Financing Government Programmmes in Economic Downturn: Theoretical Issues and Perspectives

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I.   Introduction

A primary goal of fiscal policy, defined briefly as government spending, transfers and tax decisions, is to equilibrate the public sector's financing requirement with the private sector's demand for investment. It is the centerpiece of public and economic policy with fiscal outcomes having far-reaching implications for other policies. Too often, fiscal policies fall short of their desired objectives reflecting, among other things, inappropriate expenditure programming and financing, with consequential problems of debt accumulation, debt overhang, and retarded growth. There is thus, a mismatch between theoretical expectations and practical performance in fiscal management.

Fiscal imbalance has been the experience of most developing countries since the 1970 and 1980 decades. Public spending overshot domestic revenues, resulting in fiscal crises and calls by the international community for adoption of stabilisation and adjustment programmes. While stabilisation function is concerned with the attainment of full employment of labour and capital at stable prices, balance of payments equilibrium and satisfactory rate of growth in per capita income and adjustment programmes seek to reconcile aggregate demand with aggregate supply of resources.

In an inflationary recession which currently grips the Nigerian economy, inflation is definitely not caused by excessive oggregate demand. Indeed, aggregate demand is projected to be inadequate in the face of rising unemployment rate. Public expenditures have to be properly managed as doing otherwise could create distortions which retard, rather than promote economic growth and development. Moreover, the mode of financing the expenditures need to be properly articulated as particular modes generate costs and risks which could make them sub-optimal, retarding economic growth. Thus, selectivity of choice of modes of financing government programmes is of the essence. However, it is important to assert that

economic downturn and/or recession are unavoidable in a capitalist market economy. Recessions are inherent no matter how the economy is managed. If any economy would have averted recessions it would be the USA economy. The USA economy remains the best managed market capitalist economy in the world yet, she experiences periodic booms and busts. However, no two recessions are alike and managing an economy remains a daunting task given the global complexities.

The purpose of this paper is to articulate the theoretical issues and perspectives which underscore the need for caution in financing government programmes whether in the recurrent outlay or capital programmes as individual financing modes have built in costs and risks that could inhibit the realisation of government objectives. It is also to present a vector of "optimum" choices of financing functions for possible end-uses/programmes, intuitively and qualitatively, without the implementation of an econometric model.

Consequently, the paper is divided into four parts. Besides this Introduction, the paper in Part II highlights some theoretical issues. Part III focuses on sources of financing and perspectives for choice of financing modes for particular government projects. Part IV highlights the dangers in the adoption of "wrong" financing modes, inadequate executive capacity and Part V concludes the paper. It is expected that discussion in this paper would shed more light on the subject matter and provide policy makers a menu of options required for financing government programmes in a recession.

II.   Theoretical Issues
It may be interesting to begin the analysis of the theoretical issues by articulating, albeit algebraically, the sources of financing fiscal deficit, defined as the excess of total recurrent and capital expenditures over total revenue. This will be followed, by analysis of the perspectives government needs to take in mobilising funds for its programmes. Fiscal deficits may be financed internally and externally.

Internal sources of financing the fiscal deficit include:
- Borrowing from the central bank through the issue of debt instruments.
- Altering the supply of money in the economy through engaging in open market operations (OMO) involving buying and selling of treasury securities. This is often targeted at implementing monetary policy, and
- Offering short- to long-term debt instruments (bonds). This also helps deepen the financial sector. There are many financial institutions, such as savings or mortgage banks, insurance companies, pension funds

and specialised lending agencies with vast amounts of funds that can be placed temporarily or indefinitely in government securities. In general, deficits must be financed either by borrowing or by a drawdown of cash balances.

Externally, many countries have obtained credits on concessional terms from government and multilateral development institutions for many years, and have set up units in their central banks and ministries of finance or semi-autonomous offices to manage such debts. Countries have also contracted export credits (with little concessionalities) and developed policies and strategies to negotiate and administer these debts. In recent years, many countries have borrowed extensively on commercial terms (with zero concessionality) from international banks and capital markets (see Appendix). Algebraically, a budget deficit or surplus involves stock/flow changes in public debt and stock of high powered money. That is,

$$CD_t = \Delta D_t + \Delta M_t \tag{1}$$
$$\Delta D_t = D_t - D_{t-1} \tag{2}$$

Where:

D_t = stock of public debt at the end of period t

D_{t-1} = stock of public debt at the end of period t-1

CD_t = conventional/overall budget deficit

ΔM_t = variation in the stock of high-powered money during time t

Since the stock of public debt at the end of period t can be expressed as:

$$D_t = D_{t-1} + \Delta D_t \tag{3}$$

It follows that:

$$D_t = D_{t-1} + CD_t - \Delta M_t \tag{4}$$

Decomposing the overall budget deficit into primary surplus and interest payment expenditure.

