

Effect of Financial Assets of Financial Instruments on Financial Performance of Listed Deposit Money Banks in Nigeria

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ABSTRACT

This study evaluates the effect of financial assets on the financial performance of seven (7) listed DMBs in Nigeria between 2018-2024 with amortized-cost and fair value through comprehensive income (FVOCI) as the independent variable and return on assets as the dependent variable. Data extracted from the audited published financial statements of the firms for the period covered were subjected to descriptive analysis and inferential statistics analysis. Diagnostics tests include: heteroscedasticity, Hausman test, Lagrange multiplier test. Panel Regression Analysis result reveals that amortized-cost financial assets exert a significant negative effect on return on assets (ROA), a result aligned with the literature showing that IFRS 9's ECL model reduces profitability where credit-risk exposure is high. FVOCI assets, however, demonstrate no significant effect on ROA, supporting the argument that FVOCI classification shifts valuation effects to other comprehensive income rather than current earnings. The study recommends that regulators should strengthen the credit-risk management frameworks and banks should adjust their portfolio strategies in response to IFRS-driven income volatility.

Keywords: Return on Assets, Financial Assets, Amortised Cost, Fair Value through Comprehensive Income (FVOCI).

INTRODUCTION

The transition of IAS 39 to IFRS 9 marked one of the most successive changes in global financial reporting, especially for banking institutions whose balance sheets are dominated by financial assets measured at either amortized cost or fair value through other comprehensive income (FVOCI). IFRS 9 replaced the incurred-loss model under IAS 39 with an expected credit loss (ECL) framework that requires banks to recognize credit losses earlier and more comprehensively, thereby increasing earnings volatility and sensitivity to changes in credit risk (Gope, 2018). For Nigerian Deposit Money Banks (DMBs), whose lending portfolios are substantial and whose credit-risk exposure remains structurally high, the implications of the ECL model are particularly significant. Empirical evidence consistently shows that the transition to IFRS 9 has heightened the provisioning requirements of banks in emerging markets, leading to a more pronounced lexis between asset quality and financial performance (Sellami & Ali, 2024).

Nigeria's banking sector plays a crucial role in financial intermediation and credit provision, making its stability and profitability central to economic development. Financial performance in the sector is traditionally influenced by asset composition, credit-risk management, capital strength, and macroeconomic conditions (Maccarthy & Adamu, 2022). However, the adoption of IFRS 9 introduced an additional layer of complexity by bringing profitability more closely to the credit-risk characteristics embedded within financial assets. The classification of assets under amortised cost or FVOCI determines how banks recognize interest income, impairment losses, and fair-value changes, elements that directly influence return on assets (ROA) and other indicators of financial performance (Gope, 2018). Studies from Nigerian and international banking systems generally affirm that changes in measurement rules influence both income reporting and risk behavior, with asset classification determining the timing and magnitude of profit recognition (Ehiedu & Ukeku, 2024; Sellami & Ali, 2024).

Financial assets measured at amortised cost constitute the bulk of Nigerian banks' portfolios, reflecting the predominant "hold-to-collect" business model associated with lending and receivables. Under IFRS 9, these

assets are subject to lifetime ECL measurement once credit risk increases significantly. This has the effect of increasing impairment charges more aggressively than under IAS 39's incurred-loss model, thereby compressing profitability even before actual credit events materialize. Empirical findings across developing economies demonstrate that banks with higher levels of amortised-cost assets tend to experience larger impairment burdens and more volatile earnings following the adoption of IFRS 9 (Sellami & Ali, 2024). Financial assets measured at FVOCI, by contrast, behave differently under IFRS 9. While they require recognition of fair-value changes, these changes are recorded in other comprehensive income rather than the income statement, meaning their immediate effect on ROA is limited. Prior studies report that banks use FVOCI classifications to manage earnings volatility and reduce the direct impact of market-value fluctuations on profitability, especially in environments with unstable interest rates and exchange-rate pressures (Maccarthy & Adamu, 2022).

