

## Institutional Quality and the Transmission of Monetary Policy to Financial Markets in Nigeria

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### Abstract

*This study examines the effect of the monetary policy rate on Nigeria's financial market, incorporating the moderating role of institutional quality using monthly data from 2010M01 to 2024M12. The Autoregressive Distributed Lag (ARDL) bounds testing approach and Error Correction Model (ECM) are employed to capture both the short-run and long-run dynamics. The results show that the monetary policy rate has a positive and significant impact on financial market performance in both periods, indicating the dominance of the signalling channel over the cost-of-capital channel. Institutional quality exhibits a positive but insignificant moderating effect in both the short and long run, although it is highly significant in the short run, reflecting its role in creating market frictions and instability. The negative lagged interaction term suggests that institutional rigidities delay policy transmission. The study concludes that strengthening institutional frameworks and implementing structural reforms are critical to enhancing monetary policy effectiveness in Nigeria.*

**Keywords:** monetary policy rate, financial markets, institutional quality, ARDL-ECM technique, Nigeria.

**JEL Classification:** E52, E44, C32, O43

## 1. Introduction

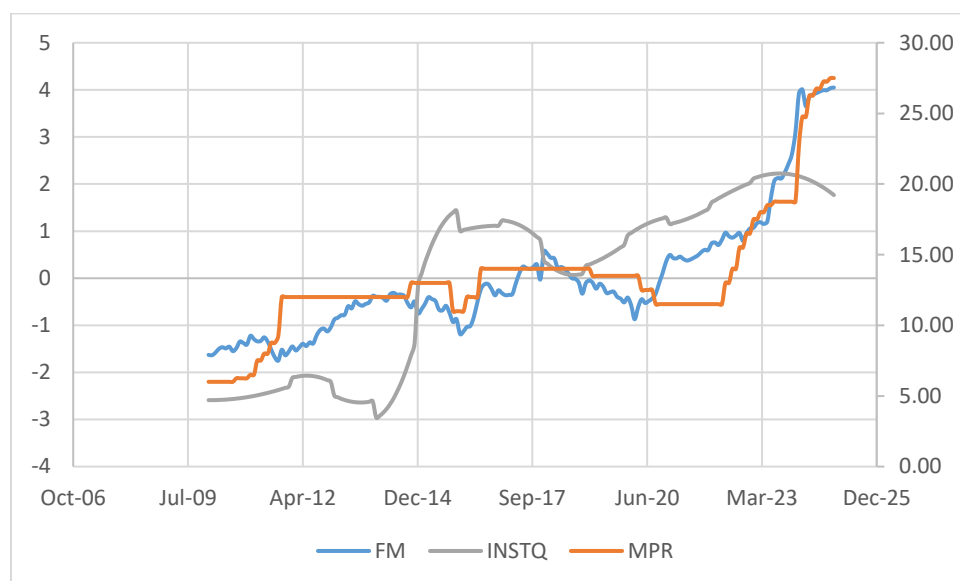
The financial market is a central mechanism by which modern economies systems mobilize savings, allocate capital and transmit macroeconomic policy impulses to the real economic activity. In Nigeria, the financial market is an interrelated system that comprises of the money market, capital market, foreign exchange market and commodity market that represents various facets of economic performance and financial stability (Onyido 1990; Ehigiamusoe 2012; Kumar 2022; Hayes 2024). These markets when properly operational help in investment as well as increasing liquidity and sustainably improving the growth of the economy. However, they are also sensitive to macroeconomic policies especially in monetary policy which affects interest rate, liquidity conditions, asset prices and investor expectations. Monetary policy is implemented mainly in the form of monetary policy rate (MPR) which is considered the benchmark interest rate used to determine the rates in the short-term market and to signal the policy position of the Central Bank of Nigeria (CBN 2018; CBN 2023a). Through this channel, adjustments in the monetary policy rate are likely to impact the financial market behaviour by affecting the cost of borrowing and the allocation of funds in portfolio decisions and the flow of capital in the economy.

Theoretically, the changes in the monetary policy rate are transmitted to the financial market through clearly established channels such as the interest rate, asset price, credit and exchange rate channel (Mishkin 2007). The reality in Nigeria however differs as the financial market response to the monetary policy rate changes has been counterintuitive. The traditional transmission systems including the interest rate and the credit channel are frequently faced with friction because of the volatile macroeconomic environment that has been faced by persistent inflation and structural rigidities. For instance, the period of contractionary monetary policy has been accompanied by falling equity prices, weak capital market activity and continuous exchange rate volatility rather than the expected stabilization effect (NSE 2021; Ugwu 2023; Masengesho et al. 2025). Similarly, despite the sustained increases in monetary policy rate which was aimed at curbing inflation and attracting capital inflows, the naira has continued to depreciate reflecting structural weaknesses, shallow market depth and speculative pressure in the foreign exchange market. These changes indicates that the effectiveness of the monetary policy rate in determining aggregate financial market outcomes might not be limited to the traditional cost of capital channel but rather would be crucially dependent on how financial market participants perceive, interpret and react to monetary policy signals.

Although the MPR is the most significant tool of the CBN, its success as a regulatory tool has faced high scrutiny in recent years. The CBN made several policy changes between 2015-2024, which included a strong tightening stance that made rates climb steadily to overcome the double-digit inflation and currency depreciation (CBN 2024). However, the financial market has often been unpredictable in its manner and seems to be unresponsive to traditional monetary policy. Indicatively, in spite of the large increases in the MPR, commercial banks have in many cases chosen to keep their reserves high instead of increasing credit, indicating a possibility of loss of contact between the money impulse and the real economy (CBN 2024; Echenim 2025). Also, investors shifted their portfolio to risk-free government securities resulting in the contractions of the equity market performance as reflected in the Nigeria Exchange All Share Index (NEG Market Review 2024). This long-term instability shows doubts on the strength of the MPR and whether

its indicators are fully captured by market valuations or they are silenced by structural bottlenecks which lie deep within the market. To better understand, the graph below shows the movements of monetary policy rate (MPR), institutional quality and the financial market index in Nigeria from 2010 to 2024.