$$D_t = D_{t-1} - SP_t + i_t D_{t-1} - \Delta M_t \tag{5}$$

It follows that:

$$D_t = (1 + i_t)D_{t-1} - SP_t - \Delta M_t \tag{6}$$

Where

i_t = (average) nominal interest rate

SP_t = primary balance (surplus excl. interest payments)

Or $\qquad D_t = (1 + i_t) D_{t-1} - B_t - \Delta M$ $\qquad\qquad$ (7)

Where

$\qquad$ B $\qquad$ = primary balance;

$\qquad$ B>0 $\qquad$ = primary surplus;

$\qquad$ B<0 $\qquad$ = primary deficit

$\qquad$ M $\qquad$ = monetary base or reserve money or high-powered money

$\qquad$ Δ $\qquad$ = change operator

Re-arranging equation (7) gives

$\qquad D_t = D_{t-1} - (B_t - i_t D_{t-1}) - BM_t$ $\qquad\qquad$ (8)

$\qquad\qquad\qquad$ Overall balance $\quad$ Seignorage

Equation (7) always holds ex-post. It states that the government meets its debt obligations, and that any gap, Bt < 0, must either be financed by new debt or monetised, or a mix of the two. In contrast, Bt > 0, can be used to reduce the stock of existing debt.

Normalise equation (7) by dividing it by nominal GDP, $P_t Y_t$

$$\frac{D_t}{P_t Y_t} = \frac{(1 + t)^D {}_{t-1}}{P_t \quad Y_t} - \frac{B_t}{P_t \quad Y_t} - \frac{M\Delta}{P_t \quad Y_t} \qquad (9)$$

$$= \frac{(1 + i_t)}{\underset{(10)}{(1 + g_i)(1 + \eta_t)}} \left(\frac{D_{t-1}}{P_{t-1} \quad Y_{t-1}} \right) - \frac{B_t}{P_t \quad Y_t} - \frac{\Delta M_t}{P_t \quad Y_t}$$

Where

$\qquad$ g_t $\qquad$ = real growth area

$\qquad$ η_t $\qquad$ = inflation rate (measured as the rate of change of GDP deflator, p. Usinglower case symbols to denote ratios to GDP and ΔM_t for seignorage, to rewrite (Eq. 10) and obtain the **Law of motion** of the government debt to GDP ratio, we have:

$$d_t = \frac{(1 + i_t) d_{t-1} - (b_t + \Delta m_t)}{(1 + g_i)(1 + \eta_t)} \qquad (11)$$

$$= \left(\frac{1 + r_t}{1 + g_r} \right) d_{t-1} - (b_t + \Delta M_t) \qquad (12)$$

Where:

$$d_t = a\, d_{t-1} - (b_t + \Delta M_t)y \qquad\qquad (13)$$
r_t = real interest rate
a_t = is a discount factor defined as at = $(1+r_t)/(1 + g_t)$

Equation (13) is the fundamental fiscal sustainability identity based on the static budget constraint condition. From the above relationships, it is clear that a change in government expenditure must be financed by a change in government debt, change in primary surplus or the monetary base. Budget deficit, however, cannot be financed by tax changes; hence recourse must be made to money creation and debt creation. Money is created when the central bank purchases either existing privately owned or newly issued public debt.

When fiscal deficit is financed by money creation, the money supply expands either directly if the borrowing is from the central bank or indirectly, if it is through the deposit money banks. This process is easily dramatised in terms of the Polak Model:

$$\Delta M = \Delta NFA + \Delta Cg + \Delta Cp + \Delta OA(net) - \Delta QM \qquad (14)$$

Where

ΔM	=	Change in money supply
ΔNFA	=	Change in net foreign assets
ΔCg	=	Change in credit to government
ΔCp	=	Change in credit to the private sector
$\Delta OA(net)$	=	Change in other assets less other liabilities of the banking system
ΔQM	=	Change in quasi money (time and savings deposits)
Δ	=	Change operator

Pundits reckon that on the average, about half of budget deficits in developing countries are financed in this way (Little et al., 1993). There are a variety of theories and/or perspectives relating to what may be deemed as the "optimal" mode of financing government programmes. Put differently, are there theories on how public funds can and should best be raised to promote economic growth, especially in a recession?

Choice Between Domestic and External Borrowing
On the domestic front, government may issue bonds for the purpose of financing general or specific budget expenditures. This is significantly more cost-effective compared with bank loans as it involves a one-off issuance cost

without any ongoing management fee. The use of bond augurs well for better budgetary control, enabling government flexibility to spread its repayment obligations over a longer (medium to long-term) period at relatively lower costs than bank finance. Even so, the full advantage of this financing mode cannot be taken if the bond market is not developed. In this regard, there are two major pre-requisites namely, the existence of macro-economic stability and a liberalised and stable financial system.

