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Moderating Effect of Audit Report Lag on the Relationship Between Audit Market Structure and Financial Reporting Quality of Listed Deposit Money Banks in Nigeria

Jimoh, Ibrahim[1]*, Olasehinde Rachael, Fajemisin[2] and Adewumi Ramat, Adedoyin[3]
[1,3]College of Management & Social Sciences, Department of Accounting, Oduduwa University, Ipetumodu, P.M.B. 5533, Ile-Ife, Nigeria
[2]Faculty of Administration, Department of Management & Accounting, Obafemi Awolowo University, (220005), Ile-Ife, Nigeria

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ABSTRACT

The study examined the moderating effect of Audit Report Lag (ARL) on the association between Audit Market Structure (AMS) and Financial Reporting Quality (FRQ) of Nigerian banks. The specific objectives are to examine the effect of ARL on FRQ among Nigerian banks and assess the moderating influence of ARL on the association between audit market structure (AMS) and FRQ among Nigerian banks. A longitudinal research design was employed, using secondary data from the audited annual accounts of selected banks. The population comprised 14 publicly quoted Deposit Money Banks (DMBs) in Nigeria, from which a sample size of 11 DMBs was obtained using purposive sampling technique. Multiple regression was used to analyse the data, revealing that ARL has a significant effect on the FRQ of Nigerian banks (t-value = 2.4928; p < 0.05). This suggests that delays in the audit process can allow auditors more time to thoroughly review and analyse financial statements, potentially leading to higher-quality audits. Additionally, the study identified that ARL has an inverse and substantial moderating effect on the association between AMS and FRQ (t-value = -1.9252; p < 0.05). The policy implication of this finding is that delays in the issuance of audit reports may weaken the overall quality of financial reporting among Nigerian banks.

Keywords: Financial Reporting Quality (FRQ), Audit Market Structure (AMS), Audit Report Lag (ARL)

1. INTRODUCTION

Bala et al. (2018) define Financial Reporting Quality (FRQ) as the accurate and objective representation of an entity's financial positions and performance in its reports. Investors rely on these statements to assess the safety of their investments, as they offer critical insights into the effectiveness of management. This financial information guides investment decisions for both investors and creditors (Muhammed et al. 2016). The banking industry, however, has been criticised for poor financial reporting practices, with some auditing firms facilitating the publication of inaccurate financial information (Muhammed et al., 2016). This may be due to the sector's involvement in a wide range of complex financial instruments, such as derivatives, structured products, and securitised assets. The intricate nature of these products can make valuation and risk assessment challenging, leading to potential inaccuracies in financial reporting.

*Corresponding Author: jimohibrahim889@gmail.com

Olowookere (2017) highlighted the interconnection between the effectiveness of the audit market and the transparency of competition in the sector. Market characteristics play a pivotal role in shaping competition among auditing firms. A company's market structure, when geared towards delivering top-notch services, can confer a competitive edge by attracting more clients based on the firm's reputation and history of providing excellent audit services.

Audit Report Lag (ARL) indicates the timeliness and efficiency of audits (Escaloni & Mareque, 2021). For users of accounting data, the prompt availability of information in financial statements is essential for effective evaluation and decision-making. Delayed availability can diminish the relevance and usefulness of the data due to several reasons such as timeliness, market condition and regulatory compliance. It is essential to establish the moderating effect of ARL on the association between Audit Market Structure (AMS) and FRQ of listed Nigerian banks. ARL is closely related to Financial Accounting Standards Board (FASB) as it affects the timeliness of enforcing and adhering to established accounting standards, impacts stakeholder confidence in financial reporting, and can lead to regulatory compliance issues. Reducing this lag is vital for maintaining the integrity and reliability of financial information.

Raak et al. (2019) express concerns that the audit market's structure limits competition among firms, risking non-competitive pricing and lower quality. Ilaboya and Ayafekhe (2017) add that greater firm control or client ownership concentration can reduce audit delays. Thus, the delay in producing audited financial statements affects the information's usefulness and the documents' relevancy and reliability (Bhattarai, 2021). The lateness of audit reports or delay in releasing them has been known to cause a lack of promptness and efficiency of audit reports (Escaloni & Mareque, 2021). Stakeholders and investors depend on timely audit findings for decisions; delays can erode confidence and worsen agency issues. Moreover, longer audit reports are associated with 'bad news', such as net losses (Ilaboya & Ayafekhe, 2017).

Extended lead times and inadequate corporate governance are traits of companies with similar financial issues or with reports from qualified auditors that have been tampered with. The risk of information leaks to investors rises with the time lag between ending of the year and the annual account's publication (Ilaboya & Ayafekhe, 2017). Such delays can lead to insider trading and misinformation, harming investor confidence. Afify (2009), notes that timely audit reports help investors make informed decisions and manage earnings disclosure timing.

According to Francis et al. (2013), market concentration in the auditing industry can be detrimental as it reduces competition among the main auditing firms, which in turn affects the quality of the audits they provide. This can lead to when only a few firms dominate the auditing market, there is less incentive for these firms to compete on quality. This concentration may lead to complacency, as firms may focus more on retaining existing clients rather than improving audit quality.

Nevertheless, there is little and conflicting research on how audit market concentration affects FRQ. According to research by Boone et al. (2012) and Newtone et al. (2013), higher concentration in the auditing industry is linked to fewer accounting restatements. This relationship can be understood when a concentrated market may lead to standardised audit practices among the major firms. These practices can promote consistency and reduce the likelihood of errors that might necessitate restatements. Numan and Willekens (2012), suggesting a favourable relationship exist between audit quality and concentration.

