Fiscal Policy and Strategic Financial Management Efficacy in Nigeria: Co-integral Regression Approach

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Abstract

This study examines the relationship fiscal aggregates and balance of payments, anchored on strategic financial management efficacy. Successive Nigerian governments had pursued various programmes to revitalize and synergize the economy. One of these is the Debt Conversion Programme (DCP). The conversion was for acquisition of government privatized enterprises, establishment of new projects, and enhancement of portfolio management. The proceeds were to be utilized to boost production using local inputs for better employment generation. With strategic financial management, fiscal policy is expected to bring about favourable balance of payments for the economy. Essentially, fiscal aggregates pertaining to regulation and deregulation dispensations in Nigeria are analyzed using co-integral regression approach, with secondary data contained in publications of Federal Ministry of Finance (FMF) and Central Bank of Nigeria (CBN). The results indicate that balance of payments has significant relationship with fiscal aggregates such as government expenditure, private investments, foreign capital inflow, and foreign capital outflow. The strategic imperatives underscore selective import restriction and productive budgetary appropriation. Paradoxically, as much as doing fiscal policy contributes towards curbing inflation, it takes strategic financial management efficacy to make the hypothetical become unequivocal in redefining the nation’s macroeconomic fundamentals.

Key Words: Balance of payments, Fiscal policy, Strategic financial management

1. Introduction

At present, economic revitalization strategy in Nigeria favour of public–private partnership (PPP), but strategic financial management analysts are still concerned with issues relating government macroeconomic initiatives including the Debt Conversion Programme (DCP). The Federal Government of Nigeria (FGN) through the Debt Conversion Committee (DCC) seeks to:

- Reduce the stock of outstanding foreign currency denominated debt so as to alleviate the debt burden;
- Create attractive avenue for inflow of foreign capital;
- Provide additional incentive for repatriation of capital;
- Stimulate investments for employment generation;
- Achieve industrial development and economic growth using local inputs;
- Encourage creation of export-oriented industries to diversify the economy; and
- Increase access to appropriate technology, external markets and other foreign investment benefits.

Aborode (2005) explains in strategic financial management circles that proceeds of the DCP were to be applied as grants to Nigerian non-profit organizations such as educational institutions, health, charitable organizations, research centres, and religious bodies. They were also to finance programmes relating to environment, ecology, poverty alleviation, prevention of HIV/AIDS and other scourges. Ultimately, the conversion was for acquisition of naira denominated government debt instruments, as well as expansion/ recapitalization of strategic industrial organizations. These have direct bearing with fiscal policy, which particularly seeks to achieve high employment, stable prices, increased gross national product and favourable balance of payments. With the DCP on course, evidence of fiscal inefficiency was manifest, given the high inflation rates, mismanagement of benefits associated with oil boom, imbalances running into huge deficits, unbearable levels of unemployment, decay in socioeconomic infrastructure poor service delivery, and unrestrained dominance by fiscal authorities (Babalola,
2007; Onoh, 2007; Adedapo & Ayodele, 2006). This remains a critical strategic financial management challenge.

Fiscal policy is central to the stability of an economy. To this end, government’s power to tax and spend affects disposable income and general business climate. With strategic financial management efficacy, critical instruments are directed at striking the much-needed balance in fiscal administration. Another strategic financial management associated with the DCP had been the diminishing quality of public expenditure added to disproportionately low capital expenditure and escalating recurrent expenditures. It became so worrisome that payroll and allied overheads of government had grown from 124 billion naira to 493 billion naira, while capital expenditures slipped from 63% of total spending to 32%. Governments began to contend with budget deficits, which involve spending more funds than the government can generate. To finance such deficits, government had to resort to borrowing or printing more money. Adopting the former is a clear reversal of the DCP even as money supply, making interest rate (cost of borrowing money) to rise. Adopting the latter increases money supply, but where there is no commensurate increase in available goods, then prices will rise. It is the high borrowing propensity that made the debt burden even more unbearable for the Nigerian economy and the DCP became inevitable.

Fiscal policy may be influenced by political consideration (such as public reactions to government involvement in economic activities). The requirements of international financial institutions for grants also shape the beneficiary country’s fiscal policy. Jhingan (2010) contends that budget deficit is adopted during depression (with intent to overcome it). It exerts expansionary effect by keeping taxes intact. On the other hand, surplus budget is a suitable fiscal policy option for boom periods when government revenues usually exceed expenditures. It helps to control inflation by increasing tax or reducing government expenditure or both; which later reduces aggregate income. Government may equally opt for balanced budget where increase in taxes and government expenditures are at par. Increase in net national income results from disproportionate reduction in consumption due to tax increase. This relates to expansionary fiscal policy potency. Compensatory fiscal policy potency ensures continuous tracking of inflation or deflation tendencies.

