USING MONETARY AND FISCAL POLICY MIX TO RESTORE MACROECONOMIC EQUILIBRIUM: AN EXAMINATION OF CONTEMPORARY REALITIES

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ABSTRACT

Macroeconomic policies are used to drive economies through the path of sustainable growth and development following systemic shock to the circular flow. In Nigeria, concerns have been expressed at the tepid pace of adjustment in response to deployment of traditional monetary and fiscal policy tools. In this paper, the author conceptualizes the typical transmission mechanism of policy instruments, namely interest rate, cash reserve requirement, government expenditure, tax and public sector borrowing requirement with a view to investigate their effectiveness in achieving growth and employment generation goals. The author employed ex-post facto research design to collect annual data of 31 years, and formulated a dynamic system model and correction procedures of unrestricted vector auto-regression (VAR). Among others, the author found that interest rate entered output function positively as lag variable suggesting a non-trivial delayed effect of this monetary policy anchor. But surprisingly, it did not appear to have steady relationship with lending rates. On the fiscal side, tax proxy was found to be a weak policy tool and it showed anomalous positive relation with national output. Recurrent and capital spending showed mixed results with seemingly neutralizing effect. In all, the author found disturbing evidence of monetary/fiscal policy non-convergence

KEY WORDS: Monetary, Fiscal, Policy, Interest Rate, Government Expenditure

1. INTRODUCTION

There cannot be any more relevant piece of applied economic research in Nigeria today than an enquiry into the relevance of different strands of economic policy and their effects on key macroeconomic variables particularly during periods of economic turbulence like the country is navigating in contemporary times. Since the global economy went into a tailspin in 2008, the material conditions of Nigeria and its people would appear not to have seen real progress with various markets for capital, labour and foreign exchange witnessing rounds of debilitating strain. After achieving consistent economic growth in the region of 7% prior to 2010, the rate of expansion initially slowed but finally declined in the second quarter of 2016, and for the first time in the last 25 years, the nation officially entered into recession. Apart from negative growth, other

worrisome developments that accompanied this recession are spiraling unemployment, inflation, foreign exchange scarcity, increased cost of doing business, reduction in effective supply and demand for credit, and low business and consumer confidence. Perhaps the concern is the festering nature of current challenges and apparent difficulties faced by policy makers in re-establishing equilibrium.

Several studies have tried to situate the important factors that cause or predate recession in modern economies, and appropriate policy response necessary to restore growth and equilibrium (Osakwe, Ibenta and Ezeabasili, 2019; Anthonio, Alves and Balhote, 2019; Grieve, 2016; Ejaz, Chaudhry & Faridi, 2014; Davis, 2008 and Ardagna, 2004).

In this paper, the author investigates the effectiveness of a mix of key policy instruments namely interest rate, cash reserve requirement, government expenditure, taxation and public sector borrowing in achieving the over-riding goals of economic growth. To that extent, the author argues that due to certain static interferences in the stylized transmission mechanism, these policy instruments have not been effective in influencing the nominated macroeconomic objectives in ways suggested by theory and evidence elsewhere; and logically follows up with recommendations on appropriate policy mix that will move the economy back to its long run equilibrium. This in line with recommendation by Rachel & Summers (2019) (after reviewing the historical correlation between real interest rate and growth) that greater tolerance of fiscal deficits and unconventional monetary policies to promote private investment is needed if full employment growth is to be maintained and inflation target achieved.

The rest of the paper details as follows: Section 2 contains review of related literature including key theories of macroeconomic thought; and views of experts in the subject area. This paper is evidence-based and as such in section 3, the author lays out largely quantitative methods of investigation followed by section 4 with a brief description of data used, results of analysis conducted and discussion of findings. In section 5, key conclusions are made, and their implications inferred. The author ends the paper by making key recommendations that will, if faithfully implemented, improve the impact and effectiveness of the available policy tools and move the economy quickly back the path of real and sustainable growth and equilibrium.