Despite the relevance of these IFRS 9 classifications, the Nigerian literature remains relatively sparse in its post-IFRS-9 empirical evaluation of how amortised-cost and FVOCI assets influence bank performance. Many earlier studies relied on aggregate measures of financial assets without distinguishing between measurement categories, limiting the ability to infer IFRS-specific effects (Maccarthy & Adamu, 2022; Ogege & Ezike, 2021). More recent studies emphasize the need to isolate IFRS 9 classifications to properly understand how impairment rules shape performance outcomes and credit-risk management practices (Sellami & Ali, 2024). This study responds directly to that gap by examining the impact of amortised-cost and FVOCI assets as classified and measured strictly according to IFRS 9 on the financial performance of listed DMBs in Nigeria.\

LITERATURE REVIEW

The Concept of Financial Performance

Financial performance refers to the ability of a company to effectively utilize its assets to generate revenue and profits over a specific period. It serves as a key indicator of a firm's financial health and efficiency, providing critical insights for stakeholders such as investors, creditors, and management. In assessing a company's financial health and profitability in relation to its revenue, equity, assets, and other financial parameters over a given time frame is known as financial performance. Financial performance itself is widely measured using indicators such as ROA, ROE, and net interest margin, with ROA being particularly relevant for assessing the efficiency with which banks deploy their resources (Maccarthy & Adamu, 2022). Financial assets form the foundation of bank performance because they determine both risk exposure and the capacity to generate income. Empirical findings consistently show that asset quality, measurement classification, and credit-risk management practices have strong implications for earnings stability (Ehiedu & Ukueku, 2024). Given the strict impairment requirements under IFRS 9, the conceptual expectation is that amortised-cost assets exert downward pressure on ROA, while FVOCI assets demonstrate a muted or limited direct performance effect.

The Concept of Financial Assets of Financial Instruments

The concept of financial assets under IFRS 9 (Recognition and Measurement of Financial Instruments) is built on two pillars: the business model of the reporting entity and the contractual cash-flow characteristics of the financial instrument. IFRS 9 requires banks to classify assets based on whether they are held to collect contractual cash flows, held both to collect cash flows and for sale, or held primarily for trading or fair-value purposes (Gope, 2018). Assets measured at amortised cost are those that satisfy the "hold-to-collect" model and whose cash flows are solely principal and interest. This category typically encompasses loans and receivables, which remain dominant in the asset structure of Nigerian Deposit Money Banks. The implications of this classification are substantial because amortised-cost assets are subject to the expected credit loss (ECL) framework, which recognizes impairment earlier and more aggressively than the previous incurred-loss model, thereby influencing profitability (Sellami & Ali, 2024).

Financial assets measured at fair value through other comprehensive income (FVOCI) follow a different reporting path. Under IFRS 9, FVOCI applies when financial instruments meet the cash-flow test but are managed under a mixed business model that involves both collection and sale of contractual cash flows. Changes in the fair value of these assets are recognized in other comprehensive income rather than the income statement, insulating return on assets (ROA) from immediate valuation effects. This accounting treatment explains why

empirical studies commonly report weak or insignificant relationships between FVOCI assets and short-term profitability in banks, particularly in volatile financial environments (Maccarthy & Adamu, 2022). Nigerian banks often hold government securities and investment portfolios under FVOCI precisely because of the buffering effect this category provides during periods of market uncertainty (Ehiedu & Ukuoku, 2024).

Empirical Review

Maccarthy and Adamu (2022) examined the relationship between financial assets and performance of united bank for Africa in Nigeria for the period of 7 years (2012-2018). The proxied for financial assets is cash equivalents and the proxied for dependent variable includes return on asset and return on equity the finding shows that there is positive and significant relationship between cash equivalents and return on investment of deposit money bank. It also indicated that there is positive and significant cash equivalents and return on equity of deposit money bank and those financial assets have significant relationship with performance of deposit money banks in Nigeria.

