

Effect of Bank's Compliance to Anti-Money Laundering (AML) Regulations On Financial Stability in Nigeria

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Abstract: *This study examined the effect of banks' compliance with Anti-Money Laundering (AML) regulations on financial stability in Nigeria. The study specifically investigated the influence of Customer Due Diligence and Know Your Customer (CDD/KYC) compliance, Transaction Monitoring and Suspicious Transaction Reporting (TMSTR), and Internal Controls and Governance (ICG) on financial stability proxied by Return on Assets (ROA) and Non-Performing Loans (NPL). The study was anchored on Regulatory Compliance Theory by Braithwaite (1992). An explanatory research design with a quantitative approach was adopted using secondary data obtained from five selected Nigerian deposit money banks over the period 2016–2025. Data were analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis. The findings revealed that AML compliance variables jointly exert a significant effect on financial stability. Transaction Monitoring and Suspicious Transaction Reporting demonstrated a positive and statistically significant effect on ROA, while AML compliance variables showed negative relationships with NPL, indicating their potential role in reducing credit risk. The study further revealed the presence of severe multicollinearity among AML variables, suggesting overlapping compliance dimensions. The study concludes that effective AML compliance enhances profitability, strengthens risk management, and contributes to the stability of the Nigerian banking sector. The study recommends stronger regulatory enforcement, improved compliance technologies, and integrated AML frameworks within banks.*

Keywords: anti-money laundering regulations, KYC compliance, transaction monitoring, internal controls & governance, return on assets, non-performing loans,

INTRODUCTION

Financial stability has become a key focus for banking systems globally. Especially now, with rising financial crimes and increasing regulatory pressure. It is usually assessed using indicators like profitability and asset quality. These give an idea of how well banks can stay resilient under both market and regulatory conditions. From the empirical viewpoint, there is clear evidence that strong anti-money laundering (AML) frameworks help in this regard. They reduce risk exposure

and improve overall operational soundness. Asset quality, often captured through non-performing loans, and profitability measures like return on assets are key channels through which AML compliance influences stability (Durguti et al., 2024). Similarly, financial regulation has been shown to improve bank stability by strengthening risk management practices, even though it may impose short-term profitability constraints (Fadhul, 2024).

In Nigeria, the banking sector operates within a structured AML/CFT framework aligned with international standards and supported by institutions such as the Central Bank of Nigeria and the National Financial Intelligence Unit. However, there are still gaps. Legal frameworks exist, but issues around adequacy and enforcement keep coming up which raises concerns about how effective these compliance mechanisms really are in ensuring financial system stability (Chitimira & Animashaun, 2023; Ifeakandu & Ardzard, 2022). IMF assessments also point in the same direction. Regulatory credibility and proper adherence to global standards are not optional, they are essential if financial stability and investor confidence are to be maintained in Nigeria (IMF, 2023).

At the operational level, AMLR compliance is driven by specific mechanisms. CDD and KYC are at the core. They form the foundation for identifying customers properly and reducing the risk of illicit financial activities. Transaction monitoring and suspicious transaction reporting systems enable banks to detect and report abnormal financial activities, particularly in increasingly digitalized financial environments (Saxena, 2024). Additionally, internal controls and governance structures ensure that AML policies are effectively implemented, enhancing accountability and regulatory compliance within banks.

Furthermore, Nigeria's ongoing digital transformation, including innovations such as the eNaira, has strengthened monitoring capabilities and improved compliance efficiency, although it also introduces new AML-related risks (Ree, 2023; Lottu et al., 2023). This evolving regulatory and technological landscape underscores the need to examine how banks' compliance with AML regulations influences financial stability in Nigeria.

LITERATURE REVIEW

Anti-Money Laundering Regulations

(AML) regulations are set rules that aim to deter illicit financial flows and preserve financial system integrity (Durguti et al., 2024). Their stability effects operate through asset-quality and earnings channels: tighter AML regimes can influence banks' resilience by shaping loan performance and profitability (Durguti et al., 2024). Cross-country evidence indicates that AML requirements and governance can affect banking stability, notably through changes in non-performing loans and broad indicators of profitability such as ROA; these relationships underscore the stabilizing potential of effective AML enforcement even where enforcement capacity varies (Durguti et al., 2024) In addition, evidence from South Sudan on AML compliance, particularly

customer due diligence shows a positive association with financial performance, implying that robust AML practices can bolster bank resilience in challenging regulatory environments (Nicknora, 2024). Taken together, these strands suggest that in Nigeria, as in other contexts, CDD/KYC, transaction monitoring, and reporting processes of AML regulation can influence stability by tightening risk controls and improving earnings quality (Nicknora, 2024). A parsimonious view identifies NPL as a principal stability proxy and profitability measures like ROA as the related channel through which AML compliance affects resilience, while acknowledging that the exact magnitudes depend on enforcement credibility and macro-financial conditions (Durguti et al., 2024; Nicknora, 2024).

