CENTRAL BANK OF NIGERIA

EDUCATION IN ECONOMICS SERIES

NO. 5

UNCONVENTIONAL MONETARY POLICY

CENTRAL BANK OF NIGERIA

RESEARCH DEPARTMENT

2016

The Education in Economics Series is intended to provide a user-friendly introduction to a wide variety of economic issues. Each topic seeks to present simple and comprehensible readings to all segments of the general public, particularly those interested in obtaining a clearer understanding of the economic issues affecting the Nigerian economy.

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Unconventional Monetary Policy

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1.0 Introduction

Macroeconomic policies are policies that are used to influence the path of growth and development of the national economy. It is different from microeconomic policies which are applied to the different segments of the economy like households and firms. The objectives of macro-policies are often diverse depending on the peculiar circumstances of the economy. However, maintaining low and stable prices is one objective that is common globally. Also, macroeconomic policies often seek to reduce unemployment and ensure a healthy balance of payments. Notwithstanding the nature and features of specific policies adopted by a country, they are intended to lead to economic growth and development ultimately. Typically, macroeconomic objectives are achieved with two broad policy frameworks namely, monetary and fiscal policies. Thus, monetary policy and fiscal policy are the key pillars of macroeconomic policy.

Fiscal policy is concerned with the management of government revenues and expenditure to influence macroeconomic outcomes. Usually, this responsibility resides with the Ministry of Finance or the Treasury Department (in some countries) and other agencies under it. Monetary policy involves using certain instruments, typically, the interest rate, to influence the price and availability of credit (money), which ultimately affects the general prices. It is often handled by a central bank or any other chosen monetary authority. The main objective of monetary policy in most countries is to ensure that aggregate prices are kept stable over time. However, at times, the monetary authority may be required to play other roles that support economic development in

addition to the main objective. This is often called developmental roles.

Monetary policy actions are taken by central banks to influence the cost and availability of money. This influence is important because of the link between money supply and the level of economic activities. If the growth of money supply is higher than the level that helps the economy to grow, inflation will arise. If the money supply, on the other hand, grows below the level required to make the economy give its best, deflation is said to occur. Thus, central banks always 'watch' the growth in money supply to ensure that it is at the optimum level to achieve a consistent growth pattern for the economy. 'Watching' means taking necessary actions at all times and involves the use of instruments.

The main traditional instruments used by central banks are the open market operations (OMO) (sale and purchase of securities to control money supply), reserve requirements, lending facilities to banks, policy rate, credit control, prudential guidelines and moral suasion. Either these instruments are used to increase or reduce the money supply, depending on whether money is in excess or short supply. Sometimes these instruments are used proactively if the central bank anticipates that an event likely to precipitate an excess or shortage of liquidity will occur in short- to medium-term.

OMO is conducted using government securities namely, treasury bills, treasury bonds, and others, and sometimes central bank instruments, for short periods of time. Recently, the policy rate has become the most effective tool for monetary control in most jurisdictions. Increasing the policy rate is often expected to reduce

the money supply while reducing it should increase the money supply, all things being equal. Under normal conditions, these actions ultimately help to control inflation, enhance a normal transmission mechanism of monetary policy, and ensure the growth of the economy. This policy paradigm, which has had a long history among central banks is referred to as a conventional monetary policy.

The objective of this series is to educate readers on the nature and features of unconventional monetary policy and to show how it has been implemented in in Nigeria.

Following this introduction, section two provides a definition of relevant concepts on the subject. Section three discusses the global macroeconomic environment that necessitated the adoption of unconventional monetary policies while Section Four contains experiences of various jurisdictions on unconventional monetary policy. Section five discusses the implementation of unconventional monetary policy in Nigeria and section six concludes.

