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MONETARY POLICY OPERATIONS AND FINANCIAL DEEPENING: A FINANCIAL EDUCATION PERSPECTIVE

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ABSTRACT

This study investigates how monetary policy instruments affect financial deepening in Nigeria using annual data from 1995–2024. It examined the extent of the effects of cash reserve ratio (CRR), liquidity ratio (LR), and the monetary policy rate (MPR) on financial deepening (FD), proxied by private-sector credit to GDP. Utilizing data obtained from the Central Bank of Nigeria (CBN) statistical bulletin, and employing the vector error-correction model (VECM), it was revealed that a stable long-run equilibrium in which CRR and LR are positively associated with FD, while persistent increases in MPR reduce FD. The error-correction term in the FD equation is negative and significant (−0.143), implying FD corrects about 14.3% of disequilibrium each period. Short-run dynamics differ: lagged MPR and LR exert positive short-run effects on FD, and Granger causality tests indicate a unidirectional short-run causal flow from FD to LR. The study suggests prioritizing and educating on structural reforms that deepen intermediation and using MPR for short-term stabilization, while reassessing the calibration of reserve and liquidity requirements within a coordinated macroprudential framework.

KEYWORDS: - Monetary Policy, Financial Deepening, Cash Reserve Ratio, Liquidity Ratio, Monetary Policy Rate, Private Sector Credit, Vector Error Correction Model, Granger Causality.

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1.0 INTRODUCTION

Financial intermediation, most visibly driven by commercial banks, remains a cornerstone of economic development in emerging economies. By reducing information and transaction costs, banks channel savings from relatively uninformed depositors to information-intensive borrowers, thereby facilitating investment, innovation, and growth (Schumpeter, 1911; McKinnon, 1973; Shaw, 1973). Empirical and policy accounts reinforce this theoretical foundation: well-developed banking systems lower monitoring costs, expand access to credit, and amplify the impact of productive projects on aggregate output (Casu, Girardone, & Molyneux, 2006; Adekunle, Salami, &Adedipe, 2013). In many emerging markets the banking sector dominates financial intermediation and asset holdings, making its performance central to macroeconomic stability and the effectiveness of public policy (Soludo, 2009; Sanusi, 2012).

Monetary policy management is a primary channel through which authorities influence the macroeconomic environment in which banks operate. Central banks deploy instruments such as policy interest rates, reserve requirements, liquidity provisions, and prudential regulations (for example, minimum capital ratios and deposit insurance) to stabilize prices, manage liquidity, and shape credit allocation. These instruments affect banks' net interest margins, funding costs, portfolio composition, and incentives for risk-taking. In emerging economies, where financial markets are often shallower, institutional frameworks are less mature, and external vulnerabilities more pronounced, the transmission of monetary policy to bank behaviour can be both powerful and unpredictable (Casu et al., 2006; Adekunle et al., 2013).

Despite substantial theoretical progress on the bank lending channel and balance-sheet (financial accelerator) effects, important gaps remain in understanding how monetary policy operates in small open and institutionally heterogeneous economies. Traditional models frequently isolate either the bank lending channel or the balance-sheet channel, whereas real-world dynamics often involve their simultaneous interaction: policy rate changes alter banks' funding and lending conditions while also affecting borrowers' collateral values and net worth, which in turn feed back into credit demand and default risk (Allen & Ndikumana, 2000). Recent cross-country work highlights both the continued relevance of monetary policy in emerging markets and the methodological challenges of identifying policy shocks where financial markets are less deep and information flows are more constrained (Checo, Grigoli, & Sandri, 2024).