Bank Compliance

Bank compliance centers on the pillars of customer due diligence (CDD/KYC), transaction monitoring, and the reporting of suspicious activities (STR/CTR), all underpinned by robust internal controls and governance. Across studies of different markets, these elements are identified as the core levers through which banks detect and deter illicit finance, align with regulatory expectations, and sustain institutional credibility (Sultan & Mohamed, 2022). In practice, implementation challenges such as name screening, data quality, verification of high-risk clients, and the cost of compliance shape how banks design their compliance architectures and allocate scarce compliance resources (Sultan & Mohamed, 2022).

Empirical insights from AML regulation literature suggest that compliance effectiveness can influence banking sector stability through channels related to asset quality and earnings capacity; stricter, more credible AML regimes tend to be associated with lower risk in loan portfolios and more stable earnings, albeit sometimes at the cost of higher compliance expenditure (Durguti et al., 2024). The stability-relevant channels such as asset quality and profitability underscore why robust CDD/KYC, monitoring, and governance are not only regulatory obligations but also prudential instruments for resilience, particularly in regions facing complex AML environments (Durguti et al., 2024).

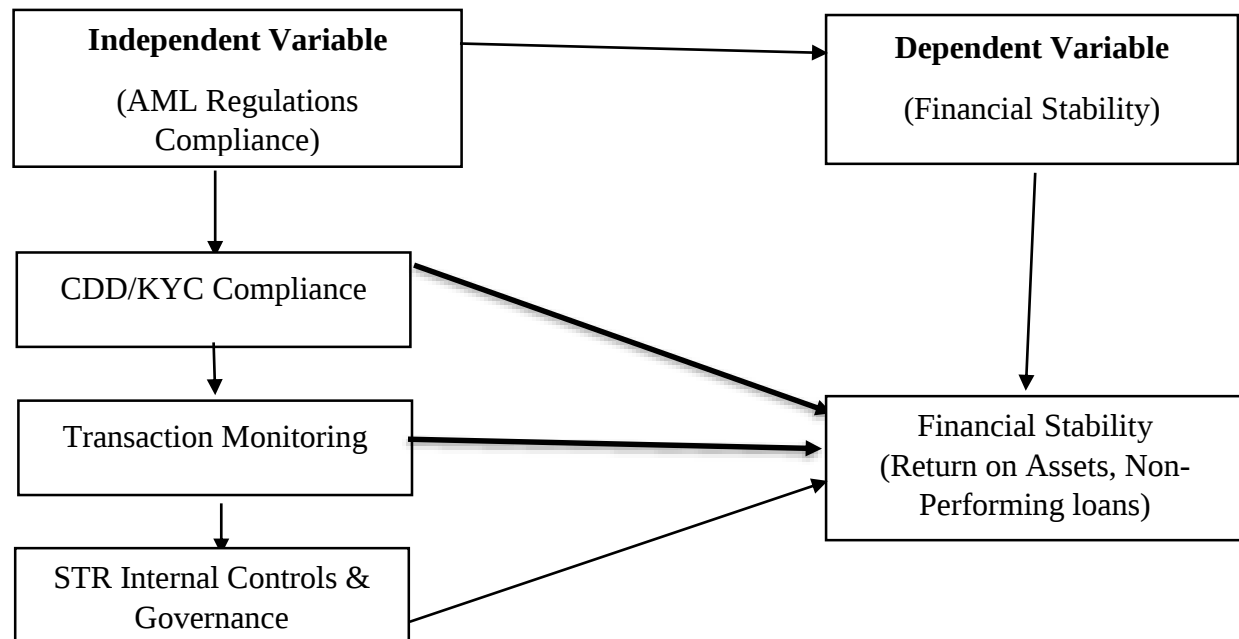
Policy implications for Nigeria, considering cross-country evidence, emphasize strengthening the core compliance triad Customer, Due Diligence /Know Your Customer, transaction monitoring with Suspicious Transaction Reporting/Currency Transaction Reporting, and governance of internal controls to bolster regulatory credibility and financial integrity. Banks should acknowledge that effective compliance supports stability by improving risk controls and reporting discipline, while recognizing that challenges such as data quality and resource constraints require targeted capacity-building and governance reforms. The Nigeria context is thus best served by reinforcing these pillars to sustain financial stability and inclusion within evolving AML frameworks. (Sultan & Mohamed, 2022; Durguti et al., 2024).

