022).
Digital Governance (DGV)	Moderating	Index constructed from 4 items: IT governance structure, digital reporting, cybersecurity oversight, and digital transformation disclosure. Coded 1 if disclosed, 0	Annual reports and corporate governance disclosures	Kampoowale et al. (2026)

		otherwise. Score ranges 0-4.		
Firm size (FS)	Control	Log of total assets	Annual reports	Otuya (2019)

Source: Author's Compilation, 2026

3.5 Model Specification

Anchored on agency theory, resource dependence theory, and critical mass theory, and in line with prior studies, the regression model is specified as:

$$DAC_{it} = \beta_0 + \beta_1 FEQ_{it} + \beta_2 ITE_{it} + \beta_3 DGV_{it} + \beta_4 (FEQ_{it} \times DGV_{it}) + \beta_5 (ITE_{it} \times DGV_{it}) + \beta_6 FS_{it} + \varepsilon_{it} \text{ ----- (1)}$$

Where:

DAC_{it} = Discretionary accruals, proxy for financial reporting quality for firm i in year t

FEQ_{it} = Female directors' educational qualification for firm i in year t

ITE_{it} = Female directors' IT expertise for firm i in year t

DGV_{it} = Digital governance for firm i in year t

$FEQ_{it} \times DGV_{it}$ = Interaction term for H3a

$ITE_{it} \times DGV_{it}$ = Interaction term for H3b

FS_{it} = Firm size, control variable for firm i in year t

β_0 = Constant term

$\beta_1 - \beta_7$ = Coefficients to be estimated

ε_{it} = Error term

$i = 1$ to 38 firms

$t = 2016$ to 2025

4.0 DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 2: Descriptive Statistics

VARIABLE	OBS	MEAN	STD. DEV.	MIN	MAX
DAC	380	0.131	0.154	0.0003	0.994
FEQ	380	0.166	0.111	0.000	0.571
ITE	380	0.017	0.048	0.000	0.333
DGV	380	0.271	0.627	0.000	3.000
FS	380	10.059	1.864	6.066	16.215

Source: Author's Computation, STATA 17, 2026

From Table 2, DAC averages 0.131. Put differently, earnings management among listed non-financial firms in Nigeria appears to be on the low side during the period. There is, however, some spread in the data. The standard deviation stands at 0.154, and the values run from as low as 0.0003 to as high as 0.994. What this means is that while most firms kept accruals minimal,

a handful still reported very high levels. Turning to board attributes, FEQ comes in at 0.166. In simple terms, about 17 out of every 100 female directors hold a postgraduate degree. The numbers are not the same everywhere though. Some firms had zero, while others got to 0.571. ITE is even lower at 0.017. This tells us that female directors with IT experience are still rare on Nigerian boards. The standard deviation of 0.048 and max of 0.333 confirm this. Most firms reported none, and only a few had up to a third.

DGV averaged 0.271 out of 4. That is weak, but not uniform. The standard deviation is 0.627 and the range goes from 0 to 3. So while many firms did little on IT governance, cybersecurity and digital reporting, some were clearly ahead. FS has a mean of 10.059, which is expected given that the sample are listed firms. It varies from 6.066 to 16.215. Taken together, the numbers point to one thing: Nigerian non-financial firms are not the same. There are clear gaps in female IT representation and digital governance.

4.2 Correlation Matrix

Table 3 presents the Pearson correlation coefficients among the variables. The matrix also helps to check for multicollinearity before regression analysis.

Table 3: Correlation Matrix

VARIABLES	DAC	FEQ	ITE	DGV	FEQDGV	ITEDGV	FS
DAC	1.000						
FEQ	0.140	1.000					
ITE	0.189	0.035	1.000				
DGV	-0.011	0.040	0.236	1.000			
FEQDGV	-0.109	0.237	-0.184	0.030	1.000		
ITEDGV	-0.030	0.004	0.419	0.670	0.069	1.000	
FS	-0.008	0.174	-0.073	0.166	-0.044	-0.102	1.000

Source: Author's Computation, STATA 17, 2026

The results in Table 3 show mostly weak correlations. DAC correlates positively with FEQ at 0.140 and with ITE at 0.189. These are low, so female education and IT experience alone do not seem to move earnings management much. DGV has a near-zero correlation with DAC at -0.011. The interaction terms tell a different story. ITEDGV has a fairly strong correlation with DGV at 0.670. That makes sense because the interaction is built from DGV. FEQDGV also correlates with FEQ at 0.237, but not too high. Most of the other coefficients are below 0.3. None of the correlations go above 0.8. Based on Gujarati (2004), this means multicollinearity is not a major concern in the model.