This paper fills a significant gap in the literature by examining the moderating influence of ARL on the association between AMS and FRQ among Nigerian banks from 2006 to 2021, an area that has not received much attention. This study aims to raise awareness among auditors and financial

information users about the significance of properly positioning corporate attributes. Clients will better understand how these traits influence financial reporting. It can also assist financial analysts and management in evaluating a company's stock value. To assess a company's overall performance and financial health, it's essential to consider market structure and the promptness of its audit reports. These factors offer valuable insights for informed decision-making. Therefore, the objective of this study is to examine the effect of ARL on FRQ among Nigerian banks, as well as the moderating influence of ARL on the relationship between AMS and FRQ.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Financial Reporting Quality (FRQ)

The Financial Reporting Quality (FRQ) is intricately linked to the standards established by the FASB, which serve as a foundation for transparent, reliable, and comparable financial statements essential for informed decision-making by users of financial reports. FASB is responsible for the creation and maintenance of Generally Accepted Accounting Principles (GAAP). These standards provide the guidelines for how financial information should be recorded, presented, and disclosed. High-quality financial reporting is dependent on adherence to these standards (Alwardat 2019). The FASB's standards are designed to enhance the transparency and comparability of financial statements across different entities. This quality ensures that stakeholders can make informed decisions based on reliable and consistent financial data.

The FRQ can be defined in two main ways. The first definition focuses on user value, emphasising the usefulness of financial information to stakeholders such as investors and analysts. High-quality reporting is characterised by accuracy, clarity, completeness, and timeliness, allowing users to make informed decisions about a company's performance. The second definition focuses on shareholder protection, highlighting the role of FRQ in safeguarding the rights and interests of shareholders and investors. From this perspective, high-quality reports enhance transparency and accountability, reduce risks of fraud and misrepresentation, and foster trust between management and stakeholders (Stergios & Michalis, 2012). Both definitions highlight the vital role of high-quality financial reporting in ensuring transparency and maintaining stability in financial markets.

Nyor (2013) defines FRQ as the ability to deliver accurate accrual figures and the extent to which reported financials reflect a company's true operating performance and help with predicting of future income. Nwaobia et al. (2016) stated that to help businesses draw in many investors, they must be able to accurately assess and project their potential for future profitability based on their past performance. Both current and prospective investors share concerns over an organisation's FRQ. Alwardat (2019) asserts that the quality of financial reporting is crucial. Investor confidence in the accuracy of these reports and their ability to fairly reflect how the success of publicly traded firms will influence their opinions and choices about investments.

Even though corporate disclosures have been the subject of a great deal of research, over the past 20 years, this topic has become one of the most popular in the world for research because of the Sarbanes Oxley (SOX) Act of 2002 requirements. According to Elbannan (2011), the degree to which a company's financial reports reflect its actual performance and underlying economic condition defines its reporting quality.

Conversely, financial reports contain information on cash flow, equity adjustments, comprehensive income statements, and statements of financial position. According to Moses et al. (2016), directors typically provide accountants and auditors with bank financial statements. This ensures that customers receive trustworthy information, enabling them to defend their

rights. Excellent financial reporting is characterised by comparability, full disclosure, and transparency (Eyenubo et al., 2017). Transparency is essential for helping clients comprehend how decisions, estimates, and judgments affect transactions and predictions. This understanding enables stakeholders to evaluate the accuracy of the financial data provided and make well-informed decisions. In financial reporting literature, quality is emphasised. Currently, the 'quality of accounting information' is not specified. FRQ matters to corporations and others. High-quality financial reports benefit the company (Bauwhede et al., 2015). Financial reporting integrity enhances bank funding, eliminates tax dodging incentives, and boosts emerging private company investing effectiveness (Chen et al., 2011).

2.1.2 Audit Market Structure (AMS)

The term Audit Market Structure (AMS) is used to characterise the level of rivalry in a specific market and refers to the extent to which only a few auditing firms dominate the audit market, particularly the Big Four audit firms (Emma, 2018). The market study focuses on Nigerian listed banks for the audit of their financial statements. Participants in a market compete based on price, service, technology, and quality. Their pricing and output decisions are often influenced by their expectations of how other market participants will behave in the future. The primary participants in the audit market for listed company are the Big Four audit firms such as Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers (PwC) which primarily serve the most prominent clients. In contrast, smaller audit firms typically cater to less prominent clients. This market concentration has raised concerns among regulators, as it is alleged that the dominance of the Big Four could lead to monopolistic power, enabling the firms to earn abnormal returns or limit the market opportunities available to other providers. Other studies found that more concentrated audit markets could increase audit quality through increased auditor independence, effort, or expertise (Bryan et al., 2023).

2.1.3 Audit Report Lag (ARL)

Audit Report Lag (ARL) refers to the period between the end of a company's accounting year and the signing of auditors' reports (Ettredge et al., 2006). Regarding annual reports, publicly listed banks in Nigeria typically must issue their annual reports within a specific timeframe after the end of their financial year. The Nigerian Stock Exchange (NSE) requires that annual reports be made available to shareholders within 90 days from the end of the financial year. These reports must include audited financial statements and other relevant disclosures pertaining to the bank's financial performance. This reporting interval, known as ARL, is significant, as prolonged delays can deter shareholders from transactions. Lee and Jahag (2008) assert that understanding ARL is crucial, as it relates closely to timely earnings announcements. Usman (2014) and Ezat (2015) emphasise that minimising audit lag is essential for enhancing market efficiency. Two key factors influencing the duration of ARL are the initiation of an auditing work and the time taken to complete it (Carslaw & Kaplan, 1991).

