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Inflation-targeting monetary policy framework in Nigeria: The Success Factors

Peterson K. Ozili

Abstract

Many developing countries are facing high inflation and the central bank in these countries have adopted several solutions to tame rising inflation. Nigeria transitioned to an inflation targeting monetary policy framework in late 2023 from a monetary targeting monetary policy framework. This study identifies the important success factors for an effective inflation targeting monetary policy regime in Nigeria. The identified success factors include the size or number of economic agents monitoring the inflation target, the credibility of the central bank, the degree of central bank independence, reduction in budget deficit, limited dollarization of the Nigerian economy, effective central bank communication, avoidance of fiscal dominance, financial development, greater financial inclusion, financial stability, and insecurity caused by farmer-herder clashes and terrorism.

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1. Introduction

This study identifies the success factors for an effective inflation targeting monetary policy regime in Nigeria. The goal of most central banks is to achieve price stability. This is generally interpreted to mean low inflation. Inflation is a general and persistent increase in the price of goods and services in an economy (Barro, 1996). Many central banks have adopted an inflation targeting monetary policy framework and have made the inflation rate the most superior objective of monetary policy.

The literature document some motivations for adopting an inflation targeting monetary policy framework (Bernanke and Mishkin, 1997; Svensson, 1997). For instance, a central bank may adopt an inflation targeting monetary policy framework when it wants to refocus on price stability as the primary goal of monetary policy (Svensson, 1999), or when it wants to avoid potential loss of credibility from frequent changes to monetary aggregates (Neuenkirch and Tillmann, 2014), or when it wants to provide an anchor for inflation expectations (Bundick and Smith, 2018).

Other advantages of an inflation targeting monetary policy framework include a low and less variable inflation rate and interest rate, stable economic growth, and greater ability to respond to shocks without losing credibility (Mishkin, 2000; Bernanke, 2003). Adopting an inflation targeting monetary policy framework may yield significant economic benefits in developing countries that are facing high inflation, large external shocks and are facing difficulties in designing sound domestic macroeconomic policies (Lin and Ye, 2009; Thornton, 2016).

Nigeria recently adopted an inflation targeting monetary policy framework. In late 2023, the central bank transitioned to a floating exchange rate system and adopted an explicit inflation targeting monetary policy framework which allows the Nigerian central bank to set an inflation target for the coming quarters or year and use its monetary policy instruments to meet the inflation target while taking into account the lags between policy decisions and their effect on output and prices. It is important to understand how inflation targeting monetary policy framework might work in Nigeria and the factors that determine its success.

This study contributes to the monetary policy literature in several ways. It contributes to the economic literature that examine the efforts of developing countries to combat high persistent inflation (Vega and Winkelried, 2005; Taylor, 2019). This study contributes to the literature by analyzing the case of Nigeria which recently adopted an inflation targeting monetary policy framework to combat high inflation. The study also contributes to the literature that explore several monetary policy frameworks for controlling inflation (e.g., Dua, 2023; Bianchi et al, 2021). This study focuses on a specific type of monetary policy framework which is the inflation targeting monetary policy framework.

The remainder of this study is structured as follows. Section 2 presents an overview of the monetary policy framework in Nigeria. Section 3 presents the literature review. Section 4 presents the success factors affecting the inflation targeting regime. Section 5 concludes.