2.0 Definition of Concepts

2.1 Conventional Monetary Policy

Under stable financial conditions and efficient financial market, the monetary authority can achieve its policy objectives by adjusting the monetary policy rate (MPR in Nigeria and bank rate in some climes) to target the rate at which banks place or borrow funds among themselves, the overnight interest rate. Changes in short-term inter-bank funds rate are expected to respond to the policy signaling rate, the MPR, which the central bank directly controls. It is also expected that all other rates in the financial

market would respond to the changes in the short-term money mark rates, which in turn influence interest-sensitive expenditures. Raising the policy rate, for instance, signals an intention to tighten monetary policy as a strategy for curtailing aggregate spending and fighting inflation (where the inflation is of monetary origin). The increase in the monetary policy rate pulls the short-term interbank rates, discount rates, and lending facility rate along, as banks reflect those decisions in their lending policy. The increase in lending rates is expected to make economic agents cut back on their spending so as to reduce pressure on the price level. The use of the adjustment of the policy rate is often complemented with the sale of securities to banks and other agents through OMO. Conversely, when the policy rate is reduced, financial conditions are eased as liquidity is expanded and interest rates fall. That way, banks can make more loans to increase aggregate spending. Also, central banks sometimes use other instruments such as the cash reserve requirement and the liquidity ratio, which are prudential in origin, to complement the use of the policy rate and the OMO

2.2 Unconventional Monetary Policy

In certain circumstances, there are adverse economic conditions like financial or economic crises. At such periods, the interest rate may already be near zero or zero, and business activities may stop responding to movements in interest rates. Also at such severe economic conditions, macroeconomic outcomes may defy the efficacy and the effectiveness of the conventional monetary policy. During such times, economic agents are guided by the need to preserve themselves, a holding firmly to what they already

have. This could be seen in reduced consumption or investment expenditure so that the policy action of raising or reducing money supply does not change decisions to buy or invest.

Also, when the interest rate is already close to zero, or zero, the monetary authority could only increase rates if it wanted to reduce economic activities.If however, the economy requires being fired up, this cannot be achieved through the reduction of interest rates because (since the interest rate is already zero) there would not be any more room to reduce interest rates in a bid to increase the money supply. Also, even if interest rates are not zero, poor financial habits, like not depositing money in banks, might make consumption and investment less dependent on interest rate movements. These conditions have in common the tendency to render conventional monetary policy impotent. Thus, in such unusual time, when monetary policy has reached its limit, the central bank has only but one thing to do, (since it cannot be unconcerned about the imminent collapse of the economy)-take unusual actions. Such actions are referred to as unconventional monetary policy to the extent that they are non-standard, atypical and non-traditional.

Therefore, unconventional monetary policy actions are all intended to influence macroeconomic outcomes – growth, inflation, and exchange rate when conditions are not normal. Some unconventional actions might involve selling/buying long-term government securities, buying and selling of private sector securities, a direct bailout of financial institutions, direct intervention in the real sector and others. These are the things central banks refer to as; (I) guiding medium to long-term interest

rate expectations, (II) changing the composition of the central bank's balance sheet, and (III) expanding the size of the central bank's balance sheet.

2.3 Quantitative Easing

Quantitative easing, involves the central bank's purchase of large and long-term government securities for the purpose of injecting liquidity into the system. The main purpose of QE is to ease monetary condition in banks to raise their capacity to lend. Large purchase of government securities by the central bank is expected to lower sovereign yields and yields on private securities. The low yields raise asset values for holders, enabling increased substitution of assets in the market that raises the level of aggregate spending. In some cases, QE also involves the purchase of private sector securities. Overall, QE drives down interest rates. As interest rates fall, the cost of business financing, especially new equipment, falls. With time, these investments bolster economic activity, create new jobs, and depress the unemployment rate. Also, QE typically increases the monetary base as banks hold increased reserves. When banks loan these reserves, they effectively increase the money supply, and if the money supply grows at a rapid rate, the increase in economic activity engendered by this could cause higher inflation and inflation expectations. This downside is one strong point of QE critics.

2.4 Credit Easing

Credit easing is a policy that directly addresses liquidity shortages and spreads in certain (wholesale) market segments. This includes

the purchase of commercial papers, corporate bonds and asset-backed securities that are mostly private issues (for example, The Term Auction Facility (TAF) in the US), Commercial Paper Funding Facility (CPFF), and MBS. Buying privately issued securities has a similar impact on the money supply or the monetary base as quantitative easing, the difference being the selection of specific private sector segments. Credit easing implies that the central bank interacts directly with the private sector. Also, it is often said that QE works from the liability side of the central banks' balance sheet, while CE works on the asset side.

2.5 Forward Guidance

Central banks often make explicit statements saying that they will keep a particular policy stance over a long period. This commitment locks-in expectations about what actions the central bank would take in the future and therefore guides expectations about the movement of inflation in the future. This is good for confidence in financial markets as it makes for easiness of consummating future financial contracts.