2. REVIEW OF LITERATURE

2.1 Theoretical Framework

The body of knowledge on macroeconomic thought on the relationship between policy choice and economic progress had historically attracted enormous interest among experts in the field of economics and finance. Like several other fields of social science, every statement concerning how relevant policy variables behave has been controversial with competing views and arguments. It is important to note from inception that various theories had in the past provided frameworks for successful practical policy formulation and implementation in different era among nations. They

have continued to provide alternative measures for policy makers as they pursue stability and growth to this date. Another point to quickly make is that new scenarios and issues continue to emerge in the socio-political and economic space to challenge continuous relevance of old views and possibly warrant revision or refinement. The first relevant School of thought typically considered in most economic policy studies is the Classical Theory inspired by Adam Smith. The Classical Economists believe that the economy is always at/or around its full employment equilibrium and that any shocks that distort the tranquility of the position are speedily, if not instantaneously cleared by the invisible forces of demand and supply (Ejaz et al, 2014; Smith, 1776). Because wages and prices are infinitely flexible, the economy will not deviate from its long run equilibrium, and actual output will not differ from potential output for a long time. At the extreme, monetary and fiscal activism cannot be relied upon to increase or reduce economic output. Any increase in money supply or government spending will simply put more money in the hands of consumers and investors, and monotonously show up as increase in prices. The pillars upon which this view is validated are absence of spare capacity in the economy and fully flexible nominal wages and prices in the labour and goods markets. Indeed several measures implemented by monetary and fiscal authorities are thought to magnify distortions in the various markets and constitute interference in the transmission process of market forces. The question to ask is: does the economy live up to classical ideals of full employment equilibrium without intervention or guidance by visible hands? Although some economists are willing to tolerate speedy clearing of money and foreign exchange markets, at the level of theory, this view has been vigorously challenged on account of its utopian-like pillars of flexible wages and prices. Even the new classical views contained in Lucas & Sargent (eds.)(1981)) recognized the futility in assumption of flexible wages by accepting that existence of pre-agreed wages and fixed contracts in the various markets can, and often make it difficult for the economy to self-adjust to full employment equilibrium following un-expected surprises. Barro (1981) and Wallace (1981) nonetheless introduced rational expectations to sustain the classical conclusions. Begg et al (1991) opines the inevitability of circumstances in which free un-regulated market fails to engender allocation efficiency due to certain distortions caused by imperfect competition, social priorities, externalities and other missing markets.

The Monetarists, associated with Friedman (1968), formulated the quantity theory of money as a further validation of the classical views. However, they were less utopian in the recognition that above distortions may lead to changes in aggregate demand in a manner that is not instantaneous. Hence, MV = PY, where M represents money supply, V represents velocity of money; P symbolizes prices while Y is used to represent quantity of transactions in the economy. To the monetarists, the use of expansionary policy to address economic recession will fuel inflation without increasing economic output as desired. Accordingly they recommended pre-determined but moderate money supply growth and supply-side policies to fight economic downturn.

At the other extreme, we have the Cambridge School with the key adherents closely associated with Keynes (1936). This school does not believe that the economy always operate at or close to the so-called full employment equilibrium. They believe instead that following the "animal spirit

of investors", investment demand fluctuates in tandem with level of optimism or pessimism of investors concerning future prospects of business and the economy. A fall in investment demand will lead to fall in aggregate demand, output and income as firms cut back on planned production and hirings. It should be noted, for emphasis that Keynes' original work was published in the period of great recession characterized by unemployment as high as 20% and persistent low levels of output in most Western Economies. With the assumption of price and wage rigidity, there will be a slump in output and employment to the full extent of the multiplier and the economy may remain for a long time, if not indefinitely, below its potential output level accompanied with high involuntary unemployment. To Keynes, the root cause of economic disequilibrium is deficiency in aggregate demand, and only demand management measures by monetary and fiscal authorities are necessary and sufficient to grow or stabilize the economy around full employment or potential level. Following devastation of the world war II, and up to the 1960's, several economists imbibed this new thinking while several governments adopted fiscal expansion (to great positive effect) in restoring their economies to pre-war equilibrium. Notwithstanding success of that era and several Nobel Prizes garnered by those that espoused keynesianism, many remained unfazed and offered scathing criticisms. Firstly, the belief that the economy has spare capacity together with fixed prices and wages was challenged (Friedman, 1968). It is argued that no matter how long it takes, prices and wages will eventually adjust leading to changes in real money balances, interest rates and income. It would therefore appear that Keynesian treatment in the long term is seriously flawed. The school of thought is also criticized for inadequate treatment of inflation: a logical result of the assumption of inflexible prices. Not surprisingly, the success of post war Keynesian activism was followed by non-trivial inflationary pressures that gave ammunition to monetarists and neo-classical theorists