FIGURE 1 Time-series trends of monetary policy rate, Institutional quality, and the financial market index (2010 – 2024)



SOURCE Author's computation from WDI & WGI data

The graph shows the movement of the independent variable (financial market index represented as FM) and the dependent variable (monetary policy rate represented as MPR) with the moderating variable (Institutional quality represented as INSTQ). From the graph, we see periods of strong negative divergence particularly between 2010 to 2013 and 2016 – 2020 where increases in monetary policy rate corresponds with contractions in the financial market index. This supports the traditional cost of capital channel that suggest high interest rate burdens market liquidity. However, this movement shifts in the later years, suggesting that a deeper, underlying long-run equilibrium. It is important to note that simple observation is insufficient and must be subject to econometrics research.

The primary objective of this study is to ascertain how Monetary Policy rate affects Nigerian Financial Market. The available studies on the various aspects of monetary policy in Nigeria still leave a gap in understanding the aggregate response of the financial market to the policy signals during a period of massive economic shocks and institutional change. This paper seeks to fill this gap by reviewing the impacts of the MPR on the Nigeria financial market index that encompasses the dynamics of the stock, money, foreign exchange, and commodity markets respectively. By so doing, provides value to the body of academic knowledge by merging the signalling channel theory in the evaluation of the monetary structure of Nigeria. To policymakers, the results provide a factual foundation upon which MPR policy changes occasionally have counterintuitive outcomes and how the monetary policy rate can be used to rebuild investor confidence. Finally, the MPR-financial market nexus should be comprehensive so that the formulation of policies can not only lead to short-term price stability but a robust financial system can be created to sustain economic growth in Nigeria.

## 2. Literature Review

### 2.1 Theoretical Framework

The theory that is most relevant to this study is the Institutional theory of monetary policy transmission which emphasise the critical role of institutional structures, governance quality and regulatory frameworks in shaping the effectiveness of monetary policy. This theory posits that the transmission of monetary policy through interest rates, credit, exchange rates and asset prices is not only determined by policy instruments such as the monetary policy rate (MPR), but also by the strength and credibility of a nation's institutional environment (North 1990; Acemoglu & Robinson, 2012).

According to North (1990), institutions is defined as the formal and informal rules, norms and enforcement that shape human interaction-play a crucial role in determining economic performance. Within the context of monetary policy, these institutions form the framework through which policy decisions are transmitted to the real economy and financial markets.

In this theoretical perspective, the transmission of monetary policy, particularly changes in the Monetary Policy Rate (MPR), is not only a function of interest rate adjustments but also of how effectively the institutional and regulatory systems support and reinforce those policy actions. Strong institutions enhance credibility, transparency, and policy enforcement, thereby improving the responsiveness of financial markets to monetary policy changes (Mishra, Montiel, & Spilimbergo, 2012). Conversely, weak institutional quality characterized by corruption, poor governance, and weak regulatory oversight distorts the transmission channels, leading to policy inefficiencies and market instability (Acemoglu & Robinson, 2012). In the Nigerian context, this theory is particularly relevant. Despite frequent MPR adjustments aimed at stabilizing prices and ensuring liquidity, the financial market often exhibits delayed or contradictory responses. This inconsistency can be attributed to institutional weaknesses such as fragmented regulatory frameworks, low investor confidence, and governance lapses that hinder the effectiveness of monetary transmission mechanisms (IMF, 2023). The performance of the money market, stock market, foreign exchange, and commodity markets often reflects these institutional bottlenecks rather than the intended outcomes of policy actions.

Therefore, the Institutional Theory of Monetary Policy Transmission provides a solid foundation for understanding how and why Nigeria's financial market may respond differently to MPR adjustments. It highlights the central question of this study: whether the institutional frameworks comprising governance structures, regulatory quality, and enforcement mechanisms matter in determining the effectiveness of monetary policy rate transmission within the Nigerian financial markets.

## 2.2 Conceptual Review

### 2.2.1 Monetary Policy Rate (MPR)

The Monetary Policy Rate (MPR) is the key policy tool in which the Central Bank of Nigeria (CBN) indicates their policy stance in monetary policy. The Monetary Policy Rate (MPR) according to Ovat et al. (2022) is the actions taken by a central bank to control the supply of money, regulate interest rates, and manage inflation. As the benchmark interest rate, the MPR serve as the anchor of the short-term interest rates in the interbank market and influences the lending and deposit rates in the banking system (CBN 2018; CBN 2023a). According to Nwaigwe et al. (2025) posits that the monetary policy rate can be considered the benchmark rate at which CBN will lend

banks under its mandate as the lender of last resort. When banks borrow and lend in the Nigerian interbank market, they benchmark the interest against the MPR and charge each other. Changes in the MPR influence the cost of credit, liquidity conditions, and investment decisions thereby influencing the behavior of financial markets and the price of assets. The in developing economies like Nigeria, the effectiveness of the monetary policy rate is often restricted by structural rigidities, shallow financial markets and institutional bottleneck.

### 2.2.2 Nigerian Financial Markets

Nigerian financial market is an integrated system that comprises money market, capital market, foreign exchange market and commodity market. All these parts help in managing liquidity, redistribution of the financial resources, long-term capital formations, exchange of the currency and diversification of risks in the economy (Abuzor and Mustafa; 2022; Bailey 2012). These markets are not independent but are closely interrelated, as events in one segment affect the others in portfolio rebalancing, price expectations, and macroeconomic conditions (Olaniyi and Odhiambo 2023), they are:

1. Money market includes the issuance of short-term financial instruments that have a maturity of less than one year including Treasury Bills, commercial papers and interbank rates. It is a major liquidity management channel and a direct conduit of transmitting monetary policy signals. The shifts in money market yields usually are the first indicator of monetary tightening or easing of the monetary policy (Aribatise et al. 2025).
2. Capital market is the long term financing system, which provides financing by issuing and trading on equities and debt securities. It is a reflection of the investor expectations, corporate performance, and macroeconomic stability as It is sensitive to the movements of the interest rates. In developing economies like Nigeria, interest rate manipulations can also act as policy credibility indicators, thus influencing investor confidence and equity prices (Alugbuo and Chika 2020; Tubotamuno and Oladosu 2024).
3. Foreign Exchange market (FX) provides the means to exchange the domestic currency with foreign currencies related to the international trade and capital flow (Ma and Lin 2016). The monetary policy activities affect foreign exchange market in terms of interest rate differentials, capital flows, and expectations of the exchange rates.
4. Commodity Market consists of the exchanges of the primary commodities of agricultural (soft commodities) and mineral or energy products (hard commodities). In resource-dependent economies, such as Nigeria, the price of commodities can indirectly be influenced by the exchange rate process and inflation expectations in response to the monetary policy (Abuzor and Mustafa 2022).

