

The Effect of Fiscal Policy on Capital Formation

Dr. Basil Uche Onwe

Senior Lecturer in Banking and Finance, Faculty of Management Sciences, Ebonyi State University, Abakaliki – Nigeria

*Corresponding Author: Dr. Basil Uche Onwe; Email: ezerich2014@gmail.com

Abstract: The study seeks to analyze the effect of fiscal policy on capital formation in Nigeria. The major objective of the study is to ascertain the extent fiscal policy measures have improved or otherwise the quantum of capital stock available for investment, consumption, and savings purposes. The problem is that the desired capital stock for investment has fallen short of the actual quantum required for such purposes despite the fiscal policy measures put in place to stimulate the desired quantum. The objectives and hypotheses could be tested and empirically investigated using the multiple regression model and correlation analysis. The t-test statistic were used to test the effect of the explanatory variables on the dependent variable. Data is gotten through both primary and secondary sources. Most secondary data is gotten from the Central Bank of Nigeria Statistical bulletin of various issues. The study recommends that domestic prices, exchange rate, interest rate and other macroeconomic indicators should be fine tuned to desired magnitudes to enhance the efficacy of the fiscal policy tools in boosting capital formation.

Keywords: Fiscal policy, Nigeria, t-test, Central Bank of Nigeria

INTRODUCTION

Fiscal policy connotes the aspect of government policy dealing with the raising of revenue through taxation and other sources and deciding on the level and pattern of expenditure for the purpose of influencing economic activities. Hence, it encapsulates the concept of taxation, other revenues, public borrowing and public expenditure. Various authors [1-5] concur on fiscal policy goals to include - increasing employment opportunities; attaining full employment; stabilization of domestic prices; promoting economic growth and development; achieving equity in income redistribution; achieving stable exchange rate; increasing the rate of investment; and by implication, stimulating the capital stock available for such investment.

Capital formation is the pool of resources, stock and capital set aside for the production of further capital. It forms an integral component of the gross domestic product. It is argued that fiscal policy is geared towards increasing the quantum of available capital stock hence the expectation is that an effective and efficient fiscal policy increases capital formation in the country.

Ideally, investment stock can only be possible when there are available resources for such. Government over the years has implemented policies geared towards addition to the national resources and capital stock. One of such policies is fiscal policy which seeks to influence public revenue and expenditure to achieve desired objectives.

The tool of fiscal policy in fostering capital stock becomes very crucial in view of the distorting economic tendencies such as inflation and deflation. According to Jhingan [6] inflationary trends are brought about when output cannot be increased as a result of full employment of resources in the economy hence an excess demand generated by increased expenditure. Conversely, the reverse is the case of deflation. While reduction in aggregate demand, surplus budget by raising taxes and encouraging saving incentives to reduce consumption expenditure are recommended policy measures to curb inflation, increment in aggregate demand, deficit budget by decreasing taxes and discouraging saving incentives to induce consumption expenditure are recommended policy measures to curb deflation. This then brings to bare the two major fiscal policy measures - contractionary/tight and expansionary fiscal policies. The former is used to fight inflation while the later curbs deflation.

The essence of fiscal policy is to adjust policy tools and leave more disposable income in the hands of the citizens to pool as capital for investment, consumption and savings purposes.

The study seeks to analyze the impact of fiscal policy on capital formation in Nigeria. This diametrical shift in approach makes the study a seminal work in this direction in Nigeria. The paper shifts from fiscal measures and effect on investment (as has been recurrent and replete in literature) to capital formation

as this has become necessary since no investment can take place without available stock of capital.

Statement of The Problem

There is a functional relationship between the fiscal policy targets and capital formation hence an efficacious fiscal policy measure (through the contractionary/tight or expansionary) or approach through the compensatory is expected to exert an increase in the available capital stock available for investment, consumption and savings purposes in the economy. This has not been so.

According to CBN [4], gross capital formation stood at N268,894.40 million, N371,897.50 million, N438,114.9 million, N429,230 million and N456,970 million, in the year 2000, 2001, 2002, 2003 and 2004 respectively, while taxation (non oil revenue) stood at N314.5 billion, N 501.9 billion, N500.8 billion, N585.7 million, in 2000, 2001, 2002, 2003 and 2004 respectively. Thus, the desired capital stock for investment has fallen short of the actual quantum required for such purposes despite the fiscal policy measures put in place to stimulate the desired quantum.