2.6 Negative Interest Rates

Under normal circumstances, depositing money in banks and other financial institutions should earn some return for the depositor, especially when such deposits are over an agreed period. This is because banks do business with the deposits and earn income in interest charged. Also, commercial banks should earn income from deposits in central banks for the same reason that the central bank lends such money to others in need. Negative interest rates work in the opposite direction. This implies that depositors are charged

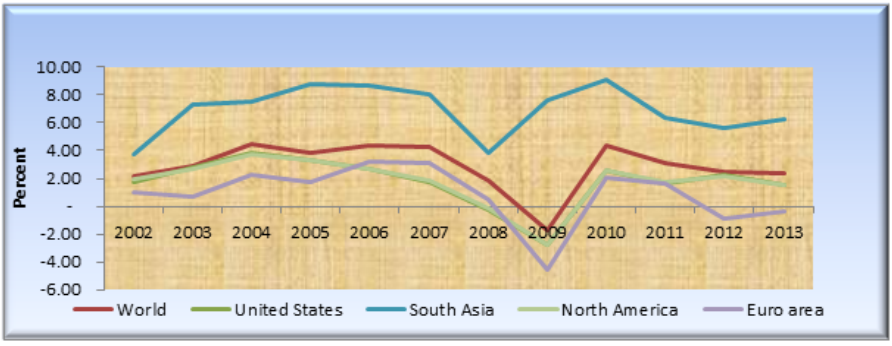
interests for cash lodgements. Obviously, this should discourage deposits. Negative interest rate policy is expected to encourage spending to increase economic activities.

3.0 Global Macroeconomic Environment leading to the adoption of Unconventional Monetary Policy

The adoption of the unconventional monetary policy was necessitated by the global financial crisis, which started in 2007 following the collapse of some financial institutions in the United States. Before the crisis, the global economy was serene, particularly between 2002 and 2006. This period was characterized by high and relatively stable rates of growth especially in developing countries; rising global savings flowing from emerging some economies, Japan and Germany, as a result of strong world fundamentals. All of these were reflected in improved export revenues, remittances, and private capital flows in advanced economies as well as a surge in investments and exports in developing countries, led by China and the emerging markets.

World GDP at the time grew at an average rate of 3.5 per cent annually (that was 101 basis points above its average growth rate during the crises period of 2007-2012). From 2.2 per cent in 2002, global GDP grew, rising steadily, to 4.4 per cent in 2006, after which it fell consistently from 4.3 per cent in 2007 to -1.7 per cent in 2009 before recovering in 2010 (see, Figure 1). This performance was driven by the level of growth in emerging economies, especially China, which grew consistently from 9.1 per cent in 2002 to 14.1 per cent in 2007. Although output declined between 2007 and 2009 in China, it was at a slower rate than in the US, UK, EU and the overall global economy, thus sustaining global GDP at positive levels except in 2009.

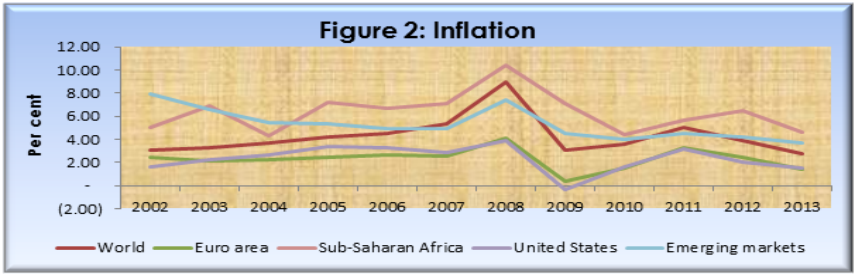
Figure 1: GDP Growth across Regions



Source: World Bank Database

The macroeconomic stability during the pre-crisis period was unprecedented. Inflation was low and stable with low-interest rates in most advanced and some emerging market economies (see, Figure 2). This was despite the substantial rise in commodity prices, strong growth and largely accommodating monetary policy stance in major currency areas, as noted by the IMF (2006). For example, Fed funds rate in the US which was 6.5 per cent in 2001 had declined to 1 per cent in 2003 up until 2004. Also, key interest rates at the ECB and Europe were relatively low and stable. These were said to be a reflection of global competition, which prevented firms from raising prices and put downward pressure on wages in many sectors.

