

GLOBAL UNCONVENTIONAL MONETARY POLICY AND NIGERIA'S RESPONSE

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Abstract

This paper examines the concept of Unconventional/ New normal Monetary Policy (UMP), its implementation, impact, exit at the global level and its implications for the Nigerian economy. The Nigerian economy is confronted with various challenges such as low crude oil prices, slowdown in the Chinese economic growth, climate change, inadequate infrastructure, current account deficit and fiscal deficit, rising inflation rate as well as problems in the budget space. The unconventional monetary policy measures include the Quantitative Easing (QE), direct credit easing, and indirect credit easing employed by the advanced economies such as US Federal Reserve, ECB, Japan and China. The effects of the UMP has been transmitted to emerging and other LDCS through the following channels: signalling channel, portfolio Rebalancing channel, liquidity channel and lending and confidence channel. Although these toolkits were employed to provide additional

money accommodation, support lending to the real sector and to enhance functioning of monetary policy transmission but they have negatively affected the emerging and Less Developing Countries (LDCs) like Nigeria. As such there exists the need to consolidate macroeconomic stability in the economy, through effective use of available monetary policy tools and corporation with the fiscal space by fostering sectoral structural transformation of the economy to spur growth.

Introduction

After the 2008-2009 global financial crisis, many Economists believed that the ‘great moderation’ was over. It is however believed that as long as slow and uncertain growth continues, conventional monetary policy in both the U.S.A and Europe will remain inadequate for addressing post-crisis economic conventions, and the use of unorthodox policies such as quantitative easing (QE) will increasingly be needed (Oxsenford 2016). Before the break down of the Bretton Woods system in 1970, the roles of Monetary Policy Committee (MPC) include inflation targeting, central bank independence from political authority, and the separation of monetary policy from regulatory activities such as supervision. Again the central bank had ignored the “spill-over” effects of monetary policy, since the breakdown of the Bretton Woods System in the 1970’s. Policy makers simply tried to accommodate the often conflicting goals of supporting economic growth, limiting inflation and maintaining stable exchange rates.

There was also lack of international coherence in monetary policy making. The U.S and Europe norms included the desirability of a rigorous inflation targeting and central bank independence from political interference. The development in 2008-2009 increased the pressure for fundamental changes in U.S and Europe’s monetary policy. However, orthodoxy monetary policy has been challenged on four grounds: in volatility of central bank independence, inadequate system-wide supervision of the financial sector, the tools of last resort of macro prudential regulation, and the role of the U.S.A dollar.

Conventional Monetary stimulus in the major economies with interest rates as its primary instrument has in effect been exhausted as interest rates have hit 'zero lower bound'. This has forced major economies of the world such as U.S Federal Reserve, the European Central Bank (ECB), Bank of Japan, and Bank of England to adopt unconventional policies such as Quantitative Easing (QE), Targeted Asset Purchase (TAP) and Forward Guidance (FG). More recent unconventional policies include negative interest rates and consideration of "helicopter money" policies such as direct financial transfer to households by central banks. Among others are,

- i. The in volatility of central bank independence is now being questioned in the EU, US and the UK where people like Jeremy Corbyn, leader of the opposition Labour Party, has proposed revoking the independence of the Bank of England.
- ii. The inadequate system wide supervisions of the financial sector are now being regarded as a cause of the financial crisis. The roles of central banks include dynamic capital buffers and liquidity ratio requirement. Such tools are also more intrusive than the pre-existing regulatory power of central bank and therefore likely target for lobbying and other attempts to influence a new regulator.
- iii. The tools of last resort of macro prudential regulation in the event of a systematic bank failure is a capital inclusion by the sovereign-a bail/out.
- iv. The role of the U.S dollar- It has been at the centre of the global monetary system since Bretton Woods, but globalisation and freer capital flows have left emerging market more exposed to shocks from U.S monetary policy e.g. Federal Reserve tapering of QE in 2013 (Eichengreen and Gupta 2014). If this trend continues, it is likely that the Federal Reserve will exert an even stronger influence on the global economy even if the U.S economy becomes less dominant in other spheres.

The above four issues show that whether the "great moderation" is in fact over or not they are likely to prominently influence what is set to be a turbulent period for Monetary policy operations in the years ahead. The critical question to ask is how and why the current money policy system

has emerged as it has. How its development reflected specific aim making in the post Bretton Woods Economist. With this in mind, this paper examines the concept of unconventional/New normal monetary policy and the response of how emerging Economies such as Nigeria responded.