External financing, on the other hand, has been the major source of financing especially, for developing countries as domestic debt markets started featuring significantly only within the last decade. External financing has come in the form of aid (defined as concessional loans plus grants). There has been project and programme aid which includes general budget support, which leaves the recipient government completely free over its use and also, sectoral aid where the donor specifies the sector (such as education or transport), but leaves the recipient to decide on the use of the aid within that category. There is also bilateral and multilateral aid. While the bilateral relates to aid from one country's government to another's, multilateral aid is largely financed by Development Assistance Committee (DAC) members. However, the downside is that aid can be source-tied and source un-tied. Again, the commercial objectives of the donors are not always explicit and they seem to play a larger part in the motivation of some countries' aid than in that of others (Ekpo and Afangideh, 2012).

However, the relatively minimal interest rate cost has been a major attraction. Aid has a grant element of 86.0 per cent as the norm but any loan with a grant element of 25.0 per cent and above is deemed concessional. The current grant element adopted by most developing economies, including Nigeria and Ghana is 35.0 per cent.

Concessionality Issue

A concessional loan is one with a grant element[1] of at least 25.0 per cent. However, it is argued that government need not shy away completely from a non-concessional loan provided that the end-use of the loan is deemed to be very profitable such as investment in the oil/energy sector. Such investments have the potentiality of high return. Thus, borrowing from the hard windows to finance such investment is advisable.

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[1] Grant Element (GE) measures the Concessionality of an official loan:

GE = face value of loan (stock) – sum of present discounted value of loan service (flow)divided by the face   value of loan X 100 (%)

= ((face value - $\sum$PV (loan service)/face value of loan) X 100

Inflation – inducing Factor

Some financing modes are more inflationary than others. For example, borrowing through bond issuance is less inflationary than borrowing from the deposit money banks, or even central bank. Borrowing from the deposit money banks is less inflationary than borrowing from the central bank because central bank financing in high powered money, a direct injection of funds in the economy.

Cost and Risk Considerations

Some financing modes are riskier and costlier than others. For example, financing projects through foreign direct investment (FDI) is good but fraught with capital flow reversal risk. Dividends payment on such FDI projects may be cumulatively significant enough to put pressure on the exchange rate, depleting the external reserves. Real exchange rate appreciation is a major risk associated with huge capital inflow through FDI or international remittances, especially where the central bank does not have instrument autonomy to sterilise the inflow[2]. Government loan portfolio should be composed of loans with minimum cost-risk combination.

Counterpart Funding

Too often, donors require recipient governments to provide a proportion of loan commitment as condition precedent to draw down on such loans. The risk attached to this financing mode is that recipient government might not have provided for it in its budget during budget preparation. Such fund could be highly concessional but remain unavailable due to the non-provision of counterpart funds.

Timing of Issuance of International or Offshore Bonds

For this mode of financing to be significantly realisable, some pre-conditions need to be fulfilled. Government must be certain of international market conditions for the effort to go beyond mere bench-marking anchor for other domestic securities. International bonds issued when the international community is facing crisis from macro-economic shocks, domestic or external, may not yield desirable outcomes.

Choice from among Generic Loans Offers

For official loans, the grant element is a decisive factor. But in the case of private or commercial loans, a lot of considerations need to be made in deciding which loan to take. Critical factors have included real interest rate,

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[2] To sterilise here is meant taking actions to prevent the capital inflow from increasing money supply.

the maturity of the loan, disbursement pattern, issues of raw material ties, and other qualitative factors. For commercial loans with complex terms, there is need to compute what is popularly called the "all in cost" and relate it to the London Interbank Offered Rate (LIBOR), choosing the loan with the highest basis point above the LIBOR (Omoruyi, 2016).

Government Programmes in Economic Downturn
In extant literature, there is a perspective that financing concrete development projects exerts a greater positive impact on economic growth than the financing of consumption goods involving capital spending on the infrastructure needs of workers (capital projects in consumption programmes). Government may, therefore, need to re-examine its capital expenditure programmes with a view to giving adequate priority to concrete development projects in recession. This will surely boost the recovery potentials of the doses of funds for financing.

If economic downturn is strictly defined as when an economy is in a declining phase then, expenditure on capital projects would impact on economic growth resulting in recovery, all things being equal. However, if the economy is in recession, then spending on both recurrent and capital becomes useful. For example, the present recession in Nigeria is due both to inadequate demand and supply (structural) challenges. Hence, putting money in the hands of households and their families would boost aggregate demand. In addition, spending on capital projects would enhance private investment.

Financing government programmes through debt would theoretically crowd out private investment. Depending on the financing mix, the crowding out could be partial or complete. Nonetheless, the outcome of the crowding-out hypothesis remains an empirical issue particularly, if government programmes are decomposed into sectors.