Okechekwu and Ugwu (2022) evaluated the effect of financial assets on the financial performance of 3 pharmaceutical firms in Nigeria for a period of 10 years, spanning (2011-2020) with cash, stock and loans as independent variables and return on assets as dependent variable proxy for performance. Result reveals positive but insignificant effect of cash, stocks and loans on return on assets of pharmaceutical firms in Nigeria.

Ehiedu and Ukuoku (2024) examined the effects financial assets (FA) on the financial performance (FP) of 10 Nigerian deposit money banks (DMBs) 10 years (2013 to 2022). The independent variable financial asset was measured using Cash Equivalents (CE), Trade Receivables (TR), Loans and Advance (LAD), and Foreign Bank Deposit (FBD) and the dependent variable financial performance was proxied by Return on Equity (ROE). The findings from the fixed effect analysis indicated that capital equity (CE), liquidity asset density (LAD), and financial burden debt (FBD) has a positive but insignificant effect on return on equity (ROE) while total revenue (TR) has a positive and significant impact on ROE.

Grosu et al (2024) examined the impact of IFRS 9 adoption on the financial performance and sustainability of 20 Romanian credit institutions from a period of 4 years form (2018-2021). Dependent variable Fair Value Evaluation Result through Profit and Loss (FVEvRPL), (FVEvROCI) - Fair Value Evaluation Result through Other Comprehensive Income and Financial Sustainability Index (FSI) While the Independent variable for the first two dependent variables are CCE - Cash and cash equivalents, TLG - Total Loans Granted, IA - Intangible Assets, TE - Total Equity, Pr - Provisions, CD - Clients' Deposits, Inc - Income, Exp - Expenditures and the Independent variable for the last dependent variable are ROE (Return on Equity), ROA (Return on Assets), RMA (Return of main activity), FVEvRPL, FVEvROC and AI (Adjustment index). Regarding the order of influence of the independent variables on the FVEvRPL dependent variable, it is as follows: CCE, Pr, Exp, CD, TE, Inc, TLG, FVEvAPL, and IA. It was revealed that CCE and TE has a positive and significant and effect while CD has a negative and significant effect, Pr has a negative and significant effect, TLG positive and insignificant effect, IA negative and significant effect, Inc positive and insignificant effect, exp negative and significant effect and FVEvAPL has a positive and insignificant effect. Regarding the influence of the independent variables on the FVEvROC dependent variable; it was found that CCE, TLG, IA and FVEvROC has a negative and insignificant effect, while TE, Pr, CD, Inc, Ex has a positive and insignificant effect. And finally, regarding the IA dependent variable ROE, RMA, FI and AI have a negative and insignificant effect while ROA, FL has a positive and insignificant effect.

Theoretical review

This study adopts the Agency theory; it explains the relationship between owners of a firm (the principals) and the managers hired to run it (agents). It was propounded by Jensen and Meckling (1976), and according to them the relationship is inherently characterized by conflicting interests, information asymmetry, and the potential for opportunistic behavior. The central argument is simple: managers do not always act in perfect alignment with shareholder goals. In the banking environment, these conflicts become especially pronounced because managers control decisions involving credit creation, risk-taking, classification of financial assets, and application of IFRS 9 impairment rules. Shareholders expect managers to select financial assets and manage credit exposures in a way

that maximizes earnings while minimizing risk. Mangers, however, may choose actions that maximize their own incentives such as expanding credit aggressively to boost term profits.

METHODOLOGY

This study adopted the ex-post facto research design, as the study made use of secondary data to evaluate the effect of financial assets on ROA of listed deposit money banks in Nigeria. The population of this study comprises the seven (12) listed deposit money banks in Nigeria, that are quoted on the Nigeria Stock Exchange as at February, 2025. The sampling technique adopted in the study is purposive sampling technique. For a company to qualify as a sample, the company must satisfy the following: it must not have been delisted for the entire period of the study and must also be in operation for the period of the study and it must have the required data for the study. The listed deposit money banks include Wema, Jaiz, Fidelity, Eco, Stanbic IBTC, FBN and Access bank. The data used for this research were extracted from the annual reports of the selected manufacturing firms, spanning from 2018-2024. This is the post IFRS 9 adoption period in Nigeria.