### 2.2.3 Institutional quality

The institutional framework defines rules, enforcement, and means of governance in the economy both the formal and the informal one. These are the quality of regulation, the rule of law, corruption control, political stability, and efficiency of government institutions (Acemoglu et al. 2001; Okoli and Meyer 2024). Weaknesses in institutions can be termed as extractive or inefficient in the Nigerian context whereby these weaknesses lead to uncertainty, wrong incentives in the market, and lack of investor confidence which undermine the conveyance of monetary policy (Mishkin 2001; Acemoglu and Robinson 2012). Therefore, the institutional quality becomes a very important moderating force in the monetary policy/financial market outcome relationship.

### 2.3 Empirical Literature

More and more empirical study has looked at the link between monetary policy, the quality of institutions, and the performance of the financial markets in different situations. The study that was done on Nigeria mostly supports the idea that monetary policy variables, especially interest rates, can have a big effect on how the financial markets work, though the effects are not always the same and go in different directions.

Aribatise et al. (2025) show that the monetary policy instruments have a big impact on the stability of banks and their ability to make money. This is because policy rates affect the performance of the financial sector. In the same way, Tubotamuno and Oladosu (2024) and Alugbuo and Chika (2020) say that interest rates have big impacts on stock market indicators such as the All Share Index, but the results vary depending on the model used and the time period. In their 2024 study, Zanfack et al. look at how monetary policy (in this case, domestic credit and money supply) has affected the financial security of 48 sub-Saharan African countries from 2000 to 2021. Using different analysis methods, such as the OLS, Driscoll-Kraay, and MMG-S, we found that monetary policy, which affects domestic credit and money supply, has a positive effect on financial stability in sub-Saharan African countries. This effect is stronger in non-franc zones than in franc zones. Alonso-Rivera et al. (2019) look at how monetary policy affects the efficiency of the financial market during speculative bubbles. We used a non-Normal and non-linear entropy-based method to study this topic, and the results show that when the money supply and credit growth rise and interest rates fall, the market becomes very inefficient at the start of a bubble. This is what Ogunlokun and Taiwo (2023), who looked into how interest rates affect behaviour and how they affect the growth of the Nigerian banking sector, said. The study looked at information from 1987 to 2020. Using the ARDL method to estimate, this study finds that the lending interest rate is important and has an effect on the growth of the Nigerian banking sector. Between 1981 and 2018, Nenbee and Amadi (2021) look at how monetary events, Nigeria's price stability, and the strength of institutions affected each other. Descriptive statistics and vector auto regression (VAR) were used to analyse this study. The information that was used included inflation, interest rates, the money supply, and the quality of institutions. The result showed that the amount of money in circulation increases as prices rise. There was a good link between interest rates and inflation, but in the long run, a higher interest rate does not always lead to inflation. Other research, like Meraj et al.'s (2025) look at how Corporate Social Responsibility (CSR), green finance, and green innovation affect the environmental performance of Indian banks. They discovered that strong CSR programs, good green finance practices, and new green strategies greatly improve banks' environmental performance. Malap et al. (2025) looked at how eco-efficiency affected the return on assets in food and drink manufacturing companies listed on the Johannesburg Stock Exchange. The GMM estimate shows that the amount of energy and water used by food and drink companies has a small but good effect on their return on assets. Instead, the results show that making trash has a negative (but not very important) impact on return on asset, while carbon emissions have a negative and important impact on return on asset.

Conditional role of institutions is pointed out by other studies. Adeniyi (2024) demonstrates that the variables of institutional quality have high short-run impacts in the Nigerian banking system, which implies that the elements of governance can determine the policy transmission mechanisms. On the continental level, Olaniyi and Odhiambo (2023) offer sound evidence that the financial development is complemented by institutional quality in African economies, which supports the argument that the efficacy of policies is institution-specific. In the same way, Okoli and Meyer (2024) look into whether building up institutions makes monetary policy work better

on inflation and output growth in Africa. Using the GMM estimation method, panel data from 36 African countries from 1996 to 2021 are included. Their research shows that when monetary policy and the efficiency of the government work together, inflation goes down. Fiador et al. (2022) look at how well monetary policy works in Africa by examining the part that financial growth and the quality of institutions play. The research uses a strong fixed effect panel data estimates method to look at data from 37 African countries from 1990 to 2017. The results show that financial development, which can be broken down into two parts (financial market development and financial institutional development), makes monetary policy transfer more effective. The former has a bigger effect than the latter. Also, the results show that lending rates in African economies went down when the quality of institutions got better.

The debate is also enriched with international studies. The findings regarding the significance of interest rate effects on stock prices in emerging Asian markets as documented by Gunardi and Disman (2023), whereas the pattern of the policy rate effectiveness declines with the development of the financial systems, which suggests the nonlinear transmission mechanisms as discovered by Ma and Lin (2016). Using the institutional approach, Abuzor and Mustafa (2022) look at the issues and current trends in the growth of the financial market. The outcome shows that to successfully solve problems related to institutional regulations of the financial market, all parties involved, including the government and investors, need to take a broad approach. It comes to the conclusion that the institutional method can lead to a more reliable regulatory framework that helps keep the financial system stable by recognising how fragile financial markets are and focusing on systemic risks.

Irrespective of these contributions, there are still significant gaps. The bulk of the Nigerian research is on the single market segments especially the banking or stock market with little or no consideration of other important parts of the market like the foreign exchange and commodity market. Additionally, there is little research that explicitly theorizes the institutional quality as a moderator variable in diverse financial market segments. This research aims to fill such gaps by offering an aggregated rather than a distributed analysis of the Nigerian financial markets.