2.2) Empirical Review

2.2.1) Monetary Versus Fiscal Policy Effectiveness

Literature is replete with views and evidence on effectiveness of monetary and fiscal policies in achieving the macroeconomic objectives. Two areas many seem to have given credit to monetary policy are moderation of price levels and market interest rates. In a paper presented in the joint conference organized by Federal Reserve Bank, Swiss National Bank and Bank of International Setttlement on monetary policy, price stability and equilibrium bond yields : Success and consequences, Clarida (2019) observed that inflation has declined globally and is expected to remain so on the back of inflation-targeting measures by monetary institutions. The author also opined that policy have succeeded in keeping yields at low levels. For Nigeria, several authors have also documented effectiveness of monetary policy. In looking at dynamic relations between monetary policy and growth, Iheanacho (2019) found the cash reserve requirement and broad money supply have inverse long run relationship with gross domestic product but that liquidity ratio and monetary policy rate exert positive long term relations. With a focus on the manufacturing sector, Osakwe, Ibenta and Ezeabasili (2019) found the key monetary policy tools are short term instruments to propel growth and cannot be effectively used in the long run. Onwuteaka, Okoye

and Molokwu (2019) found strong evidence that money supply, interest rate and external debt are important predictors of direction of economic growth. Notwithstanding its acclaimed successes, there is plethora of views and evidence that perhaps monetary policy has outlived its usefulness, and that fiscal policy is required to drive growth particularly when the economy is in recession. This obtains in situations where some of disequilibria factors are fundamental and locates outside the control of Central Bank (Clarida, 2019). This would appear to be where China got to as it begins a new decade in 2020 and "transit to a more modest level of growth". According to Mayger (2020), chinese economists are wary of boosting monetary stimulus and are hinting of greater reliance henceforth on fiscal efforts to achieve stabilization goals. In an assessment of its effectiveness in South Africa, Makhoba, Kaseeram and Greyling (2019) found government revenue and gross fixed capital formation to be positive and significantly related to economic growth. Government expenditure and public debt, on the other hand yielded negative long run relationship. With primary focus on Saudi Arabia, Al-kasasbeh (2018) found that relationship of fiscal policy to economic growth is not fixed and constant in all countries and all situations. In some cases fiscal policy alone cannot provide growth, and in other cases the degree of fiscal impact on long term growth is much more than short term. Al-kasasbeh went ahead to identify sources of income and expenditure as factors that can vary fiscal policy effectiveness. Blanchard (2019) in a similar case found that in situations where safe interest rates are expected to lag behind growth rate for a long time, increase in public debt may be feasible to maintain macroeconomic stability..

2.2.2) Policy Mix: Theory and evidence

The question is; how have these theories stacked against the facts? In the years following devastations of world war II and subsequent golden era of Keynesian activism, Begg et al (1991) reported remarkable reduction of unemployment in most western economies which was however shown as a trade-off with higher inflation in the UK (recall that Philips Curve showed that unemployment rate of 2.5% was consistent with zero percent inflation rate). For the period 1960 – 73, the authors reported real GDP growth rate of 3.2% for UK, unemployment rate of 2.9% and inflation rate of 5.1%. For USA, real growth rate was 4.2%, with higher unemployment rate of 5% and lower inflation rate of 3.2%. Interestingly, for all the Western Countries, growth rate witnessed remarkable decline in the ensuing decade of 1973 – 81 characterized by widespread rejection of Keynesian economics and embrace of monetarism. Inflation surprisingly spiked upward and likewise unemployment, followed by a tepid recovery in the eighties and early nineties. No wonder Rasche & Williams (2005) held that one great legacy of great depression was uncertainty of monetary policy effectiveness in addressing output disequilibrium and even price fluctuation in the short run. It is given that economies undergoing recession should embrace somewhat expansionary policy. What is perhaps less clear is the mix of policies between monetary and fiscal regimes. As reported by Caballero (2013), *"the International Monetary Fund has provided some ideas on the role of fiscal policy in the great depression. ……. firstly the crisis has provided evidence that fiscal policy is an appropriate countercyclical policy tool under some circumstances. Secondly countercyclical fiscal policies could be more effective and the most appropriate policy,*

thirdly, ……. surge in central bank purchases of government debt has helped restore financial market functioning; but the Fund recommended that central bank support should be a compliment to fiscal adjustment"