III.   Financing by End-Use – A Rationalisation
III.1   Methodology
The above sources of financing indicated early in the preceding section involve costs and risks, making the choice of the "optimum" sources of financing for specific end-use problematic. This section is targeted at considerations governing the choice of optimum financing sources for particular end–uses. Although analysis such as this would require the construction of a quantitative probit model, the paper elects to be qualitative at this point, relying largely on pragmatism and assumed notions of costs and risks associated with financing end-use vis-à-vis a vector of financing modes/options.

There are challenges/constraints involved in the choice of one financing option rather than another in the lead up to mobilisation of a pool of financing sources, at least, theoretically deemed optimal or feasible vis-à-vis the end-use. Discussions would revolve round eight end-use financing choice functions formulated from the perspectives of developing countries such as Nigeria and under some simplifying assumptions, which include:

    a. no time constraint in the mobilisation of the optimal sources;
    b. no undue political interference; and
    c. existence of resource gaps: investment gap (1-S) and government deficit gop (G − T) to be financed by the current account gap, M-X.

III.2   Sources of Financing
Debt and non-debt sources constitute the source of financing in resource-deficit low income countries.

Debt Sources	Non-debt Sources

• Concessional loans and grants
 	
   o Multilateral sources/creditors
   o Bilateral donors
 	
• Non-concessional sources
 	
   o Export credits
      • Suppliers' credit
      • Buyers credit
      • Official export credit
   o Multilateral bank loans and bonds (domestic and external)
   o Bank overdraft facilities
   o International Capital Markets (market finance)
	• Foreign direct investment (FDI)
	• Equity
	• Privatisation receipts
	• Public-Private-Partnership (PPP)
	• Monetary base:
	
	   o currency outside banks (COB) + bank reserves
	
	   o $\Delta Cg + \Delta Cp + \Delta OA$ (net) + ΔNFA or NDA + NFA
	
	   Where:
	
	   NFA = Net foreign assets
	
	   NDA = Net domestic assets
	
	   Other variables are as defined previously.

III.3   Possible End-use and Financing Options
In articulating the optimum combination of financing issues for end-use, the paper first outlines the end-uses vis-à-vis their possible financing options, in the form of end-use financing choice functions:

Optimum Choice of Financing (OCF)

$$OCF = f(\text{end-use, constraint, country circumstances}) \tag{15}$$

$$\text{End-use} = f(\text{constraints, country circumstances}) \tag{16}$$

Possible End-uses

Economic project

$$\text{Financing} = f(\text{FDI, loans, bonds, PPP, privatisation receipts}) \tag{17}$$

$$\text{Infrastructure/social safety nets} = f(\text{PPP, concessional loans, bonds, FDI, Privatisation receipts, grants}) \tag{18}$$

$$\text{Bridging finance} = f(\text{overdrafts/loans/short-term}) \tag{19}$$

$$\text{BoP support} = f(\text{IMF facilities, SDR}) \tag{20}$$

Equations (17) – (20) relate end-uses to possible financing modes. Which is the possible combination of financing modes for an end-use having regord to costs, risks, legal and exigency of end-use? As indicated in equation (15), the optimum financing source for an end-use is governed largely by constraint of financing mode and country circumstances. The underlay of these determinants of choice of financing for an end-use is broken down into costs, risks, legal and exigency of end-use.

In reviewing particular end-uses vis-à-vis its possible financing sources, the paper argues as follows:

Financing of Economic Projects

Equation (17) relates an end-use economic project to possible sources of its financing, namely FDI, loans, bonds, PPP, privatisation receipts, etc. These financing sources have their characteristics. FDI is non-debt creating but it requires the need to repatriate dividends in the future. In the process of repatriation, pressure could be placed on available resources of the country as well as on the exchange rate. These are costs to the economy although, inflow of FDI could momentarily appreciate the exchange rate, and could create opportunities for financing investment project.

However, loans, even if non-concessional and costly, could be an optimal choice for financing economic projects of strong viability where concessional loans with string attached are hardly suitable. Bonds, especially those issued for the international capital market, could adequately serve to finance economic projects and even do so better than non-concessional loans which may have relatively shorter maturity. PPP is good but its availability hinges on private sector perception of the credibility of government including the latter's governance rating. Even so, PPP approach could engender the

creation of contingent liabilities with great potential to balloon the debt stock. This is a hidden cost which must be recognised in this financing mode. It may be argued that for economic projects, the optimum sources of financing include, bonds, loans, PPP, FDI and privatisation receipt, in that order.

Infrastructure/Social Safety nets
Equation (18) relates infrastructure/social safety nets to the following financing modes: PPP, concessional loans, bonds, FDI, privatisation receipts and grants. Considering that concessional loans are characterised by high grant element and long maturity, it is the financing mode to occupy second best position after grants for infrastructure projects. Although PPP is a good source for financing infrastructure, the hidden cost manifesting in emergence of contingent liabilities, places this financing mode in the third position after grants and concessional loans, os optimum sources of financing infrastructure/social safety nets. For PPP, government must have the capacity to negotiate and make it a win-win situation.