2. Literature review

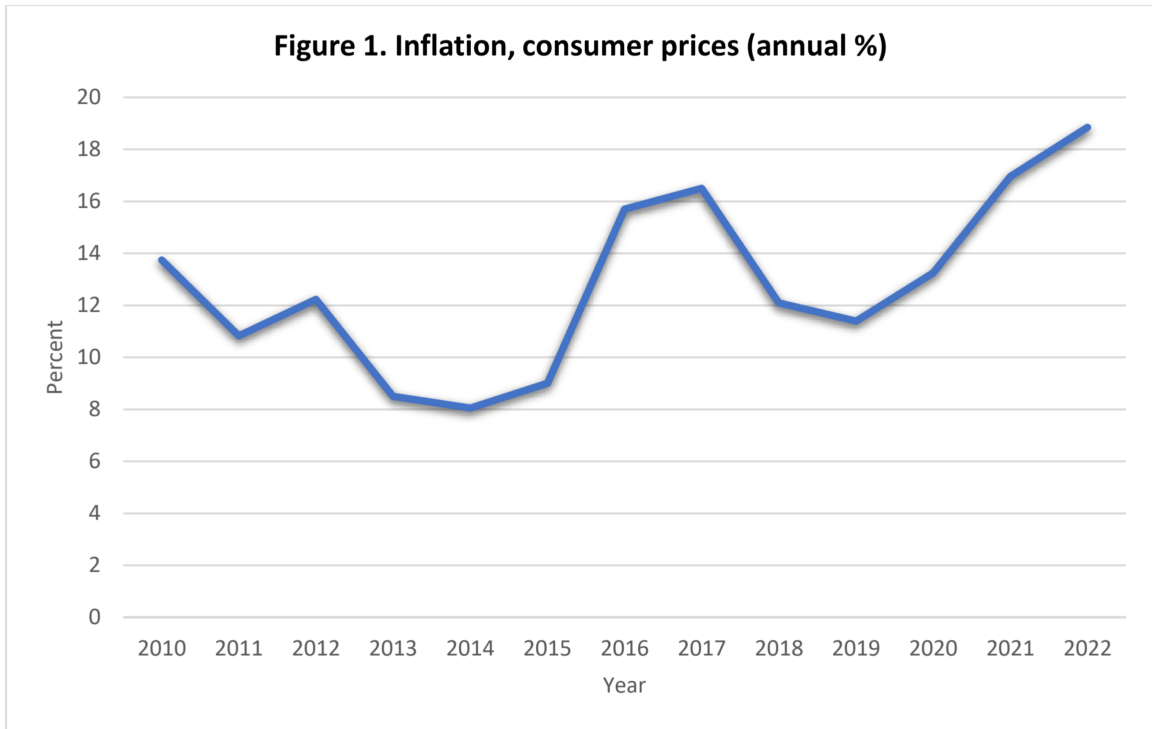
Several studies have investigated inflation targeting as an approach of central banks to control inflation. Svensson (2010) suggests that inflation targeting is a monetary policy strategy that involves announcing an inflation target. It was first introduced in New Zealand in 1990 and it was successful in stabilizing both inflation and the real economy in New Zealand. As of 2010, about 25 industrialized and emerging-market economies had adopted inflation targeting (Svensson, 2010). Ball and Sheridan (2004) showed that inflation-targeting regimes have worked well as it led to significant reduction in both the rate of inflation and inflation expectations. They also observed that shocks to inflation die away more quickly under inflation targeting than in other monetary policy regimes. Mishkin and Schmidt-Hebbel (2001) undertook a review of the inflation targeting regimes adopted in 18 countries and compared it with the non-inflation targeting regime used in other countries. They found that inflation targeting is successful in controlling inflation. However, they showed that there is still much to learn about inflation targeting as an approach to conduct monetary policy. In a related study, Mishkin and Schmidt-Hebbel (2007) empirically examined the efficacy of inflation targeting in countries that adopt inflation targeting