In a study that included 28 European Union countries on interactions between fiscal and monetary policies, Alfonso, Alves and Balhote (2019) found a form of substitution relationship between policies whereby the central bank assumes an active role in cases of higher levels of debt. What all these mean is that a form of combination between monetary and fiscal policies is required to achieve macroeconomic objectives. This is in accordance with the recommendation in Rachel and Summers (2019) for greater tolerance of budget deficits and un-conventional monetary policies. Interestingly Daly (2015) found that monetary and fiscal policies are not complementary in France. Melitz(1997) had earlier found evidence that monetary and fiscal policies move in opposite direction in a manner of strategic substitutes. In a similar vein, Begg et al (1991) observed that increase in government spending increases equilibrium level of income even when we take account of money market and effect of interest rates on aggregate demand. Tcherveva (2011) reminds us of keynes' original thesis of creating employment by engaging in public work programmes not indirectly through output growth. This would appear to suggest that key focus of Keynesian activism during recession is job creation.

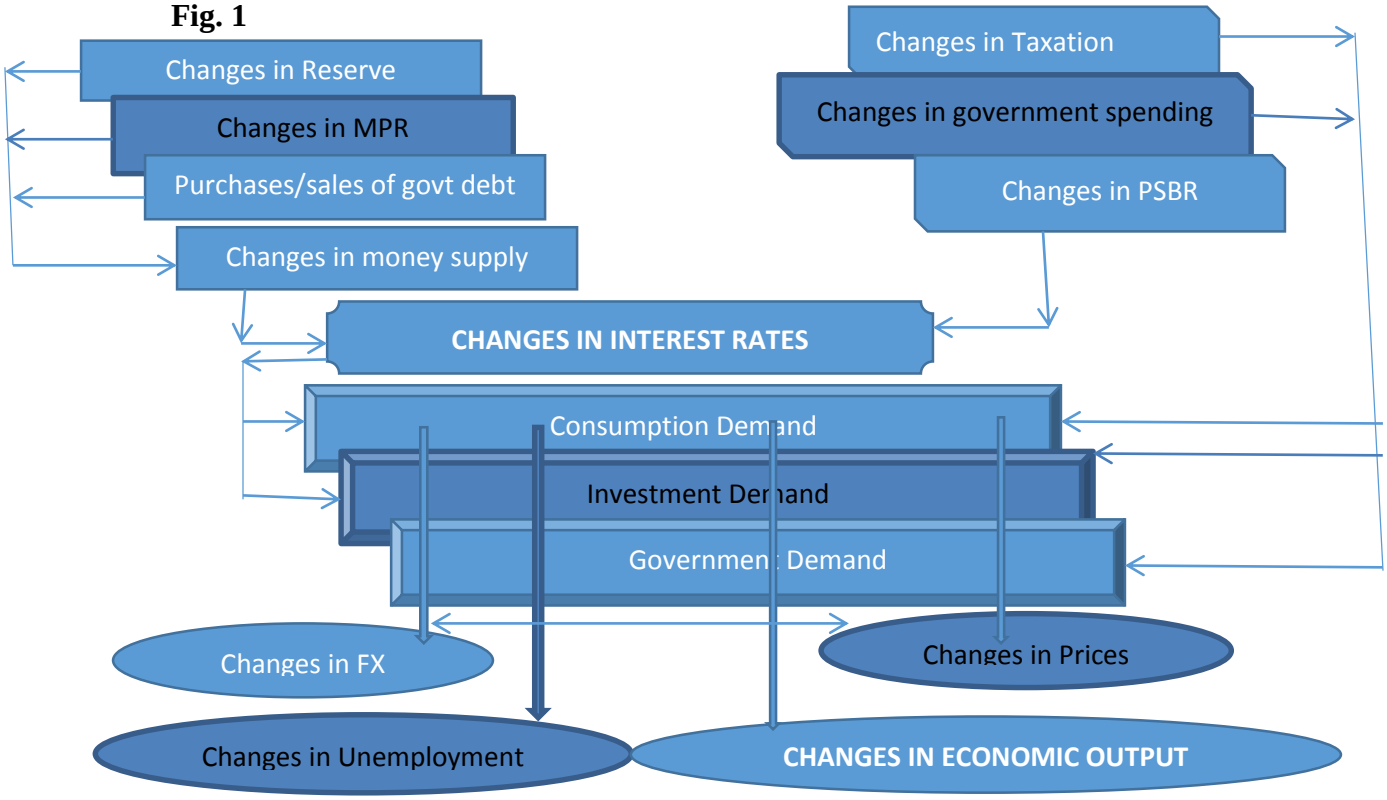
2.2.3) Active and Non-Discretionary Policy

