

# Monetary Policy Transmission Mechanism in Nigeria: Does Interest Spread Complicate Inflationary Targeting ?

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## Abstract

*Prolonged deviation in the interest rate spread in the monetary transmission channel has become the point of academic inquiry in recent years. The possibility that the current interest rate spread and poor liquidity management of the Central bank have combined to frustrate the financing role of majority of deposit money banks in Nigeria. This study analysed the extents to which varied interest rate monetary transmission complicate investment and inflationary targeting framework of the bank. The results shows that interest spread have severe implication on the stability role of the Central bank in Nigeria.*

**Key words:** interest rate, monetary policy, financial stability, inflation

**J.E.L. classification:** E4, E42, E5

## 1. Introduction

A flashback to the financial crises in the middle and final quarter of 2007 and 2009 create another lacuna in financial economic literature on the extent to which interest rate monetary transmission channel can influence the operation of the Deposit Money Banks (DMBs) and possibly avert shocks that may affect the real economic activities in the country. Apparently, the financial crises have raise doubt on the capability of existing monetary policy to enhance stability in the financial system, since studies have shown that there is perceived intricate relationship between interest rate spread and operational role of the deposit money banks. For instance, Chiwira, Tadu and Muyambiri (2013) argue that the exploring condition under which monetary transmission regulates the money market will provide basis for financial stability role of the Apex banks. Khan, Ahmed and Gee (2016) also pointed out that closing the gap between the domestic savings and investment will facilitate the degree of monetization in the economy. Ahmed and Mallick, Mohanty and Zampoli (2017) established that serving the unserved population and granting credit access to stimulate investment is crucial to enhance for monetary policy formation.

The preoccupation of this study is to analysis the relationship between monetary policy rates and money market indicators in Nigeria. The study also assesses the trend and flow of this money market fundamentals and its implication on the operations of the deposit money bank vis –a-vis deposit mobilization and their lending role. While, the outcome of this study is expected to provide strategies for resolving the conflict between inflation targeting role and the developmental role of the Central bank and also provide policy options for efficiency operation of deposit money banks in terms of resource mobilization and reallocation.

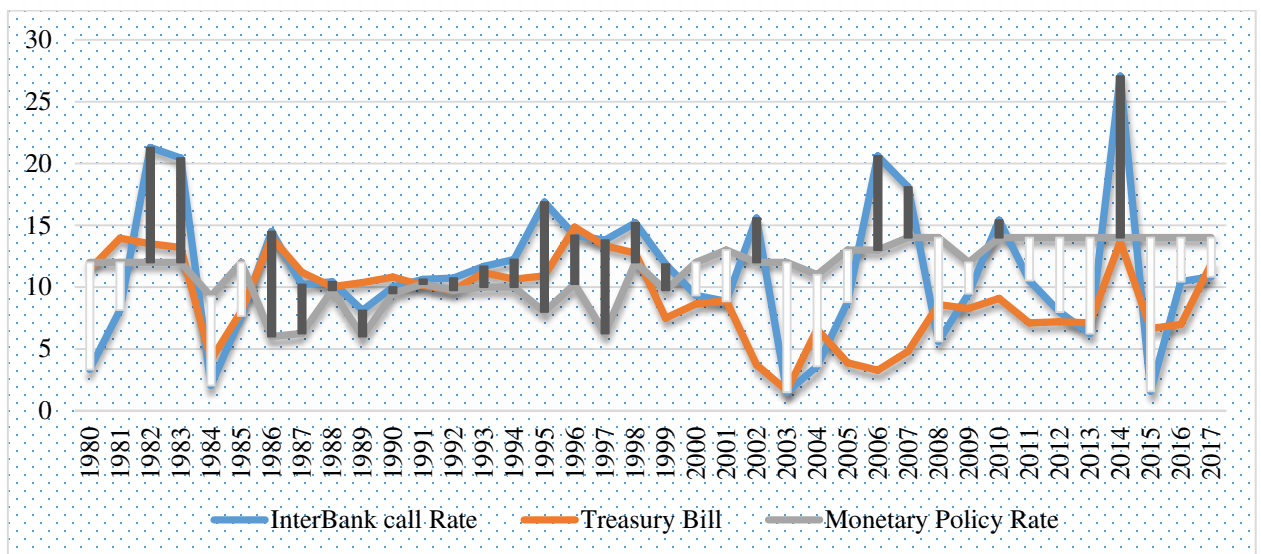
Following the introductory section, the paper is structured into five main sections. Section 2 discusses some stylized facts on monetary policy rates and money market indicators in Nigeria. Section 3 provides a brief literature review both at the theoretical and empirical level. Section 4 addresses the theoretical framework, while section 5 discusses empirical results, concluding remarks and policy implications.