and found that inflation targeting helps countries to achieve low inflation in the long run, and it helps to obtain inflation outcomes that are closer to the inflation target. However, they emphasise that their result does not suggest that countries adopting inflation targeting have better monetary policy performance than countries that adopt a non-inflation targeting regime. De Mendonça and Souza (2012) examined the adoption of inflation targeting in 180 countries from 1990 to 2007. They used the propensity score matching methodology and found that the adoption of inflation targeting yield good results by reducing inflation volatility in developing economies. However, inflation targeting adoption does not offer much benefits in advanced economies. They conclude that the adoption of inflation targeting is useful for countries that want to increase the credibility of the management of monetary policy. Kumar et al (2015) study whether inflation targeting can assist in the anchoring of inflation expectations in New Zealand. They survey a large number of firms and found that managers of these firms display little anchoring of inflation expectations, they are poorly informed about recent inflation dynamics, and their forecasts of future inflation reflect high levels of uncertainty in the economy. Mishkin and Posen (1998) examine the operation of inflation targeting in some countries. They found that all of the inflation targeting countries have low inflation rates and greater monetary policy transparency without harming the real economy. Fratzscher et al (2020) examine whether inflation targeting acts as a shock absorber during crises or disasters. They use quarterly data of many countries and found that inflation targeting leads to better macroeconomic performance after crises or disasters. Inflation targeting decreases inflation, increases output growth, and lowers inflation and growth variability compared to other monetary regimes. They also show that only hard inflation targets, but not soft targets, will reap fruits in an inflation targeting regime. While these studies have examined inflation targeting in several contexts, these studies have not examined inflation targeting in Nigeria. This study examines the case of Nigeria.

3. Monetary policy in Nigeria

3.1. Exchange rate and monetary targeting regime

The objective of monetary policy in Nigeria is to achieve and maintain price, monetary and financial stability. Over the years, one of the major characteristics of the Nigerian economy is the persistent double-digit inflation (see figure 1). Between 2014 and mid-2023, the central bank adopted a monetary targeting framework and maintained a managed float exchange rate system. The data in figure 1 shows that the 'monetary targeting' monetary policy framework yielded positive results in managing inflation during the time. It led to low double-digit inflation and significant growth in non-oil export between 2014 and mid-2023 (see figure 2). However, the gains of the central bank's 'monetary targeting' monetary policy framework was marred by the occurrence of two economic recessions in 2016 and 2020, insecurity arising from farmer-herder clashes, and low revenue generation by the fiscal authorities. The central bank's monetary policy also led to negative economic consequences which include high budget deficit financing (see figure 3), a wide gap in the exchange rate in the official and parallel foreign exchange rate markets, preferential access to cheap foreign exchange, and restricted access to foreign exchange for dealers of 43 items which led to significant market distortion.



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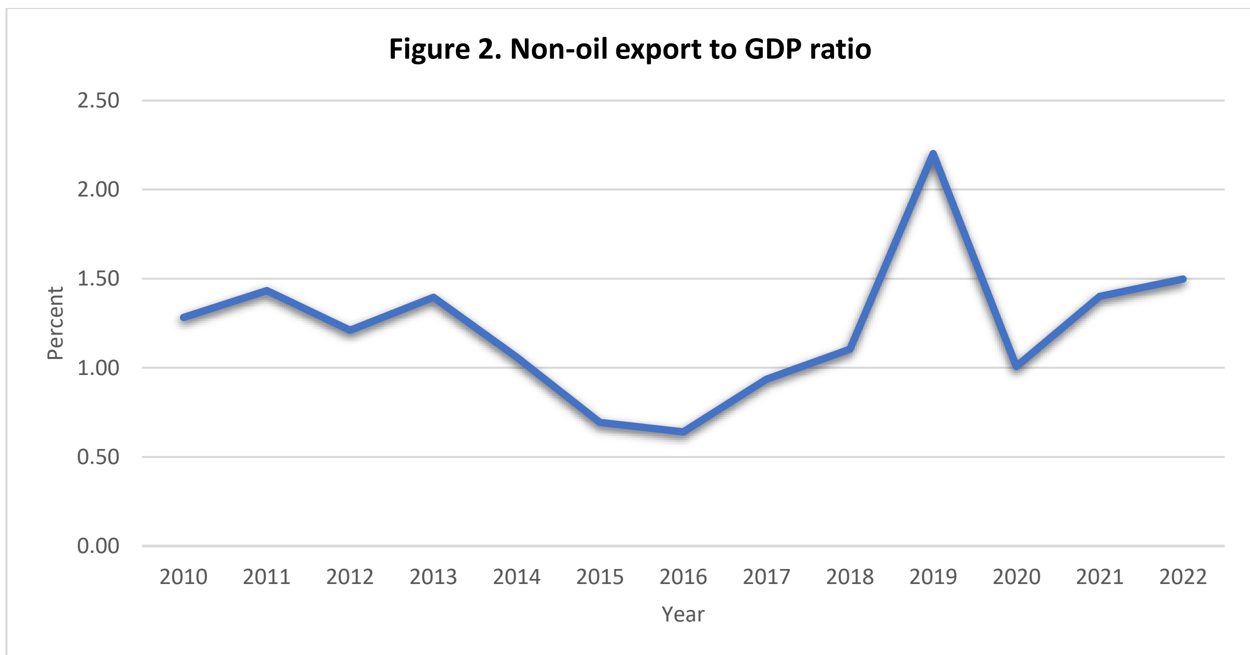