Another important argument in literature concerns the desirability of active and non-discretionary policies. Should policy makers simply fix, target, design and implement pre-set rules devoid of active intervention from time to time? In the hardcore classical model, there is no place for active intervention by policy makers. Within the monetarist framework, intervention is limited to specification and maintenance of possibly moderate pre-announced money supply growth targets supported with supply side measures while market forces are allowed to work through the transmission mechanism to move aggregate demand to desired direction. Keynesianism thrives on activism, and this is not surprising given the market-failure-like assumptions of inflexible prices and wages, and existence of spare capacity which are inconsistent with full employment equilibrium. Hence it has found more application in the use of government spending and taxation to, in a more direct way, influence the aggregate demand, output and income. Although discretionary policies are hailed as being effective in speedily restoring equilibrium, a number of downsides have been identified. They are said to rely on actions, experiences, and nuances of policy makers and their patrons, and as such subject to human error and narrow political interests (Grieve, 2016).

2.3) Conceptual Framework

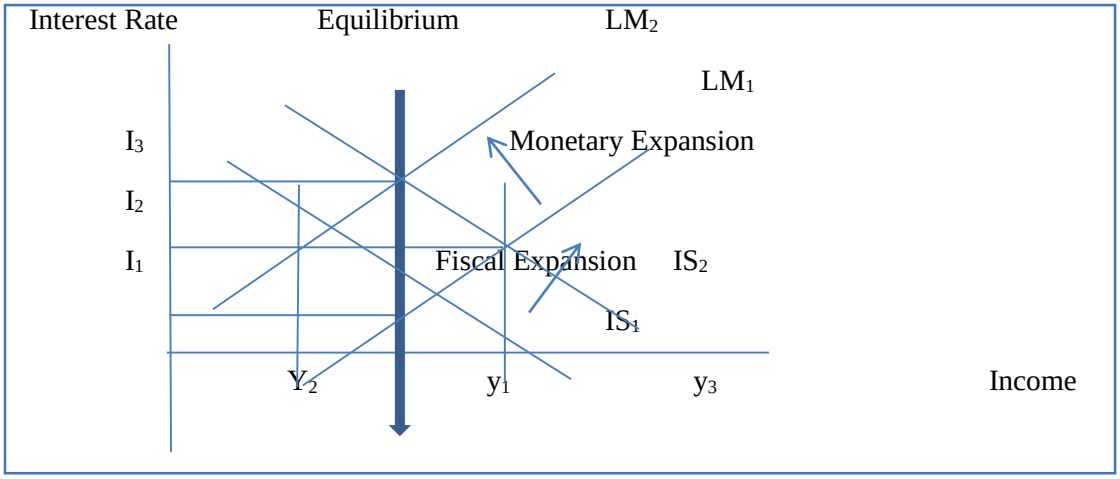
Channels of transmission of monetary and fiscal policies

Fig. 1



The framework adopted for this paper is the conventional demand management transmission mechanism which details the path traced by the policy instruments towards achieving the traditional goals. Changes in reserve requirements and monetary policy rate are expected to change size of the money multiplier while sales and purchases of government securities will alter the monetary base; these work to change real money supply given that wages and prices do not change fast, leading to change in real interest rates. Ultimately aggregate demand is altered leading to changes in exchange rates, prices, employment and national output. On the fiscal side, changes in taxation alter disposable income of households and firms and, with changes in government expenditure, directly impacts aggregate demand and output. However expenditure financed through borrowing is expected to crowd out private sector thereby impacting interest rate negatively. In order to determine policy mix to achieve desired equilibrium level of income and interest rate during recession, we introduce the IS-LM model

FIGURE 2: Policy Mix IS-LM Model



Given a desired level of income Y_1, if the economy goes into recession with income dropping to Y_2, a fiscal expansion will shift IS curve from IS_1 to IS_2. But a tight money regime will be required to raise interest rate to I_3 in order to restore desired output. This explains near obsession of Central Banks with contractionary policies in scenarios of fiscal exuberance.