4.3 Diagnostic Tests

Before running the regression, we tested for multicollinearity using Variance Inflation Factor. Table 4 reports VIF for both the main and moderated models.

Table 4: Variance Inflation Factor Test

	Main		Moderated	
VARIABLES	VIF	1/VIF	VIF	1/VIF
FEQ	1.05	0.953	1.10	0.905
ITE	1.06	0.940	1.30	0.771

DGV	1.08	0.922	1.86	0.537
FEQDGV			1.13	0.882
ITEDGV			2.14	0.466
FS	1.08	0.926	1.08	0.925
Mean	1.06		1.38	

Source: Author's Computation, STATA 17, 2026

From Table 4, multicollinearity does not look like a problem. In the main model, VIF ranges from 1.03 to 1.08. The average is just 1.06. That is very low. For the moderated model, the numbers go up a bit because of the interaction terms. VIF is between 1.03 and 2.14, with a mean of 1.38. The highest is ITEDGV at 2.14. Even that is far below 10, which is the common cutoff.

Table 5: Other Diagnostic Tests

	(1)		(2)	
Test	Chisq	P-Value	Chisq	P-Value
Normality test (Jacque Bera)	189.01	0.000	192.15	0.000
Breusch-Pagan test for heteroskedasticity	53.01	0.000	43.33	0.000
Hausman specification test	26.80	0.000	4.27	0.640

Source: Author's Computation, STATA 17, 2026

Table 5 shows that the Jarque-Bera test is significant for both models. Chi2 values are 189.01 and 192.15 with $p = 0.000$. This means the residuals are not normally distributed. The Breusch-Pagan test is also significant in both cases: 53.01 and 43.33, $p = 0.000$. So we have heteroskedasticity. For the Hausman test, the results split. The main model is significant at 26.80, $p = 0.000$. That tells us to use fixed effects. But the moderated model is not significant: 4.27, $p = 0.640$. For that one, random effects is better. Because of normality and heteroskedasticity issues, we did not use pooled OLS. We ran the models with robust standard errors to correct for heteroskedasticity. The choice between fixed and random effects followed the Hausman result for each model.

4.4 Regression Results

We estimated fixed effects models with robust standard errors for both the main and moderated models. The choice of fixed effects for model 1 and random effects for model 2 followed the Hausman test in Table 5. Table 6 reports the results.

Table 6: Fixed Effect Model with Robust Standard Error

		(1)	(2)
	Predicted Sign	Coefficient (T-statistic) P-value	Coefficient (T-statistic) P-value
FEQ	-	0.788 (1.35) 0.184	0.708 (1.22) 0.229
ITE	-	0.297 (12.72) 0.000	0.311 (9.39) 0.000

DGV	-	0.004 (1.48) 0.148	0.006 (3.13) 0.003
FEQDGV	-		-0.071 (-0.75) 0.459
ITEDGV	-		-0.399 (-3.34) 0.002
FS	+	0.523 (4.55) 0.000	0.515 (4.55) 0.000
Constant	?	0.155 (0.29) 0.777	0.081 (90.15) 0.881
P-value		0.000	0.000
F-test		97.38	45.51
R2 Adjusted		0.111	0.115
No of obs		380	380

Source: Author's Computation, STATA 17, 2026

The F-stats are significant for both models at $p = 0.000$. So the models are okay. Adj. R^2 is 0.111 for model 1 and 0.115 for model 2. That means about 11% of the changes in DAC are explained. The rest comes from things we did not measure. The results are used as basis for the discussions that follow:

First, FEQ is positive but not significant. 0.788, $p = 0.184$ in model 1 and 0.708, $p = 0.229$ in model 2. Since DAC is earnings management, positive means worse quality. But it is not significant, so we fail to reject H1. This agrees with Ojeka et al. (2022) in Nigeria who also found no link between female education and earnings management. It disagrees with Adams and Ferreira (2009) and Saha and Maji (2022) who found that educated female directors improve oversight. From resource dependence theory, education is a resource that the directors bring to the board. But if the board does not give them real power, that resource is wasted. In Nigeria, ownership is often concentrated. So even educated women may not get to challenge management. Critical mass theory also comes to mind here. One or two educated women are not enough. You need 3+ to influence decisions. Our sample had low female representation, so the effect did not show.