Therefore the desired benefit derivable from the investible projects has fallen short of the actual benefits over the years. This desired benefit gap has been widened due to macroeconomic shocks and instability. The relationship between public revenue and capital stock has been insignificant as real income is eroded by a soaring inflationary rate. Thus, the overall impact of fiscal policy measures on capital stock has remained insignificant.

OBJECTIVES OF THE STUDY

The broad objective of this study is to ascertain the effect of fiscal policy measures on capital formation in the country. The study has the following specific objectives-

- To ascertain the effect of taxation on capital stock.
- To ascertain the impact of public budget on capital formation.
- To establish the relationship between consumption expenditure and capital formation
- To establish the level of relationship between the real capital formation and macro economic variables in Nigeria

Scope Of The Study

The government sector, the world over, is no doubt, a very large institution irrespective of the level of development or practice of governance. The essence of fiscal policy is to enhance the lives of the citizenry by stimulating investment. This study captures the period of 1991 to 2010. Although it captures the Nigerian

economy, the relevance is applicable to other developing economies.

Significance of the study

The study could never have been of immense significance to the national economy at any other time than now. The study is of immense benefits to the economy and its actors, and fundamental for the average Nigerian. The government will be stimulated to manipulate its expenditure and revenue patterns to enhance capital stock for investment purposes. Also government will be stimulated to boosting its fiscal policy efficacy and aspiration towards the gap-filling between the desired capital stock and actual capital for investment. The economy will be invigorated through the enthronement of viable and stable macro economic variables that will enhance the fiscal policy initiatives.

Limitations of the Study

Research in an undeveloped and developing economy and polity is usually hampered by some problems and limitations, Infrastructure! dearth and where available, is grossly insufficient, remains a clog in the wheel of research progress.

Data and information needed at one time or the other may not be readily available or insufficient.

Accessing funds from the ETF to enable carry out higher degree research have remained a mirage and only accomplished by government in the mass media as against actually matching words with actions.

REVIEW OF RELATED LITERATURE

Empirical Review

Scores of theoretical and empirical literature exist on fiscal policy investment, and economic growth and development in Nigeria and other countries-developed and developing.

Aigboka[7] investigated the role of the public sector in economic growth in Nigeria between 1960 and 1993 using regression of production function model, and Granger causality technique for direct assessment of the relationship. He found that over 80% of variation in gross domestic product is explained by growth in gross capital formation, labor force and government spending.

Enweze [8] made another intuitive finding in his study of fourteen selected developing countries which revealed that though the ratio of government expenditure to National Income was rising, it was however, not associated with any functional component of total expenditure.

Iyoha [9] in his finding noted practically all studies have proved government expenditure to exhibit a tendency to rise at a faster rate than the GDP

irrespective of the level of development and capital formation.

Ekpo [10] examines the relationship between public expenditure and economic growth in Nigeria. His regression results confirmed that government expenditure has stimulated private initiatives and developmental process and capital formation. Consumption and avoid undesirable effects on the national income, production and employment.

THEORETICAL FRAMEWORK OF ANALYSIS

Keynes crowding out theory /Compensatory Fiscal policy framework

The study is predicated on the Keynes crowding out theory of fiscal policy, that is, the compensatory fiscal policy framework. It refers to the reduction in private expenditure (or investment) caused by an increase in government expenditure through deficit budget via decrease in tax or increase money supply. An increase in government expenditure raises aggregate demand.

The compensatory fiscal policy framework is aimed at continuously compensating the economy against domestic distortions -inflation and deflation by manipulating public expenditure and taxes. It prescribes the long run measure as opposed to the short run.

During deflation, government should increase expenditure via deficit financing and budgeting and reduce tax. This will compensate the lack of private sector investment due to low capital stock, raise effective demand, employment, output and income. This then will stimulate the quantum of capital formation.

During inflation, government should reduce expenditure by budget surplus, increase tax and hence restore full employment.

There are two approaches of compensatory fiscal policy- built in stabilizers and the discretionary policy. Built in stabilizers involves the automatic adjustment of the expenditure and taxes to reflect the cyclical upswing and downswings in the economy. Automatic stabilizers include companies profit taxes, income tax, excise tax, unemployment reliefs.

During deflation, tax decline, government expenditure on unemployment reliefs increases, budget deficit and then counteract deflation. During inflation when National Income rises, taxes rise, government expenditure declines and government budget surplus and inflation is counteracted.

Discretionary policy requires deliberate change in the budget by changing tax and government expenditure or both. It may take three forms- changing tax and government expenditure constant, changing government expenditure and tax constant, changing tax and government expenditure.