### 3. Methodology

Given the dynamic nature of monetary policy transmission and the probable existence of relationships between various short-term adjustments and long-term equilibrium, the Autoregressive Distributed Lag (ARDL) method is utilised. This approach is appropriate for limited samples and for variables that are integrated of varying orders,  $I(0)$  and  $I(1)$ , as defined by Pesaran, Shin, and Smith (2001). Monthly data were utilised, with the monetary policy rate, inflation rate, financial deepening, and interest rate sourced from the central bank bulletin, while the institutional variables were obtained from the World Governance Indicators (WGI). To encapsulate the comprehensive performance of the financial market, a composite financial market index (FMI) is constructed utilising Principal Component Analysis (PCA). This index amalgamates variables from the money market, capital market, foreign currency market, and commodities market, therefore mitigating multicollinearity and preserving information from individual series. The empirical relationship between monetary policy, institutional quality and financial markets is specified as follows:

$$fm = f(mpr, instq) \dots\dots\dots(1)$$

However, there are other variables that could influence financial markets other than monetary policy rate and institutional quality, such as inflation rate, interest rate, and financial deepening. Therefore, modifying the functional form of the econometric model to capture each

variable, and capturing the effects of employment in agriculture and that of FDI as control variables in the model, the study specifies the mathematical form of the model as given below:

$$fm = \alpha_0 + \alpha_1 mpr + \alpha_2 instq + \alpha_3 mpr * instq + \alpha_4 inf + \alpha_5 int + \alpha_6 fd \dots \dots \dots (2)$$

where  $FM_t$  denotes the financial market, MPR represents the monetary policy rate, INSTQ represents the institutional quality, INF is the inflation rate, INT is the interest rate, FD which represents the financial deepening and the  $INSTQ * MPR$  are the moderating factors to check the moderating effects and  $e_t$  is the stochastic error term.

**3.1 Method of Estimation** The dynamic ARDL is used in this study to assess the impact of green innovation and infrastructural development in Nigeria. The dynamic ARDL model estimates the cointegration association between the dependent with explanatory variables. It is also effective when the variables in the study are mixed stationary. The ARDL modelling approach has been recognised for its ability to address spurious regression by using lags to compensate for missing variables (Maduka et al. 2022). Furthermore, the ARDL estimator still has several drawbacks despite its capacity to tackle endogeneity and serial correlation problems, which allowed it to efficiently estimate robust and consistent coefficient estimates (Bekun et al. 2023). According to Maduka et al. (2022) and Bekun et al. (2023), when the lag structure for the ARDL model is not carefully chosen, it may lead to misleading and incorrect coefficients. To validate the robustness and accuracy of the ARDL estimates in this study and to ensure their applicability in policy recommendations that align with the study's goal, the current study uses the most recent dynamic ARDL approach.

We can specify the Dynamic Autoregressive Distributive Lag (ARDL) Model for this study as follows:

$$\begin{aligned} \Delta FM_t = & \alpha_0 + \beta_0 FM_{t-1} + \beta_1 MPR_{t-1} + \beta_2 INSTQ_{t-1} + \beta_3 INF_{t-1} + \beta_4 INT_{t-1} + \beta_5 FD_t + \\ & \beta_6 INSTQ * MPR_{t-l} + \sum_{i=1}^p \alpha_0 \Delta FM_{t-i} + \sum_{j=0}^q \alpha_1 \Delta MPR_{t-j} + \sum_{k=0}^r \alpha_2 \Delta INSTQ_{t-k} + \\ & \sum_{l=0}^s \alpha_3 \Delta INF_{t-l} + \sum_{m=0}^u \alpha_4 \Delta INT_{t-m} + \alpha_5 FD_t + \alpha_6 INSTQ * \\ & MPR_{t-l} + \mu_t \end{aligned} \quad (3)$$

where FM denotes the financial market, MPR represents the monetary policy rate, INSTQ represents the institutional quality, INF is the inflation rate, INT is the interest rate, FD which represents the financial deepening and the  $INSTQ * MPR$  are the moderating factors to check the moderating effects and  $e_t$  is the stochastic error term.

In equation (3), all the variables remain as previously defined in equation (2) except for  $\Delta$  and  $\sum$  which are the difference estimator and summation symbol. Similarly, p, q, r, s and u are the maximum lag of the individual explanatory variables whereas, i, j, k, l and m are the minimum lags of the various explanatory variables.

By introducing the error correction mechanism, we then have a new model called the ECM model with  $\theta$  representing the ECM coefficient. The ECM model is stated as follows:

$$\begin{aligned} \Delta FM_t = & \alpha_0 + \beta_0 FM_{t-1} + \beta_1 MPR_{t-1} + \beta_2 INSTQ_{t-1} + \beta_3 INF_{t-1} + \beta_4 INT_{t-1} + \beta_5 FD_t + \\ & \beta_6 INSTQ * MPR_{t-l} + \sum_{i=1}^p \alpha_0 \Delta FM_{t-i} + \sum_{j=0}^q \alpha_1 \Delta MPR_{t-j} + \sum_{k=0}^r \alpha_2 \Delta INSTQ_{t-k} + \\ & \sum_{l=0}^s \alpha_3 \Delta INF_{t-l} + \sum_{m=0}^u \alpha_4 \Delta INT_{t-m} + \alpha_5 FD_t + \alpha_6 INSTQ * \\ & MPR_{t-l} + \varphi ECM_{t-1} + \mu_t \end{aligned} \quad (4)$$

where the error correction term (ECM) is a measure of the speed at which the long-run equilibrium is restored. The existence of long-run causality between the monetary policy rate and the

performance of the financial market is established by a negative and statistically significant coefficient.