Financial Stability

Financial stability refers to the resilience of the financial system, particularly banks, to shocks so that core functions such as payment, credit intermediation, and liquidity provision continue with minimal disruption and confidence remains intact. It hinges on the system's ability to absorb losses, manage risk, and withstand episodes of stress without cascading crises. In AML-regulatory terms, stability is enhanced when prudential and AML measures curb illicit risk, maintain asset quality, and support earnings, thereby sustaining capital adequacy and lending capacity even as compliance costs rise (Atellu et al., 2021).

Financial stability in banks, especially under AML regulation can be effectively understood through two core indicators: Return on Assets (ROA) and Non-Performing Loans (NPL). Conceptually, asset quality (as captured by NPL) and earnings capacity (captured by ROA) form the primary stability channels through which AML regimes influence resilience. The literature consistently identifies that lower NPLs are associated with stronger stability, while higher NPLs erode profitability and balance-sheet strength, signaling greater fragility in the banking system (Durguti et al., 2024). Empirical work in Western Balkans shows that decreases in NPLs directly bolster banking stability and that ROA frequently serves as a key outcome measure of stability in AML contexts (Durguti et al., 2024). In parallel, country-specific evidence from Nigeria indicates that rising NPLs depress ROA, highlighting how credit risk quality translates into earnings and overall bank performance, a critical consideration for stability in AML-compliant regimes (Odebode et al., 2024). When taken together, these findings support a parsimonious stability specification where Non-Performing Loans serves as the primary risk channel and Return On Assets as the corresponding earnings channel (Odebode et al., 2024). Overall, financial stability emerges from a credible regulatory regime combined with robust risk-management and governance that preserve credit and payment functions under adverse conditions (Atellu et al., 2021).

Conceptual framework



Source: Researcher (2026)

Theoretical Review

The study is anchored on the Regulatory Compliance Theory, which explains why organizations adhere to rules and standards to avoid sanctions, maintain legitimacy, and ensure operational stability. The theory is associated with the work of John Braithwaite (1992), particularly in his work *Responsive Regulation: Transcending the Deregulation Debate*, published in Australia. The theory posits that compliance with regulatory frameworks is driven not only by enforcement but also by the need to sustain institutional credibility and trust within the financial system. Regulatory Compliance Theory provides a strong foundation for explaining how banks respond to Anti-Money Laundering (AML) regulations. Banks implement compliance mechanisms such as Customer Due Diligence (CDD/KYC), Transaction Monitoring and Suspicious Transaction Reporting (STR), and Internal Controls and Governance to meet regulatory expectations and avoid penalties. These compliance practices are not merely legal obligations but strategic tools for reducing financial crime risks and enhancing institutional stability.

The theory is particularly relevant to Nigeria, where regulatory frameworks exist but their effectiveness depends largely on the degree of compliance by banks. Studies have shown that compliance-driven regulatory systems improve risk management, reduce exposure to illicit financial flows, and enhance financial system resilience (Durguti et al., 2024; Chitimira & Animashaun, 2023). Thus, the theory underpins the expectation that higher levels of AMLR

compliance will positively influence financial stability, measured through indicators such as Return on Assets (ROA) and Non-Performing Loans (NPL).

Empirical Review

Nicknora (2024): The study reviewed (AML) Anti-Money Laundering compliance and financial performance in South Sudan, focusing on Customer Due Diligence (CDD) and KYC compliance as key proxies. Findings showed that strong Customer Due Diligence/KYC practices reduce exposure to illicit financial activities and improve financial performance indicators. The study concludes that effective customer verification processes enhance institutional stability. This directly supports the present study's use of Customer Due Diligence/KYC compliance as a major determinant of financial stability.

Durguti et al. (2024): This study analyzed the effectiveness of (AML) Anti-Money Laundering regulations in ensuring banking sector stability in the Western Balkans using empirical methods. Findings indicate that effective (AML) Anti-Money Laundering compliance improves financial stability by reducing non-performing loans and enhancing profitability indicators such as Return On Assets. The study identifies asset quality and earnings performance as key channels through which (AML) Anti-Money Laundering policies affect stability. This directly supports the current study's use of ROA and NPL as proxies for financial stability. **Egbiri & Azinge (2023):** The study explored the risks of money laundering in digital financial systems, particularly cryptocurrencies, within the West African context. It found that weak regulatory oversight and anonymity in digital transactions increase exposure to illicit financial activities. The study emphasizes the need for stronger transaction monitoring and regulatory controls to mitigate these risks. This is relevant to the present study as it reinforces the importance of transaction monitoring and suspicious transaction reporting as key (AML) Anti-Money Laundering compliance mechanisms influencing financial stability.