Model Specification: According to Koutsoyiannis (2003), a model specification is a mathematical expression which involves the determination of the dependent and independent variables. The general multiple form of the model is specified thus:

The implicit mathematical form of the model is specified thus:

$$ROA = f[FA(1), FA(2)] \dots \dots \dots (i)$$

The econometric form is given as:

$$ROA_{it} = \beta_0 + \beta_1 LogFA(1)_{it} + \beta_2 LogFA(2)_{it} + \beta_3 LogFS_{it} + \varepsilon_{it} \dots \dots \dots (ii)$$

Where:

ROA	=	Return on Asset
FA(1)	=	Financial assets at amortized cost
FA(2)	=	Financial assets at fair value through comprehensive income (FVOCI)
FS	=	Firm Size
Log	=	Natural logarithm of the variables
e	=	Error Term
It	=	Company effect (<i>i</i>) and time effect (<i>t</i>)

Table 1.1: Variable Measurement

VARIABLES	MEASUREMENTS	SOURCE
Returns on assets	$\frac{\text{Net Profit after tax}}{\text{Total Assets}} \times 100$	DeYoung & Tona (2013)
Financial asset at amortized cost	LogFA(1) = Natural logarithm of financial assets at amortized cost	Eheidu and Nwaokocha (2024)

Financial assets at FVOCI	LogFA(2) = Natural logarithm of financial assets at fair value through comprehensive income	Eheidu and Nwaokocha (2024)
Firm Size	Log _total assets	Andries & Capraru (2014)

Source: Authors' Compilation, 2025.

The study specifically investigates financial assets measured at amortized cost and financial assets at fair value through comprehensive income

DATA ANALYSIS AND RESULTS

Table 1.2: Descriptive Statistics and Correlation Matrix

	Descriptive Statistics						
Variable	Obs	Mean	SD	Min	Max	Skewness	Kurtosis
ROA	49	0.02	0.023	0.09	1.80	1.80	5.42
LogFA1	49	16.14	3.97	8.67	22.73	-0.12	2.05
LogFA2	49	14.48	3.47	8.28	20.50	-0.14	1.94
LogFS	49	18.71	3.94	9.00	24.50	-0.75	2.7
	Correlation Matrix						
Variable	ROA	LogFA1	LogFA2	LogFS			
ROA	1.0000						
LogFA1	-0.5359*	1.0000					
LogFA2	-0.4950*	0.7724*	1.0000				
LogFS	-0.3305*	0.7110*	0.6119*	1.0000			

Table 1.2: D

S Source: Authors' compilation, 2025.

The table above provides results for descriptive statistics and correlation matrix for this study. Banks in the sample have low average ROA (2%) but considerable dispersion (0.023%); a few banks and year performed better than most. The log-transformed variables are well distributed, the highest mean (16.14) among amortized cost asset variables, indicate that these are the largest component of bank assets (primarily loans and held-to-maturity securities). Both amortized cost assets and FVOCI holdings are negatively correlated with ROA; stronger for LogFA1. The high positive correlation between LogFA1 and LogFA2 means banks with large loan/credit portfolios also hold more FVOCI instruments, has a strong negative correlation with ROA (-0.5359), the strongest of all variables.

Table 1.3: Hausman Specification Test

Pooled Effect Regression			Fixed Effect Regression			Random Effect Regression		
Variable	Coef.	p-value	Variable	Coef.	p-value	Variable	Coef.	p-value
LogFA1	-0.04	0.016	LogFA1	-0.007	0.000	LogFA1	-0.006	0.000
LogFA2	-0.01	0.268	LogFA2	0.0001	0.915	LogFA2	-.0004	0.643
LogFS	0.0003	0.763	LogFS	0.007	0.013	LogFS	0.005	0.019
_cons	0.068	0.000	_cons	0.01	0.787	_cons	0.05	0.147
Hausman test = $\text{Chi}^2(4) = 2.78$								
Prob>chi2 = 0.5953								
LM test = $\text{chibar}^2(01) = 45.89$								
Prob > $\text{chibar}^2 = 0.0000$								

Source: Authors' compilation, 2025.