2.4) Gap in Literature

Clearly economists and authors have a lot to say and write concerning what, when and how the monetary and fiscal policy instruments can be used for optimal results. In a great deal of literature however, these tools are often treated as if they have distinct channels of influence. As could be observed from most of reviewed literature, influences of monetary variables are studied separately from the fiscal variables in a conventional policy framework that assumes absolute instrument and regime autonomy of the respective policy authorities. This equally assumes unique tract of interaction with growth variables. This approach ignores the emerging reality of modern policy environment that calls for more policy convergence. This work aims to fill this gap

3. METHODS

In determining the link between policy and key macroeconomic variables, reliance is placed on ex-post facto research design with quantitative data collected using secondary instruments as Central Bank of Nigeria Statistical Bulletins covering the period 1986 to 2016. This yielded annual data of 31 years on Gross Domestic Product (GDP), Cash Reserve Requirement (CRR), Monetary Policy Rate (MPR), Money Supply (MS), Lending Rate (LR), Tax Revenue (T), Capital Expenditure (CapEx), Recurrent Expenditure (RecEx), Inflation (inf) and Exchange Rate (ExR). The choice of these variables is predicated on the understanding that they have a complex system of interaction often manipulated to achieve the desired objectives. Firstly, Gross Domestic Product (GDP) and Lending rate (LR) are the dependent variables of the system; and were chosen as proxies to income and interest rate used as the two objects of policy mix in IS-LM model. This is based on assumption that the entire economy boils down to interactions in the various markets for

goods and money. The others which constitute the independent variables are the key monetary and fiscal instruments used by the authorities to manipulate these interactions to determine direction of rates and economic output. Moreover as seen in preceding theory and evidence, these variables are claimed to have one form of relationship in one form or the other (Iheanacho, 2019; Osakwe et. al, 2019; Makhoba et. al, 2019; Rachel and Summers, 2019; Al-kasasbeh, 2018 and Caballero, 2013) We accordingly specify model of simultaneous equations as follows:

$$GDP = f(T, CapEX, RecEX, PSBR, CRR, MPR, MS, inf, ExR)(1)$$

$$LR = f(T, CapEX, RecEX, PSBR, CRR, MPR, MS, inf, ExR)(2)$$

As part of the pre-regression computation, we first run the unit root test using the Augmented Dicky Fuller procedure and observed the presence of unit roots. Moreover we observed the joint functional relationship and hence endogeneity of regressors of the model and adopted the correction procedures of Unrestricted Vector Auto-Regression (VAR) model which involves introduction of lags in the separate equations for the endogenous variables. We accordingly re-specify a dynamic model making sure all right hand side variables are pre-determined variables:

$$GDP = a_0 + a_1T + a_2CapEX + a_3RecEX + a_4PSBR + a_5CRR + a_6MPR + a_7MS + a_8inf + a_9ExR + a_{10}LR(-1) + a_{11}LR(-2) + a_{12}GDP(-1) + a_{13}GDP(-2) + u \quad (3)$$

$$LR = a_0 + a_1T + a_2CapEX + a_3RecEX + a_4PSBR + a_5CRR + a_6MPR + a_7MS + a_8inf + a_9ExR + a_{10}LR(-1) + a_{11}LR(-2) + a_{12}GDP(-1) + a_{13}GDP(-2) + u \quad (4)$$

This re-specification is considered appropriate not only to handle the joint interactions between some variables and hence simultaneous equation bias but also take care of delayed effects of certain types of policy instruments. We estimate the model with the aide of E Views 7 software.

4. RESULTS AND DISCUSSION

4.1) Interest Rate Response to Policy

Interest rate plays key role in the transmission channel of policies in modern economies. First we found the effect of interest rate anchor, Monetary Policy Rate (MPR), to be positive as should be expected with a coefficient of 0.79 and statistically significant at 5% level, meaning that we may be able to reject the null hypothesis that this monetary policy instrument has no relationship with rates charged by lenders. It would appear therefore that when the CBN increased this rate, lenders followed the lead accordingly. With a negative coefficient, an increase in Cash reserve holdings of deposit money banks did not appear to have the desired effect of tightening credit conditions as banks surprisingly lowered rates (though marginally). This is however not a statistically significant result showing the doubtful effectiveness of this instrument. Surprisingly, money supply did not appear to play important role in determining the direction of interest rates. First the sign was positive, infinitesimal and the result was statistically insignificant.