According to the CBN (2016), macro prudential policy refers to a policy that uses prudential tools to limit systems wide financial risks, thereby limiting the occurrence of disruptions that can adversely affect the real economy by reducing the incidence of financial imbalances. Furthermore, the policy is intended to moderate the rate of exposure of financial institutions to spill over risk that could arise through contagion effect, and undermine the credibility of the entire financial system (CBN 2016). On the other hand, macro prudential regulation refers to the adoption of a holistic approach to financial system regulation in order to reduce risk associated with financial instability and safeguard the entire system against contagion effect. It is recognised as a necessary ingredient that fills the gap between macroeconomic policy and the tradition of microeconomics prudential regulation of financial institution. Also, it's stabilization of regulations by government to ensure proper supervision and monitoring of financial institution in order to enforce compliance with their regulations, for efficient risk management practices.

The escalating financial crisis after 2008/2009 pushed the title of this paper to the centre stage. Central Banks the world over, have been taking both Conventional and Unconventional policy measures as well as what is known today as new Normal Monetary Policy. This paper attempts to have a good understanding of the term Unconventional and new normal monetary policy at the global level and how the Nigerian Monetary policy authority has responded to its implementation and unwinding. According to Sharma (2013,) Central Banks in the United States, Japan, and Great Britain and in the Euro zone have deployed new policy tools labelled “unconventional monetary policies” both during and after the global financial crisis of 2008. These policies were designed to prevent a collapse of the financial system by stabilising financial markets via measures such as injection of cash into the economy through direct provision and purchase of private assets. These

will provide monetary assistance through bond purchase to keep interest rates at zero or near zero. These policies have helped to support economic recovery. Nevertheless these unconventional measures also carry potential and unintended risks. Therefore a timely and orderly exit from these monetary conditions is essential. In essence, this paper sheds focuses on the contemporary issues relating to unconventional and new normal monetary policies employed by the more advanced economies such as US, UK as well as its impact on our economy.

Conceptual Issues

Unconventional Monetary Policy at the Zero Bound

Unconventional monetary policies are other forms of monetary policies that are used particularly when interest rates are at or near zero percent and there are concerns about deflation occurring. These include credit easing, quantitative easing, forward guidance and signalling. We discuss each below.

Credit Easing – In this case, a Central Bank purchases private sector asset to improve liquidity and improve access to credit. It involves increasing the money supply by the purchase not of government bonds but of private sector assets, such as corporate bonds and residential mortgage-backed securities. In 2010, the U.S Federal Reserve purchased US\$1.25 trillion of mortgage-backed securities to support the sagging mortgage market. These purchases increased the monetary base in a way similar to a purchase of government securities.

Quantitative Easing – it is a monetary policy whereby a Central Bank creates new electronic money in order to buy government bonds or other financial assets to stimulate the economy (i.e. to increase private sector spending and return inflation to its target). It is usually used when standard monetary policy has become ineffective at combating a falling money supply. A Central Bank implements this policy by buying specified amount of financial assets from commercial banks and other financial institutions. This increases the prices of these financial assets, lowering their yields while simultaneously increasing the money supply. Quantitative easing differs

from the more usual policy of buying or selling short-term government bonds (i.e. expansionary and contractionary monetary policies) to keep interbank interest rates at a specified target value. Because when short-term interest rates reach or approach zero percent expansionary monetary policy can no longer work, therefore, monetary authorities may then use quantitative easing to further stimulate the economy by buying assets of longer maturity than short-term government bonds to lower interest rates further out on the yield curve.

Quantitative easing can help ensure that inflation does not fall below a target. Risks include the policy being more effective than intended in acting against deflation (leading to higher inflation in the longer-term due to increased money supply), or not being effective enough when banks remain reluctant to lend and potential borrowers are unwilling to borrow. According to International Monetary Fund (IMF 2016), quantitative easing undertaken since the global financial crisis of 2007 – 2008 has mitigated some of the economic problems since the crisis.

Forward Guidance – It is a tool used by a Central Bank to exercise its power in monetary policy in order to influence, with their forecasts, market expectations of future levels of interest rates. In other words, communication about the likely future course of monetary policy is known as forward guidance. Individuals and businesses will use this information in making decisions about spending and investments. Thus, forward guidance about future policy can influence financial and economic conditions today.