Bridging Finance
This is a form of short-term loan from banks available to government to "bridge" the period until government obtains expected revenue inflow or a medium or long-term loan to replace it. For example, an overdraft is a good source. For individuals, bridging loan features also in the housing market to enable them to finance the purchase of new houses while arranging long-term mortgage finance.

BOP Support
The IMF provides support through its concessional window in the form of the Poverty Reduction and Growth Facility (PRGF) and also, through its non-concessional facilities such as the Stand-By Arrangements (SBA), Extended Fund Facility (EPF), Supplemental Reserve Facility (SRF), etc.

III.4   Constraints to Choice of Financing Options
In the lead up to an optimum envelope of financing options for specific end-uses, the debt manager is faced with a variety of constraints. Some of the constraints are general in nature regardless of the nature of end-use. These include the legal framework, foreign policy/international economic-relations, level of government and global economic conditions.

Legal Framework
Most developing countries have in place the basic element of a legal framework for public debt management. However, changes in the legal framework are often crucial to enabling countries to manage their debt liabilities, especially market borrowing, actively and flexibly. The changes

could include the extent to which the roles and responsibilities of officials are specified in legislation which may also constrain their activities in those roles. Primary legislation for debt management that includes debt ratios as a fiscal stability tool can be problematic. If they are too low, they may constrain responses at the time of financial stress, given the time lags involved in passing new legislation. If too high, debt ratios may not be meaningful. Thus, it is imperative to have a clear awareness of the legal framework and issues prior to resource mobilisation.

In the particular case of sub-national borrowing, for instance, concerns may be reflected in the debt legislation:

(i)   that the aggregate of sub-national borrowing does not undermine the government macroeconomic policy stance.

(ii)   that borrowing is properly appraised; and does not constrain central government's own borrowing. (Ekpo, 2012)

Foreign Policy/International Economic Relations

Foreign policy could also pose challenges to effective funds mobilisation. In some cases, policy may preclude borrowing from specific country jurisdictions for strategic reasons regardless of the merits of some financing source. However, this type of constraint is few and far between.

Level of Government

Central government would impose borrowing restrictions on the sub-national jurisdictions in order to maintain macroeconomic stability.

Global Economic Conditions

As exemplified by the global economic crisis of 2008/9, restrictions to borrowing often affects recovery effort of governments in deep financing needs.

Country Circumstances

Individual developing country circumstances vary and could pose financing constraints. Such constraints may include: the current stage of development, especially with respect to financial markets and economic policies, the level and composition of the country's debt portfolio which may constrain further borrowing however attractive the loan terms, and the exchange rate regime maintained. Other constraints are the degree of capital account liberalisation, which could inhibit capital inflow, and the country's credit rating which may inhibit its effective negotiation of loans, political instability, availability of counterpart funding as condition precedent to loan disbursement and above all perceptions about the governance processes.

IV.   Effects of "Wrong" Financing Modes

The effects of application of "wrong" financing modes for government projects are legion. The most notable include: cost overruns; debt servicing difficulties; project failure; debt overhang; and economic decline. The theoretical prescriptions of debt overhang which stand in bold relief among the effects are listed below:

- **Debt overhang induces a decline in investment:** Studies have shown that the poor investment and growth performance of highly indebted countries in the recent years is frequently attributed to the burden of their foreign debt – a high ratio of external debt to GDP – a phenomenon known as debt overhang. According to this hypothesis, the accumulated debts act as a tax on future output, discouraging productive investment by the private sector. This is because an increase in the production or export of the indebted country generates revenues that must be used to repay current debt obligation. In other words, creditors receive a significant portion of future returns on investment (Borensztein and Kumar, 1991; Omoruyi, 1995).

- **Unduly large debt size creates problems for effective debt management:** For effective debt management, the debt/GDP ratio is often at a low level, not exceeding the critical levels set by the World Bank. Recently, the World Bank has put in place different debt sustainability thresholds reflecting the quality of countries' policies, debtor countries' policies and institutions. This is because a high debt/GDP ratio suggests that the debtor country is at a great risk. Thus, for large values of the debt/GDP ratio, increased reliance on foreign borrowings may lower the growth rate of GDP even if the marginal product of capital exceeds the world interest rate. Moreover, an excessive rise in debt/GDP ratio may increase the perceived probability of future debt-servicing difficulties, thus raising expectations about increased taxation, inflation, currency depreciation or capital flight. However, it should be noted that revenues pay for debt and not GDP.