The practical implications of these theoretical channels are evident in the policy and performance record of many emerging economies. Banks respond to successive monetary regimes by redesigning portfolio strategies to preserve profitability, liquidity, and safety; yet these adjustments often reveal trade-offs. Prudential tightening that raises capital or liquidity buffers can constrain credit supply and slow financial deepening, while overly accommodative policy

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can spur credit booms that later translate into elevated nonperforming loans and systemic fragility (Sanusi, 2012; Soludo, 2009). In Nigeria, for example, a sequence of regulatory reformsaimed at recapitalization, consolidation, and improved supervisionhas strengthened some aspects of resilience but has not fully resolved persistent problems such as wide interest-rate spreads, liquidity mismatches, and limited private-sector credit growth (Adekunle et al., 2013; Soludo, 2009).

The uncertainty surrounding monetary transmission in emerging markets is compounded by volatile exchange and interest rates, sectoral credit allocation mandates, and episodic macroeconomic shocks. These factors influence interest-rate spreads, the value of collateral, non-price lending terms, and ultimately the quantity and quality of credit outstanding. Empirical studies of Nigeria and other emerging economies have produced mixed findings: some analyses emphasize the potency of policy rates for credit and growth (Iwedi& Toby, 2021; Lateef et al., 2021), while others highlight structural constraints on intermediation and the limited pass-through of policy to bank lending (Chukwunenye& Emmanuel, 2020; Odum &Temuhele, 2022). The heterogeneity of results reflects differences in data, estimation methods, and country-specific institutional features, underscoring the need for context-sensitive empirical work.

In Nigeria, recurrent policy shifts and regulatory reforms have not consistently translated into deeper private-sector credit or narrower spreads, raising questions about the channels and conditions under which monetary policy supports sustainable growth (Onyeiwu, 2012; Shittu, 2012).

To address these concerns, the study is specificallydriven to examine the extent of the effects of cash reserve ratio, liquidity ratio, and monetary policy rate on financial deepening in Nigeria (proxied by the ratio of credit to private sector to gross domestic product) while emphasizing financial education as the basis for policy success. By so doing, it aims to disentangle the relative importance of quantity-based (reserve and liquidity) versus price-based (policy rate) tools in shaping bank behaviour and economic outcomes. It contributes to literature by providing evidence on the micro- and macro-linkages between monetary policy and bank performance in an economy where the banking sector dominates financial intermediation.

2.0 LITERATURE REVIEW

Monetary policy is the principal macroeconomic tool through which central banks influence the supply, cost and allocation of money and credit to achieve price stability, external balance and sustainable growth (Nnanna, 2001; CBN, 2011). In emerging economies, where banks dominate financial intermediation and markets are relatively shallow, monetary instruments not only affect

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aggregate demand but also directly shape banks' funding, portfolio choices and risk profiles. Classical and development-oriented contributions emphasize this linkage: Schumpeter (1911) stressed finance as an engine of innovation, while McKinnon (1973) and Shaw (1973) argued that financial deepening is central to capital accumulation and growth. Contemporary banking literature likewise highlights how central-bank actions transmit to bank performance through both price and quantity channels (Casu, Girardone, & Molyneux, 2006). The main instruments of monetary policy in Nigeria are: cash reserve ratio (CRR), liquidity ratio (LR), and monetary policy rate (MPR).

The CRR is a statutory requirement that obliges deposit-taking institutions to hold a specified share of their deposit liabilities as non-remunerated or low-remunerated reserves at the central bank or as vault cash; by directly removing a portion of deposits from banks' lendable funds, changes in the CRR immediately affect the monetary base and short-term credit capacity (IMF, 2022). In practice, central banks in many emerging markets use CRR adjustments both as a blunt instrument of liquidity sterilization when market-based tools are limited and as a prudential buffer to support payment-system stability; however, high CRR settings raise banks' funding costs and can compress intermediation and widen interest-rate spreads, so policymakers must weigh stabilization benefits against intermediation costs (IMF, 2022).