TABLE 1 Descriptive Summary Statistics of the variables.

| Variables | Observations | Mean      | Standard Dev. | Maximum   | Minimum   |
|-----------|--------------|-----------|---------------|-----------|-----------|
| FM        | 180          | -2.22E-08 | 1.358686      | 4.0491170 | -1.748775 |
| MPR       | 180          | 13.32083  | 4.285815      | 27.50000  | 6.000000  |
| INSTQ     | 180          | 3.892589  | 1.797928      | 2.523262  | -2.59766  |
| INF       | 180          | 14.99874  | 6.582750      | 37.98694  | 7.620908  |
| INT       | 180          | 15.59189  | 2.067727      | 19.05000  | 11.13000  |
| FD        | 180          | 18.92413  | 1.796006      | 22.83734  | 14.76480  |

The negative mean and median show that Nigeria financial market has generally experiences weak performance with standard deviation of 1.35 showing high volatility in the Nigeria financial market. The sharp movement between the maximum value and minimum values of 4.04 and -1.74 confirms that the market is highly volatile and vulnerable to macroeconomic shocks such as inflation, FX fluctuation etc.

#### 4. Empirical Findings and Discussions

##### 4.1. Unit root Test

Because most of the time series that are employed in empirical estimation vary, it is pertinent to ascertain their stationarity and therefore, unit root tests. Both the Augmented Dickey-Fuller (ADF) and Philip-Perron (PP) tests were used to perform this test and results are shown in table 2:

TABLE 2 Unit Root Test

| Variable                                                                                                                                                                                        | Augmented Dickey-Fuller Result |                     | Philips-Perron Result |                     | Lag order | ~I(d) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|-----------------------|---------------------|-----------|-------|
|                                                                                                                                                                                                 | ADF Test statistics            | Critical value (5%) | PP Test statistics    | Critical value (5%) |           |       |
| FM                                                                                                                                                                                              | -6.5859                        | -3.4355             | -11.4617              | -3.4352             | 4         | I(1)  |
| MPR                                                                                                                                                                                             | -7.4003                        | -3.4354             | -12.1623              | -3.4352             | 4         | I(1)  |
| INSTQ                                                                                                                                                                                           | -3.9084                        | -3.4371             | -9.6538               | -3.4352             | 4         | I(1)  |
| INF                                                                                                                                                                                             | -3.6402                        | -3.4355             | -8.5986               | -3.4352             | 4         | I(1)  |
| INT                                                                                                                                                                                             | -3.8851                        | -3.4358             | -15.4600              | -2.8776             | 4         | I(1)  |
| FD                                                                                                                                                                                              | -3.2020                        | -3.4355             | -3.8319               | -3.4351             | 4         | I(0)  |
| INSTQ*MPR                                                                                                                                                                                       | -7.6316                        | -3.4352             | -11.9124              | -3.4352             | 4         | I(1)  |
| The best lag lengths have been selected based on the information criteria (AIC) of Akaike. Both the Augmented Dickey-Fuller and Philips-Perron unit root test models estimated contain a trend. |                                |                     |                       |                     |           |       |

In Table 2, The Augmented Dickey-Fuller (ADF) test result showed that except financial deepening which is stationary at level, others were stationary at first difference. In this regard, these variables were differenced once and tested again in a model with trend and lag length of 4. The variables became significant at 5 per cent at the 1<sup>st</sup> difference.

Also, the Philips Perron test showed the same result except financial deepening which is stationary at level. This result is in conformity with the result of the Augmented Dickey-Fuller test.

## 4.2. Co-integration Test

Since all the variables are not stationary at level, a co-integration test is carried out using the Pesaran, Shin and Smith (2001) Bounds test to test for the existence of a long run relationship among the variables in the model.

**Table 3. ARDL Bounds Test Result**

| Test Statistic | 5% critical value   |                     | 1% critical value      |                     |
|----------------|---------------------|---------------------|------------------------|---------------------|
|                | Lower Bound<br>1(0) | Upper Bound<br>1(1) | Lower<br>Bound<br>1(0) | Upper Bound<br>1(1) |
| 8.475914***    | 2.62                | 3.79                | 3.41                   | 4.68                |

The F-test at the level of 5 percent indicates that the asymptotic critical values were less than F-statistics Bounds value of the model. This implies that, the null hypothesis of no long run relationship is rejected at 5 percent regardless of whether the regressors are of pure I(0), pure I(1) or they are mutually cointegrated. Having come to this finding, we can conclusively state that there exists a long run cointegration between the set of (I(0) and I(1)) variables. The ARDL model has a long run relationship between the variables.

**TABLE 3** ARDL estimation result

| The dependent variable is FM |             |            |             |        |
|------------------------------|-------------|------------|-------------|--------|
| Variable                     | Coefficient | Std. Error | t-Statistic | Prob.* |
| FM(-1)                       | 0.947149    | 0.024356   | 38.88700    | 0.0000 |
| <b>Long-Run</b>              |             |            |             |        |
| MPR                          | 0.296610    | 0.251991   | 2.999529    | 0.0031 |
| INSTQ                        | -0.105780   | 0.251991   | -0.419776   | 0.6752 |
| INF                          | 0.015011    | 0.097388   | 0.154138    | 0.8777 |
| INT                          | -0.568780   | 0.241593   | -2.354292   | 0.0197 |
| FD                           | 0.948347    | 0.508250   | 1.865905    | 0.0638 |
| INSTQ_MPR                    | 0.075917    | 0.058544   | 1.294536    | 0.1972 |
| C                            | -12.59986   | 6.675146   | -1.887578   | 0.0608 |
| <b>Short-Run</b>             |             |            |             |        |
| D(MPR)                       | 0.098505    | 0.021220   | 4.642163    | 0.0000 |
| D(INSTQ)                     | -0.261144   | 0.085629   | -3.049731   | 0.0027 |
| D(INF)                       | -0.156707   | 0.030709   | -5.103047   | 0.0000 |
| D(INT)                       | -0.006753   | 0.023722   | -0.284686   | 0.7763 |
| D(FD)                        | 0.050121    | 0.009958   | 5.033232    | 0.0000 |

|                    |           |          |           |        |
|--------------------|-----------|----------|-----------|--------|
| D(INSTQ_MPR)       | 0.013137  | 0.010841 | 1.211734  | 0.2275 |
| C                  | -0.665912 | 0.175317 | -3.798324 | 0.0002 |
| ECM/COINTEQ*       | -0.052851 | 0.006277 | -8.419588 | 0.0000 |
| R-squared          | 0.993140  |          |           |        |
| Adjusted R-squared | 0.992204  |          |           |        |
| F-statistics       | 1061.644  |          |           |        |
| Prob(F-statistics) | 0.000000  |          |           |        |
| Durbin-Watson stat | 1.805010  |          |           |        |