## 2. Stylized Facts on Monetary Policy Rate and Money Market Indicators in Nigeria

### *Trend in Monetary Policy, Interbank rates and Treasury bill*

An in-depth understanding of how monetary policy rate affect changes in availability of credit supply provide basis for price stability and economic growth. In Nigeria, the Central bank through the monetary policy committee regulates the interbank rate and Treasury bill in the money market in other to ensure sound financial system.

Figure no. 1. Trend Analysis of Market Rates Indicators and Monetary Policy Rate, 1980-2016



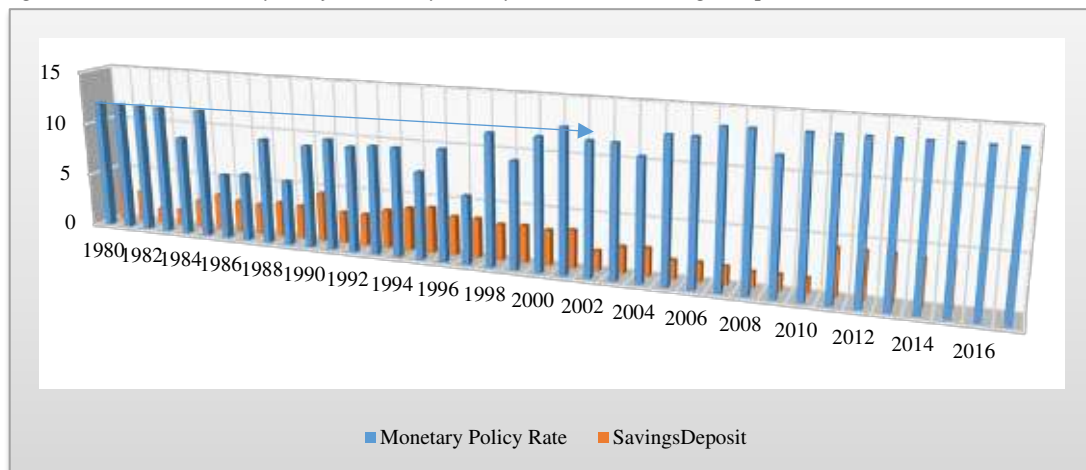
Source: CBN Statistical Bulletin, 2016 and World Development Indicators, 2016

The Figure no. 1 shows that there is a strong positive correlation between monetary policy rate, interbank rate and Treasury bill in Nigeria during the period reviewed. The trend provides evidence that MPR passes through T-bill within a month and that there exist a long relationship among the three indicators.

### *Trend in Monetary Policy and Savings Deposit rates*

Economic literature widely acknowledge that an high interest rate usually serve as incentive for people to save more, knowing fully well that economic agent are expected to earn more income for saving their money in the bank.

Figure no. 2. Trend Analysis of Monetary Policy Rates and Savings Deposit Rate, 1980-2016



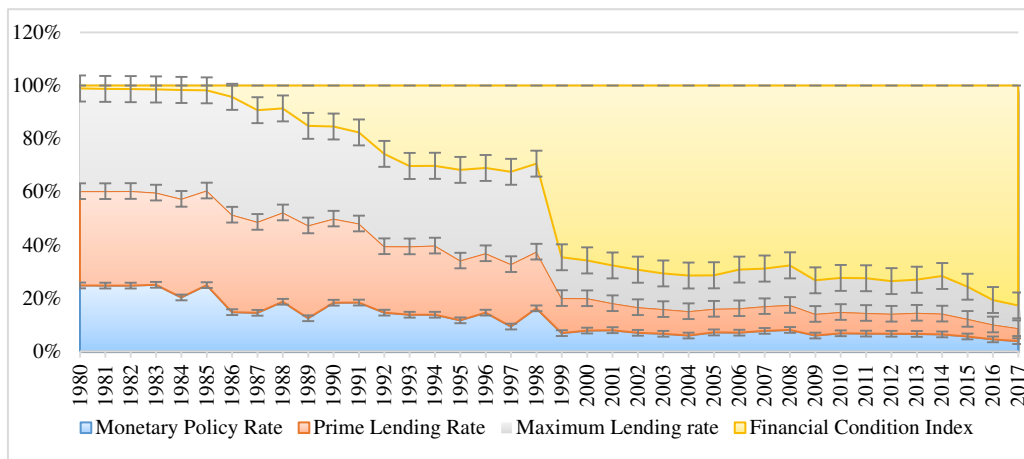
Source: CBN Statistical Bulletin, 2016 and World Development Indicators, 2016

Figure no. 2 shows that the degree at which the deposit money banks can attract savings mobilization depends on the manipulation of the MPR. The figure depicted existing variation in the MPR and saving deposit in Nigeria during the period reviewed.