Nonetheless, manipulating (managing) public expenditures and taxes has to go beyond the conventional. Strategic financial management requires adoption of fiscal policy as long-run measure and not as once-for-all stroke. Government increases expenditures under deflationary so that, over time, reduction in taxes compensates for low private investments and subsequently boosts aggregate demand, employment, output and income. Where there are inflationary pressures, reduction in government expenditure (through surplus budgeting) is compensated by increase in taxes in order to stabilize and galvanize the economy. Compensatory fiscal policy, therefore, works with discretionary galvanizers and non-discretionary (built in) stabilizers. With these in perspective, this study examines the extent to which balance of payments relates to fiscal aggregates in the Nigerian economy. The pertinent research question is: To what extent is balance of payments related to fiscal aggregates in Nigeria? The comprehensive research hypothesis (CRP) elicited, in null form, is:

CRHo: There is no significant relationship between balance of payments and fiscal aggregates in Nigeria.

2. Literature Review

Though the proponents of the market mechanism saw little or no need of government direct involvement in economic activities, the Great Depression of the 1930s made it imperative to strategically manage the economy (Jhingan, 2010; Bhatia, 2003). The Keynesian doctrine of government intervention had since gained prominence but not all propositions have positively influenced economies in terms of macroeconomic expectations of price stability, full employment and favourable balance of payments. The classical, monetarist and rational expectation adherents, therefore, take exception to the workability of government intervention. Nonetheless, to bring about greater productivity and viability, strategic financial management is expected to forge more robust and competitive frameworks for economies to produce better standards of living for the citizenry. Basically, the government intervention advocacy critically influences the process of:

- Promoting free and fair competition, to eradicate undue monopolistic tendencies;
- Promoting beneficial trade liberalization, to curtail limiting commercial tendencies;
- Promoting informational quality, to prevent irrational decisional tendencies;
- Promoting constructive management of externalities, to prevent publicly harmful tendencies; and
Promoting socio-political responsiveness, to address unfair tendencies including violation of rights to property, employment, life, and decent living).

Against this backdrop, more is required to justify the practicability of the idealized conditions of the market mechanism. The conditions which include prevalence of perfect competition, feature of all commodities as private goods, absence of undue influence of externalities, and perfect access to all information relating to prices and critical characteristics of goods and services among buyers and sellers in the market are indeed idealistic. The Nigerian market is still far from being ideal and this expediently necessitates government intervention to ensure equitable allocation of resources, mitigation of harmful externalities, and promotion of efficiently funded programmes relating to public health/welfare, granting of socially beneficial subsidies (especially for better education and human development) as well as food and drug administration to ensure safety of manufacture and use. Many analysts also advocate government intervention because the market mechanism is often undermined in less developed countries (LDCs) by several imperfect conditions (Oparanma, Ohaka, Maxwell & Orukuowu, 2008; Egwakhide, 2005; Baumol & Blinder, 2003).

Unlike their industrially developed countries (IDCs) counterparts, the LDCs are hampered by dearth of functional communication infrastructure, specialized industrial/commercial exchange, auspicious customs/traditions, and innovative/responsive leadership. These realities compel government to initiate and influence industrial and general economic management through expedient fiscal policy. Government uses it budgets to break the yoke of poverty among the citizenry and develops critical public infrastructure to stimulate private investments. Government investment in health, education, transport and natural resource development constitute social overheads which strategic financial management efficacy translates to the spearhead of macroeconomic transformation and competitiveness. Amadi (2004) underscores government intervention as being critical to fostering economic growth and development. Other protagonists, including Gbosi (2008) and Onoh (2007), also contend that deliberate macroeconomic policy mechanisms help to achieve critical targets especially price stability and full employment.