2.2 Theoretical Framework

The primary framework that directed this investigation was agency theory. Agency theory is a framework that examines the relationship between principals (such as shareholders) and agents (such as company executives, managers or auditor) in a business context. The core idea is that there is a potential conflict of interest between the two parties, as principals expect agents to act in their best interests, while agents may pursue their own interests. This divergence can lead to issues such as inefficiency and lack of transparency. In a nutshell, agency theory provides a lens through which to understand the dynamics between managers and shareholders, particularly concerning ARL and the overall quality of financial reporting. By recognising potential conflicts of interest, stakeholders can better assess risks and advocate for practices that promote transparency and accountability.

Watts and Zimmerman (1986) indicate that the agency hypothesis supports the need for auditing by assuring that FRQ are free from significant misstatements caused by fraudulent act. Statutory audits play a critical role in mitigating false information and protecting shareholders by ensuring the accuracy of financial statements. According to the agency theory, stakeholders would insist on audits to bolster the financial accounts' credibility, as noted by DeFond (1992); Dedman and Lennox (2005). The theory garnered significant interest from professionals and academics, offering information about the dynamics of supply as well as demand in the audit industry. Agency theory brought attention to the fact that self-interest drives the vast majority of organisational life, offering two organisational perspectives and considering information as a traded commodity. Additionally, it was used to manage risk in organisations with uncertain futures, explaining why independent parties require the assistance of external auditors to address agency concerns following the separation of ownership and control.

2.3 Empirical Review

Bryan et al. (2023) provide important insights into the effects of audit market concentration on analysts' estimates. Their study shows that while auditor independence may diminish in concentrated markets, this is counterbalanced by enhanced auditor effort and a greater likelihood of involving a Big Four auditor - Deloitte, Ernst & Young, KPMG, or PricewaterhouseCoopers (PwC). As a result, audit market concentration tends to improve audit quality and positively impacts analysts' projections, particularly in contexts where audited financial statements are frequently used. These findings highlight how audit market concentration can enhance audit quality, while also addressing regulators' concerns about the concentration within the US audit market.

Escaloni and Mareque (2021) conducted a study on the ARL, focusing on differential analysis between Spanish SMEs as well as non-SMEs. The study aimed to identify the reasons for ARL in Spanish SMEs compared to non-SMEs, based on an analysis of 3,217 unlisted Spanish companies between 2008 and 2015. Ordinary Least Squares (OLS) was used to estimate the ARL, with independent variables including company, auditor, and audit exercise characteristics. The research revealed that SMEs had more independent variables affecting audit report delays compared to non-SMEs. Factors such as bankruptcy, auditor type, level of economic activity, industry sector, and audit fees were found to be linked to audit report latency in SMEs, with independent factors explaining report lag varying depending on the organisation's size, with audit report latency being more pronounced in SMEs.

Bhattarai (2021) used convenience sampling to analyse panel data from seven commercial banks regarding delayed audit reports during 2013–2014 and 2017–2018. The study utilised descriptive statistic, correlation analysis, and causal-comparative techniques, finding that audit report turnaround times ranged from 18 to 242 days. It also found that board size and debt levels affecting latency in Nepalese banks. Ayoola et al. (2020), conducted an important study on the impact of audit market concentration on audit fees for Deposit Money Banks in Nigeria, utilising secondary data from 16 listed banks between 2006 and 2017. Their findings revealed that while audit market concentration alone did not directly influence audit fees, the interaction of audit market concentration with audit quality significantly increased those fees. This raises critical concerns about the Big Four firms - Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers (PwC)- potentially exploiting their dominant position to charge higher fees. These concerns highligh the need to reevaluate existing regulatory frameworks to ensure fair pricing and enhance market competitiveness within the audit market.

Abdullahi et al. (2019) examined the factors influencing ARL and auditor characteristics. The purposive sample from 2014 to 2016 included 77 Indonesian Stock Exchange-listed manufacturers, and the analysis was conducted using multilinear regression. The findings indicated that financial conditions benefited audit report delays, while audit committee

effectiveness and profitability had negative effects. It was discovered that auditor qualities did not contribute to audit report delays. Aggreh (2019) investigated how auditor characteristics and market concentration influenced audits of Nigerian industrial firms. The study assessed Audit Quality (AQ), Market Concentration (AMC), And Auditor Attributes (AUT, AUF, ADFE, and YEN) in the industrial sector. Using an ex post facto design and random selection, 52 companies listed on the NSE from 2001 to 2015 provided 780 full-year observations. The study found a non-substantial favourable Herfindahl-Hirschman Index (HHI) for audit quality using panel Estimated Generalised Least Squares (EGLS) and pooled OLS. It also noted a slight negative correlation between audit quality and the concentration ratio of the Big Four firms, whereas auditor tenure was positively associated with improvements in audit quality.

Odesa and Agubata (2019) investigated Nigeria's audit market concentration and audit selection process using cross-sectional data from 91 NSE-listed non-financial firms. The study examined audit rotation, switching, and tendering as independent variables influencing audit market concentration. Regression, correlation, and descriptive statistical techniques were employed for the analysis. The research indicated that audit rotation, tendering, and switching have an impact on the Nigerian audit market concentration. Egusa and Urhoghide (2017) conducted a study with 540 firm-year observations from 60 Nigerian companies that went public between 2007 and 2015, focusing on the audit market's quality. The use of regression analysis revealed that as the audit market became more concentrated, audit quality improved. The study also noted that Big Four firms - Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers (PwC) - enhanced their audit services to maintain client satisfaction and public trust.

Choi et al. (2017) delved into the impact of market concentration and audit fees in the international auditing industry. The study examined market concentration and audit fees across a diverse sampled encompassing 17 countries. The study reported three key outcomes: first, increased audit market concentration was associated with higher audit fees; second, this association weakened in countries with stronger legal systems; and third, the relationship between audit concentration and fees was stronger among clients of non-Big Four auditors compared to clients of the Big Four auditing firms.