*Trend in Monetary Policy and Financial Confidence Index*

Prior to the introduction of financial liberalization in 1986, the level and structure of interest rate is fixed by the Central bank. This makes it easier for the bank to control the deposit and the lending rate. The autonomous control makes it possible resource allocation and credit disbursement to the preference sector. For instance, concessionary interest rate was granted to the agricultural and the manufacturing sector to stimulate investment in the country.

Figure 3. Trend Analysis of Monetary Policy Rates and Money Market Indicators, 1980-2016



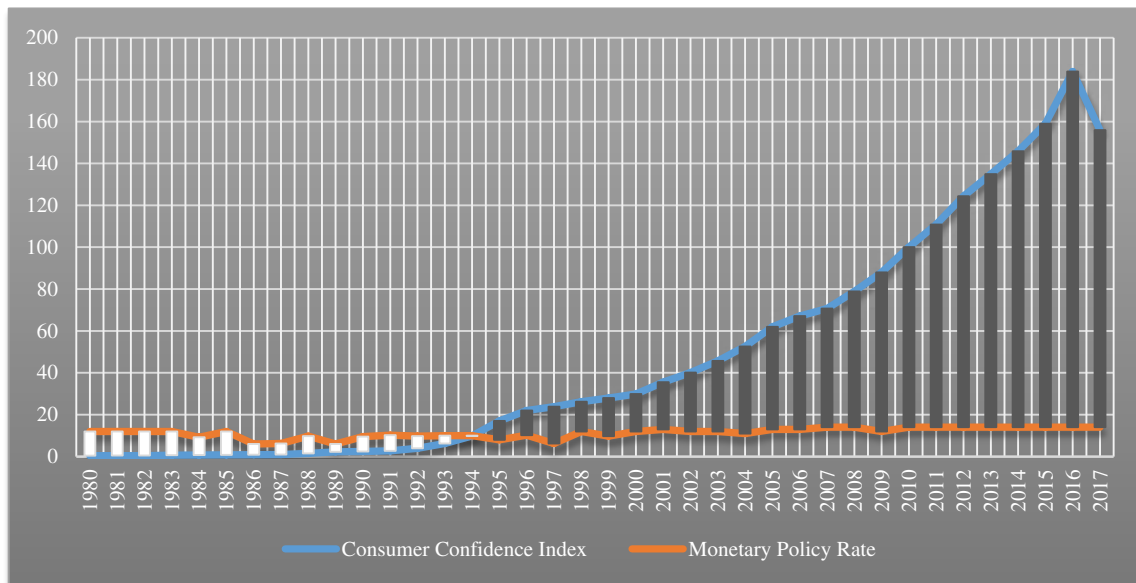
Source: CBN Statistical Bulletin, 2016 and World Development Indicators, 2016

Figure no. 3 buttresses this analysis; it shows that MPR have severe implication on the prime, minimum and maximum lending rates which has implication on investment in the economy. As it stands, the prime lending rate which is charge on high network individual is highly correlated with MPR, while the maximum lending rate disbursed to mortgage banks and SMEs financing seems to be less attractive. The minimum lending rate meant to drive lower credit rating customer was highly affected by MPR.

*Trend in Monetary Policy and Consumer Confidence Index*

The twenty century set a stage for inflation targeting in Nigeria by recognizing the independent role of the Central banks. The bank mandate now focus on inflationary control at the expense of it developmental role coupled with additional mandate for poverty reduction. The monetary policy authority made attempt to manipulate the MPR to achieve these objectives. At some point, the Central bank try to tighten the MPR to enhance stability of the system which further complicate the process of monetary policy implementation. Obviously, the deficiency and limited competition is enough argument to justify the degree of monopoly power in the money market which has implication on the inflationary expectation.