Figure : Inflation Rate across Regions



Source: World Bank Database

Unfortunately, the tranquility that prevailed during the pre-crisis period was not to last much longer. The low-interest rates which endured for a long period led to the huge and rapid expansion of bank credit to the private sector; search for yield by financial institutions and investors; excess liquidity, which fostered higher leverage and greater risk-taking; and an eventual credit and mortgage boom. These factors were accentuated by widening regulatory gaps, excessive optimism, underestimation of risks and a build-up of risks leading to an asset bubble which signaled the beginning of a crisis.

All the three main sectors (government, financial and real) of the US economy had a fair share of blame in the ensuing crisis, as noted by Verick and Islam (2010). The government sector contributed to the global crises through the financial deregulation of the 1990s and loose monetary policies between 2002 and 2005, coupled with poor regulation of the financial markets dealing in highly sophisticated financial instruments. According to Taylor (2007), loose monetary policy added fuel to the housing boom; led to excessive risk-taking in housing finance; and a sharp increase in foreclosures and balance sheet deterioration in many financial institutions.

The financial sector's contribution was epic and played out remarkably in the US housing market and later spread to other countries. It was characterized by the use of off-balance sheet entities (such as Structured Investment Vehicles, SIVs), over-the-counter transactions; complex securitisation of assets (through Collateralised Debt Obligations, and CDOs and Special Purpose Vehicles, SPVs). It was also characterised by the use of other

innovative financial instruments, which were traded globally through integrated but badly regulated financial markets. The use of these instruments was accompanied by lax risk analysis, excessive leverage and reliance on short-term debt (repos), excessive risk-taking encouraged by remuneration incentives as well as aggressive mortgage lending occasioned by poor lending standards. The real sector, on the other hand, contributed through households borrowing beyond their means. The loans were subprime, because under due diligence, individuals who were granted the loans would be unable and ineligible to acquire such loans.

By 2006, there were evident tell-tale signs or triggers of the impending economic doom characterized by activities in the housing market, global savings glut, subprime lending, interest rate spreads, movements in the stock market as well as movements in oil prices. There began an unprecedented and drastic decline in housing prices from its high levels in 2002, following the burst of the asset bubble. As a result, banks began to reduce mortgage lending. This led to stricter monetary policies, mortgage defaults leading to liquidity and credit crunch, slower economic activities and by 2007, rising unemployment. These events, among others culminated in the global financial crises that began in the second half of 2007 and became pronounced by mid-2008 leading to global imbalances as a result of inter-linkages in the global financial system.

The effects of the global financial crisis which saw huge losses in the subprime housing market, insolvency of lending institutions, loss of confidence in the financial system, and cut back on short-term

lending by banks led ultimately to failure of "big" financial institutions in the US and Europe. In the US, Bear Stearns collapsed in March 2008. The consequences grew worse with the bankruptcy and eventual collapse of Lehman Brothers Holdings Inc. and AIG, while Freddie Mac and Fannie Mae were placed under conservatorship, in September 2008. Elsewhere, in Europe, banks in UK, Germany, Ireland, Switzerland, and others, revealed toxic debts, falling share prices, loss of confidence and fall in lending, as the crisis spread from the US.

4.0 Experience of other Jurisdictions with respect to Unconventional Monetary Policy (UMPs)

As stated earlier, the contagion effect of the GFC had spread to other parts of the globe, and thus the US and other affected countries around the world took some actions – which became what is now generally referred to as UMP, to address the negative impact of the crisis. In the following sections, we highlight some of the actions by the United States, United Kingdom, and Japan.

4.1 United States

In the US, several measures of UMPs have been implemented since the GFC, of which the major ones are, forward guidance, and quantitative easing. Others include:

i. Large-scale asset purchase programme;
ii. "Twist" programme;
iii. Use of negative interest rates;
iv. Nationalization of some troubled financial institutions;
v. Temporary guarantee for money market funds; and

vi. Troubled Assets Resolution Programme (TARP).

By and large, policy actions that were pursued include emergency liquidity provisions, aggressive lowering of interest rates, capital injections, asset purchases and debt guarantees, deposit insurance, bailouts, sales of financial institutions to new owners, nationalization of financial institutions. Central banks are currently implementing many of these unconventional monetary policy measures around the globe.