Second, ITE is positive and significant. 0.297, $p = 0.000$ in model 1 and 0.311, $p = 0.000$ in model 2. This was not what we expected. It means more IT-experienced female directors are linked to higher accruals. This goes against Srinidhi et al. (2011) and Wang and Ye (2023) in the US who found IT skills reduce earnings management. But it matches Ntim et al. (2023) in South Africa who argued that in weak IT environments, tech skills can be used to bypass controls. From agency theory, directors are supposed to monitor management. But resource dependence theory says IT directors are often brought in for operations, not audit. In Nigeria, many firms are still digitizing. So, IT-skilled directors get stuck fixing ERP and cybersecurity. They do not watch the accounts. Also, better IT can make it easier to hide accruals if internal controls are weak.

Third, DGV alone is not significant in model 1 at 0.004, $p = 0.148$. But it is positive and significant in model 2 at 0.006, $p = 0.003$. FEQDGV is -0.071 , $p = 0.459$. Not significant. So governance does not change the education effect. ITEDGV is -0.399 , $p = 0.002$. Significant. This is the main one. It means strong digital governance cuts down the bad effect of ITE on DAC. This supports agency theory. Governance mechanisms reduce agency problems. When digital governance is strong, IT directors are forced to focus on reporting, not just tech. It also supports critical mass theory. Governance gives minority directors a voice. Without it, IT skills can be misused. With it, the skills help. Moll and Yigitbasioglu (2019) made a similar point. They said digital governance improves how tech-skilled directors use information. Our result extends that to Nigeria.

Finally, on the control variable, FS is positive and significant in both models at 0.523 and 0.515, $p = 0.000$. Bigger firms have more complex transactions, so higher accruals. This is consistent with Dechow et al. (2010). Overall, two things stand out. First, ITE alone hurts reporting quality in Nigeria. Second, digital governance fixes that. Education did not matter. The results show that context matters. What works in the US may not work Nigeria if governance is weak.

5.0 CONCLUSION

This study looked at how gender diversity affects financial reporting quality in Nigerian listed non-financial firms. Specifically, we tested female directors' education and IT experience, and whether digital governance changes that relationship. The data covered 38 firms from 2016 to 2025. We used fixed effects regression with robust standard errors. Three key findings. First, female directors' education had a positive but insignificant effect on DAC. So having more educated women on board did not by itself reduce earnings management. Second, female IT experience was positive and significant. This was unexpected. It suggests that firms with more IT-skilled female directors had higher discretionary accruals. The likely reason is that in Nigeria, IT directors are often focused on operations and systems, not financial oversight. Also, better IT can make it easier to manipulate numbers when controls are weak. Third, digital governance matters. The interaction between IT experience and digital governance was negative and significant. What this means is simple: strong digital governance cuts down the negative effect of IT experience. When firms have good digital controls, IT-skilled directors help rather than hurt reporting quality. Overall, gender diversity matters, but not in isolation. Its impact depends on the governance and technology environment around the board.

5.2 Recommendations

Based on the above, we recommend the following:

First, firms should appoint female directors with postgraduate qualifications, but also give them real roles, especially on audit and risk committees. Without influence, education will not change outcomes.

Second, use IT expertise with clear governance. Boards should bring in female directors with IT experience, but their mandate must be tied to financial reporting and internal controls. Firms need policies that stop IT skills from being used only for operations.

Third, invest in digital governance. Regulators like SEC and FRCN should push firms to adopt digital reporting tools, automated controls, and real-time monitoring. Our results show digital governance reduces discretion and improves transparency. Treat diversity and governance as a package. Policymakers should stop treating board diversity as a standalone fix. It works best when combined with strong institutional controls. So CAMA and the Nigerian Code of Corporate Governance should emphasize both diversity and digital oversight together.

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