LR is a prudential metric that requires banks to hold a minimum stock of high-quality liquid assets (HQLA) relative to expected short-term outflows; the Basel III Liquidity Coverage Ratio (LCR) is the most widely adopted standard, obliging banks to hold sufficient HQLA to survive a 30-day stress scenario (BCBS, 2013). Unlike the CRR, which directly alters the quantity of reserves, liquidity ratios shape the *composition* and quality of banks' liquid buffers and are explicitly forward-looking: they reduce reliance on emergency central-bank funding and lower fire-sale risk, but they also influence asset allocation and can constrain lending if eligible HQLA are scarce or concentrated in low-yield sovereign paperan important consideration for emerging markets with limited HQLA markets (BCBS, 2013).

The MPR is the central bank's policy interest rate and serves as the primary price-based instrument for steering short-term market rates, influencing banks' funding costs, lending rates, and the broader demand for credit; changes in the MPR transmit to bank profitability, loan growth and asset quality through interest-rate margins and borrower balance-sheet effects (Central Bank of Nigeria, 2021). In emerging economies the MPR is often the central anchor of monetary policy, but its effectiveness depends on market structure, pass-through to retail rates, and the interaction with quantity-based tools (CRR) and prudential constraints (liquidity ratios); coordinated calibration of price and quantity instruments is therefore essential to balance price stability with sustained credit intermediation (Central Bank of Nigeria, 2021; IMF, 2022).

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2.1. Theoretical Framework

Theoretically, the fractional reserve and the credit creation theory underscore this study. The fractional reserve theory of banking intermediationwas propounded by Gurley and Shaw (1955), and it states that a fraction of the deposits should be held in reserve. Fractional reserve banking is a system in which only a fraction of bank deposits are backed by actual cash on hand and available for withdrawal. This is done to theoretically expand the economy by freeing capital for lending. Banks are required to keep on hand and available for withdrawal a certain amount of the cash that depositors give them. For instance, if someone deposits ten thousand naira in the bank for savings, the theory believes that the bank cannot lend the entire ten thousand naira as a loan. It suggests that a fraction of the deposited amount should be held back by the bank.

On the other hand, Richard Werner proposed the credit creation theory. Credit creation theory proposes that individual banks can create money, and banks do not solely lend out deposits that have been provided to the bank. Instead, the bank creates bank deposits as a consequence of bank lending. Consequently, the amount of money that a bank can create is not constrained by their deposit taking activities, and the act of bank lending creates new purchasing power that did not previously exist. According to supporters of the credit creation theory, banks do not need to collect deposits at first to issue a loan. MacLeod (1906) said that "the business of banking is not to lend money, but to create Credit: and by means of the Clearing House these Credits are now transferred from one bank to another, just as easily as a Credit is transferred from one account to another in the same bank by means of a cheque."

Many empirical studies consistently support a functioning credit channel. Iwediand Toby (2021) find causality from credit to RGDP and a long-run equilibrium linking credit variables and growth. Chukwunenye and Emmanuel (2020) show that M2 and exchange-rate movements stimulate private credit and output, though M2 is inflationary. Together, these results indicate that changes in monetary conditions that affect bank lending materially influence real activity.Studies like Lateef et al. (2021) and Onaolapoand Habeeb (2017) document significant negative effects of inflation and interest rates on loans; Lateef et al. also show that inflation Granger causes lending rates. Eke et al. (2015) demonstrate that the sign and significance of rate effects depend on the regulatory regime, with deregulation altering the relationship. The empirical pattern implies that tightening aimed at price stability can constrain credit supply.

Godwin and Uduak (2019) and Aribatise et al. (2025) report positive effects of MPR, T-bill rates and CRR on profitability and liquidity, while Agoh et al. (2024) find CRR positively associated with ROE, but MPR and liquidity ratio are insignificant. These suggest that reserve management and market rates influence bank margins, though the magnitude varies with sample and model.Findings on monetary aggregates and OMOs are context dependent. Chukwunenyeand

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Emmanuel (2020) and some others find M2 raises output and credit but at an inflation cost; Aribatise et al. (2025) find money supply negatively affects bank performance. Kwakye and Okai (2025) highlight that OMOs generally support bank performance, but OMO selling and higher policy rates reduce profitability, underscoring that the direction of OMO effects depends on whether operations inject or withdraw liquidity.