3. METHODOLOGY

This study employed a longitudinal research design. The population included fourteen Nigerian Deposit Money Banks (DMBs) listed on the Nigerian Exchange Group (NGX), from which eleven banks were selected using purposive sampling. The selection criteria involved: (i) eliminating banks with incomplete data for all variables to maintain homogeneity in the sample, and (ii) omitting banks that presented their financial statements in foreign currency. The research covered a sixteen-year period, from 2006 to 2021. The study obtained information from annual accounts of the selected deposit money banks. Descriptive statistics and panel estimate techniques were used to analyse the data.

3.1 Market Structure Measures

3.1.1 Static Measurement

Audit Market Concentration (AUC): This represented by the Herfindahl Index (HI). HI is a standard measurement of competition within a market (Asien, 2014).
HI is calculated as

$$HI = \sum_{i=1}^{n} \left(\frac{ARi}{TAR}\right)^2, \quad 0 < HI \leq 1 \tag{1}$$

Where HI is the sum of the squares of auditors' remuneration for each year. ARi represents the the regime's auditors' remuneration, while TAR is the sum of all auditors' remuneration. Equation (1) indicates that HI is bounded between 0 and 1. HI can be calculated for the number or frequency of clients that an auditor audits, audit regimes, and industry specialisation. By interpretation, a low Hl suggests low concentration or high competition, which also suggests high concentration or low competition (Asien, 2014). The study calculated Hl to account for auditors' remuneration among Nigerian audit market, to determine the dominance and focus of each audit regime. According to the U.S. Department of Justice and Federal Trade Commission (DJFTC, 2010), the HI is defined as the sum of the squares of the market shares of all entities in an industry, ranging from 1/N to 1. A maximum HI indicates a monopoly with one corporation dominating the market, while a minimum HI reflects a competitive market with equal shares. Various measures and interpretations of the HI can be used to evaluate the degree of market concentration in an industry.

The U.S. DJFTC (2010) provide a classification scale for interpreting HI values:

HI <0.01: The market is highly competitive.
HI < 0.15: The market is not concentrated.
HI between 0.15 and 0.25: The market concentration is moderately concentrated.
HI > 0.25: The market is highly concentrated.

Alternatively, the European Commission (2004) offers a slightly different scale to assess market concentration:

HI < 0.10: The markets are considered unconcentrated
HI between 0.10 and 0.20: The market is moderately concentrated.
HI > 0.20: The market is highly concentrated.

3.1.2 Dynamic Measurement

Dynamic measurement of audit market concentration involves both market share concentration and client movement. The audit market is categorised by client size and location. For a given client *i,* the audit market comprises auditor-client pairings within a 50-kilometre radius, in a situation where all clients in the indigenous market have total assets in line with the quartile centered within client *i,* as illustrated. The average audit market concentration is measured using two metrics. The first involves calculating the HI index as follows:

$$\text{Herfindahl index}_{kt} = \sum_{i=1}^{L} (market\ share\ of\ a\ compay_{ikt} \tag{2}$$

Market share represents the audit firm's market share, and L is the total of audit firms in market *k* during year *t.* Higher market concentration is expected to increase both the HI and portfolio size, potentially improving audit partner efficiency and market dominance.

The second metric, client mobility, captures annual fluctuations in a firm's share of the indigenous audit market, reflecting its its ability to attract and retain client. It is calculated as:

$$\text{Clients Mobility}_{kt} = \sum_{i=1}^{L} market\ share_{ik,t} - market\ share_{ik,t-1} \tag{3}$$

3.2 Model Specification

According to the prior model adapted from Aggreh (2019), the following equation was used to achieve the research objective:

$$FRQ_{it} = \beta_0 + \beta_1 ARL_{it} + \beta_2 \text{AUC} * \text{ARL}_{it} + \beta_3 \text{AMS} * \text{ARL}_{it} + \beta_4 SAF_{it} + \beta_5 AUTN_{it} + \beta_6 FSZ_{it} + \varepsilon_{it} \quad (4)$$

Where:
FRQ = Financial Reporting Quality
AUC = Audit Market Structure Concentration
AMS = Audit Market Structure
ARL = Audit Report Lag
SAF = Specialised Audit Firm
AUTN = Audit Tenure
FSZ = Firm Size

Table 1 Measurement of Variables

Variables	Variable' Nature	Definition	Source
FRQ	Dependent	The FRQ metric, known as Dechow and Dichev (2002) model, assesses the alignment of cash flow realisations and working capital accruals. A poor match indicates low accrual quality, leading to adjustments in working capital accruals to reflect operating cash flows, resulting in Discretionary Accrual (DAC). The model specification is: $TAC_{it} = \delta_0 + \delta_1 CFO_{it-1} + \delta_2 CFO_{it-1} + \delta_3 CFO_{it+1} + \delta_4 \Delta REV_{it} + PPE_{it} + \omega_{it}$ where: $TAC_{it} = (\Delta CA_{it} - \Delta Cash_{it}) - (\Delta CL_{it} - \Delta STDBET_{it})$	Dechow & Dichev (2002).
AUC	Independent	A static based on concentration ratios, using Herfindahl index (HI)	Emma (2018)
AMS	Independent	Represents the audit fee income generated from both engaged and departed clients, divided by the total number of clients an auditor services in a year.	Emma (2018)
ARL	Independent	The number of days between the end of a company's accounting year and the date the auditor signs the report.	Egbunike & Azusu (2020)
SAF	Control	A dummy variable: 1 if the bank's financial report is audited by a specialised audit firm; 0 otherwise.	Ugwu (2020)
AUTN	Control	A dummy variable: 1 if the audit firm has been changed within a three-year period; 0 otherwise.	Ugwu (2020)
FSZ	Control	Measured as the natural logarithm of total assets.	Ugwu (2020)