The U.S. carried out its first QE programme between November 2008 and March 2010. This programme involved the purchase of long-term Treasury and mortgage-backed securities. The implementation of the first QE programme however, failed to achieve the desired results and was followed by the second phase of QE (QE2). QE2 involved the purchase of US$600 billion in long-term Treasury securities and was in operation from November 2010 to June 2011. It was followed by the "twist" programme from September 2011 to December 2012. The twist programme was characterized by the sale of short-term assets and the purchase of long-term assets. The impact of this measure was underscored by the increase in the average maturity of the assets on the Fed's balance sheet. The Fed ran its QE3 programme – a larger scale purchase of securities – from September 2012 to October 2014.

The unconventional monetary policy measures adopted during the recent GFC impacted the US economy in diverse ways. With the increase in consumption credit occasioned by lower rates of interest, there was an increase in consumption to its pre-crisis levels by 2011. Similarly, there was a recovery of residential and non-

residential investment following QE.

Government spending was said to have expanded the fiscal space both on the revenue and cost side, leading to considerable fiscal stimulus and deficit. Although the trade deficit declined with QE, the impact of UMP on net exports in the US was difficult to ascertain due to confounding factors with somewhat stronger influence.

Overall, GDP has been recovering steadily at around 2 per cent per annum since 2009, although core inflation has consistently been below the 2 per cent target. Many new jobs were created thus reducing unemployment.

4.2 United Kingdom

Like in the US, the Bank of England (BoE) in the UK introduced some unconventional monetary policy measures in the aftermath of the financial crisis, as interest rates were already close to their lower bounds. The measures included:

i. enhanced liquidity support;
ii. controlled activities of the financial markets;
iii. large-scale asset purchases
iv. quantitative easing (QE);
v. funding for Lending Scheme (FLS);
vi. Negative Interest Rates; and
vii. Forward guidance.

The first round of QE which consisted of purchases of outstanding debt worth £200 billion by the central bank began in March 2009 and ran until January 2010. It was introduced to dispel the fears that without further monetary easing measures, the reduction of policy rates to 0.5 per cent would be insufficient to avoid inflation. To ease

the tension on anticipated rise in UK inflation over its target of 2.0 per cent, the second phase of QE was implemented between October 2011 and June 2012 in the UK, with the BoE purchasing £175 billion of UK government securities.

Besides QE, the FLS was announced in June 2012 and launched in July 2012 with the aim of reducing bank funding costs to increase bank lending, especially to firms and households. Under this scheme, banks, and building societies were offered cheap funding to boost their lending to the UK real economy. By August 2013, the Monetary Policy Committee of the BoE adopted Forward guidance as one of its UMP measures.

These UMP interventions among others brought about some outcomes. QE2 for example had a significant positive effect on GDP growth of about 0.6 per cent and a significant positive effect on inflation according to Churm et al. (2015). The FLS led to a drop in wholesale funding spreads which culminated in a positive peak effect of 0.8 per cent of GDP and 0.6 per cent on inflation more than a year after the start of the policy.

4.3 Japan

The Japanese economy had witnessed varying degrees of economic crisis characterized by vicious cycles of deflation and stagnant economic activity. The Bank of Japan had implemented quantitative and qualitative measures in a bid to stabilize the economy. The Bank of Japan introduced quantitative easing in 2001 while following the Zero-interest-rate policy (ZIRP). Also in 2013, the BoJ adopted the quantitative and qualitative monetary easing (QQE) to increase the monetary base to encouraging a decline in

interest rate across the entire yield curve by purchasing Japanese government bonds (Shirai, 2015)

The QE practiced in Japan attempted to increase inflation through the purchases of large quantities of short-term government securities. The qualitative measures, purchases of exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) were used to affect premium of risk assets. The BoJ also adopted forward guidance with the objective of indication a future direction for ongoing monetary easing. This was to signal the intention to maintain a significantly low policy interest rate over a long period. Another UMP measure used by the BoJ is the conditional long-term lending facility. Under this facility, the BOJ provides low-cost funding (fixed at 0.1 per cent) to financial institutions up to an amount that is twice the net increase in their lending with a maximum of four years under the stimulating bank lending facility.