The hausman specification test selected random effect in place of fixed effect however, for the random effect, an increase in amortised-cost financial assets is associated with a large, statistically significant decline in ROA, Log FA1 is significantly negative (coef. -0.0072). LogFA2 shows no significant effect; hence a significant negative effect on profitability across all models (coef. -0.006, $p=0.000$) was observed. The Breusch-Pagan Lagrange Multiplier (LM) test for random effects shows a significant panel effect, so either random or fixed are preferred.

Diagnostics test

TEST	PROBABILITY
Heteroskedasticity Test:	$\text{chi}^2(1) = 8.57$; Prob > $\text{chi}^2 = 0.0034$
Test for Normality	Skewness/Kurtosis $\text{chi}^2(2) = 3.00$ ($p=0.2229$) Shapiro-Wilk $W = 0.95981$ ($p=0.09304$)
Variance Inflation Factor (VIF)	Mean VIF 3.14

Source: Authors' compilation, 2025.

The variance of residuals is not constant across observations. Because heteroskedasticity inflates and deflates standard error, a robust regression was carried out. The residuals approximate normality sufficiently for inference; no strong departure that would invalidate z test. The VIF shows that there are no issues of multicollinearity, as the accepted rule of thumb is 10. So, interpretation of individual coefficients remains reliable.

Test of Hypothesis and Discussion of Findings

Hypothesis one (H_{01}): Financial assets at amortized cost have no significant effect on the financial performance of listed deposit money banks in Nigeria.

Rejected, the analysis revealed a statistically significant negative effect ($\beta = -0.0062$, $p = 0.000$). The results reveal that amortised-cost financial assets exert a negative and statistically significant effect on return on assets

(ROA), reflecting the heavier impairment burden associated with the expected credit loss (ECL) framework. This finding is consistent with Eyalsalman et al., (2024) who Investigated Jordanian banks and found a negative and significant link between IFRS 9 and return on equity, but inconsistent with the study of Osirim and Chukwu (2017) who Found a significant positive association between the financial assets held for trading and the performance" of Nigerian banks.

Hypothesis two (Ho₂): Financial asset measured at fair value through comprehensive income have no significant effect on the financial performance of listed deposit money banks in Nigeria.

Failed to reject, the relationship was found to be statistically insignificant ($\beta = -0.0004$, $p = 0.643$). The study further establishes that FVOCI financial assets have a negative but statistically insignificant effect on ROA. This is consistent with IFRS 9's requirement that fair-value changes in FVOCI instruments be recognized in other comprehensive income rather than the income statement, thereby muting their immediate impact on performance metrics (Gope, 2018). This finding is consistent with Ehiedu and Ukueku (2024) who found that various financial asset proxies (like cash equivalents and loans) had a "positive but insignificant effect on return on equity (ROE)" in Nigerian banks, but inconsistent with Eyalsalman et al (2024) who found a "negative and significant link between IFRS 9 financial assets and return on equity.

CONCLUSION AND RECOMMENDATION

The study examined the effect of financial assets measured under IFRS 9; specifically amortised-cost and FVOCI assets on the financial performance of listed Deposit Money Banks in Nigeria. The results reveal that amortised-cost financial assets exert a negative and statistically significant effect on return on assets (ROA), reflecting the heavier impairment burden associated with the expected credit loss (ECL) framework.

Based on the empirical findings and the reviewed literature, several recommendations are proposed to strengthen financial performance and risk-management practices among Nigerian DMBs. First, banks should enhance credit-risk assessment and monitoring frameworks to reduce impairment losses associated with amortised-cost financial assets. Second, regulators such as the Central Bank of Nigeria (CBN) should strengthen supervisory guidance on IFRS 9 implementation. Studies highlight that clear regulatory oversight enhances the consistency and reliability of ECL estimation across banks, reducing model risk and ensuring that impairment recognition reflects true credit-risk conditions.

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