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$TAC_{it} = \delta_0 + \delta_1 CFO_{it-1} + \delta_2 CFO_{it-1} + \delta_3 CFO_{it+1} + \delta_4 \Delta REV_{it} + PPE_{it} + \omega_{it}$:where:$TAC_{it} = (\Delta CA_{it} - \Delta Cash_{it}) - (\Delta CL_{it} - \Delta STDET_{it})$

(5)

Where:

CFO: Cash Flow from Operations
ΔCA_{it}: Change in Current Asset
ΔCL_{it}: Change in Current Liabilities
$\Delta STDET_{it}$: Change in Short-Term Debt
$\Delta Cash_{it}$: Change in Cash
ΔREV: Change in Revenue
PPE_{it}: Property, Plant and Equipment
Δ REC: Change in Receivables
DAC: Discretionary Accrued
A_{it-1}: Total Assets in the Previous Year
TAC_{it}: Total Accruals, calculated as NI − CFO, where NI = Net income, and CFO = Operating Cash Flow
δ_0 , δ_1, … δ_5 : Estimated coefficients
ω = Error term
i = firm
t = time

4. RESULTS

4.1 Descriptive Statistics

This section offers a descriptive analysis to provide a preliminary understanding of the parameters employed in this paper. Outcome in Table 2 revealed that FRQ has a mean of 0.1257, indicating a low and unimpressive level of FRQ among the sampled deposit money banks. The average AMS*ARL for the studied banks was 30.465, showing that audit report latency did not significantly impact market share instability. As a result, new auditors were appointed. The average ARL was about 74 days, indicating that most banks filed their audited annual reports on time. The average audit tenure was two years and seven months; this implied that auditor–client associations were not too lengthy. In addition, the findings indicated the mean of audit firm specialisation was 0.3750; this indicated that about 38 percent of the banks were audited by specialist audit firms. The probability Jarque-Bera of all the variables were less than 0.05 significant level.

Table 2 Descriptive Statistics of Variables

	FRQ	ARL	AMS*ARL	AUC*ARL	AUTN	SAF	FSZ
Mean	0.126	74.261	30.465	24.311	0.278	0.375	21.293
Median	0.086	72.000	29.982	22.641	0.000	0.000	20.999
Maximum	0.666	180.000	75.711	95.325	1.000	1.000	26.923
Minimum	0.001	32.000	11.800	2.407	0.000	0.000	0.000
Std. Dev.	0.128	22.751	9.687	15.408	0.450	0.486	2.479
Skewness	1.650	0.848	1.019	1.490	0.989	0.516	-2.844
Kurtosis	6.023	5.233	5.610	6.613	1.978	1.267	33.266

	FRQ	ARL	AMS*ARL	AUC*ARL	AUTN	SAF	FSZ
Jarque-Bera	146.909	57.665	80.431	160.791	36.343	29.855	6954.55
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sum	22.139	13070.00	5361.95	4278.803	49.000	66.000	3747.50
Sum Sq. Dev.	2.882	90581.98	16420.14	41546.66	35.357	41.250	1075.38
Observations	176	176	176	176	176	176	176

4.2 Correlation Analysis

Table 3 reveals a positive and significant association between ARL and FRQ for the sampled Nigerian banks, with a coefficient of determination of 0.154. ARL showed a weakly positive and significant moderating effect on the connection between AMS and FRQ, with an association coefficient of 0.079. Additionally, a slight positive association between AUTN and FRQ was found, with an association coefficient of 0.069. In addition, the estimated association coefficient of -0.276 indicated that SAF was significant and negatively associated with the FRQ of sampled Nigerian banks. The results further revealed a weak association among the predictor variables as the association coefficient among the predictor parameter is relatively low, with none of them exceeding 0.5. This implies that all variables were free from issues of multicollinearity problem.

Table 3 Correlation Matrix

Variables	FRQ	ARL	AUC*ARL	AMS*ARL	AUTN	SAF	FSZ
FRQ	1						

ARL	0.1544	1					
	0.0408	-----					
AUC*ARL	-0.0481	0.3836	1				
	0.5263	0	-----				
AMS*ARL	0.079	0.3286	0.422	1			
	0.2972	0	0	-----			
AUTN	0.069	0.1353	-0.02	0.0764	1		
	0.3599	0.0733	0.7907	0.3133	-----		
SAF	-0.276	-0.062	0.1202	0.0106	-0.114	1	
	0.0002	0.4121	0.1118	0.8888	0.13	-----	
FSZ	0.1536	0.1299	-0.124	0.1579	0.1841	-0.178	1
	0.0417	0.0855	0.0985	0.0363	0.0144	0.0179	-----

4.3 Diagnostic Tests of Variables

Table 4 summarises the results of the Variance Inflation Factors (VIF) for multicollinearity. The average VIF was reported at 3.50, with a maximum of 8.18. Since neither the highest VIF nor the average VIF approached the threshold of 10 and the study's model was free from multicollinearity issues, it can be concluded that the dependent variables used in the research were not problematic.

Table 4 Multicollinearity Tests

Variable	VIF	1/VIF
AMS*ARL	8.18	0.122
ARL	7.86	0.127
AUTN	1.43	0.699
AUC*ARL	1.29	0.777
FSZ	1.15	0.866
SAF	1.09	0.914
Mean VIF	3.50	

In Table 5, the findings showed that, at the 1 percent level, the null hypothesis of no serial correlation is accepted. Hence, the study found evidence of no serial correlation in the model tested. The results of the modified Wald test used in testing for the presence of heteroscedasticity are summarised in Table 5. From the results, the null hypothesis of the modified group-wise heteroscedasticity test is rejected in the study's objectives. Hence, the study found evidence of heteroscedasticity in each of the objectives.