3.0 METHODOLOGY

The study employed the quasi-experimental design to explore the link between monetary policy and bank performance. It utilizes data from 1995 to 2024, sourced from the CBN Statistical Bulletin (2024). It adopts the model of Adediran, Ekejiuba, Matthew, and Adegboye (2017), but with some modifications, as follows:

$$FD = f(CRR, LR, MPR) \quad (1)$$

Transforming the structural econometric model to regression model,

$$FD = \alpha_0 + \alpha_1 CRR + \alpha_2 LQR + \alpha_3 MPR + \alpha_4 CPS + \alpha_5 LDR + \alpha_6 INTR + \mu \quad (2)$$

WhereFD = Financial Deepening
CRR = Cash Reserve Ratio
LR= Liquidity Ratio
MPR = Monetary policy Rate
α_0 = Constant
$\alpha_1 - \alpha_3$ =Coefficients of independent variables
μ=Error Term
By apriori, $\alpha_1, \alpha_2, \alpha_3 < 0$.

The Fully Modified Ordinary Least Squares (FMOLS) technique was employed in estimating the model.

4.0RESULTS AND DISCUSSION

Table 2: Descriptive Statistics

	FD	CRR	LR	MPR
Mean	14.25633	14.81000	32.66667	13.62500
Median	17.58500	10.00000	30.00000	13.50000
Maximum	22.75000	50.00000	40.00000	27.50000
Minimum	5.810000	1.000000	25.00000	6.000000
Std. Dev.	5.998437	11.27494	5.040069	4.104114

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Skewness	-0.159571	1.186879	0.421258	1.114278
Kurtosis	1.300831	4.270923	1.901620	5.988925
Jarque-Bera	3.736284	9.062469	2.395339	17.37516
Probability	0.154410	0.010767	0.301897	0.000169
Sum	427.6900	444.3000	980.0000	408.7500
Sum Sq. Dev.	1043.456	3686.607	736.6667	488.4688
Observations	30	30	30	30

Source: Researcher's Computation with EViews

The Table shows that FD (mean 14.26, SD 5.998) and LR (mean 32.67, SD 5.04) are relatively stable,while CRR (mean 14.81, SD 11.27) and MPR (mean 13.63, SD 4.10) display wider spread, with CRR showing the largest variability. The maximum and minimum values indicate occasional extreme policy settings (CRR up to 50.0; MPR up to 27.5) that could drive short-run dynamics. Jarque–Bera tests for the four variables in show FD (p = 0.1544) and LR (p = 0.3019) do not reject normality at the 5% level, whereas CRR (p = 0.0108) and MPR (p = 0.00017) are non-normal.

Table 3: Correlation Matrix

	FD	**CRR**	**LR**	**MPR**
FD	1.000000			
CRR	0.546143	1.000000		
LR	-0.407881	-0.329679	1.000000	

Source: Researcher's Computation with EViews

The correlation matrix in Table 3 indicates CRR and FD are positively correlated (0.546), while LR is negatively correlated with FD (−0.408) and with CRR (−0.330). These signs imply that higher reserve requirements tend to be associated with higher financial development (FD) in the sample, whereas higher lending rates are associated with lower FD and tend to move opposite CRR.

Table 4: Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF

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CRR	0.009044	6.003832	2.155882
LR	0.027140	57.47372	1.292793
MPR	0.061031	23.90571	1.927665
C	30.22905	58.63963	NA

Source: Researcher's Computation with EViews

Centred VIFs are CRR = 2.16, LR = 1.29, MPR = 1.93, all well below common concern thresholds (e.g., 10), indicating the unlikelihood of multicollinearity in the series.