Signalling – This can be used to lower interest rates in the future. For example, during the credit crisis of 2008, the U.S Federal Reserve indicated that rates would be low for an “extended period”, and the Bank of Canada made a “conditional commitment” to keep rates at the lower bond of 25 basis points (0.25 percent) until the end of the second quarter of 2010.

Neoclassical and Keynesian economists significantly differ on the effect and effectiveness of monetary policy in influencing the real economic variables (aggregate output, income, or employment). Both economic schools accept that monetary policy affects monetary variables (price levels, interest rates). The distinction between the various types of monetary

policies lies primarily with the set of instruments and target variables used by the monetary authorities to achieve their objectives, as shown in Table 1.

Table 1: Instruments and Target Variables of Monetary Policies

Type of Monetary Policy	Target Market Variable	Long-term Objective
Inflation targeting	Interest rate on overnight debt	A given rate change in the Consumer Price Index
Price level targeting	Interest rate on overnight debt	A specific Consumer Price Index number
Monetary aggregate	The growth in money supply	A given rate change in the Consumer Price Index
Fixed exchange rate	The spot price of the currency	The spot price of the currency
Gold standard	The spot price of gold	Low inflation as measure by the gold price
Mixed policy	Usually interest rate	Usually unemployment plus change in the Consumer Price Index

Source: Central Bank of Nigeria, 2016.

According to Smaghi (2009), unconventional measures are not what are generally done, so they are not supposed to become the standard model of monetary policy. When deciding on them, monetary policy makers have to think ahead and ask themselves, 'we can get in, but how do we get out?' They need to consider carefully the timing of their withdrawal of

such monetary measures - for there are risks in doing it too early, and there are risks in leaving too late. It was in response to the 2007/2008 global financial crisis that the USA, ECB, UK and Japan launched programmes in quantitative easing (QE).

Unconventional Monetary Policy Measures

The QE are implemented by the following measures:

- i. Direct Quantitative Easing (US Federal Reserve, European Zone ECB, UK, and Bank of Japan).
- ii. Direct credit easing.
- iii. Indirect (or Endogenous Quantitative/credit easing).

Direct Quantitative Easing

This is where the central bank decides to expand the size of its balance sheet, by choosing which assets to buy. Quantitative easing usually focuses on buying longer-term government bonds from bankers. Sovereign yields serve as a bench mark for pricing riskier privately issued securities. When long-term government bonds are purchased, the yields on privately issued securities are expected to decline in parallel with those on government bonds. If longer term interest rates were to fall, this would stimulate longer term investment and hence aggregate demand, thereby supporting price stability. Banks play critical roles in the success of any quantitative easing policy.

Direct Credit Easing

Is a policy that directly addresses liquidity shortages and spreads in certain (wholesale) market segments through the purchase of commercial papers, cooperate bonds and asset backed securities. The effectiveness of this measure depends on their importance in the financing of households, and firms which varies considerably from country to country. It is more attractive in times of acute bank distress, for obvious reasons.

Indirect Quantitative/Credit Easing

This is an alternative way to increase the size of the balance sheet by lending to banks at longer maturities, against collateral which includes assets whose markets are temporarily impaired. For instance, monetary policy

operations with maturity of six months directly attack the 6 months interbank money market. This is true if the case of the operation which is conducted at a fixed rate on full allotment. The increase in the monetary base is determined endogenously by the banking system, based on the state of stress of the banking system.

When and why the Adoption of Unconventional Monetary Policy?

Unconventional policies were adopted as a last resort in contexts where the potential for traditional policy instruments were largely exhausted in developed economies such as the USA, Euro Zone, UK, and Japan. In developed economies, with deep and diverse financial markets, including for government debts, QE was targeted at further lowering long-term interest rates. It was meant to lower long-term interest rates and thus reducing the cost of capital and to eventually boost domestic demand and investments, employment and inflation.

According to Ajakaye (2016), the *laissez-faire* thinking that has dominated Economic policies in the last 4 decades is now being challenged by the development services in the global economy beginning with 2008/2009 global financial crisis. He is of the view that the era of focus on price stability with a light touch on financial stability is losing attention with demand for broader mandate to include macro stability, financial stability and external stability. There is however a knowledge gap and the veracity of instruments which remains a challenge to the pursuit of a broader mandate. In deciding which of the three unconventional monetary policy measures to incorporate, it is important to consider their costs and benefits along with the conventional policy tools. The unconventional monetary policy is trusting up the need to have a new mandate and new policy instrument/tool kit, but we should however, not throw away our regular instruments. Ajakaiye (2016) suggests the following:

- i. Awareness of negative spill over from the application of unconventional tools in advance countries;
- ii. Huge inflows of resources into our economy, creating an illusion of wealth and misuse of foreign exchange which now creates problems in the foreign exchange market;
- iii. Monetary authorities should aggressively enforce micro and macro prudential policies;

- iv. Sustain ongoing interventions;
- v. A plan is key to addressing issues with intervention.