Fadhul (2024): The study examined the impact of financial regulations on bank profitability in Uganda using a quantitative approach. Profitability was proxied by ROA and ROE, while regulatory intensity captured compliance effects. The findings revealed that stricter regulatory compliance improves risk management and operational discipline, though it may reduce short-term profitability. However, in the long run, regulatory adherence enhances financial soundness. This is relevant as it supports the use of ROA as a financial stability proxy and suggests that AMLR compliance can influence bank performance through improved regulatory discipline. **Benzerrouk et al. (2023):** This study investigated the effect of banking supervision on anti-money laundering compliance using quantitative methods. The results showed that effective supervision significantly improves (AML) Anti-Money Laundering compliance levels within banks, particularly through stronger internal controls and governance mechanisms. The study highlights that supervisory intensity enhances monitoring and enforcement of (AML) Anti-Money Laundering practices. This

is relevant as it supports the role of internal controls and governance as key proxies of (AML) Anti-Money Laundering compliance influencing financial stability in Nigeria.

Chitimira & Animashaun (2023): The study evaluated the adequacy of Nigeria's legal framework for combating money laundering and terrorist financing using a doctrinal research approach. It found that while Nigeria has established (AML) Anti-Money Laundering laws and institutions, gaps in enforcement and implementation weaken overall effectiveness. The study concludes that stronger compliance mechanisms, particularly in CDD/KYC and regulatory enforcement, are necessary to improve financial system integrity. This aligns with the present study by highlighting (AML) Anti-Money Laundering compliance dimensions as critical drivers of financial stability. Lottu et al. (2023): This study reviewed digital transformation in Nigeria's banking sector, focusing on proxies such as digital monitoring systems, data analytics, and compliance automation tools. Findings indicate that digitalization improves transaction monitoring, enhances compliance efficiency, and strengthens risk management. The study concludes that technology-driven systems improve financial system resilience. This supports the role of transaction monitoring and internal control systems in strengthening (AML) Anti-Money Laundering compliance and financial stability.

Gaviyau & Sibindi (2023): This study critically reviewed global AML/CFT frameworks, focusing on compliance effectiveness. It identified key proxies such as institutional enforcement, regulatory alignment, and governance mechanisms. The findings show that weak enforcement and fragmented compliance structures reduce (AML) Anti-Money Laundering effectiveness, while strong governance enhances outcomes. The study concludes that compliance quality, rather than the existence of regulations, determines effectiveness. This aligns with the present study by supporting internal controls and governance as key proxies of (AML) Anti-Money Laundering compliance influencing financial stability. Husnaningtyas et al. (2023): The study conducted a systematic review of (AML) Anti-Money Laundering systems, focusing on technology-driven compliance. Key proxies included transaction monitoring systems, detection accuracy, and reporting efficiency. Findings revealed that machine learning and deep learning significantly improve suspicious transaction detection and monitoring capabilities. The study concludes that enhanced transaction monitoring strengthens (AML) Anti-Money Laundering compliance and risk mitigation. This supports the present study's inclusion of transaction monitoring and STR as critical determinants of financial stability.

Ifeakandu & Ardzard (2022): The study examined institutional frameworks supporting AML/CFT in West Africa, with proxies such as regulatory coordination, supervisory enforcement, and governance structures. Findings showed that strong institutional frameworks significantly improve (AML) Anti-Money Laundering compliance and financial system integrity, while weak coordination undermines effectiveness. The study concludes that governance and enforcement are central to (AML) Anti-Money Laundering success. This supports the inclusion of internal controls and governance as key (AML) Anti-Money Laundering compliance proxies affecting financial

stability in Nigeria. Meiryani et al. (2022): The study investigated the effectiveness of RegTech in Indonesia's banking sector using proxies such as automated compliance systems, monitoring tools, and reporting accuracy. Findings revealed that RegTech significantly improves (AML) Anti-Money Laundering compliance by enhancing detection of suspicious transactions and strengthening internal controls. The study concludes that technology adoption reduces financial crime risks and improves banking stability. This reinforces the importance of transaction monitoring and internal controls in (AML) Anti-Money Laundering compliance.

Atellu, Muriu & Odhiambo (2021): The study examined whether bank regulations influence financial stability in a developing economy using panel data analysis. The findings revealed that stronger regulatory frameworks significantly enhance financial stability by reducing risk exposure and improving institutional resilience. The study emphasizes that effective regulatory enforcement contributes to improved asset quality and overall banking soundness. This is relevant to the current study as AML regulations form part of broader financial regulations, and their compliance is expected to similarly strengthen stability indicators such as ROA and NPL in Nigeria.

Literature Gap

Existing literature has extensively examined the relationship between financial regulation, AML frameworks, and banking sector performance; however, several critical gaps remain. Many studies, such as Atellu et al. (2021) and Fadhl (2024), focus broadly on financial regulation without isolating AML compliance as a distinct construct, limiting understanding of how specific AML mechanisms influence financial outcomes. Studies that directly address AML, such as Benzerrouk et al. (2023) and Gaviyau and Sibindi (2023), emphasize regulatory frameworks and institutional effectiveness rather than bank-level compliance behavior, while Chitimira and Animashaun (2023) focus on legal adequacy in Nigeria without empirically examining how compliance practices translate into measurable stability outcomes.