Table 5: Augmented Dickey-Fuller (ADF) Unit Root Test

Variables		t-statistic	Critical value (0.05)	Prob.	Order of Integration
FD	Level	-1.102405	-2.976263	0.6999	*I*(1)
	1st Difference	-4.965224	-2.976263	0.0004	
CRR	Level	1.848629	-2.967767	0.9996	*I*(1)
	1st Difference	-3.551196	-2.971853	0.0138	
LR	Level	-1.828549	-2.971853	0.3596	*I*(1)
	1st Difference	-3.675308	-2.976263	0.0106	
MPR	Level	-0.708149	-2.967767	0.8293	*I*(1)
	1st Difference	-5.224976	-2.971853	0.0002	

Source: Researcher's Computation with EViews

The result in Table 5 indicates that all four variables are stationary at their first differences. From the result, none of the variables employed in the model has a unit root.

Table 6: Johansen Cointegration Test

Unrestricted Cointegration Rank Tests

	Trace Test				Max-Eigen Test		
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.666870	52.05325	47.85613	0.0191	30.77819	27.58434	0.0188

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At most 1	0.362206	21.27506	29.79707	0.3407	12.59271	21.13162	0.4904
At most 2	0.266522	8.682351	15.49471	0.3956	8.678821	14.26460	0.3139
At most 3	0.000126	0.003530	3.841466	0.9508	0.003530	3.841466	0.9508

Source: Researcher's Computation with EViews

Both the Trace and Eigenvalue statistics reveal the presence of 1 cointegrating variable, thus establishing a dynamic long-run relationship between the variables.

Table 7: Vector Error CorrectionTest

Cointegrating Eq:	CointEq1
FD(-1)	1.000000
CRR(-1)	-1.339894
	(0.25574)
	[-5.23931]
LR(-1)	-2.907088
	(0.70213)
	[-4.14036]
MPR(-1)	8.285122
	(1.24430)
	[6.65844]
C	-8.085162

Error Correction:	D(FD)	D(CRR)	D(LR)	D(MPR)
CointEq1	-0.143461	0.109119	0.029197	0.039207
	(0.03992)	(0.08173)	(0.04441)	(0.06600)
	[-3.59347]	[1.33515]	[0.65749]	[0.59407]
D(FD(-1))	-0.088845	0.499955	-0.421499	0.176787
	(0.20701)	(0.42378)	(0.23025)	(0.34221)
	[-0.42919]	[1.17976]	[-1.83058]	[0.51660]
D(FD(-2))	-0.632970	-0.507659	-0.657060	-0.389580
	(0.24100)	(0.49336)	(0.26806)	(0.39840)
	[-2.62644]	[-1.02898]	[-2.45115]	[-0.97786]
D(CRR(-1))	-0.152137	-0.380035	0.041483	-0.058620
	(0.15893)	(0.32536)	(0.17678)	(0.26274)
	[-0.95724]	[-1.16804]	[0.23466]	[-0.22311]

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D(CRR(-2))	-0.317962	0.541799	-0.086800	0.422589
	(0.15312)	(0.31345)	(0.17031)	(0.25312)
	[-2.07660]	[1.72849]	[-0.50966]	[1.66952]
D(LR(-1))	0.004731	-1.282022	-0.051501	-1.030217
	(0.23648)	(0.48410)	(0.26303)	(0.39092)
	[0.02001]	[-2.64824]	[-0.19580]	[-2.63534]
D(LR(-2))	0.453035	-0.066991	0.126717	0.120306
	(0.20967)	(0.42922)	(0.23321)	(0.34660)
	[2.16073]	[-0.15608]	[0.54336]	[0.34710]
D(MPR(-1))	1.050257	0.148659	-0.090914	-0.019444
	(0.36095)	(0.73893)	(0.40149)	(0.59670)
	[2.90968]	[0.20118]	[-0.22645]	[-0.03259]
D(MPR(-2))	0.483419	0.150113	0.031338	0.103106
	(0.21807)	(0.44643)	(0.24256)	(0.36050)
	[2.21677]	[0.33625]	[0.12920]	[0.28601]
C	1.004284	1.279122	0.627097	0.211873
	(0.42273)	(0.86539)	(0.47020)	(0.69882)
	[2.37573]	[1.47809]	[1.33369]	[0.30319]
R-squared	0.654781	0.509146	0.653927	0.443782
Adj. R-squared	0.472019	0.249282	0.470712	0.149313
Sum sq. resids	55.94484	234.4548	69.21455	152.8854
S.E. equation	1.814076	3.713685	2.017782	2.998876
F-statistic	3.582685	1.959280	3.569180	1.507059