The ultimate goal with these instruments was to promote bank lending to the private sector. The QE policy contributed to the expansion of corporate profits and employment which helped improve the output gap by about 2.0 per cent

5.0 Unconventional Monetary Policies (UMP) in Nigeria

5.1 The Macroeconomic Environment before the Policies

Monetary management before 1986 depended on direct monetary policy instruments such as credit ceilings, selective credit controls, administered interest and exchange rates. Otherswerethe prescription of cash reserve requirements and special deposits. The use of market-based instruments was not feasible at that point

because of the underdeveloped nature of the financial markets and the deliberate restraint on interest rates, while open market operations were used merely to raise revenue for the government and strictly not as instruments of monetary policy. However, the structural adjustment program (SAP) introduced in the mid-1980s promoted market-based monetary policy. The OMO and discount window operations (i.e., lending to banks) have remained the main instrument for influencing movement in interest rates and interest-sensitive expenditure.

The idea was to induce a market-oriented financial system that would effectively aid mobilization of financial savings and efficient resource allocation. However, the banking system that evolved turned out to be very weak in the transmission of monetary policy to real economic activities. This necessitated the banking system reforms in 2004, which had its thrust, to grow the banks and position them to play pivotal roles in driving development in other sectors of the economy, and to induce improvements in their operational efficiency. Thus, banks were consolidated through mergers and acquisitions as the capital base was raised from N2billion to a minimum of N25 billion. Consequently, the number of banks fell to 25 from 89 in 2005 and later to 24. Furthermore, banks expanded their branches and restructured labour to manage an expanded capital base.

The global financial and economic crises, which began effectively in 2007 and stretched to 2009, strained the gains from the bank consolidation exercise. The global financial crises of impacted economies in several ways and led to different policy responses by governments.

In Nigeria, the effects included decline in revenue from oil export to all tiers of government; reduced capital inflows, which led to the depletion of external/foreign reserves; and increased demand pressure in the foreign exchange market. Others were substantial decline in stock market capitalization and share prices, and huge bank losses on margin loans and share-backed facilities; and progressive decline in credit to the private sector. While the immediate impact of the crises was consistent with global trends, the severity was accentuated by the internal conditions and management problems in domestic banks, arising from their adventures in high-risk business conducts that further exposed the sector's vulnerabilities.

As more signs of distress in banks were observed through their frequent resort to the Expanded Discount Window (EDW), the CBN commenced a special joint examination in conjunction with the Nigerian Deposit Insurance Corporation (NDIC) in 2009 to ascertain the true state of the industry. The exercise revealed some banks with imminent signs of collapse, capable of putting the entire banking sector and the Nigerian economy in grave danger. Most of the banks were found with:

- Substantial non-performing loans;
- Poor corporate governance
- Weaknesses in capital adequacy; and
- illiquidity

5.2 Actions Taken By the CBN

CBN took some specific (non-traditional) and urgent actions in order to avoid systemic distress in the banking system, including:

- Lender–of-last-resort action of injecting tier II capital amounting to N620 billion into five banks to shore their operating capital
- Guarantee for interbank lending.
- Temporary suspension of mop-up operations
- The creation of Asset Management Corporation of Nigeria (AMCON), which commenced full operation in November 2010.

5.1.2 Real Sector Intervention Programmes

The central bank also embarked upon different direct real sector intervention measures between 2009 and 2015. These are measures aimed at making finance available to specific sectors of the economy through the commercial banks. Some of the major ones are:

(a) N500 Billion Critical Infrastructure Fund: The Infrastructure Intervention Fund was introduced in April 2010 by the CBN to provide long-term support to finance critical infrastructure projects. The Fund is a 15-year debenture investment in the Bank of Industry (BOI) for on-lending to all eligible Deposit Money Banks(DMBs) and Development Finance Institutions (DFIs) at 1%. The DMBs and DFIs, in turn, lend to promoters of the projects at a maximum of 7.0%.

(b) N200 Billion Refinancing/Restructuring of SME/Manufacturing Fund: Out of the N500 billion Critical Infrastructure Fund approved, N200 billion was set aside for refinancing/restructuring of SME/Manufacturing Fund in April 2010 to enable banks refinance and restructure their existing loan portfolio to SMEs and manufacturing. The 15-

year facility has a 3-year moratorium with loan amounts ranging from N5 million (minimum) to N1 billion (maximum) to single obligor at an interest rate of 7.0 per cent annually repayable quarterly.

(c) **N300 billion for long-term funding of Power and Aviation.** The balance of N300 billion was also approved to provide long-term funding Power (N250 billion) and Aviation Industry (N50 billion).