Furthermore, studies examining individual AML components such as CDD/KYC (Nicknora, 2024) or transaction monitoring systems (Husnaningtyas et al., 2023; Meiryani et al., 2022) do not integrate these into a unified compliance model. Much of the empirical evidence also derives from non-Nigerian contexts, including the Western Balkans, Uganda, and South Sudan, limiting contextual applicability. Finally, despite (Durguti et al., 2024) identifying asset quality and profitability as key channels of financial stability, limited Nigerian studies jointly employ ROA and NPL as dual stability indicators in relation to AML compliance. This study therefore fills these gaps by providing an integrated, Nigeria-focused empirical analysis linking CDD/KYC compliance, transaction monitoring and STR, and internal controls and governance to financial stability proxied by ROA and NPL.

METHODOLOGY

This study adopts an explanatory research design using a quantitative approach. The design is appropriate because it examines the effect of banks' compliance with Anti-Money Laundering (AML) regulations on financial stability in Nigeria. The study employs secondary data analysis, focusing on measurable financial indicators and compliance-related variables. The population comprises deposit money banks operating in Nigeria, as regulated by the Central Bank of Nigeria (CBN). These banks are selected because they are directly subject to AML regulations and play a critical role in maintaining the financial system stability. Data will be from 2016 – 2025 (10 years). In addition to financial data, AMLR compliance variables will be constructed using content analysis of annual reports and corporate governance disclosures of selected banks. The extracted information will be coded and transformed into quantitative indices to enable statistical analysis. The study utilizes secondary data obtained from: Annual reports of selected banks, Central Bank of Nigeria (CBN) publications, Nigeria Deposit Insurance Corporation (NDIC) reports.

Data collected include: Return on Assets (ROA), Non-Performing Loans (NPL), Indicators related to AML compliance (CDD/KYC Compliance, Transaction Monitoring & STR, Internal Controls & Governance). The data collected was analyzed using the Statistical Package for Social Sciences (SPSS) software. Data will be analyzed using descriptive statistics and multiple regression analysis. Descriptive statistics will summarize the characteristics of the data, while regression analysis will examine the relationship between AML compliance and financial stability.

Model Specification

The study uses two regression models:

$$\begin{aligned} \text{ROA} &= \beta_0 + \beta_1 \text{CDDKYC} + \beta_2 \text{TMSTR} + \beta_3 \text{ICG} + \mu \\ \text{NPL} &= \beta_0 + \beta_1 \text{CDDKYC} + \beta_2 \text{TMSTR} + \beta_3 \text{ICG} + \mu \end{aligned},$$

Where: ROA = Return on Assets, NPL = Non-Performing Loans, CDDKYC = Customer Due Diligence / KYC Compliance, TMSTR = Transaction Monitoring & Suspicious Transaction Reporting, ICG = Internal Controls & Governance, β_0 = Intercept, β_1 – β_3 = Coefficients

- μ = Error term

RESULTS AND DISCUSSION

Data Analysis

To provide empirical evidence for the study, data for both the dependent and independent variables were obtained from secondary sources. The dependent variables; Return on Assets (ROA) and Non-Performing Loans (NPL) were extracted from the audited annual financial statements of selected deposit money banks in Nigeria. The independent variables, representing AML compliance dimensions such as; Customer Due Diligence/KYC (CDDKYC), Transaction Monitoring and Suspicious Transaction Reporting (TMSTR), and Internal Controls and

Governance (ICG) were derived through content analysis of the banks' annual reports, particularly from the corporate governance, risk management, and compliance sections (Collected data, converted to chart can be seen below in Fig. 1 and 2).

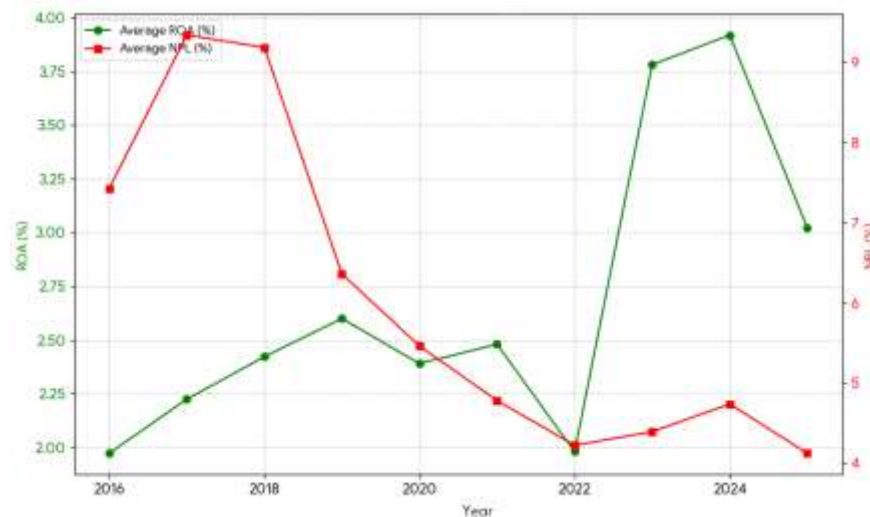


Fig.1: Financial stability trends (2016-2025)