Source: Researcher's Computation with EViews

From the result in Table 4.11, the explanatory variables determine 54.8% of the variations in RGDPR. The F-statistic of 3.14 and p-value of 0.012indicate that the model has a high goodness of fit. However, the t-statistics indicate that only LQR(-1), LQR(-2), andMPR(-2) have significant influences on RGDPR in the short run.

Table 9: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
CRR does not Granger-cause FD	28	0.28840	0.7521
FD does not Granger-cause CRR		2.04539	0.1522

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LR does not Granger-cause FD	28	0.14667	0.8644
FD does not Granger-cause LR		9.90999	0.0008
MPR does not Granger-cause FD	28	1.08745	0.3538
FD does not Granger-cause MPR		2.11390	0.1436

Source: Researcher's Computation with EViews

The result in Table 4.40 indicates the absence of causality between the monetary as well as banking intermediation variables and RGDPR. On the other hand, a unidirectional causality runs from CPS to CRR, LQR and MPR, from DEP to CRR, as well as from LDR to CRR. Thus, banking intermediation can be said to have a causal impact on monetary policy.

Discussion of Findings

From the vector error-correction results, there is a stable long-run equilibrium linking financial development (FD) to the cash reserve ratio (CRR), lending rate (LR), and the monetary policy rate (MPR). In the long run, higher CRR and higher LR are associated with greater FD, whereas a higher MPR is associated with lower FD. The error-correction term shows that FD is the variable that corrects disequilibrium, adjusting by roughly 14.3% per period toward the long-run equilibrium when shocks occur. Short-run dynamics, however, reveal a different pattern: lags of MPR and LR exert positive short-run effects on FD even though sustained increases in MPR reduce FD over time. These empirical regularities reconcile several strands of the earlier literature and have clear implications for policy design.

The long-run coefficients suggest that reserve management plays a constructive role in shaping financial development. The positive long-run CRR–FD coefficient implies that, over sustained horizons, higher reserve requirements are associated with higher measures of financial development in the sample. This finding aligns with studies that emphasize the structural importance of reserve and prudential tools for bank outcomes (Godwin & Uduak, 2019; Agoh, Ogbulu, &Okanta, 2024). One plausible interpretation is that, when applied prudently and predictably, reserve requirements can strengthen intermediation by stabilizing liquidity and encouraging sound balance-sheet management; however, the descriptive diagnostics show CRR is volatile and non-normally distributed in the sample, which cautions against abrupt or large swings in reserve policy that could produce asymmetric short-run effects (Aribatise et al., 2025).
By contrast, the long-run negative coefficient on MPR indicates that persistent monetary tightening, holding other factors constant, tends to depress financial development. This is consistent with empirical work that finds contractionary rate policy can constrain credit supply and dampen intermediation over time (Lateef et al., 2021; Onaolapo& Habeeb, 2017). The VEC results nuance this conclusion by showing that MPR's short-run impact can be positive: both the

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first and second lags of MPR enter the FD equation with positive and statistically significant coefficients. This duality suggests that temporary increases in policy rates may coincide with short-term improvements in measured financial development,perhaps through higher bank margins, improved returns on interest-bearing assets, or reallocation of intermediation, while sustained high rates raise the cost of funds and ultimately reduce lending and broader financial deepening. The coexistence of positive short-run and negative long-run MPR effects reconciles apparently mixed findings in the literature (Eke et al., 2015; Chukwunenye& Emmanuel, 2020) and underscores the importance of policy horizon when evaluating rate moves.