Table 1: Unrestricted Vector Autoregression Estimates of Dynamic models

	GDP (Economic Output)			LR (Interest Rate)		
	Coefficient	t-stats	Std error	Coefficient	t-stats	Std error
GDP(-1)	0.662977	4.30184	0.15411	-0.000172	-0.92484	0.00019
GDP(-2)	0.006992	0.05700	0.12267	-0.000034	-0.23047	0,00015
LR(-1)	-139.1624	-0.97605	142.577	-0.088856	-0.51760	0.17167
LR(-2)	-480.5926	-2.34585	204.87	-0.416897	-1.69011	0.24667
C	22,937.89	3.17027	7235.31	18.27208	2.09746	8.71152
CaPex	-18.80380	-4.13481	4.54769	-0.006163	-1.12561	0.00548
ReCex	20.84777	6.88351	3.02865	-0.006861	-1.88139	0.00365
CRR	0.602862	0.42931	1.40426	-0.001100	-0.65048	0.00169
EXR	-55.08232	-3.30610	16.6608	0,017638	0.87925	0,02006
INF	87.24309	1.72807	50.4859	0.133952	2.20366	0.06079
MPR	-529.8240	-2.56441	206.607	0.794260	3.19287	0.24876
MS	-0.005922	-3-90135	0,00152	0.0000013	0.75433	0.0000018
T	4.061847	1.29861	3.12785	0.008567	2.27470	0.00374
PSBR	7.170489	2.30761	3.10732	0.004691	1.25374	0.00374
R^2	0.997952			0.849149		
Adj. R^2	0.995904			0.698299		
F-stat	487.2547			5.629072		
Akaike C	18.47254			5.028378		
Schwarz	19.14446			5.700294		

Source: Author's E-Views Computations

There may be other important factors outside the purview of money supply and monetary authorities that define the behavior of interest rates. This is not surprising in an environment where the other costs of doing business are high. Can fiscal policy provide some explanation? Our regression of public sector borrowing requirement (PSBR) revealed a positive relationship which suggests the potential for crowding out of private sector by government fiscal operations. This is however not statistically significant but supportive of thesis of government distortionary influence on the financial market, and a key reason why interest rates remain high in the market

4.2) Monetary Measures and National Output

Inferring from reviewed theory, there is no direct cause-effect relations between primary instruments of monetary policy and national income. The effects are rather transmitted through money supply and market interest rates. Interest rate enters the output function here as lag variable.

This is because, when rates are reduced, net present value of investment opportunities increase; firms decide to accept such investments, acquire assets, employ labour, and execute the projects that would ultimately yield higher output. There is obviously a time lag in taking these decisions and the effect showing up in output and employment.

Our empirical result showed negative relationship between lagged interest rates and output confirming postulations of theory. Interestingly it lacked statistical significance in one year lag but firmly significant in the two year lag. This suggests a non-trivial delayed effect of monetary policy in Nigeria. This also affirms that high interest rates in Nigeria have not helped the economy attain its full potential. This is particularly worrisome as our investigation could not reject granger causality between the two important macroeconomic variables in a bi-directional manner. Surprisingly, an increase in gross domestic product was associated with a decline in lending rates, a seemingly anomalous result that suggests reduced demand for money balances during the period. Application of monetary policy has emerged with mixed results. While monetary policy rate has been used to desired effect, reserve requirements appeared somehow blunt. Interest rate appeared to have played its role in the transmission process of influencing direction of output but in a very slow process. Money supply appears to be a weak link in this channel as interest rates have not effectively responded to its changes resulting in the weakening of policy.