Source: Author computation using evIEWS 9

Key finding from the long-run estimation showed that monetary policy rate (MPR) has a coefficient of 0.2966 which means that all things being equal, a unit increase in monetary policy rate leads to a 0.2966 units rise in the Nigerian financial markets. This further suggests that an increase in monetary policy Rate (MPR) is positively and significantly associated with improvements in financial markets. Specifically, the long run results suggest that higher monetary policy rate contributes to enhanced Nigeria financial markets in general. This relationship though statistically significant at 5% level, contradicts the traditional cost of capital channel but aligns with the monetary policy signalling channel. This suggests that rather than being deterred by higher borrowing cost, the Nigeria financial markets interpret a higher MPR as a positive signal of the central bank strong commitment to price stability and favorable future economic conditions, thereby boosting investor confidence and market valuation. A similar significant relationship was established among the monetary policy rate in the short run. The short-run monetary policy rate coefficient (D(MPR)) is 0.0985 with a t-statistic of 4.6421 and a probability value of 0.0000. This gives an indication that MPR shocks have a significant immediate effect on the financial markets and it is highly significant even at 1% level. The positive impact of monetary policy rate (MPR) shows that tighter monetary policy can bring inflows in foreign investments hence improves liquidity and stimulate the growth of financial markets. Nevertheless, the negative lag effect of MPR would suggest that such interests on gains might not be sustainable when interest rates are excessively high over a prolonged period, as it may discourage credit and long-run expansion and investment activities. These mixed dynamics shows the need to balance a policy on inflation-fighting with the consideration of growth in the financial sector.

Institutional Quality variable both in the long run and short-run showed a negative coefficient of -0.1057 and -0.2611 with probability values of 0.6752 and 0.0027 respectively. This suggest that institutional quality was only significant in the short run (p-value = 0.00027). This means that institutional quality acts as a confidence indicator for short term sentiment that is, a sudden negative change in institutional quality would generate a strong immediate negative shock to the financial market. Similarly, the moderating effect of institutional quality and monetary policy rate which both in the short run and long-run have positive coefficients and are not significant (P-values of 0.1972 and 0.2275) suggests that the impact of monetary policy rate is statistically the same irrespective of whether institutional quality is high or low. While the short run is significant (negative in the lagged interaction term), confirms that it only acts as a transitory friction on policy transmission and not a long-term structural modifier. These findings is in line with Abaidoo and Agyapong (2025) on the role of governance and institutional quality on financial market uncertainty where their empirical result show that institutional quality and government effectiveness have a negative moderating effect on the nexus between macroeconomic risk, inflation uncertainty, exchange rate and financial market uncertainty.

The error correction coefficient (or the adjustment coefficient) has the expected negative sign and, is highly significant ( $p = 0.0000$ ), confirming the existence of a stable long-run co-integrating relationship. The estimated speed of adjustment is  $-0.052851$  per month, which lies between the theoretical range of 0 and  $-1$ . This specifically means that approximately 5.3 percent of the errors (or disequilibrium) generated in the financial market (FM) in the previous month is automatically corrected by the system in the subsequent month, however, the adjustment process is slow. This slow response or speed of adjustment shows structural rigidities within Nigeria's financial system, including weak transmission efficiency, limited diversification of financial assets and shallow market depth. Consequently, shocks to the financial market persist for several periods or months before equilibrium is restored.

The control variables such as the interest rate which is consistent with the cost of capital channel which was negative and significant in the long run suggesting that higher lending rate reduces financial market activity by raising borrowing costs. Also, the positive impact of financial deepening confirms that expanding financial access and broadening financial products enhances market liquidity and strengthens capital formation, however this finding is insignificant in the long-run with a probability value of 0.0638 providing evidence of a shallow financial market in Nigeria which is in line with the findings of Tiarniyu (2022). This implies that institutional rigidities and dominance of the government debt market (crowding out) are preventing financial liquidity from translating into a statistically robust, wealth-creating determinant of the Nigeria financial market's long-run equilibrium. Also, weak transmission mechanism affects financial deepening. An interesting finding is the positive and significant short run coefficient indicating that the Nigeria financial market is highly sensitive to liquidity shocks. When liquidity is injected into the Nigeria financial market or monetary policy rate increases, it immediately flows into assets that provide the fastest, safest or highest return (short-term treasury bill) boosting market momentum and speculation, however, when the liquidity shock passes, the money pump fails to be directed toward real, long-term capital formation but rather got crowded out by attractive government debt. Therefore, financial deepening in Nigeria liquidity or MPR push boosts market momentum temporarily but fails to establish a sustainable, higher equilibrium level for market assets.

## 5. Summary and Conclusion

This paper discussed the impacts of the Monetary Policy Rate (MPR) on the financial market of Nigeria using a compounded finance market index which is a composite index of the money market, capital market, foreign exchange market, and the commodity market. The short-run dynamics and the long-run equilibrium relations were represented in the analysis based on the ARDL framework and ECM model of monthly data. The study indicates in the body of literature not only surpassing the single-market proxy but also providing an overall assessment of financial system monetary policy transmission in Nigeria.

The empirical results show that Monetary Policy rate positively and statistically significantly impact the performance of financial market in the long and short run. It is observed that the monetary policy intervention in Nigeria is largely effective through the signaling and expectation channel rather than the traditional cost-of-capital channels. The financial markets see the rate adjustments as credible indications of macroeconomic discipline and Central Bank commitment to price stability therefore strengthening investor confidence and valuation.

Also, Institutional quality exhibits short-run influence but fails to sustain monetary policy effects in the long term. This suggests that governance frameworks, regulatory enforcement, and

market supervisory systems are insufficient to provide durable policy support. As such, weak institutional structures create friction and delay the full realization of monetary policy goals, thereby limiting the long-run efficiency of the financial system.