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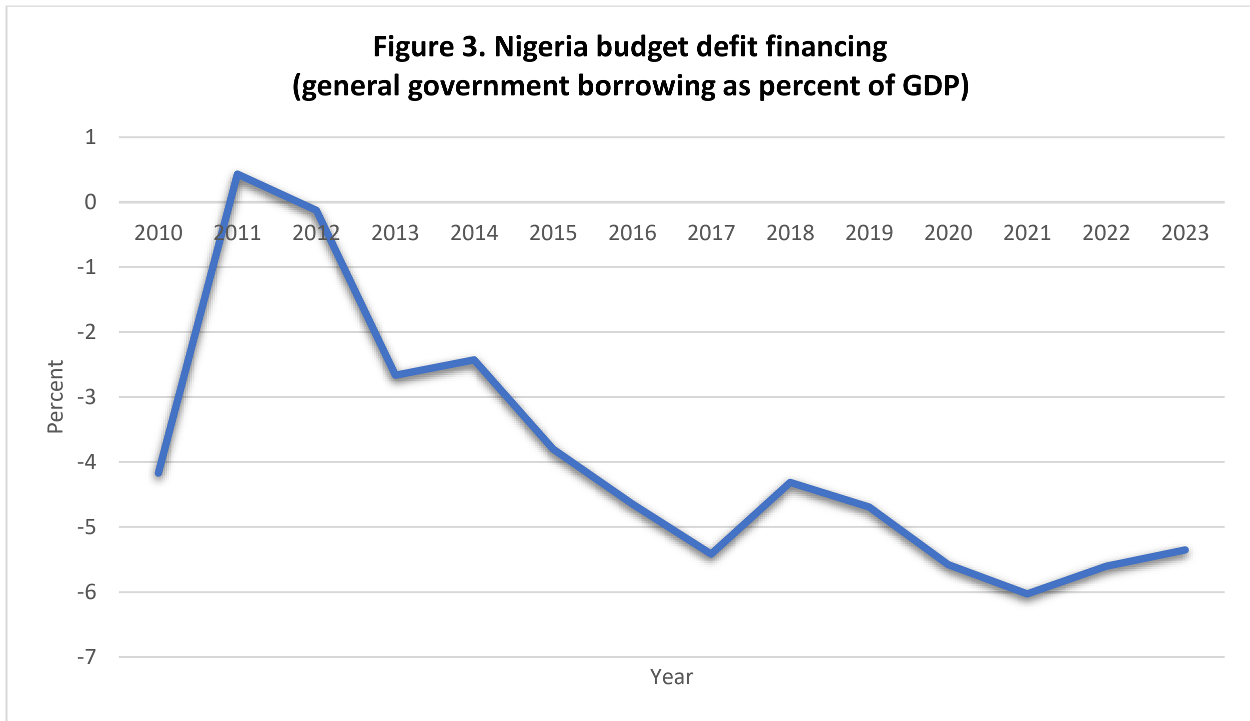