Figure no. 4. Trend Analysis of Consumer Confidence Index and Monetary Policy Rates in Nigeria, 1980-2016



Source: CBN Statistical Bulletin, 2016 and World Development Indicators, 2016

The Figure no. 4 indicate that a stronger asymmetry relationship exist between consumer price index and monetary policy rates between 1980 and 1994, suggesting that monetary was very effective during the period. However, wide variation was observed between 1998 and 2016. This implies that the monetary policy rate performed below expectation during the period.

### 3. Review of Related Literature

#### 3.1. Review of Related Theories

Economic literature has suggested two main approaches to how Central banks can use monetary policy rate to affect money market indicators in other to curtail inflationary pressure in an economy (Nelson, 2000). The first strands of the literature was advocated Friedman Milton for optimal monetary policy that will lead to a steady rate of deflation (Bernanke, 2017). According to Friedman, monetary policy affects the nominal rate of return, but not the real rate of return, at least, in the long run. Friedman therefore suggested that if the Central bank can ensure that expected inflation equals to the negative of the rate of return, the nominal interest rate will be equal to zero. This implies that Central bank needs to generate a sustainable deflation in the economy to drive nominal interest rate on short term security such as Treasury bill and interbank rate to zero (Fiedman. 1972; Meaning and Zhu, 2011). While, Friedman's suggestion may seems complicated in a higher monetized economy, since the Central bank must ensure that growth in money supply must be equal to the real rate of return in the economy. It suggestion cannot be ignored since the possibility of consumer price index to fall as the money supply is declines is logically advocated. The second strands of the literature disagree with Friedman suggestion on the possibility of its rules to conflict other objectives. These economists argues that monetary policy is more important for reduce the opportunity cost of holding money and responding to shocks that hit the economy (Taylor, 1980). Therefore, the traditional role of money advocated by Keynesian theory holds. These economists further favour the Taylor monetary policy rules that suggests a reduced form of approximation response of the nominal interest rate, as set by the Central bank to change in inflation, output or other economic conditions (Taylor, 1993).

### 3.2. Empirical Review

Over 30 years of empirical studies, Friedman (1972) and Taylor (1980) observation continued to generate hot debate with controversial and/ or inconclusive results. This is not surprising the logical display of their model must have created a puzzle that needs more reconciliation with recent economic realities.

In 2001 paper, Petursson discusses the transmission mechanism of monetary policy and its implication on aggregate demand formation. A Petursson result shows that economic agent has important role in monetary policy formation due to the role of expectation in policy design. In a similar study, Gomez and Julio- Roman (2003) describe the nature inflation and how it evolves in Colombia and shows that monetary policy has greater impact in curtailing inflationary pressure in Colombia.

Sander and Kleimeier (2006) investigate interest rate pass-through in four Common Monetary Area (CMA) countries of the South African Custom Union (SACU). The authors show that CMA bank lending market exhibit a higher degree of homogenization as the pass through is often fast and complete. In the same spirit, Mukherjee and Bhattacharya (2011) examine the operation of Keynesian interest channel of the monetary policy transmission mechanism in five potential inflation targeting economies in MENA region and compare it with fourteen inflation targeting (IT) studies. The authors results suggest that private consumption and investment in both group of countries move with interest rate.

Lange (2016) examines the monetary transmission and inflation targeting regime using the switching VAR approach for Canada and show that innovation in monetary transmission impact on inflation in Canada. Tagchi and Wanasilp (2018) review the Thailand monetary policy rules and its performance under the adoption of inflation targeting regime since 2000 using Vector Autoregressive Model. Their results suggest a countercyclical response of monetary policy toolkit to inflationary pressure in Thailand

A flashlight on the existing studies reviewed above shows that there is a setback in their information as well as methodology used. Beyond obvious the controversy between Taylor rules and Friedman argument was ignore in the context of using robust econometric model to justify their results. More worrisome, the use of VAR in policy studies does not provide basis for forecasting nor rely on any economic theories which was common used by this studies, as such the results presented were complicated and misleading. Thus, the lacuna in the existing studies call for reconciliation between theoretical underpinnings and economic realities which is the aim of this present study.

### 4. Conclusions

The articles look at how monetary transmission mechanism affect the operation of deposit money bank in an attempt to stabilized the economy and curb inflation. Varied constrained to effective monetary policy was identified along with the theoretical logic in Taylor rule and Friedman Milton arguments. Annual series data was collected to describe the behaviour of considered indicators. The review shows that the existing monetary policy impact negatively on the traditional lending role of deposit money banks and affects their ability to finance the economy.

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