The negative implications of market interest rates (long run) and the insignificance of financial deepening, however, shows structural weakness. These include, shallow financial markets, the prevalence of government securities, and inefficient intermediation of credit, which slows down the costs of adjustment and decreases the effectiveness of transmitting monetary policy. This structural constraint is also confirmed by the error correction mechanism as the process of adjustment to the long-run is slow.

In conclusion, the results suggest that although monetary policy can still play an important role in influencing financial market performance within Nigeria, its full potential is limited by institutional and structural rigidities in the financial system.

### 5.1 Policy Recommendations

#### 1. Enhance Monetary Policy Communication and Credibility.

Due to the prominence of the signaling channel, Central Bank of Nigeria (CBN) should enhance guidance, transparency, and consistency in the communication of the policies. Policy intentions will be articulated clearly and this will serve to anchor the expectations, minimise speculative noise, and enhance financial market responses to MPR adjustments.

#### 2. Align Policy Intentions with Market Interest Rates.

The adverse long-run implication of lending rates implies that there is no relation between policy rate and effective lending costs. The monetary transmission is an area that policymakers need to enhance by increasing the efficiency of the credit markets in terms of risk premium, structural bottlenecks that do not allow policy rate changes to be translated into productive investment financing need to be addressed.

#### 3. Strengthen Regulatory and Legal Consistency and Improve Policy Transmission Efficiency

Addressing the short-run policy friction identified by the significant negative interaction term and focusing on institutional reforms that directly impact investor confidence, such as judicial independence, contract enforcement and anti-corruption measures. Since institutions cause immediate negative shocks and uncertainty, reducing the perceived risk of political or regulatory shock will stabilize short-term market dynamics.

#### 4. Deepen Financial Markets beyond fixed assets.

The insignificance of financial deepening shows that in the long term, crowding-out effects are brought about by the overreliance on government debt instruments. Government authorities should facilitate private sector credit expansion, financial diversification and encourage the development of long term capital market to make sure that the liquidity injections will not stimulate short-term speculation but increase the long-term growth in assets.

#### 5. Enhance Market Adjustment.

The pace of the adjustment to the equilibrium is slow, which shows that there is the necessity to reinforce the market infrastructure, liquidity management structures, and regulatory coordination among the financial market segments. Deepening and integrating the market will speed up the adjustment following the monetary shocks and be more effective in implementing the policy.

### 5.2 Suggestion for Further Research

Further studies should analyse this further by directly testing the nonlinear and asymmetric impacts of monetary policy in the overall performance of the financial markets, especially during

tightening and easing of the monetary policy. Moreover, further research may also incorporate global financial conditions and external shocks, including international interest rates and commodity prices fluctuations, to capture the interaction between domestic monetary policy and international factors on financial markets in Nigeria more adequately.

## References

- Abaidoo, R., & Agyapong, E. (2025). Financial market uncertainty and the macro economy: the role of governance and institutional quality. *Economia*, 26(1), 89-107.
- Abuzor, A. Y., & Mustafa, O. (2022). Institutional approach to financial market regulation: Problems and perspectives. *Economic Consultant* 3(2), 43–51.
- Acemoglu, D., Johnson, S., & Robinson, J. (2001). The colonial origins of comparative development: An Empirical Investigation. *American Economic Review*, 91 (5), 1369-1401
- Acemoglu, D., & Robinson, J. (2012). *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. Crown Publishers.
- Adeniyi, D. (2024). Monetary Policy, Institutional Quality and Banking System Fragility in Nigeria. *International Journal of Research and Innovation in Social Science*, 8(3), 3132-3148. <https://doi.org/10.47772/IJRISS.2024.803223>
- Alonso-Rivera, A., Cruz-Ake, S., & Venegas-Martinez, F. (2019). Impact of Monetary Policy on Financial Markets Efficiency under Speculative Bubbles: A Non-Normal and Non-Linear Entropy-based Approach. *Analisis economico*, 34(86).
- Alugbuo, J., & Chika E. (2020). Monetary policy and stock market performance: Evidence from Nigeria stock exchange market. *International Journal of Research and Innovation in Social Science*, 4(5), 556-566. [https://scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S2448-66552019000200157](https://scielo.org.mx/scielo.php?script=sci_arttext&pid=S2448-66552019000200157)
- Aribatise, A., Adeyemi, G., Adedokun, D & Adeseke, A. (2025). The Effect of Monetary Policy on Bank Performance in Nigeria. *African Banking and Finance Review Journal (ABFRJ)*, 20(6); 22-37. [https://researchgate.net/publication/393549256\\_The\\_Effect\\_of\\_Monetary\\_Policy\\_on\\_Bank\\_Performance\\_in\\_Nigeria](https://researchgate.net/publication/393549256_The_Effect_of_Monetary_Policy_on_Bank_Performance_in_Nigeria)
- Bailey, R. (2012). *The Economics of Financial Markets*. Cambridge University Press. Retrieved from [https://btng.education/uploads/9/3/9/2/9392622/economics\\_of\\_financial\\_markets.pdf](https://btng.education/uploads/9/3/9/2/9392622/economics_of_financial_markets.pdf)
- Bekun, F., Adekunle, A., Gbadebo, D., Alhassan, A., Akande, O., & Yusoff, M. (2023). Sustainable electricity consumption in South Africa: the impacts of tourism and economic growth. *Environmental Science and Pollution Research*, 30(42), 96301-96311.
- Central Bank of Nigeria (CBN, 2018). Monetary Policy Decisions and Report. Abuja: CBN. Retrieved June, 2019 from <https://www.cbn.gov.ng/MonetaryPolicyReport>
- Central Bank of Nigeria (CBN, 2023a). Monetary Policy Decisions and Report. Abuja: CBN. Retrieved June 10, 2025 from <https://www.cbn.gov.ng/MonetaryPolicyReport>
- Central Bank of Nigeria (CBN, 2023b). Financial Market Department: Annual Activity Report. Retrieved August 11 from [https://cbn.gov.ng/annual\\_activity\\_report](https://cbn.gov.ng/annual_activity_report)
- Central Bank of Nigeria (CBN). (2024). Money Market Indicators (Treasury Bill Rate, 91-Day Tenor). Retrieved June, 2025. From <https://www.cbn.gov.ng/rates/macroIndicators.html>
- Echenim, S. (2025). Banks' deposits with CBN surge 1,578% to N53.5trn, signaling excess liquidity. *The Nigeria Economy*. Retrieved June 3 2025 from <https://economyng.com>