New normal Monetary Policy

What are the main characteristics of unconventional or new normal monetary measures? It is a term used in business and economics, to refer to financial conditions following the financial crisis of 2007-2008 and the aftermath of the 2008-2012 global recessions. The term has been used to imply that something which was previously abnormal has become common place. According to El-Erain (2015) “our use of the term was an attempt to move the discussion beyond the notion that “the crisis, was a mere flesh wound...instead the crisis cut to the bone.” In the literature, China’s new normal refers to the marked slowdown, with growth rates declining from double digit levels (before the 2007-2008 financial crisis to around 7% in 2014 (a statement by Xi Jinping -General Secretary of the Communist Party of China, indicating that China was entering a ‘new normal ‘. It came to refer to expectation of 7% growth rates in China for the foreseeable future. This is indicative of the Chinese government’s anticipation of moderate, but perhaps more stable economic growth in the medium to long term. There is increasing market anxiety about monetary policy effectiveness because there is increasing market uncertainty and also, the unconventional monetary policy has benefits and costs.

What are the ways Unconventional Monetary Policies are transmitted? Moss (2016) presents a policy package of Unconventional Monetary Policy by the ECB. The importance of Unconventional Monetary Policies for the developed countries includes:

- i. Central banks in systemic advanced economies are committed to keeping inflation stable
- ii. Downward trend in interest rates since the 1980s implies challenges given the central bank’s focus on a policy rate as primary instrument.
- iii. An increased resource to unconventional monetary policy measures is a natural consequence in this context.

Transmission Channels of Unconventional Monetary Policy

There are four Channels of Transmission Mechanism of UMP

- i. Signalling channel
- ii. Portfolio rebalancing channel
- iii. Liquidity channel
- iv. Bank lending and confidence channel (Ncube, 2016).

Firstly, the UMP transmission mechanism works through the signalling channel via a bond purchase program of long-term assets that provides information about the future path long term interest rate and commitment to lower interest rates in the future. For example Federal Reserve purchase program (\$85 billion monthly), ECB (\$80 billion), China, etc. If the FED raises interest rate in future, then it would realise huge losses. This is a commitment mechanism to lower rates. According to Ncube and Hausker (2013), the US lowered interest rates had impacted on employment and growth, positively.

Secondly, the portfolio rebalancing channel is another mechanism through which the UMP works. This transmission mechanism works by purchasing assets held by the private sector and therefore altering relative supply and their pricing (yields). This makes investors to then rebalance their portfolio, by purchasing other assets with similar yields, and therefore pushing up prices and thus lower yields, as in the UK UMP programme in 2000, and post-BREXIT in 2016. This transmission mechanism works through the portfolio rebalancing approach lowers long-term interest rates and on this asset in boosting growth in the UK.

Thirdly, UMP may work through liquidity channel. This is a situation where the central bank increases liquidity in the hands of investors by purchasing long term securities and issuing bank reserves. The impact of this is that it lowers the premium for illiquidity, increases prices and lower yields. Japan is among the countries that apply the liquidity channel. However, according to Ncube (2016), this channel does not work well in boosting economic growth.

Finally, the bank lending and confidence channel mechanism works by boosting bank lending and confidence among stake holders. At the same time it helps in boosting bank liquidity and then financing new loan.

Spill-over from Unconventional/New normal Monetary Policy

One relevant metric for assessing the global effects of monetary policies in systemic Advanced Economies are the Spill over. Given the size of the Euro area and its importance for neighbouring economies trade, stabilising the Euro zone economy entails positive spill over. A key question therefore is whether ECB monetary policy has been effective in achieving its domestic mandate (Moss, 2016). Stabilization of the domestic economy benefits the Euro zone trading partners directly. It should be noted that positive net spill over from a global perspective do not imply there will not be challenging scenarios in some instances. Some economies might be subject to domestic and cross -border financial imbalances which could unwind disorderliness. The aim must be to reap the positive monetary policy spill over while mitigating adverse spill over. There is also the need for clear and transparent communication by systemic advanced economies' central banks, regarding the future path of monetary policy. Adoptions of policies which reduce vulnerabilities in spill over recipient economies .The multilateral elements include IMF surveillance, regional financial arrangements, and capital flow management policies.