(d) **Commercial Agricultural Credit Scheme (CACS):** The CACS was established in 2009 with the sum of N200 billion to fast-track agricultural development to ensure food security, job and wealth creation. The CACS among other things encourage banks to lend more to the agricultural sector, provide a robust agricultural insurance, offer technical assistance and reach out to four million farmers within five years while spearheading the realization of food security and improve farmers' income.

(e) **Refinancing/Restructuring Small and Medium Enterprises (SME) Manufacturing Fund:** The Scheme was introduced in April 2010 with the provision of N200 billion to fast-track the revitalization and development of ailing SMEs in the country through refinancing and restructuring of their existing loans. The facility which is accessible through the Bank of Industry (BOI) is made available to borrowers for a maximum tenor of 15 years and an annual interest rate of 7.0 per cent payable quarterly.

(f) **The Small and Medium Enterprises (SME) Credit Guarantee Scheme (SMECGS):** The Small and Medium Enterprises

(SME) Credit Guarantee Scheme (SMECGS) was introduced in March 2010 to provide 80.0 per cent guarantee for credit granted to manufacturing SMEs, agricultural value chain and educational facilities. The intervention which was also to create more jobs allows all DMBs to participate, provides for an N100 million maximum loan with five years tenor and has a claim settlement fund of N200 billion

(g) **The Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL):** In line with the policy of working with experts (local and international consultants and other relevant stakeholders) committed to fostering an inclusive financial system, the CBN signed an agreement with the Alliance for a Green Revolution in Africa (AGRA) in November 2010 to develop the Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL). The agreement was to develop an innovative mechanism that will unlock access to credit by de-risking the sector, employing appropriate risk sharing mechanisms, providing technical assistance and incentives to banks. It will assist smallholder farmers, agro-processors, and agri-business and input suppliers in the agricultural value chain to improve their access to finance.

(h) **MSME Development Fund (MSMEDF):** Micro, Small, and Medium Enterprises Development

Fund (MSMEDF) on August 15, 2013. This was in recognition of the significant contributions of the Micro, Small, and Medium Enterprises (MSME) sub-sector to the economy. In the first

half of 2016, N16.53 billion was disbursed, making the total sum disbursed from inception to date to N74.19 billion with N55.50 billion (74.8%) to state governments, while the MSMEs collectively accessed N18.69 billion (25.2%). The financial institutions that participated in the programme were fourteen (14) DMBs, thirty-three (33) MFBs, three (3) Non-Governmental Organizations Microfinance Institutions (NGO-MFIs) and fourteen (14) cooperative societies. Also, nine (9) state governments accessed funds under the programme in the review period.

(i) **Anchor Borrowers' Programme (ABP):** The Bank introduced the Anchor Borrowers' Programme as a veritable component of the MSMEDF to boost the local production of key agricultural commodities to reduce food importation and conserve foreign exchange. Under the Scheme, participating farmers are assured of the off-take of their produce at guaranteed minimum prices while input supplies and prices are negotiated directly with manufacturers and major dealers to reduce production cost. The pilot programme commenced in November 2015 with the dry season rice cultivation in Kebbi State with the target to cover 78,000 farmers. Two (2) other states, Zamfara and Benue, joined the programme in the review period. In the first half of 2016, a total sum of N14.46 billion was disbursed to 77,990 smallholder rice farmers in the three (3) States. Analysis of Disbursements by states showed that 66,459 rice farmers in Kebbi were availed N13.7 billion (95.2%), while 2,274 farmers in Benue State benefitted from N0.41 billion (2.8%) and

Zamfara State farmers got N0.28 billion (2.0%). Analysis of disbursement by the participating banks, including the Bank of Agriculture (BoA) indicated that disbursement by BoA constituted 92.0 per cent, Sterling Bank Plc 7.0 per cent, and the balance of 1.0 per cent was disbursed through Excellent Microfinance Bank, Heritage Bank Plc, and Fidelity Bank Plc. The cumulative amount disbursed under the ABP at end-June 2016 was N15.76 billion.

(j) Real Sector Support Facility (RSSF): The RSSF was established to provide long-term, single-digit interest credit facilities to economically important corporate bodies with huge potentials to generate employment and save foreign exchange for the country. The initiative replaced the Refinancing and Rediscounting Facility (RRF) which was discontinued by the Bank. Two (2) projects valued at N4.60 billion had been financed under the initiative since inception.