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3.2. Inflation targeting monetary policy regime

The central bank in November 2023 abandoned the managed-float exchange rate system and the 'monetary targeting' monetary policy framework. It adopted an inflation targeting monetary policy framework which was designed to allow the central bank to set an inflation target for the medium-term, announce the inflation target to the public to manage inflation expectations, and use its monetary policy instruments to meet the inflation target. The inflation targeting monetary policy framework was introduced alongside the unification of exchange rates, the lifting of the ban on the forty-three items, increasing the capital requirement of banks and the introduction of new foreign exchange guidelines. The central bank adopted the inflation targeting monetary policy framework towards the end of 2023 at a time when there was high public debt stock, low government revenue, low foreign direct investment, rapid currency depreciation and rising

energy prices due to fuel subsidy removal. Due to these factors, I argue that the success of the inflation targeting regime will depend on several factors some of which I will discuss in the next section.

4. Factors determining the success of an inflation-targeting regime in Nigeria

4.1. Size or number of economic agents monitoring the inflation target

The expectation is that once the central bank announces an inflation target, economic agents in Nigeria will monitor the movements in the monetary base and they should be aware of its influence on prices. In simple terms, the central bank expects economic agents to monitor the movements in the inflation target and factor-in the movement in the inflation target in their consumption behavior and pricing decisions. This is the expectation in theory (D'Acunto et al, 2019). However, a problem that arises is that many economic agents in Nigeria pay little attention to a central bank inflation target, and those that pay attention to the inflation target announcement are usually less than 1 percent of the population. As a result, the announcement of an inflation target may have little impact on the inflation expectations of economic agents in Nigeria if the segment of the population that respond to the inflation target announcement is small.

4.2. Credibility of the central bank

Inflation targeting would be effective if the reputation of the central bank is credible. Ideally, when the central bank announces the inflation target, the general public will [or should] become aware of the inflation target. If the central bank misses the inflation target for any reason, even when it missed the target through no fault of its own, the central bank will immediately lose credibility. As a result, the general public or economic agents will disregard the importance of the inflation target. This will make inflation targeting ineffective to rein in the inflation expectations of economic agents. To avoid this effect, the central bank will be under pressure to do all it can

to meet the inflation target it has set in order to preserve its existing credibility or to regain its lost credibility. Often, a central bank that has a weak reputation and is unable to control inflation may choose to adopt an inflation targeting monetary policy framework with the hope that setting and meeting the inflation target will help the central bank regain its credibility. The central bank may set an inflation target that is too easy to achieve even without the central bank doing anything. This will help the central bank to meet the inflation target and preserve or regain its credibility.

4.3. The degree of central bank independence

Central bank independence refers to the ability and the right of the central bank to set its own monetary policy goals with or without coordination with the fiscal authorities and without undue political interference. In Nigeria, central bank independence does not mean absence of coordination between the central bank and the fiscal authority. Rather, it means that the central bank of Nigeria should determine by itself the specific areas where it will coordinate with the fiscal authority and the areas where it will not coordinate with the fiscal authority. The degree of independence of the Nigerian central bank will be pivotal for the success of the newly adopted inflation targeting monetary policy framework. However, too much central bank independence has several disadvantages for inflation targeting. First, it could reduce the transparency of inflation forecast because nobody outside the central bank will be able to question or challenge the assumptions made by an independent central bank in determining the inflation target. As a result, the transparency of the inflation target will be diminished. Second, central bank independence could diminish the credibility of the central bank's inflation target because an independent central bank can undertake frequent changes in interest rate within a short time to achieve the inflation target. But the market may interpret the frequent changes in interest rate within a short time as an attempt to cover up the failure of the central bank to meet its inflation target using fewer changes in interest rate. To mitigate these consequences, there is a need for a degree of central bank independence that encourage monetary and fiscal policy coordination so that the fiscal authority can help to curtail excessive monetary policy activism by an independent central bank.