A Typology of Unconventional Monetary Policy

This section addresses the issue of when monetary authorities need to unwind the extra monetary stimulus?

- i. Measures aimed at addressing the impairment of the Monetary Policy transmission channels.
- ii. Interest rate policy measures such as: forward guidance on the future policy rate path; and Negative interest rate,
- iii. Balance sheet measures such as: credit easing measures (liquidity provision) and large scale Asset purchase programme.
Can EMEs/LDCS positively influence the Netherlands Spill over?

Effects of UMP on Capital Flow in Nigeria

- i. Foreign Direct Investment (FDI) into Nigeria dropped in 2015, partly due to crude oil prices and currency volatility.
- ii. Portfolio flows into the Nigeria's capital market decreased due to rising interest rates in developed markets (US).
- iii. The unwinding UMP which impacts on bank liquidity negatively, also impacts on trade finance facilities and lines of credit to Nigerian

banks (regulatory spill over of Basle II and III also responsible for this).

Effects of UMP on Nigeria via commodities and the “third country effect”

- i. Ending of UMP has contributed to the fall in the oil prices, and other commodity prices, in addition to the supply shocks from major oil producers like Nigeria.
- ii. Rising long-term rates, signal lower demand and growth in future and thus lowers commodity prices including oil prices.
- iii. Lower oil prices have resulted in lower export earnings from commodity producing countries like Nigeria. This has negatively impacted the current account and foreign reserves.
- iv. The slowdown in China's growth has exacerbated the fall in commodity prices (Third world country effect).
- v. Nigeria's exchange rate has depreciated and volatility has risen in many other African countries.

Effects of UMP on Exchange Rates in Africa...via Gold price.

- i. The unwinding of UMP has the effect of lowering gold price. Gold price had dropped from \$1700 in 2012 to \$110 in 2016.
- ii. Fall in gold price lowers the value of gold reserves, held by Central banks currently and in the future.
- iii. This lowers export earnings for Gold producers, and worsens current account deficit.
- iv. This results in depreciation and increased volatility of exchange rates of African gold producing countries.

Exit Strategy of Unconventional/New Normal Monetary Policy

Countries can exit Unconventional/new normal monetary policy measures when the economy rebounds, and inflationary prospects are back in line with the central bank's price stability objective. Exiting unconditional monetary is also to reduce debt. Sovereign debt (or debt that is issued or guaranteed by a Sovereign or government) in the advanced economies has increased exponentially as an aftermath of the 2008 global financial crisis. The compendium of large fiscal stimulus packages for example (i)

bail outs of the financial sector, (ii) The nationalisation of private sector debt, (iii) reduced tax revenue due to the contraction in economic activities, and (iv) the prolonged recession and anaemic recovery have worsened debt-to-GDP to levels not seen since the Great Depression of the 1930.

The Implications of unwinding UMP

The initial uses of UMP were to support the financial markets as well as support economic activities. As highlighted earlier, this is achieved through quantitative easing, forward guidance and Negative Interest Rate (NIR). The environment for UMP impact includes measures that have not led to recovery or influenced real macroeconomic indicators. The cost of sustaining UMPs is under estimated. The measures are best viewed as short term rather than long-term solutions. The implication of UMP can be seen in the pace of interest rate changes, for example, higher borrowing cost leading to Capital Flow reversal, and fall in asset prices. However, it should be noted that reversal of quantitative easing will lead to some exposure and affect the resilience of the economy. QE announcement effects on spreads in emerging markets, leading to declining macro fundamentals e.g. oil exporters, asset, and GDP growth has declined as reviewed earlier.