- **Monetary and economic instability:** Granted that large amounts of capital inflow notably foreign borrowing, grants and direct foreign investment may lead to an accumulation of foreign exchange reserves, the impact of this development on the financial system may be seen through an analysis of the monetary survey as follows:

  $$M \quad = \quad NDA^b + NFA^b \qquad\qquad \text{(i)}$$
  $$NDA^b \quad = \quad C_g + C_p \qquad\qquad\qquad \text{(ii)}$$

M	=	$C_g + C_p + NFA^b$	(iii)
But G $-$T	=	$\Delta C_g - \Delta NFA_g$	(iv)
ΔC_g	=	$-(G-T) - \Delta NFA_g$	(v)
ΔC_g	=	$(G-T) + \Delta NFA$	(vi)

Substitute (vi) in (iii)

$$M = (G-T) + \Delta NFA^g + \Delta C_p + \Delta NFA^b$$

This accounting identity can be used to analyse the effects on the money supply of borrowing abroad by the government to finance a deficit, arising from debt overhang.

Where

M	=	money supply (M1): narrow measure of the money stock
C_g	=	credit to government
C_p	=	credit to private sector
NFA^g	=	net foreign assets of government (central bank)
NFA^b	=	net foreign assets of the private sector (banks)
Δ	=	change operator

Given the widened fiscal deficit arising from heavy debt service payment, government has to finance it both from domestic credit to government (ΔC_g) and change in foreign assets (NFA^g). When the government borrows from the external credit market, so that there is a decline in NFA^g, and transfers the proceeds of the borrowing to the banking system, then the net effect will be an increase in net foreign assets of the private sector (banks) and an equivalent increase in money supply (M) associated with the foreign financing of the government deficit.

However, this theoretical prognosis may not fully hold. The actual size of increase in money supply depends on movements in credit to government and private sector response to funds availability. Thus, it depends on whether the sectors absorb more credit or keeps more of the funds away in term deposit accounts.

V.   Conclusion

This paper has reviewed the various sources of financing of government programmes during economic downtown, articulating both internal and external sources. It has also rationalised the financing modes for particular programmes on the basis of some assumed notions of costs, risks and country circumstances, perspectives and theories characterising such financing

vehicles. This is aimed at ensuring that, as much as possible, the financing of government programmes (end-uses) is governed by some "optimal" considerations even without implementing the rigorous probit econometric analysis often germane to such binary choice situations.

The end-uses have included financing of economic projects, infrastructure/social safety nets, bridging finance and BOP support, in the lead up to the determination of the optimal sources of financing. Each end-use or programme is related in a financing function to a vector of financing modes, taking into consideration inherent costs, risks, exigency situation, country circumstances etc. and a vector of other limiting constraints. Thus, economic project financing is related to loans (non-concessional), bonds, PPP, FDI and privatisation receipts in that order. Infrastructure/social safety net financing is related to grants, concessional loans, PPP, bonds, FDI, and privatisation receipts. Overdrafts/loans – short-term financing from the banks, are the optimal sources for bridging finance. Finally, it may be argued that BOP support can be related to IMF facilities and SDR as its feasible sources of financing.

Of importance, is the theoretical analysis, of the possible effects of application of unsuitable financing modes, in terms of costs/risks considerations. The analysis of the effects of debt overhang stands in bold relief.

It is important to state that there is no primrose path to the financing of government programmes. It behooves officials engaged in mobilisation and negotiation of financing modes to be thoroughly acquainted with the rules, principles, practices or conventions and workings of the markets as well as the peculiarities of individual financing modes. It is also essential to constitute negotiation teams made up of experts versed in concessional loans, export credits and market finance. The teams should include lawyers who will monitor hidden clauses in loan agreement that may derail the effective execution of the programmes or projects. Finally, experts must be familiar with the techniques of choosing between financing sources as well as possess a deep, thorough knowledge or understanding of the projects to be financed. It is a truism that there are no primrose paths to financing of government programmes; hence the panoply of theories and perspectives invoked by debt managers involved in funds mobilisation. The need to recover from the current recession and resume growth calls for discipline, dedication, skills and pragmatism in the application of the identified theories and perspectives in funds mobilisation for programme financing.

References

Anthony, C., D. Forsyth and Hug, M., (2009). *Development Economics*, Mc Graw- Hill Higher Education, Berkshire.

Blackwell, M. and Noceras, S., (1989). "*Debt Equity Swaps*", Analytical Issues in Debt, Eds. J. A. Frenkel, M. P. Dooley and P. Wickham, IMF, Washington DC.

Borensztein E. and Kumar, M. S., (1991). Proposals for Privatization in Eastern Europe, *IMF Staff Papers*, 38, (2), 300-326.

Ekpo, A. H. (2011). "Global Economic Crisis and Africa's Economic Performances; Africa Insight, forthcoming.