- Ehigiamusoe, U. (2012). The Place of Financial Markets in the Development Process: Evidence from Nigeria. *Journal of Economics and Behavioral Studies*, 4(11), 649-659. <https://www.researchgate.net/publication/302909371>
- Fiador, V., Sarpong-Kumankoma, S., & Karikari, N. (2022). Monetary policy effectiveness in Africa: The role of financial development and institutional quality. *Journal of Financial Regulation and Compliance*. Advance online publication. <https://doi.org/10.1108/JFRC-03-2021-0024>
- Gunardi, N., & Disman, S. (2023). The effect of money supply and interest rate on stock price. *Central European Management Journal*, 31(1), 233–240.
- Hayes, A. (2024). *Commodity Market: Definition, Types, Example, and How It Works*. Investopedia. <https://www.investopedia.com/terms/c/commodity-market.asp>
- Kumar, P. (2022). *Financial Management: Types of Financial Markets*. The MBA Institute. Retrieved October 21 from <https://themba.institute>
- Ma, Y., & Lin, X. (2016). Financial development and the effectiveness of monetary policy. *Journal of Banking & Finance*, 68, 1–11.
- Maduka, A., Ogwu, O., & Ekesiobi, C. (2022). Assessing the moderating effect of institutional quality on economic growth-carbon emission nexus in Nigeria. *Environmental Science and Pollution Research*, 29(43), 64924-64938.
- Malapa, D., & Ngwakwe, C. (2025). Analysis of the Effect of Eco-Efficiency on Asset Return in Food and Beverage Manufacturing Companies Listed at the Johannesburg Stock Exchange. *Managing Global Transitions*, 23(2), 175-200. <https://doi.org/10.26493/1854-6935.23.175-200>
- Masengesho, E., Dada, S., & Ogboi, C. (2025). Effects of Monetary Policy on Foreign Direct Investment (FDI) Inflows in East African Countries: The Moderating Impact of Institutional Quality. *Archives of Business Research*, 14(3), 44-57.
- Meraj, M., Afzal, M., Kaur, M., & Chauhan, J. (2025). Impact of CSR, green finance and green innovation on environmental performance of banks in India. *Managing Global Transitions*, 23(2), 201-231. <https://doi.org/10.26493/1854-6935.23.201-231>
- Mishkin, F. (2007). Housing and the monetary transmission mechanism. NBER Working Paper Series No.13518 (NATIONAL BUREAU OF ECONOMIC RESEARCH). DOI 10.3386/w13518.
- Mishkin, F. S. (2001). From monetary targeting to inflation targeting (No. 2684). World Bank Publications.
- Nenbee, S., & Amadi, S. (2021). Monetary Policy, Institutional Quality and Price Stability Interactions: The Case of Nigeria, 16, 112-124 [https://researchgate.net/publication/356251940\\_Monetary\\_Policy\\_Institutional\\_Quality\\_and\\_Price\\_Stability\\_Interactions\\_The\\_Case\\_of\\_Nigeria](https://researchgate.net/publication/356251940_Monetary_Policy_Institutional_Quality_and_Price_Stability_Interactions_The_Case_of_Nigeria)
- Nigerian Exchange Group. (2024). NGX annual report and market review 2024. <https://ngxgroup.com/ngx-download/ngx-annual-report-2024/>
- Nigerian Stock Exchange. (2021). Annual report and financial statements 2021. <https://www ngxgroup.com>
- Nwaigwe, F., Anaenugwu, N., & Mgbemena, O. (2025). Non-Linear Autoregressive Approach to Monetary Policy Rate and Nigerian Capital Market Development. *Journal of Social Sciences and Humanities*, 10(1).

- Ogunlokun, A., & Taiwo A. (2023). Interest Rate Behavior and Financial Sectors Growth: A Relationship Analysis. *Acta Universitatis Danubius. Economica*, 19(2), 223-257. Retrieved from <https://dj.univ-danubius.ro/index.php/AUDOE/article/view/2252>
- Okoli, T., & Meyer, D. (2024). Institutional Development and Monetary Policy Effectiveness: Empirical Evidence from African Economies. *African Journal of Development Studies*, 14(1), 33-57. <https://doi.org/10.31920/2634-3649/2024/v14n1a2>
- Olaniyi, C., & Odhiambo, N. (2023). Does institutional quality matter in the financial Development-Economic complexity Nexus? Empirical insights from Africa. *Research in Globalization*, 7, 100-173. <https://doi.org/10.1016/j.resglo.2023.100173>
- Onyido, B., (1990). The Nigerian financial markets: growth, performance, appraisal and prospects. *CBN Economic and Financial Review*, 28(2), 46–55.
- Ovat, O., Ishaku, R., Ugbaka, M., & Ifere, O. (2022). Monetary Policy Rate and Economic Growth in Nigeria. *International Journal of Economics and Financial Issues*, 12(3), 54-59. <https://doi.org/10.32479/ijefi.12868>
- Pesaran, H., Shin, Y., & Smith, R. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- Tiamiyu, K. (2022). Exchange Rate Pass-Through to Inflation: Symmetric and Asymmetric Effects of Monetary Environment in Nigeria. *Munich Personal RePEc Archive*, 1–16. Available online: <https://mpira.ub.uni-muenchen.de/113223/> (accessed on 20 May 2024).
- Tubotamuno, B., & Oladosu, O. (2024). Monetary Policy and the Performance of Stock Market in Nigeria. *African Journal of Social and Behavioural Sciences (AJSBS)*, 14(3).
- Ugwu, A. (2023). Corporate Governance and Financial Performance of Listed Insurance Companies in Nigeria. *Corporate Governance*, 2276-8645.
- Zanfack, T., Ngounou, B., Domguia, E., & Possi-Tebeng, X. (2024). Financial stability in sub-Saharan Africa: Does monetary policy matter? 2405–8440.