4.4. Reduction in budget deficits

The central bank's financing of budget deficit will lead to money creation and hinder the central bank's effort to achieve the inflation target under an inflation targeting monetary policy regime. If the central bank has low independence, one channel through which inflation targeting would reduce inflation is through the reduction of budget deficits. In the case of Nigeria, the central bank can achieve its inflation target if it fully resists the pressure by politicians to fund large fiscal deficits. Adopting an inflation targeting monetary policy framework, in collaboration and consultation with politicians, can make politicians support the central bank's commitment to reduce inflation and would make politicians to stop pressuring the central bank to fund the budget deficit. This will not only increase the central bank’s independence, but it will also bring an end to budget deficit financing by the central bank, thereby curbing inflation that is induced by rising budget deficit.

4.5. Limited dollarization of the Nigerian economy

Financial dollarization of the Nigerian economy frustrates the central bank's effort to reduce inflation because dollarization reduces the efficiency of monetary policy instruments, increases Nigeria's sensitivity to external shocks, increases money supply and exchange rate, and increases exchange rate pass-through to price, thereby increasing inflation and inflation expectations. The recent adoption of an inflation targeting monetary policy framework in Nigeria should be supported by the de-dollarization of the economy to obtain maximum results. To de-dollarize the Nigerian economy, the central bank must achieve a sustained reduction in inflation. The reduction in inflation must be substantial and visible to the general public through a significant increase in their purchasing power. This will encourage the general public to stop saving their wealth in dollars or in any other foreign currencies, thereby leading to a gradual de-dollarization of the Nigerian economy.

4.6. Effective central bank communication

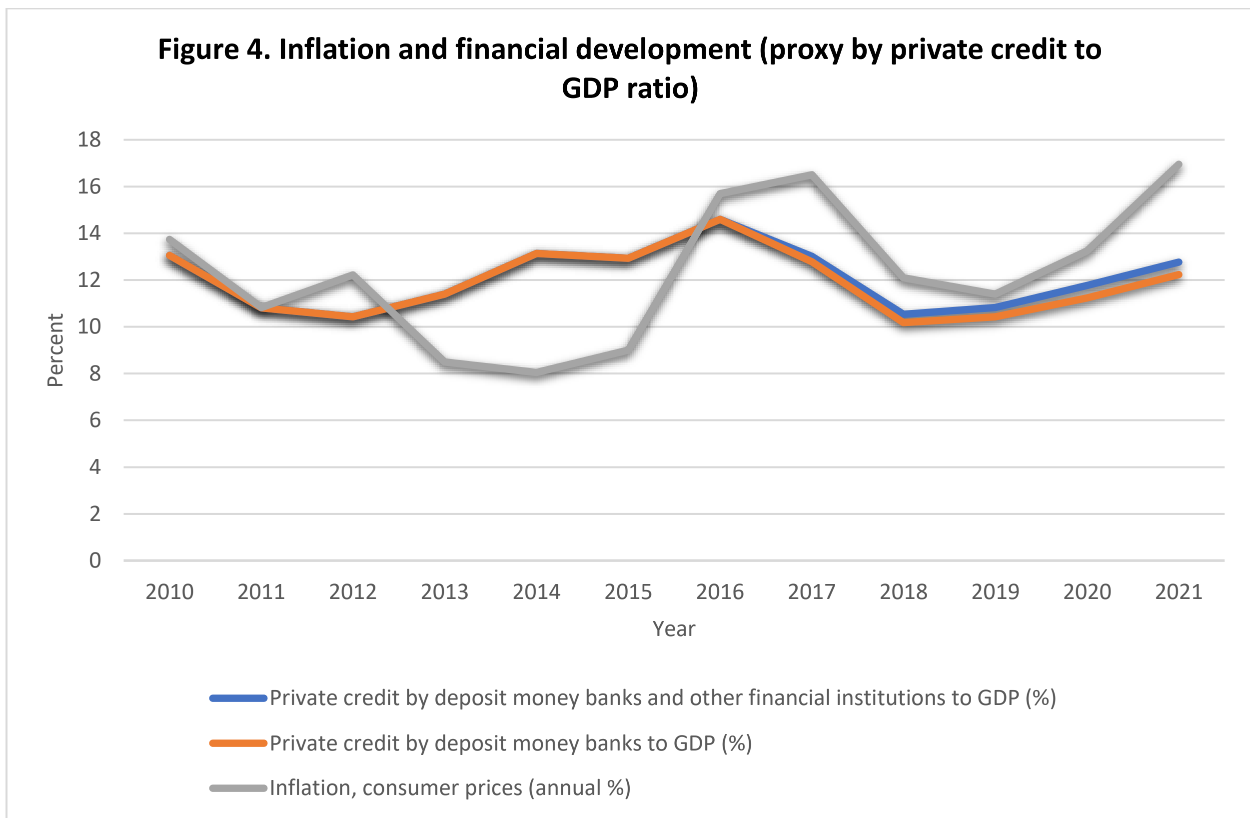
Another factor that is crucial for the success of inflation targeting in Nigeria is effective central bank communication. The central bank should constantly communicate to the public its own assessment, evidence, and policy strategy. The central bank should also make clear its limitations too. The central bank can use three communication tools, namely, inflation targets, inflation forecasts, and quarterly reports that present the assessments of inflation factors (Baranowski et al, 2021). Furthermore, announcing the entire policy process upon which the inflation target is based will amount to full communication and it will give households, firms, and government a more accurate forecast of future macroeconomic conditions, and lead to greater stability in firm output, inflation, and nominal interest rates. But if the central bank only announces the variables upon which interest rate decisions are made, it will amount to partial communication and may produce less stability in firm output, inflation, and nominal interest rates.