Table 5 Serial Correlation and Heteroscedasticity Tests

Wooldridge test for autocorrelation	H0: No first-order autocorrelation F(1,10) = 2.318 Prob > F = 0.1589	First Order Serial Correlation Nonexistence
Breusch-Pagan / Cook-Weisberg test for heteroscedasticity	Ho: Constant variance chi2(1) = 17.38 Prob > chi2 = 0.0000	There is evidence of heteroscedasticity

4.5 Regression Results

Table 6 Estimated Panel Regression Results

Variables	(1) OLS	(2) FE	(3) RE
ARL	0.00287**	0.00035	0.00287**
	(2.533)	(0.1182)	(2.4928)
AMS*ARL	-0.005310**	0.0014	-0.00531**
	(-1.9562)	(0.2011)	(-1.9252)
AUC*ARL	-0.000329	-0.00053	-0.00033
	(-0.4854)	(-0.7671)	(-0.4777)
AUTN	0.0155	0.0225	0.0156
	(0.637)	(0.8843)	(0.6273)
SAF	-0.0598**	-0.0547 **	-0.0598**
	(-3.019)	(-2.2949)	(-2.9709)
FSZ	0.0062	0.0067	0.006173
	(1.549)	(1.4430)	(1.5251)
Constant	-0.0639	-0.0946	-0.0639
	(-0.690)	(-0.9056)	(-0.6794)
Observations	176	176	176
Adj.R^2	0.102	0.073	0.102
Number of fid	11	11	11
Chow F		8.11	
Chow p-value		0.000	
Hausman Chi		5.525	
Hausman p-value		0.5961	

The Hausman Test reported a P-value of 0.5961 in Table 6, indicating a preference for the Random Effect (RE) model. The Chow test produced a P-value of 0.000, confirming that RE model was suitable compared to pooled OLS and Fixed Effects (FE) regression. Results showed that the Random Effect was appropriate (Hausman Test P-value > 0.05), while the Fixed Effect (FE) was not. The explanatory variables accounted for about 14% of the total variation in FRQ, with the stochastic error term making up the remaining 86%.

Table 6 indicates that ARL had a favourable substantial impact on the FRQ of listed banks (t-value = 2.4928, $p < 0.05$). The outcome implies that a delay in the audit process can allow auditors more time to thoroughly review and analyse financial statements, leading to higher-quality audits. Additionally, Table 6's results showed that AMS*ARL had a negative moderating effect on the association between audit market structure and FRQ (t-value = –1.9252, $p < 0.05$). In line with the result, ARL affected the FRQ of sampled Nigerian banks. Furthermore, audit tenure showed a positive and non-substantial effect on FRQ (t-value = 0.6273; p-value > 0.05).

This finding indicates that simply extending auditor tenure may not be a panacea for improving reporting quality. Instead, a holistic approach that includes regular assessments of auditor performance, ongoing training, and possibly rotating auditors could be more effective in enhancing transparency and accountability in financial disclosures. The FRQ of listed DMBs is significantly and inversely affected by specialised audit firms (SAF) (t-value = -2.9709; $p < 0.05$). This indicates that better financial reporting is linked to banks audited by these specialised firms, underlining the value of industry expertise in ensuring accurate and reliable financial disclosures. Meanwhile, firm size (t-value = 1.5251; $p > 0.05$) had a favourable and insignificant effect on FRQ.

4.5 Discussion

The study examined how audit report latency moderates the association between AMS and FRQ of Nigerian banks. AMS was measured using static and dynamic indicators. The study found that the ARL had a favourable and substantial effect on the FRQ of Nigerian banks. The result indicates that delays in the audit process can allow auditors more time to thoroughly review and analyse financial statements, thereby enhancing audit quality. Improved accuracy in financial reporting can enhance investor confidence, potentially increasing stock prices and shareowners' wealth. This finding is similar to the results of Bryan et al. (2023), who revealed an overall net positive effect of audit market concentration on audit quality and, ultimately, on analysts' forecasts. Similarly, Escaloni and Mareque (2021) reported a strong association between audit opinion and ARL, reinforcing the notion that company size influences audit reporting timelines. The study found an inverse and substantial moderating effect of ARL on the association between AMS and FRQ. This suggests that delays in the issuance of audit reports may undermine the overall quality of financial reporting. However, if there is a timely issuance of audit report, this could lead to improvement of its value and enhancing the company's reputation for rigour and trustworthiness. It could also positively impact access to bank financing and attract investments, particularly in the current pandemic climate, where financing is crucial for a company's survival. Additionally, timely of audited financial information can improve decision-making and reduce information asymmetry for investors (Escaloni & Mareque, 2021). The study found that AUTN insignificantly yet favourably impacted FRQ for listed deposit money institutions, suggesting that longer audit tenure might lead to better financial reporting. However, prolonged audit tenure raises concerns about auditor independence, potentially jeopardising the FRQ. Similarly, findings from Olaoye and Akintayo (2021) disclosed that audit firm size is a predictor of the FRQ of Nigerian quoted companies. Additionally, the audit firm's size, specifically, affiliation with the Big Four audit companies, was found to inversely and substantially impact FRQ, indicating that high-quality financial reporting is associated with banks audited by Big Four firms (Deloitte, Ernst & Young, KPMG, and PricewaterhouseCoopers (PwC)).