Ekpo, A. H. (2012) "Public Debt and Growth in Selected West Africa Countries: Implications for Economic Integration", *African Journal of Economic Policy*, Vol. 19, No. 2, December, pp. 1- 25.

Ekpo, A. H. and Udo, E., (2015). "External Debt, Growth and Poverty Reduction in a Failing State: Nigeria, 1970 – 2011", *Journal of Business and Economics*, Vol. 6, no. 5, pp 944 – 951.

Ekpo, A. H. and Afangideh, U., (2012). "Official Development Assistance and Economic Performance in Nigeria, 1970 – 2010", *West African Journal of Monetary and Economic Integration*, Vol. 12, No. 1, June, pp. 128 – 152.

Komolafe, O. S. (1999). "Measurement and Financing of Fiscal deficit in Nigeria", Fiscal Policy Planning and Management in Nigeria, Eds O.S. Komolafe, Hossein Jalilian and Meak Hiley, secreprint Nigeria Ltd, Ibadan

Little, I. M. D., Cooper, R. N., Corden, W. M. and Rajapatirana, S., (1993). *Boom, Crisis and Adjustment: The Macroeconomic Experience of Developing Countries*, New York, Oxford Economic Press.

Omoruyi, S. (1995). "Basic Issues and Types of Sovereign Borrowing Arrangements", being a Paper presented at the Workshop on Negotiating International Contracts Sovereign Borrowing Arrangements and International Arbitration, organised by Nigeria Institute of Advanced Legal Studies, held at the UNILAG campus, Akoka, April 3-14.

Omoruyi, S. (2008). "New Financing: Experiences from WAIFEM Member Countries" being a Paper presented at the Regional Course on Poverty Reduction, Strategy, Medium Term Expenditure Framework (MTEF) and the Annual Budget organised by WAIFEM and Held in Lagos, Nigeria, June 9-20.

Omoruyi, S. (2009). "External Borrowing and Development Process", being in text of a Lecture presented at the WAIFEM Regional Course on International Loan Negotiation and Mechanics of Loan Agreement Accra, Ghana.

Omoruyi, S. (2016). *Public Debt Management: Theory and Application*, Unilag Press, Lagos.

APPENDIX

Sources of External Borrowing

1.   Official Development Finance (ODF)
    - Official Development Assistance (ODA); and
    - Other official Development Flows (ODF).

    ODA
    - Grants/loans by governments to promote economic development/ welfare cooperation;
    - Excludes military assistance and official exports credits;
    - 25 per cent or more grant element qualifies a loan as ODA; however, norm for ODA is 86 per cent and
    - Grants component of ODA has risen through the years.

    ODF
    - ODF loans have title or no concessionality; it includes:
        o Disbursement from regional development banks
        o IBRD loans
        o Bilateral components arising from debt restructuring agreements;
        o Interest on World Bank loans must cover interest cost + 50 basis point (or ½ per cent)

2. Export Credits (ECs)
    - Non-concessional loans to finance purchase of goods;
    - Disbursement occur when goods ore received by the importer
        o Types
            - When export credits are extended directly by an exporter (suppliers credits)
            - When export credits extended by exporter's commercial bank – (buyers credits).
            - When extended by specialised agencies of exporter's government (official export credits).

Types of ECs may be grouped into
    - Private Export credits
        o Suppliers' credits
        o Buyers' Export Credits
    - Official Export Credits

Suppliers' Credits
- Extended by private firms in developed countries to governments in developing countries;
- Credits in form of commodities or technical cooperation.

Buyers' Credits
- More common than suppliers' credits as they are extended through commercial banks; and
- Maturities are short: 3 – 7years

Note
Most private export credits are insured by national export insurance agencies. When insured, private export credits are negotiated through the Paris Club Protocol.

Official Export Credits
- Insured by specialised export credit agencies (ECA); examples US Export-Import Bank (EXIM), France (Coface); Italy (SACE), Germany (Hermes), United Kingdom (ECGD) etc,
- Paris Club debts are covered by these export credit agencies;
- Interest rate is market related; and
- Maturities are much longer than can be provided by private lenders

Export Credits Agencies
- Purpose promotion of domestic export industry in ECA country
- Loans, guarantees and insurance to support sales to buyers in developing countries
- State – controlled (OPIC, Exim Banks, ECGD, Hermes, KfW, SACE, Coface, etc....)
- Financers, guarantors and/or insurers
- Trade distortions through mixed financings (aid and export credit)
- Regulation via OECD Consensus/Arrangement
  - o ECA financing limited to 85 per cent of value of total transaction
  - o Minimum interest rate chargeable to borrowers
  - o Maximum repayments terms
  - o Minimum grant element in tied aid
- Concerns on competition between ECAs and resulting lack of social and environmental safeguards of projects supported.