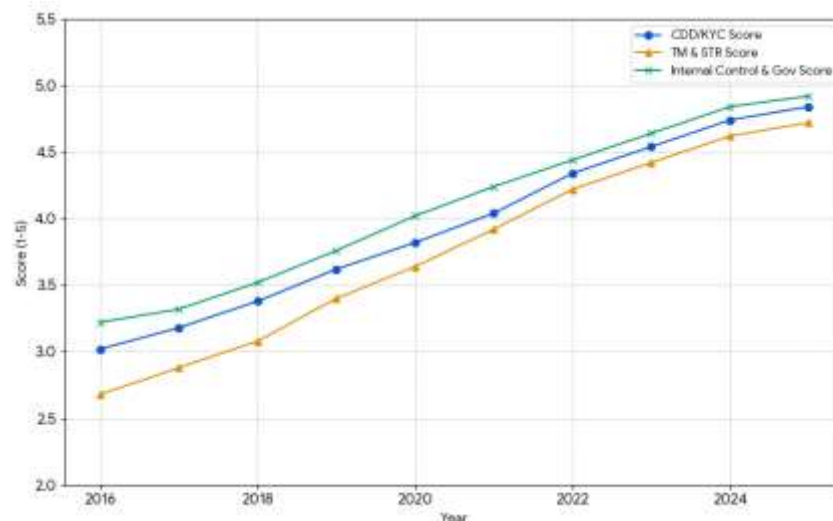


Fig.2: AML compliance index trends (2016-2025)

The study focused on five major banks, namely, First Bank, United Bank for Africa (UBA), Guaranty Trust Holding Company (GTCO), Access Bank and Zenith Bank, which are popularly known as the 'FUGAZ' banks. The dataset spans a ten-year period (2016–2025), resulting in a balanced panel of 50 firm-year observation (5 banks × 10 years). All data were sourced from the

published annual reports of the respective banks, ensuring consistency, reliability, and comparability across the study period.

Descriptive statistics

This section provides important characteristics of the sample such as the mean, minimum, maximum and standard deviation.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (Constant)	50	.50	8.30	2.679	1.416
NPL	50	2.10	24.40	6.131	4.474
CDDKYC	50	3.00	5.00	4.152	.523
TMSTR	50	2.90	5.00	4.112	.558
ICG	50	3.50	5.00	4.370	.439
Valid N (listwise)	50				

Source: Author's computation (2026)

The descriptive statistics in Table 4.1 provide an overview of the financial stability and AML compliance indicators of the sampled Nigerian banks across fifty observations. The mean Return on Assets (ROA) of 2.679% indicates moderate profitability, although the wide range and standard deviation of 1.416 show noticeable variations in earnings performance across banks, largely influenced by stronger-performing institutions such as GTCO. Similarly, the mean Non-Performing Loan (NPL) ratio of 6.131% reflects moderate credit risk, slightly above the regulatory benchmark, with substantial variation driven by historically high NPL levels in some banks, particularly First Bank.

In contrast, the AML compliance indicators recorded consistently high mean values, with CDDKYC at 4.152, TMSTR at 4.112, and ICG at 4.370, indicating strong compliance across the banking sector. Internal Controls and Governance (ICG) emerged as the most stable compliance component with the lowest standard deviation. Overall, the findings suggest that while profitability and credit risk vary across banks, AML compliance remains relatively high and consistently implemented within the Nigerian banking sector.

Regression analysis**Regression analysis results on effect on ROA**

Model Summary				
Model	R Square	Adjusted Square	R	F-Statistics
1	.373 ^a	.332		9.9102
				Prob (F-Statistics)
				.0000

a. Predictors: (Constant), CDDKYC, TMSTR, ICG

Coefficients ^a						
Model		Unstandardized Coefficients (β)	Std. Error	Standardized Coefficients Beta	t	Sig.
1	Constant	3.373	3.373		.927	.359
	CDDKYC	-3.735	2.562	-1.380	-1.458	.152
	TMSTR	8.242	2.852	3.250	2.890	.006*
	ICG	-4.366	3.063	-1.352	-1.425	.161

a. Dependent Variable: ROA

Source: Author's computation (2026)