4.3) Fiscal Policy and Economic Growth

In this study, we found tax revenue (defined as payments made to government by the private sector outside those that are oil related) to be positive. This is an anomalous result that suggests that transfer of resources from private to public sector translated to increase in national output. But what is not surprising is that this result lacked statistical significance. Taxation has been a weak fiscal tool in the hands of successive governments in Nigeria. Easy and ready oil revenue, poor governance and corruption are often adduced as some of the factors that weaken this policy instrument. On government spending which in the absence of effective tax machinery, remained the key driver of government fiscal policy, a disaggregated specification yielded some interesting outcomes, just as data revealed this to be a key component of aggregate demand in the economy. Infact Alesina (2012) opined the superiority of spending over tax-based fiscal adjustment. While recurrent spending had positive relationship with output, capital spending had negative and almost neutralizing effect in terms of size of impact. This is highly remarkable given that recurrent spending which was only lower than capital component some 30 years ago had consistently been above 70% in the later part of the review period. Both impacts are statistically significant on level dimensions reflecting the quick response time of policy. It would appear that relative small size of capital expenditure and other inefficiencies of government could not allow this all important instrument to influence output in the right direction, and especially in the face of a poor network of infrastructure. The import of this less than desirable impact of government spending is further magnified by ambivalent effects of public sector borrowing on interest rate and national income. While its impact on output, on the surface, appeared expansionary with a positive coefficient in the output equation, the impact on the financial market was not exactly salutary. Perhaps the impact

of a weak tax system, an anomalous capital expenditure and intrusive deficit budgetary process meant fiscal regime that is by implication ineffective.

5. CONCLUSION AND RECOMMENDATIONS

5.1. CONCLUSION

The certainty of boom and burst cycles of national economies is perhaps like day and night. The structure of economies and the self-innervating forces at play guaranties that occurrence of recession is like self-fulfilling prophecy. Like the Keynesian belief, an economy can stay in recession for a long time if no, or inappropriate intervention takes place. By the contemporary experience of Nigeria, the crisis would appear to be overwhelming with monetary and fiscal measures seeing mixed results as evidenced:

i. Taxation appears not to have been used as an effective tool to grow the economy
ii. Government spending appears structured to only encourage an aspect of aggregate demand (consumption demand) without encouraging investment and production
iii. Government would appear to have successfully used fiscal deficit to stimulate the economy but perhaps at huge cost to firms in the financial markets
iv. Certain monetary policy variables, like monetary policy and lending rates, appear to be effective in influencing direction of the economy as a whole while others like cash reserve requirements and narrow measure of money supply did not prove to be that effective. This suggests that monetary policy can be a potent weapon for economic adjustment but has contemporaneously seen some weaknesses traced to factors not directly within its purview. It would appear that monetary policy approached limit of its effectiveness in pursuit of growth
v. We found suggestive evidence of policy non-convergence, an indication of less than desired level of coordination between monetary and fiscal policies

5.2) Recommendations

From these conclusions, the following recommendations are made to help in effective formulation and implementation of economic policies.

i. Fiscal policy should be primed to drive the process of recovery. Firstly, government should seek to increase tax revenue responsibly without increasing tax burden on the productive sectors by:
    a. Tax on luxury goods
    b. More reliance on indirect tax
    c. Elimination of multiple taxation and illegal tolls
    d. Introduction of ‘fictitious ‘tax for unexplained income
    e. Reduce tax rate payable by firms
    f. Match taxes with services in ways that are visible to tax-payers
ii. Government expenditure should not be used just to ‘run’ machinery of government during recession, but used to ‘spend’ the economy out of recession:

a. Gradually scale up capital spending ratio to 60% over the next ten years by reforming government bureaucracy. It contributes more to the multiplier.
b. Use government spending consciously to stimulate investment component of aggregate demand

iii. Fiscal deficit has proved to be potent and should continue to be adopted in the recovery process. But it should preferably be funded with low cost foreign borrowing or (wait a minute) ways and means advances. Though said to be inflationary, the later has been held to be more expansionary than bond-based financing and does not crowd out private sector from the financial markets.

iv. Monetary policy should, for now, be used for stabilizing role to support fiscal drive towards growth; monetary policy and market rates should continue to be used in counter-cyclical manner to moderate prices and exchange rates.

v. Supply side measures to reduce ease/cost of doing business and create conditions for investment and production should be adopted. This will help reduce interest rate, increase effective demand and make such variables like cash reserve requirements and money supply more responsible members of the transmission process and hence improve monetary policy effectiveness in both stabilization and growth roles.

vi. Greater coordination is required between monetary and fiscal authorities in the design and implementation of policies

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