Nigeria's Response

The Nigerian economy is currently faced with the following constraints: slow growth, rising inflation, high debt levels, exchange rate depreciation pressure, depleting foreign reserve, effects of the current insecurity situation, as well as China's economic slowdown. Nigeria has to understand how unconventional monetary policy was introduced, and the form the process will take. To assess the impact of UMP on Nigeria will require some level of certainty. For example, quantitative easing has been delayed. Brexit referendum has affected the quantitative easing. ECB and Japan, are considering raising QE in order to promote growth outside the US, prolonged low interest rate in a new normal monetary policy in Europe and Japan. Does Nigeria have the capacity to cope with UMP? It should be noted that if the US raises interest rates it will trigger outflow of funds from emerging and less developed economies to the US. It should also be noted that policy makers in less developed economies should take the

opportunity of continuing with the good work they have been doing. If unconventional Monetary Policies were adopted by countries in developed economies, any QE will be seen as monetary debt, and will as such, affect inclusive growth, will aggravate the QE. Did central banks adopt the UMP because the conventional monetary policy reached its limits, was or no longer effective? It should be noted that domestic shocks are as important as global shocks and the ability to sustain future growth depends on domestic policy response to global shock. The transmission channels give policy makers pointer on how to target policy response.

Key Lessons to be learnt from UMP:

- i. Strong overall macroeconomic policy matters are needed to stabilize the economy.
- ii. Price stability should be the primary objective of monetary policy.
- iii. Market infrastructure and institutional setup must be capable of instilling confidence.
- iv. Effective communication with financial markets and private sector investors is critical.
- v. Policy is best cast in credible medium-term plans aimed at keeping macroeconomic imbalances in check.
- vi. Prioritise sequence, and focus on quality infrastructure projects with high internal rates of social return.

Conclusions

Monetary policy affects the rest of the world economy through the trade channel when home currency depreciates, home import price rise; this leads to expenditure switching (contraction for Row). The Monetary Policy stimulus also raises home demand or foreign goods—"expenditure boosting" (expansionary for Row). Financial spill over channels matter too in the case of internationally used currencies. The sign and magnitude of overall spill over apriority is ambiguous, but expansionary expenditure boosting and financing channels typically dominate contractionary expenditure switching channels. Unconventional Monetary Policy is used to achieve the following: support lending to the real sector of the economy, and to enhance functioning of the Monetary Policy transmission mechanism. The

unconventional monetary policy has spill overs that negatively affect the emerging and LDCs like Nigeria. Therefore, the ability of Nigeria to sustain future growth will depend on the domestic policy response to the global shocks as well as domestic shocks.

Recommendations

Nigeria should consolidate macroeconomic stability by employing appropriate monetary policy tools. It should foster sectorial structural transformation of the economy by laying a solid foundation for solid minerals, manufacturing and agriculture sector. Reflate the economy through expenditures on socio-economic, transportation, energy and manufacturing through diversification of the economy.

Nigeria should finance her development plan effectively through adequate planning and mobilisation of both internal and external resources. This will assist the leadership at the highest level to move us out of the current recession through promoting real sector, growth, employment; reduce poverty and raising the Gross Domestic Product.

The traditional monetary policy toolkit should not be abandoned because they have not been proved to be ineffective. However, monetary and fiscal coordination is highly recommended to stabilise and stimulate the growth of the economy.

The policy makers should take note of global Unconventional Monetary Policy to safe guard its spill over effects by deploying appropriate monetary policy tools to grow the economy and stabilise the economy.

References

- Ajakaiye, O. (29th April, 2016). What's new about new normal monetary policy, A paper presented at Monetary policy Committee (MPC) workshop April 29-30th 2016, Lagos.
- ABenassy_Qudre, (8t April 2016), Fixing a Sovereign currency, Vox CEPR's policy.
- Auer Bachama, A. and Obstfeld, M. (2005), "The case for open market purchase in a liquidity Trap," American Economic Review, Vol. 95, No.1, March 2005.
- Banka, S. (updated2017) Macro prudential policy for the Banking sector strategic Framework, Bank of Slovenia Euro system.