4.7. Avoidance of fiscal dominance

Fiscal dominance exists when Nigeria's public debt, budget deficit and external debt levels are too high that monetary policy ceases to be an effective tool for controlling inflation. When there is fiscal dominance, the government through the central bank will either service domestic debt by printing more money which will lead to inflation, or the central bank will reduce interest rate to reduce the cost of debt servicing, but this will also lead to rising inflation and cause the central bank to miss the inflation target. Either way, the central bank will miss the inflation target. Furthermore, when debt is sufficiently high, it will lead to concerns about debt overhang, debt sustainability and the possibility of fiscal dominance which will induce the central bank to pay more attention to decreasing the cost of debt servicing instead of focusing on achieving its inflation target (Blanchard, 2004). Fiscal dominance will pressure the central bank to deviate from the inflation target in ways designed to ease the debt burden of the government (Ahmed et al, 2021). When this happens, the central bank will miss its inflation target. Therefore, the central bank must oppose fiscal dominance if the inflation targeting framework is to succeed. The central bank should advise the federal government against increasing public debt.

4.8. Financial development

The inflation targeting monetary policy framework in Nigeria will lead to a shift towards a more market-oriented and developed financial system. High level of financial development is essential to meeting the inflation target of Nigeria's central bank because greater levels of financial development are associated with greater access to finance (and credit) and greater financial intermediation (see figure 4), which makes the interest rate channel of monetary policy transmission more effective and enables greater consumption-smoothing which leads to a decrease in the inflation rate.



Source: World Bank

4.9. Greater financial inclusion

Greater financial inclusion enhances inflation targeting by bringing people into the formal financial system and bringing their monies as deposits into the financial system. This will decrease the amount of money outside banks. Greater financial inclusion brings money into the formal banking sector so that central bank interest rate can affect all financial system deposits. Greater financial inclusion also allows households and firms to smooth consumption thereby decreasing the inflation rate.