Conceptual framework

Fiscal policy is a powerful instrument of stabilization. Government actions affecting its receipts and expenditure which are ordinarily taken as measured by the government's net receipt, its surplus and deficits[11]. Although the ultimate fiscal policy objective is the long run stabilization of the economy, yet it can be achieved by moderating short run economic fluctuations. In this context, Eckstien [12] defines fiscal policy a changes in taxes and expenditure which aim at short run goals of full employment and price level activity.

Fiscal policy measure may be classified as expansionary or contractionary/tight. The former is used to fight deflation while the latter is employed to tackle inflationary tendencies[13].

According to Enweze [8], approaches of fiscal policy may contra cyclical or compensatory. In the former the government is assigned the role of varying its tax and expenditure policies with the objective of moderating fluctuation in income and employment over business cycle. The government is expected to increase its expenditure and reduce taxes during depression (in the period of decline in the private spending), and raise taxes and cut expenditure during inflation.

The compensatory fiscal policy approach opines that given the future prospects of secular stagnation and or secular inflation, deficit financing and surplus financing become long run imperatives[14]. So if inflation is a long run problem, long run surplus financing will be necessary, if persistent deflationary tendencies develop, long run deficit financing will be required.

According to Jhingan [6], capital refers to real assets such as factories, plant, equipment, inventories of finished goods and semi finished goods. It is any previously produced input that can be used in the production process to produce other goods. The aggregate of capital stock available in the economy forms the capital formation.

According to CBN [16], gross fixed capital formation at current prices stood at ₦268,894.40 million, ₦371,897.50 million, ₦438,114.9 million, ₦429,230 million and ₦456,970 million, in the year 2000, 2001,2002, 2003 and 2004 respectively.

While investment is the commitment of scarce funds into projects in anticipation of future stream of inflows, capital stock is the pool of capital stock available for the investment purposes[17].

The efficacy of the fiscal policy depends on the ability of the economic distortions to adjust to the policy tools hence leaving more disposable income in the hands of the citizens to pool as capital for investment, consumption and savings purposes.

DISCUSSION

Strategies for Accomplishing Stated objectives

Data will be collected using both primary and secondary data. Personal observations depict primary data while data collected for the CBN statistical bulletin of various issues, CBN statement of accounts of various issues depicts the secondary data. The following tools are to be used to test the hypothesis and objectives. They are- the multiple regression analysis, coefficient of estimates, test of significance, correlation coefficient, Durbin Watson statistic.

The t- test statistics will be used to test the effect of the fiscal policy tools on capital formation. If the t-test calculated is greater than the t-test tabulated, we conclude that the explanatory variables has significantly affected the dependent variables, and conversely if t-test calculated is lesser than the t-test tabulated.

Discussion of theoretical framework

The compensatory Fiscal policy framework is aimed at continuously compensating the economy against domestic distortions -inflation and deflation by manipulating public expenditure and taxes.

The theory asserts that capital stock can be boosted when income level in the hands of the individuals are stimulated. However domestic distortions (inflation and deflation) erode such stimulation effort. So fiscal policy should be geared towards fighting such distortions and also compensating the individuals against the vagaries of such tendencies. Hence, the leaving compensate disposable income in the hands of the citizens to stimulate capital stock. During deflation, government should increase expenditure via deficit financing and budgeting and reduce tax. This will compensate the lack of private sector investment due to low capital stock, raise effective demand, employment, output and income. This then will stimulate the quantum of capital formation.

During inflation, government should reduce expenditure by budget surplus, increase tax and hence restore full employment.

Thus the objective of this study which is to ascertain the effect of fiscal policy measures on capital formation in the country could be achieved in view of the theory.

Validity/ Realism of the Theory

The value of a model/theory lies in its predictive power and the model cannot be judged by the realism of its underlying assumptions. This point has been expressed with great clarity and persuasiveness by Milton Friedman in a famous essay. The relevant question to ask about the assumptions of a theory is not whether they are descriptively 'realistic' for they never are, but whether they are sufficiently good approximations for the purpose in hand. These questions can be answered only by seeing whether the theory works, which means whether it yields sufficiently accurate predictions.

Suffice, to state that the compensatory fiscal policy technique is valid and real in a somewhat ideal perfect government sector activity condition. This condition is also prevalent in the Nigeria economy.

Assumptions of the Theory

There is revenue elasticity, hence it assumes that level of tax is flexible. It also assumes an automatic adjustment of the domestic distortions as soon as the stabilizers are applied. It assumes the long run measure as opposed to the short run. It assumes a perfect economy. It involves a deliberate change in the budget by such actions as changing tax rates, or government expenditure or both.