Export Credit Agencies - Methods of financing
- Direct lending: ECA loan to buyer in developing country to finance purchase from exporter in ECA country.
- Intermediate lending: ECA loan to commercial bank which in turn lends to buyer in a developing country.
- Interest rate equalisation: ECA compensation to commercial lender which loans funds to buyers at below – market interest rate.

Structure of transactions:
- Buyer's credit: loan to purchaser of goods as borrower
- Supplier's credit: loan to exporter of goods as borrower, issuance of promissory notes by buyers against remittance of goods; recourse against buyer of notes not paid on maturity.

3.   **Private Flows**
- Consist of
  - International bank loans
  - Bonds

With the debt crisis of 1982, private lending shifted from commercial bank lending to bond and equity portfolio flows. Bond issues of developing countries were mainly in US dollars; but Latin American borrowers began to issue bonds denominated in ECUs (now Euros) and pesetas. Major borrowers issuing bonds were in Korea, Mexico, Brazil, Hungry, and Argentina.

Sources and Costs of Concessional Flows
The main sources of concessional flows for most developing countries are official that is, multilateral donors and creditors.
- Many multilateral institutions and bilateral governments have two financing windows: a concessional window for aid finance and a non-concessional window for export credits or market-related loans.
- Aid flows are also provided by non-governmental organisations (NGOs), charities and religious, scientific, educational and cultural organisations.

Multilateral Donors/Creditors
The main multilateral institutions providing grants and concessional loans include:

- The **European Union**, which provides both grants and concessional loans to developing countries. The European Investment Bank (EIB), a development bank, provides long-term loans to both public and

private sectors. The European Development Fund (EDF) provides resources, mainly, grants to cover planned macro-economic support, programmes and projects. In addition, resources can be used for debt relief or to help with unforeseen shocks.

- The **International Monetary Fund (IMF)**, provides concessional loans to low income countries through its Poverty Reduction and Growth Facility (PRGF). Non-concessional loans are provided through the Fund's five main facilities: Stand-by Arrangements (SBA), Extended Fund Facility (EFF), Supplemental Reserve Facility (SRF), Contingent Credit Lines (CCL) and Compensatory Financing Facility (CFF).

- The **Islamic Development Bank**, provides long-term finance for development projects, mainly, agriculture and infrastructure in the least developed countries.

- The **United Nations and its main agencies**, such as the United Nations Development Programme (UNDP), United Nations Conference for Trade and Development (UNCTAD), United Nations Children's Fund (UNICEF) and the World Food Programme (WFP), provide most of their assistance in the form of grants.

- The **World Bank**, has three lending arms. The International Development Agency (IDA) provides highly concessional loans and some grants to low income countries, with per capita income of less than US$885. The International Bank for Reconstruction and Development (IBRD) provides non-concessional loans to middle income and creditworthy poorer countries. The International Finance Corporation (IFC) provides loan and equity finance for private sector projects in developing countries.

There are also regional development banks and institutions providing external assistance to geographical regions. The main regional providers are:

- The **African Development Bank**, provides external assistance through its concessional window, the African Development Fund (AFDF) and non-concessional lending, through the African Development Bank (AFDB).

- The **Arab Bank for Economic Development in Africa** (BADEA) provides concessional loans for projects financing and technical assistance grants.

- The **Asian Development Bank** (ADB) provides both concessional (its OCR facility), non-concessional loans and exceptional assistance via its Special Programme Loans (SPL).

- The **European Bank for Reconstruction and Development** (EBRD) provides market-related loans to governments and private enterprise in the countries of Central and Eastern Europe and the Commonwealth of Independent States.

- The **Inter-American Development Bank** provides both concessional finance through its FSO window, and non-concessional loans (Ordinary Capital) to member states.

In addition, there are **Sub-regional institutions** providing external assistance including the:

- Arab Fund for Economic and Social Development (AFESD).
- Caribbean Development Bank (CDB) and CARICOM Multilateral Clearing Facility (CMCF).
- Central Bank of West African States (BCEAO), West African Development Bank (WADB), ECOWAS Fund.
- East African Development Bank (EADB)
- Central America Bank far Economic Integration (CABEI), Ardean Development Corporation (CAP) and Financial Fund for the Development of the River Plate Basin (FONPLATA).
- Nordic Development Bank (NDB) and Nordic Development Fund (NDF).
- Organisation of Petroleum Exporting Countries (OPEC).

Bilateral Donors/Creditors

Bilateral donors/creditors are sovereign governments or their agencies provide external assistance. The donors/creditors include developed and developing country-governments and agencies. The developed country-governments, which are members of the OECD, are sometimes referred to as OECD donors/creditors, with the others being called non-OECD donors/creditors. Another classification of bilateral donors/creditors refers to those governments, which are participating creditors at the Paris Club, referred to as Paris Club Donors/Creditors, and those which are not, called non-Paris Club Donors/Creditors. Most developed country-governments provide grants and concessional loans.