5. CONCLUSION AND RECOMMENDATIONS

The policy implication of the negative and significant moderating effect of ARL on the relationship between AMS and FRQ in Nigerian banks suggests that delays in the issuance of audit reports may deteriorate the overall quality of financial reporting. This finding indicates that regulatory bodies need to consider implementing stricter guidelines around the audit timeliness to enhance transparency and reliability of financial statements. Regulators could focus on improving the AMS, perhaps by increasing competition among audit firms or establishing clearer standards and expectations for reporting deadlines. Reducing ARL could help ensure that banks provide accurate and timely financial information, thereby fostering greater trust among investors and stakeholders. Stakeholders, including investors, regulators, and the general public, will benefit from this study because it highlights the critical role of timely audits in ensuring high-quality financial reporting. Improved financial reporting can lead to better-informed decision-making, increased investment, and enhanced confidence in the banking sector. Additionally, stakeholders could advocate for reforms that prioritise timely reporting, thereby potentially influencing policy changes that support better governance and accountability within banks.

The study concluded that a strong AMS leads to higher FRQ, indicating no immediate concern about declining financial reporting due to a lack of rivalry since market share instability remains high. Furthermore, the study concluded that, given changes in audit markets, there is currently no reason for concern regarding delays in signing and filing audit reports. In view of outcomes, the authors made recommendations that banks should publish their audited annual reports as promptly as possible to attract investment. If investors are aware of standard audit report timelines, they can anticipate when the audited financial data will be available. This transparency aids will improve decision-making and lessens market false information.

The paper contributes to the existing body of knowledge by exploring the association between AMS, ARL and FRQ in Nigerian deposit banks, incorporating diagnostic and robustness tests not previously used. However, it was limited to DMBs from 2006 to 2021, excluding sectors like insurance. Further research is needed in the insurance sector and other non-financial industries. Other research needs to further engage in AMS where regulatory differences exist.

REFERENCES

Abdullahi, B.A., Norfadzilah, R., Umar, A.M., & Ademola, L.S. (2019). The Financial Determinants of Earnings Management and the Profitability of Listed Companies in Nigeria, *Journal of Critical Reviews*, *7*(9), 32-38.

Afify, H. A. E. (2009). Determinants of Audit Report Lag: Does Implementing Corporate Governance Have Any Impact? Empirical Evidence from Egypt. *Journal Of Applied Accounting Research, 10*(1), 56–86. https://doi.org/10.1108/09675420910956997

Aggreh, M. (2019). Effect Of Audit Market Concentration and Auditor's Attributes on Audit Quality in the Company Quoted on the Nigerian Manufacturing Sector. *International Journal of Accounting & Finance* (IJAF), *8*(1), 97-110.

Alwardat, Y. (2019). Disclosure Quality and its Impact on Financial Reporting Quality, Audit Quality, and Investors' Perceptions of the Quality of Financial Reporting: A Literature Review. *Accounting and Finance Research*, *8*(3), 54-66. https://doi.org/10.5430/afr.v8n3p201

Asien, E. N. (2014). Exploring The State of The Audit Market in Nigeria. *African Journal of Accounting Auditing and Finance, 3*(4), 287–307. https://doi.org/10.1504/AJAAF.2014.069846

Ayoola, T. J., Oyerinde, A.A., & Inneh, G.E. (2020) Audit Market Concentration and Audit Fees: Empirical Evidence from Nigerian Deposit Money Banks. *IJAM*, *3*(2), 91-106

Bala, H., Amran, N. A., & Shaari, H. (2018). Audit Fees and Financial Reporting Quality of Listed Firms in Nigeria. *International Review of Management and Business Research, 7* (2), 483-490.

Bauwhede, H. W., De Meyere, M., & Van Cauwenberge, P. (2015). Financial Reporting Quality and The Cost of Debt of SMEs, *Small Bus Econ*, *45(1)*, 149–164. https://doi.org/10.1007/s11187-015-9645-1

Bhattarai, B.P. (2021). Determinants Of Audit Report Lag of Commercial Banks in Nepal. *International Journal of Accounting Research*, *9*(6), 213-134. https://doi.org/10.5539/ijbm.v15n10p108

Boone, J.P., Khurana, I., & Raman, K.K. (2012). Audit Market Concentration and Auditor Tolerance for Earnings Management. *Contemporary Accounting Research, 29*(4), 1171–1203.

Bryan, G.B., Chuong, D., & Bradley, P.L. (2023). Audit Market Concentration and Audit Quality: Evidence from Analysts' Forecasts. *Accounting Horizons, 37*(3), 59–77. https://doi.org/10.2308/HORIZONS-19-192.

Carslaw C., & Kaplan, S.E. (1991). An Examination of Audit Delay: Further Evidence From New Zealand. *Accounting and Business Research*, *22*(85), 21-32. https://doi.org/10.1080/00014788.1991.9729414

Chen, F., Hope, O.K., Li, Q., & Wang, X. (2011). Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets. *The Accounting Review*, 86(4), 1255-1288. https://doi.org/10.2308/accr-10073.

Choi, J., Kim, S., & Raman, K.K. (2017). Did the 1998 Merger of Price Waterhouse and Coopers and Lybrand Increase Audit Quality? *Contemporary Accounting Research*, *34*(2), 1071–1102. https://doi.org/10.1111/1911-3846.1222

Dechow, P.M., & Dichev, I.D. (2002). The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review*, 77(S-1), 35–59. https://doi.org/10.2308/accr.2002.77.4.35

Dedman, E., & Lennox, C. (2005). Perceived Competition, Profitability, and the Withholding of Information About Sales and the Cost of Sales. *Journal of Accounting and Economics*, 48(2), 210-230. https://doi.org/10.1016/j.jacceco.2005.01.002

DeFond, M.L. (1992). The Association Between Changes in Client Firm Agency Costs and Auditor Switching. *The Accounting Review*, 67(3), 299-307. https://doi.org/10.2308/accr.1992.67.3.299

Egbunike, P.A., & Azuzu, P. (2020). Audit Fees and Audit Report Lag. *EPRA International Journal of Research and Development (IJRD), 5*(7), 181–187.