Theory Implication

The theory implies that the government budget should be used as the major instrument for the achievement of macroeconomic objective and that budgetary changes should be made as often as desired and in whatever magnitude desired. Hence taxation is subordinated to the compensatory interest since according to the proponents the purpose of taxation is never to raise money but to leave less in the hands of the taxpayer.

Critique of the Technique

The policy tends to adopt measures over the long run rather than the short run. However since long run forecasts may be inaccurate, policies and actions based on it may be harmful. There is also the problem of unavailable accurate data and where available may be with delay. The uncontrollable portions of the budget (contingency budget) pose a problem in the policy implementation. There is also limitation in the time lag.

The theory will however enable the accomplishment of the objectives of the study. There can be a pool of capital stock when the individuals have adequate disposable income. This income can be consumed, saved or invested. The portion of income not consumed is pooled to form stock of capital for the production of further capital. This is possible when fiscal policy measures are geared towards leaving enough income to the people. Fiscal policy also intends curbing the distortions inherent in the economy that erode such available disposable income.

Discussion of Reviewed Literature

Available literature have centered on the effect of fiscal policy measures on investment. Literature available found out that fiscal policy has the leverage of boosting the investment, consumption and domestic variables in the economy.

Gap in the Literature

There has been little or scanty literature on the fiscal policy measures on the capital formation. Rather discussions have been centered on fiscal policy and investment. This study predicates on capital formation since investment and consumption cannot take place without capital stock. The study attempts to bridge the gap since investment cannot be possible without capital

CONCLUSION

Fiscal policy aims at the promotion and acceleration of the rate of investment in the private and public sectors of the economy. Consumption, production, savings and distribution are stimulated when investment is stimulated through investment. However, this is possible when there is available pool of capital stock. The success of fiscal policy in achieving its objectives of capital formation depends on the amount of public revenue available and the direction of public expenditure. The government efforts of fiscal policy can be geared towards boosting capital for investment purposes.

Recommendation

- The built- in stabilizers should be supplemented with the discretionary fiscal policy to achieve results.
- There is need for a fiscal/ monetary policy mix. This is to tap maximally the results of both policies for better results. Expansionary fiscal policy should be combined with tight monetary policy and vice versa.
- Concerted efforts should be made to fine tune the domestic prices, exchange rates, interest rates etc to desired magnitudes.

- Efforts should be geared towards making policies that will stabilize macroeconomic variables to avoid shock in the economy.

REFERENCES

1. Anyanwu JC; Monetary Economics - Theory, practices and institutions. Onitsha: Hybrid Publication Ltd. 1993.
2. Abeng MO; Determinants of Non -Debt Government Expenditure in Nigeria 1970 2003" Central Bank of Nigeria Economic and Financial Review, 2005; 43(2).
3. Adekanye Femi; The Elements of Banking in Nigeria. Lagos: F&A Publishers Ltd. Aigbokhan B.E , 2006) Government size and economic growth — the Nigerian Experience. The Nigeria Economic Society annual conference. 1986; P505-523
4. Uzoaga; Nigeria Financial System. New York: Macmillan. 1983.
5. Central Bank of Nigeria, CBN Briefs (various Issues).
6. Jhingan ML; Macroeconomic Theory. 11th ed. Delhi: Urinda Publication Ltd. 1997.
7. Aigbokan B; Nigerian Economic Society. Conference. Beyond adjustment: management of the Nigerian economy: selected papers for the 1996 Annual Conference. The Society, Secretariat, Dept. of Economics, University of Ibadan. 1996.
8. Enweze; Structure of Public expenditure in selected developing countries A time series study. The Manchester School or Economic and Social studies. 2006.
9. Iyoha MA; Macroeconomics: Theory and Policy. Benin City: March Publishers, 2002.
10. Ekpo AHL; Public Expenditure and economic growth in Nigeria. Final Report AERC Nairobi Kenya. 2009.
11. Cohen J, Grodzins M; How Much Economic Sharing in American Federalism?. The American Political Science Review, 1963; 5-23.
12. Eckstein O (ed.); Studies in the Economics of Income Maintenance. Washington DC. Comparative Social Policy: Concepts, Theories and Methods, 1963;33(3), 247.
13. Friedman M; A monetary and fiscal framework for economic stability. The American Economic Review, 1948; 245-264.
14. Drèze JH, Malinvaud E; Growth and employment: The scope of a European initiative. European Economic Review, 1994; 38(3):489-504.
15. Central Bank of Nigeria. Annual Report and statement of Accounts. Various Issues,
16. Eichengreen BJ; Capital flows and crises. MIT press. 2004.