(k) Textile Sector Intervention Fund (TSIF): The TSIF was introduced by the Bank as a one-off special intervention with a seed fund of N50 billion to resuscitate the country's ailing textiles industry. The Facility was for restructuring existing loans of textile and garment companies. It provides additional credit to promoters of these companies as part of the Bank's contribution to the development of the nation's textile and garment sub-sectors. The Bank of Industry (BOI) is the managing agent. In the first half of 2016, the sum of N7.560 billion was released, through the BOI, to finance ten (10) projects under the Scheme.

5.3 Outcomes of Unconventional monetary policy in Nigeria

It should be expected that the various unconventional monetary policy measures might have exerted some effects on the Nigerian economy. These could be classified into the balance sheet effects, Liquidity effects, and employment/output effects.

5.3.1 Balance Sheet Effects

The eminent effect of the unconventional monetary policy is expansion in the balance sheet of the central bank. Unconventional monetary policy affects central banks' balance sheet in several ways. Available data showed that the balance sheet of the CBN grew over the level at end-December by 91.1 per cent in 2011 and 23.46 per cent by 2012 but declined to 27.16 per cent 2013. The surge in the balance sheet reflected largely, credit to the private sector, which grew by 277.67per cent, 13.05 per cent, 283.66 per cent and 7.43 per cent, respectively in 2009, 2010, 2011 and 2012. It contributed 8.9, 1.8, 45.2 and 2.4 percentage points to the growth of CBN assets at the end of the respective years. Growth in foreign assets was modest, at 7.7 per cent at the end of 2011 and 26.9 per cent in 2012 but declined in the subsequent periods.

Of the total CBN assets, the foreign assets component constituted the highest proportion, ranging between 34.8 and 75. 62 per cent, while claims on government and the private sector, which respectively constituted 1.71 and 6.5 per cent in December 2006, rose to 15.94 and 7.58 per cent in December 2010. Successive real sector intervention by the central bank as well as lending to government raised these ratios to 38.2 and 15.24 per cent by December 2015.

5.3.2 Liquidity Effects

The analysis covers the main financial interventions of the CBN aimed at increasing the quantity of credit that select sectors (priority) of the economy received as a percentage of total credits. These interventions have been delivered at subsidized prices (below the ruling market interest rate). The sectors that have been intervened include, power and aviation, agriculture, manufacturing, and small and medium enterprises.

Although the ultimate objective of these interventions is to increase output in the various sectors and support the growth of the gross domestic product, they have also served to support the liquidity in the economy. Liquidity has implications for the pricing of credits, outcomes in the capital market and above all, the success of monetary policy. The analysis spans July 2010 to July 2015. Data is monthly and sourced from the Bank's database.

Analysis shows that the highest combined liquidity effect of the interventions was in July 2010, when N112 billion was injected. This gave a comparative ratio of 0.1. Overall, the average liquidity arising from all the interventions as a ratio of total industry liquidity is 0.01. Thus, it is concluded that the liquidity flowing from CBN interventions does not affect the equilibrium of liquidity in the industry. This observation could be extended to inform that the cost of liquidity operations is not significantly affected by the interventions.

6.0 Conclusion

The paper has reviewed unconventional monetary policy noting that it is adopted when traditional instruments fail to deliver desired policy objectives, either because the indicative policy rates are

near zero that they cannot be lowered further or that structural factors obstruct the normal channels of transmission. They are not entirely new but gained attention during the 2007/09 global financial and economic crises. One take-home from the review is that central banks could still influence economic activities even when their traditional instruments become ineffective. However, given the possible adverse implication of unconventional monetary policy, central banks tend to reverse the deployed instruments the moment conditions normalize.

The macroeconomic effects of QE in Nigeria are difficult to quantify. A host of other factors might have been important in influencing the Nigerian economy during and after the crisis period, making it very difficult to isolate the specific effects of QE. Elsewhere, a few studies have begun to evaluate the macroeconomic effects of unconventional monetary policies. What makes the evaluation of the Nigerian case even more difficult is the fact that the Nigerian-type UMP is in the form of the real sector interventions rather than QE. However, the evaluation of the wider macroeconomic impact of the UMP on the Nigerian economy is now a compelling research agenda

Further Reading

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