Eguasa, B.E., & Urhoghide, R.O. (2017). Audit Market Concentration and Audit Quality in Nigeria. *IOSR Journal of Business and Management*, *9*(9), 01-09. https://doi.org/10.9790/487X-1909040109

Elbannan, M. (2011). Accounting And Stock Market Effects of International Accounting Standards Adoption in an Emerging Economy'. *Review of Quantitative Finance and Accounting*, *36*(2), 207-245. https://doi.org/10.1007/s11156-010-0176-1

Emma S.G. (2018). Audit Market Dynamics: Effects on Audit Quality. *Marble Research Papers*, 107-121. https://doi.org/10.26481/marble.2018.v1.556

Escaloni, S., & Mareque, M. (2021). Audit Report Lag. Differential Analysis Between Spanish SMEs and non-SMEs. *Sustainability*, *13*(22), 12830. https://doi.org/10.3390/su132212830

European Commission. (2004). *Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings*, European Commission, Brussels. Retrieved from https://eur-lex.europa.eu/EN/legal-content/summary/guidelines-on-the-assessment-of-horizontal-mergers.html?fromSummary=08

Ettredge, M. L., Chan Li., & Dan, L. S. (2006). The Impact of SOX Section 404 Internal Control Quality Assessment on Audit Delay in the SOX Era of Auditing: *A Journal of Practice & Theory*, *25*(2), 1-23. https://doi.org/10.2308/aud.2006.25.2.1

Eyenubo, S.A., Mohamed, M. & Ali, M. (2017). An Empirical Analysis on the Financial Reporting Quality of the Quoted Firms in Nigeria: Does Audit Committee Size Matter? *International Journal of Academic Research in Business and Social Sciences, 7*(9), 50-63.

Ezat, J.A. (2015). The Impact of Audit- Related Factors on Audit Report Lag for the Egyptian Listed Non-Financial Companies*. JRL of the Faculty of Commerce for Scientific Research*, *52*(2), 1-39

Francis, J.R. Michas, P.N., & Yu, M.D. (2013). Office Size of Big Four Auditors and Client Restatements. *Contemporary Accounting Research, 30*(1), 325-355. https://doi.org/10.1111/1911-3846.12011

Ilaboya, J., & Ashafoke, T. (2017). Board Diversity and Firm Performance in Nigeria. *International Journal of Management, Accounting and Economics, 4*(10), 1002-1019.

Lee, Y., & Jahng, J. (2008). Determinants of Audit Report Lag: Evidence from Korea - An Examination of Auditor-Related Factors. *The Journal of Applied Business Research Second Quarter*, *24* (2), 27-44. https://doi.org/10.19030/jabr.v24i2.1352

Moses, T., Ofurum, C.O. & Egbe, S. (2016). Audit Committee Characteristics and Quality of Financial Reporting in Quoted Nigeria Banks. *International Journal of Advance Academic Research, Social and Management Sciences, 2*(5), 1-10.

Muhammed, A., Abubakar, H., & Danrim, M L. (2016). The Effect of Financial Reporting on Investment Decision Making by Bank in Nigeria. *International Journal of Research in Finance and Marketing*, *6*(4), 21- 50.

Newton, N.J., Wang, D., & Wilkins, M.S. (2013). Does a Lack of Choice Lead to Lower Audit Quality? Evidence from Auditor Competition and Client Restatements. Auditing*: A Journal of Practice and Theory*, 32(3), 31-67. https://doi.org/10.2308/ajpt-50461

Nwaobia, A.N., Kwarbai, J.D., Jayeoba, O.O., & Ajibade, A.T. (2016). Financial Reporting Quality on Investors' Decisions. *International Journal of Economics and Financial Research*. *2*(7), 140-147.

Nyor, T. (2013). Financial Reporting Quality of Nigeria Firms: Users' Perception. *International Journal of Business and Social Science*, *4*(13): 273-279.

Odesa, J., & Agubata, N.S. (2019). Effect of Audit Selection Regime on Audit Market Concentration in Nigeria. *Asian Journal of Science and Technology, 10*(04), 9633-9638.

Olowooke, K. (2017). Audit Market Concentration and Quality of Financial Reporting Among Quoted Manufacturing Companies in Nigeria. *International Journal of Management and Development Studies, 3*(1), 120-128.

Raak, J.V, Peek, E., Meuwissen, R., & Schelleman, C. (2019). The Effect of Audit Market Structure on Audit Quality and Audit Pricing in The Private-Client Market. *Journal of Business Finance & Accounting, Wiley Blackwell, 47*(3-4), 456-488. https://doi.org/10.1111/jbfa.12414

Stergios, T., & Michalis, B. (2012). Auditor's Perceptions of Financial Reporting Quality: The Case of Greece. *International Journal of Accounting and Financial Reporting*, *2*(1), 57 -74.

Ugwu, I.V. (2020). Determinants Of Auditor's Switching Behaviour of Firms in Nigeria. *IAA Journal of Social Sciences*, *6*(1), 63 – 77.

U.S. Department of Justice & Federal Trade Commission (USDJFTC) (2010). *Horizontal Merger Guidelines*. Available online

Usman, A. (2014). Audit Attributes and Financial Reporting Quality of Quoted Food and Beverages Firms in Nigeria. *M. Sc Thesis Department of Accounting A.B.U. Zaria*

Watts, R. L., & Zimmerman, J. L. (1986). *Positive Accounting Theory*. New York: Prentice Hall