- Baberdeen, J. Kearns and M. Lombardi, (2015), "(Why is investment weak", BIS Quarterly Review, March 2015.
- Bernanke, B. S. (2009), "The crisis and the policy response", Stamp lecture at the London School of Economics, 13 January 2009, London, England.
- Blanchard, O. Portal (2016), "Slow growth is a fact of life in the post crises World" Financial Times.
- Bordo, M. J. Duca and Koch, C (2016), "Economic policy uncertainty and the credit channel", NBER working paper, no 22021.
- Borio, C. L. Gambacort and B. Hofmann, (October 2015), "The influence of monetary policy on bank profitability", BIS Working Papers, no.5.
- Bullard, J. (2009), "Effective monetary policy in a low interest rate environment", "The Henry Thornton lectures, case Business School, London 24 March. 2009.
- Claessen, S, N Coleman and M Donnelly, (April 2016), "Low for slung interest rates and net interest margin of banks in advanced foreign economies," IFDP Note, Federal Reserve Board.
- CBN (2016) Understanding Monetary Policy.
- Creal, D. and C. Wu (2014) "Monetary policy uncertainty and economic fluctuations", NBER Working papers, no2055.
- Eggertsson, G. But and Woodford M. (2004), "Policy options in a liquidity Trap", American Economic Review papers and proceedings 94, May 2004, 76-79.
- Eichengreen, B and Gupta, P. (2014) Tapering Talk: The impact of Expectations of Reduced Federal Reserve Security Purchase and Emerging markets, policy Research Working paper, Washington D.C. World Bank.
- Gener, Leon (2016), "Implications of Unwinding Unconventional Monetary Policy for Monetary policy in African", paper presented at 2016 symposium of the Assembly of Governors on the theme "unwinding Unconventional Monetary Policy: Implications for Monetary policy and financial stability in Africa, in, Abuja.
- Gomstyn, Alice (15th June 2005), "Finance: Americans adapt to the 'New Normal" ABC News."

- Gomstyn, Alice (15th June 2009), Its America's high jobless rate the new normal ", ABC News Online, 10 August 2012.
- Hanke Samsung. (22 May 2016), John Hopkins economist put Nigeria's inflation at 58.6 percent financial Nigeria, pp. 10 to 22.
- Jeanne, O. and Svensson I. E O. (2007), "Credible commitment to Optimal Escape from liquidity Trap: The Role of the Balance sheet of an independent central bank", American Economic Review, Vol. 97, no. 1 March.
- krugman, P. (1998), "H, S Baagckl Japan's slump and Return of the liquidity Trap ", Brooking Papers of Economic Activity, 1998, (2), pp. 137 - 18.
- Luiz Awazu Pereira da Silva (2016), Deputy General Manager of the BIS, at the Eurofi High level Seminar 2016 Amsterdam, 20-22 April 2016.
- Mohammed A. El-Erian (2010), navigating the new normal in Industrial Countries "The 2010 per Jacobsson lecture delivered by the Head of PMCO.
- Mohohlo London. K. (August 18 2016), Unwinding unconventional monetary policies: Implications for Monetary policy and financial stability in Africa.
- Paper presented at 39th Ordinary meeting of the Assembly of Governors Association of African Banks 2016 Symposium at Abuja, Nigeria.
- Moss, F (18th August 2016), "Spill overs from unconventional monetary policies: Some lessons learned "A symposium of African Central Banks, Abuja Nigeria.
- Ncube, Mthuli (18-1 9 August, 2016), "Impact of unwinding UMP on Exchange rates and capital flows in Africa, paper presented at symposium of the Association of Central Banks (AACB), Abuja.
- Saggu, A. and Anukoonwattkam W. (2015), "China's' New Normal' Challenges ahead for Asia-Pacific Trade "United Nations ESCAP, Retrieved 9 July 2015.
- Sharma S. D. (2013), Negative Implications of the Unconventional monetary policies in the Advanced economies: Time for an orderly exit", Meiji Journal of Political Science and Economics vol. 2 no.20.
- Smaghi, Lorenzo Bini (2009), "Conventional and unconventional monetary policy "member of Executive Board of the European Central Bank

- keynote lecture at the International Centre for Monetary and Banking Studies (ICMB), Geneva, 28th April 2009.
- Stella, P. (2005), "Central Bank Financial strength, Transparency and policy credibility, IMF Staff Papers 52 (2).
- Svensson, L. E. O. (2006), "Monetary policy and Japan's liquidity Trap.
- Garter, P. (1993). The collapse of the Bretton Woods fixed Exchange Rate system in Bordo, M.D and Eichengreen, Bordo. (eds) (1993), A Retrospective on the Bretton Woods system; lessons for international monetary Reform, pp.461-94, Chicago: University of Chicago Press, <http://papers.nber.org/books/bord93-1>.
- Good Hart, C. (2010). The changing role of central banks, BIS cooking paper No.326, Based: Bank for international setter Merthyr, <http://Wood.Bis.org/pub/work326.pdf>.
- Hakkio, C (2013). The Great moderation, Federal Reserve History, 22 November 2013, <http://www.federalreserve.org/events/detail/view/65>.