The regression results in Table 4.2 show that the model explains 37.3% of the variation in Return on Assets (ROA), indicating moderate explanatory power. This suggests that AML compliance contributes significantly to bank profitability, although other factors also influence ROA. Among the AML variables, Transaction Monitoring and Suspicious Transaction Reporting (TMSTR) emerged as the only statistically significant predictor, with a p-value of 0.006. The results indicate that improvements in transaction monitoring and reporting systems significantly enhance bank profitability and operational stability. In contrast, Customer Due Diligence/KYC (CDDKYC) and Internal Controls and Governance (ICG) did not show statistically significant effects on ROA at the 5% significance level. Overall, the findings highlight transaction monitoring as the most influential AML compliance mechanism affecting financial performance.

Regression Model on effect on NPL

Model Summary				
Model	R Square	Adjusted Square	R	F-Statistics
1	.201 ^a	.149		3.854
				Prob (F-Statistics)
				.0015

a. Predictors: (Constant), CDDKYC, TMSTR, ICG

Coefficients ^a						
Model		Unstandardized Coefficients (β)	Std. Error	Standardized Coefficients Beta	t	Sig.
1	Constant	1.186	12.972		.091	.928
	CDDKYC	-10.674	9.139	-1.248	-1.168	.249
	TMSTR	-7.169	10.171	0.894	-.705	.484
	ICG	18.019	10.925	1.766	1.649	.106

a. Dependent Variable: NPL

Source: Author's computation (2026)

The regression results presented here in Table 4.3 show that the model explains 20.1% of the variation in Non-Performing Loans (NPL), indicating weak explanatory power. This suggests that although AML compliance contributes to explaining credit risk, other factors such as macroeconomic conditions, lending policies, and borrower characteristics also influence NPL levels. The findings reveal that Customer Due Diligence/KYC (CDDKYC) and Transaction Monitoring and Suspicious Transaction Reporting (TMSTR) have negative relationships with NPL, implying that stronger AML compliance may help reduce credit risk. However, none of the AML variables were statistically significant at the 5% level, as all p-values exceeded 0.05. Internal Controls and Governance (ICG) was the most influential variable, with a p-value of 0.106. The model was also affected by high standard errors and variability across banks, particularly due to historically high NPL levels in some institutions such as First Bank. Overall, the results support the theoretical importance of AML compliance in improving asset quality, although the lack of statistical significance suggests that bank-specific factors also play a major role.

Correlation Analysis

The table below provides the correlation coefficients of the variables. The coefficients represent the degree of relationship between the variables.

Pearson Correlation

Correlations

		ROA	NPL	CDDKYC	TMSTR	ICG
ROA	Pearson Correlation	1	-.309**	.507**	.541**	.507**
	Sig. (1-tailed)		.105	.051	.015	.368
	N	50	50	50	50	50
NPL	Pearson Correlation	-.309**	1	-.389**	-.380**	-.354**
	Sig. (1-tailed)	.102		.033	.034	.318
	N	50	50	50	50	50
CDDKYC	Pearson Correlation	.507**	-.389**	1	.992**	.988**
	Sig. (1-tailed)	.061	.033		.005	.055
	N	50	50	50	50	50
TMSTR	Pearson Correlation	.541**	-.380**	.992**	1	.992**
	Sig. (1-tailed)	.000	.000	.003		.007
	N	50	50	50	50	50
ICG	Pearson Correlation	.507**	-.354**	.988**	.992**	1
	Sig. (1-tailed)	.368	.387	.000	.007	-.546**
	N	50	50	50	50	50

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

Source: Author's computation (2026)

The Pearson correlation results in Table 4.4 show that Return on Assets (ROA) has positive relationships with all AML compliance variables, with Transaction Monitoring and Suspicious Transaction Reporting (TMSTR) recording the strongest correlation ($r = 0.541$), followed by Customer Due Diligence/KYC (CDDKYC) and Internal Controls and Governance (ICG) at 0.507 respectively. This suggests that stronger AML compliance is associated with improved profitability and operational efficiency in banks. Conversely, Non-Performing Loans (NPL) show negative correlations with all AML variables, indicating that improved compliance contributes to lower credit risk and better asset quality. However, the correlation matrix also reveals extremely high inter-correlations among the AML variables, with coefficients above 0.98, indicating severe multicollinearity. This implies that the variables capture closely related dimensions of compliance, making it difficult to isolate their individual effects. Therefore, combining them into a composite AML compliance index would provide a more reliable measure for further analysis.