4.10. Financial stability

Under inflation targeting, the central bank should aim to achieve a low inflation target and should meet the inflation target. Meeting the inflation target will lead to correct inferences about future real returns of investments. This, in turn, will lead to accurate and well-informed lending/borrowing decisions, decrease in loan defaults, and lower bankruptcies which will improve financial stability. However, the central bank faces the risk of setting an easy-to-achieve inflation target in order to increase its credibility but may fail to detect early the build-up of financial imbalances that increase financial instability risks. These imbalances can show up in the form of credit market imperfections or financial frictions that hinder the transmission mechanism between monetary policy and inflation by reducing welfare through mechanisms that are not fully reflected in the inflation target. The central bank can strive to meet its inflation target by increasing interest rate to mitigate risks to financial stability. Increasing interest rate to meet the inflation target can decrease financial instability risk because increasing interest rate will make borrowing become expensive and will decrease economic activity. High interest rate will induce financial sector agents to decrease leverage in the financial system. The decrease in leverage, with equity levels remaining unchanged, will decrease the debt-to-equity ratio, decrease insolvency risk and bankruptcy risk in the financial system and improve financial stability (Woodford, 2012).

4.11. Insecurity farmer-herder clashes and terrorism

Farmers/herders clash could make the central bank miss its inflation target. The farmers/herders clashes over the years have restricted farmers from accessing their farmlands, leading to food price inflation. If the central bank sets a low inflation target, there is the risk that the central bank may miss the inflation target if unexpected escalation in farmers/herders clashes occur, leading to farmers avoiding their farmlands. This will increase the farmgate price of food and lead to food price inflation. Terrorism in Northern Nigeria also contributes to the increase in food price inflation because terrorists may impose levies on farmers who want to access their farmlands in terrorized areas. As a result, farmers will increase the price of farm produce, leading to food price inflation and a higher risk of the central bank missing the inflation target.

5. Conclusion

The purpose of this paper was to identify the success factors that will be crucial for an effective inflation targeting monetary policy framework in Nigeria. Several success factors were considered. These include the size or number of economic agents monitoring the inflation target, the credibility of the central bank, the degree of central bank independence, reduction in budget deficit, limited dollarization of the Nigerian economy, effective central bank communication, avoidance of fiscal dominance, financial development, greater financial inclusion, financial stability, and insecurity caused by farmer-herder clashes and terrorism. Many developed countries such as New Zealand, Canada, the U.S., the U.K., and many others have adopted inflation targeting. Nigeria's central bank has also adopted the inflation targeting monetary policy framework as its monetary policy framework for achieving price stability or low inflation. Having adopted inflation targeting in Nigeria, the central bank of Nigeria should view inflation targeting as a policy framework rather than as a system of rules to increase its acceptance. There is a need to customise the inflation targeting approach to fit Nigeria's peculiarities provided that its core features remain which is the announcement by the central bank that in the future it intends to hold inflation at a specified level. Furthermore, special consideration should be given to the risks

associated with an inflation targeting monetary policy framework. The significant risks are that inflation targeting may not be operational because of the time that it takes for monetary policy actions to affect inflation. Another risk relates to the difficulty in forecasting inflation. There is also the potential for exchange rate volatility because adopting inflation targeting in open economies, such as Nigeria, can lead to changes in interest rates, and the changes in interest rates can affect capital flows and the exchange rate. Notwithstanding the challenges, the implication of adopting an inflation targeting monetary policy framework in Nigeria is that the central bank will have a full understanding of the benefits and risks of an inflation targeting monetary policy framework. Finally, it is too early to determine whether the inflation targeting monetary policy framework will succeed or fail. The best we can do is to give it a chance to work. But I think it will work because the advantages will outweigh the risks. Future studies can examine whether an explicit inflation targeting framework might be more appropriate in Nigeria. Future studies can also examine whether an implicit inflation targeting regime or an average inflation targeting regime would be more appropriate to adopt in Nigeria.

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