The positive long-run association between LR and FD is notable. Although higher lending rates are often expected to dampen credit demand, the VEC long-run coefficient implies that, in this context, higher LR is associated with greater financial development. One interpretation is that higher lending rates may reflect deeper financial intermediation, more active credit markets and a broader set of interest-bearing instrumentsrather than simply contractionary conditions. Alternatively, higher LR may improve bank profitability and thereby support balance-sheet expansion that underpins measured FD. This interpretation finds echoes in studies that document complex, sometimes counterintuitive links between market rates, bank margins, and credit volumes (Godwin & Uduak, 2019; Eke et al., 2015).

The error-correction dynamics further clarify the system's adjustment process. Only the FD equation contains a statistically significant error-correction term, indicating that FD absorbs disequilibria while CRR, LR, and MPR behave more like short-run exogenous drivers. This asymmetry implies that monetary authorities and market rates tend to move independently in the short run, while the financial sector gradually adjusts to restore the long-run relationship. The finding that FD corrects disequilibrium is consistent with evidence that banking intermediation responds to policy and macro shocks over time and that the banking sector's structural characteristics determine the pace of adjustment (Adesina, Nwidobie, & Amadi, 2018).

In the short-run analysis, the significant negative second lag of FD suggests mean-reverting behaviour in the short run, while the positive and significant second lag of LR indicates that past increases in lending rates can raise FD in the near term. These short-run responses may reflect transient balance-sheet effects; higher rates temporarily boost bank income and measured intermediation, before the longer-term cost effects of higher rates reduce credit. The mixed short-run and long-run signs for policy variables underscore the need for policymakers to distinguish between immediate stabilization objectives and longer-term goals for financial deepening.

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Granger causality tests complement the VEC findings by showing a unidirectional predictive relationship from FD to LR: FD Granger-causes LR, but CRR and MPR do not Granger-cause FD. This result implies that banking intermediation conditions can be leading indicators for market lending rates, reinforcing the view that the banking sector feeds back into price formation in credit markets. The feedback from FD to LR supports the notion that central banks should monitor intermediation indicators as part of their information set when setting policy, because changes in financial development can presage movements in lending rates and thus affect transmission (Chukwunenye& Emmanuel, 2020).

5.0 CONCLUSIONS AND RECOMMENDATIONS

The study examined the link between monetary policy and banking performance in emerging economies, using Nigeria as a case study. The VEC results show that the long-run coefficient on CRR is positive and statistically significant, indicating thathigher CRR is associated with higher measured FD. Also, LR is positive and significant, while short-run dynamics show that lagged LR can raise FD temporarily. The Granger tests indicate that FD Granger-causes LR, suggesting a feedback loop where banking conditions influence market lending rates. On the other hand, the MPR exhibits horizon-dependent effects: its lags have positive short-run impacts on FD, while the long-run coefficient is negative and significant. This indicates temporary rate hikes may coincide with short-term increases in measured FD (via margins or re-pricing), but sustained high MPR reduces financial development by raising intermediation costs.

Based on these findings, the following policy recommendations will significantly improve the overall effect of monetary policy on banking performance.

1. The monetary authority should re-evaluate the CRR as a monetary policy tool, given its ineffectiveness in curtailing credit growth in the country. Its implementation should be gradual and predictable,and adjustments in the CRR should be tied to clear objectives (liquidity normalization, prudential strengthening) rather than abrupt swings.
2. The CBN should strengthen market competition and disclosure to ensure LR changes reflect efficient pricing rather than market power or information frictions.
3. Given MPR's short-run effects on financial deepening, monetary authorities can use interest rate policy to manage short-term fluctuations in financial development, but should not expect MPR alone to change long-run equilibrium relationships.
4. Given the importance of monetary policy and financial deepening, broad-based financial education is chiefly suggested.

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