Test of Hypotheses

- i. **Hypothesis One (H₀₁)** states that AML compliance has no significant effect on Return on Assets (ROA). The result of the regression analysis shows that the F-statistic probability value is 0.000, which is less than the 0.05 level of significance. This provides sufficient statistical evidence to reject the null hypothesis. The implication of this result is that AML compliance variables jointly exert a significant influence on bank profitability. In practical terms, adherence to AML regulations through effective customer due diligence, transaction monitoring, and governance structures contributes positively to the financial performance of banks. This finding aligns with the expectation that strong compliance frameworks enhance operational efficiency, reduce financial crime exposure, and improve overall profitability.
- ii. **Hypothesis Two (H₀₂)** indicates that AML compliance has no significant effect on Non-Performing Loans (NPL). The regression results indicate that the F-statistic probability value is 0.0015, which is also below the 0.05 threshold. Consequently, the null hypothesis is rejected. This result suggests that AML compliance variables jointly have a statistically significant effect on credit risk, as measured by NPL. Although individual coefficients may not all be significant due to multicollinearity, their combined effect is meaningful.

DISCUSSION OF FINDINGS

The empirical results of this study provide clear evidence that AML compliance plays a significant role in shaping financial stability within the Nigerian banking sector. The findings from both models indicate that AML compliance exerts a meaningful influence on profitability and credit risk, although the strength and clarity of this influence vary depending on the specification of the model. With respect to profitability, the results show that AML compliance has a significant joint effect on Return on Assets (ROA). This suggests that banks with stronger compliance frameworks tend to perform better financially. The implication is that effective implementation of customer

due diligence, transaction monitoring, and governance mechanisms enhances operational efficiency, reduces exposure to financial crimes, and ultimately improves earnings capacity. This aligns with theoretical expectations that sound regulatory compliance contributes to institutional stability and performance.

Regarding credit risk, the findings also reveal that AML compliance has a statistically significant joint effect on Non-Performing Loans (NPL). Although individual AML variables were not always statistically significant, their combined effect indicates that improved compliance contributes to better asset quality. This supports the argument that rigorous screening of customers and continuous monitoring of transactions help reduce the likelihood of loan defaults and fraudulent activities. A critical econometric observation in this study is the presence of extremely high correlations among the AML variables (approximately 0.99), indicating severe multicollinearity. This condition distorts coefficient estimates, reduces statistical significance, and produces unstable regression results. Consequently, while the overall model remains valid, the individual coefficients should be interpreted with caution. The high degree of overlap among the variables suggests that they capture closely related dimensions of compliance, reinforcing the need to focus on their collective rather than isolated effects. Finally, the findings demonstrate that AML compliance has a significant joint effect on credit risk (NPL) and overall financial stability. The results underscore the importance of a holistic and integrated compliance framework in strengthening the resilience of the banking sector. AML compliance plays a critical role in enhancing financial stability by improving profitability and reducing credit risk within the Nigerian banking sector.

CONCLUSION AND RECOMMENDATIONS

Based on the empirical findings of the study, it is concluded that banks' compliance with Anti-Money Laundering regulations significantly contributes to financial stability in Nigeria. The study established that stronger AML compliance frameworks improve profitability and reduce credit risk within the banking sector. Effective implementation of customer due diligence procedures, transaction monitoring systems, suspicious transaction reporting mechanisms, and internal governance structures enhances operational transparency, minimizes exposure to illicit financial activities, and strengthens institutional resilience. The findings further demonstrate that AML compliance should not be viewed merely as a regulatory obligation, but as a strategic financial stability mechanism capable of improving overall banking performance. Banks with stronger compliance structures were observed to exhibit better profitability outcomes and lower levels of non-performing loans. Although the study encountered econometric challenges associated with multicollinearity among AML variables, the use of a composite AML index confirmed the existence of a significant joint relationship between AML compliance and financial stability indicators. Therefore, the study concludes that a holistic and integrated AML framework is essential for promoting sustainable banking operations and safeguarding the Nigerian financial system against financial crimes and systemic vulnerabilities.

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. Banks should strengthen AML compliance frameworks by investing in advanced compliance technologies, automated transaction monitoring systems, and robust customer verification mechanisms to improve the detection and prevention of suspicious financial activities.
2. Regulatory authorities such as the CBN, EFCC and NFIU should intensify supervision and enforcement activities to ensure continuous compliance with AML regulations across all deposit money banks. Regular compliance audits and sanctions for non-compliance should be strengthened.
3. Banks should enhance staff training and capacity development programs on AML policies, emerging financial crime trends, and regulatory reporting requirements. Continuous training will improve institutional competence and compliance effectiveness.
4. Financial institutions should adopt integrated AML compliance systems that combine customer due diligence, transaction monitoring, governance, and risk management into a unified framework. This integrated approach will improve operational efficiency and financial stability.
5. Banks should improve corporate governance and internal control structures by ensuring stronger oversight from boards and compliance committees. Effective governance mechanisms are critical for sustaining compliance culture and minimizing operational risks.

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