These accolades notwithstanding, it takes strategic financial management efficacy to record enhanced critical macroeconomic fundamentals. On account of this, the classical, monetarist and rational expectation adherents who still prevail as government intervention skeptics contend that government attempts to prevent private restrictions on trade end up creating more restraints; while correcting rationality problems, government ends up creating more bureaucratic informational bottlenecks. Thus, system-induced lags, in the course of managing externalities inadvertently complicate and compound the intricacy of internalities. With the strategic framework is in place, government laws against negative externalities could actually check predatory industrial tendencies or even help to synergize dominant and local productive enterprises. Fostering positive externalities by government may compel improvisation and subsidization which are later compensated by higher taxes. By seeking to correct socio-economic unfairness, government appears more responsive to the yearnings of stakeholders. Enforcing favourable wage policy attracts increments which give impetus to productivity and ingenuity. Highly resourceful workers are, therefore, not denied commensurate reward, knowing that if they become discouraged, overall productivity falls and society is worse for it. Considering the reasons advanced for government intervention against those of the non-interventionists make strategic financial management analysts advocate harmonious systemic/institutional framework within which the Nigerian market can operate, since markets do not perform efficiently under contrary settings. The strategic systemic/institutional framework should:

- Spell out fair rules of ownership;
- Determine allowable terms of trade;
- Specify enforceable commercial contracts; and
- Drive functional productive institutions.

Government exerts this beneficial influence on the economy with the characteristic instrumentality of fiscal policy (Moss, 2007; Ogbole, 2007; Onuchukwu, Ofoeze & Nteegah, 2006). It is hoped that fiscal policy with meaningful strategic financial management content would attract and sustain synergistic macroeconomic fundamentals in the Nigerian economy.

3. Research Methodology

This study harnesses financial time series (secondary data) contained the publications of the Federal Ministry of Finance (FMF) and Central Bank of Nigeria (CBN) spanning a period of 37 years. The fiscal aggregates underscored in the study are government expenditure, private investments, net export, foreign capital inflow and foreign capital outflow. The criterion variable on which the fiscal aggregates are regressed is balance of
payments. Johansen’s co-integration test facilitates the determination of long-run relationship between research variables (Ogbole, 2010; Amadi, 2004; Gujarati, 2003; Furlong, Lovelace & Lovelace, 2000). This long-run relationship imperative between study variables is real in this research framework, making the fiscal aggregates quite appropriate for co-integral regression analytical purposes. The research framework, therefore, provides the appropriate co-integrating equation (CE) that anchors the long-run relationship between the variables. The facilitating regression model in ordinary least square (OLS) specification is:

\[
\text{BOP} = f(\text{GE, PI, XM, CIF, COF})
\]

\[
\text{BOP} = a_0 + a_1 \text{GE} + a_2 \text{PI} + a_3 \text{XM} + a_4 \text{CIF} + a_5 \text{COF} + a_6 \text{DUM} + U
\]

\textit{a priori expectation} (\(a_1 \ldots a_4 > 0; a_5 < 0\))

Where:

- **BOP** = Balance of payment
- **GE** = Government expenditure
- **PI** = Private investments
- **XM** = Net export
- **CIF** = Foreign capital inflow
- **COF** = Foreign capital outflow
- **DUM** = Dummy variable
- **U** = Random error term

The co-integration highlights relating to the research variables are presented in Table 1:

### Table 1: Johansen Co-integration Test Highlights

<table>
<thead>
<tr>
<th>Sample: 1970-2006</th>
<th>Included observations: 37</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series: BOP, GE, PI, XM, CIF, COF</td>
<td>Lags interval: 1 to 1</td>
</tr>
<tr>
<td>Data Trend: None, None, Linear, Linear, Quadratic</td>
<td>Rank of No. of CEs: No. intercept, No Trend, Intercept, Intercept Trend, Intercept Trend</td>
</tr>
<tr>
<td>Selected (5% level) Number of Co-integrating Relations by Model (columns):</td>
<td>Log Likelihood by Rank (rows) and Model (columns):</td>
</tr>
<tr>
<td>Trace Max-Eig.</td>
<td>4</td>
</tr>
<tr>
<td>0</td>
<td>-960.2593</td>
</tr>
<tr>
<td>1</td>
<td>-905.6214</td>
</tr>
<tr>
<td>2</td>
<td>-853.3054</td>
</tr>
<tr>
<td>3</td>
<td>-840.9099</td>
</tr>
<tr>
<td>4</td>
<td>-836.8585</td>
</tr>
<tr>
<td>5</td>
<td>-836.8582</td>
</tr>
<tr>
<td>6</td>
<td>-960.2593</td>
</tr>
<tr>
<td>Akaike Information Criteria by Rank (rows) and Model (columns):</td>
<td>Schwarz Criteria by Rank (rows) and Model (columns):</td>
</tr>
<tr>
<td>0</td>
<td>63.23065</td>
</tr>
<tr>
<td>1</td>
<td>57.61482</td>
</tr>
<tr>
<td>2</td>
<td>55.17837</td>
</tr>
<tr>
<td>3</td>
<td>52.87460</td>
</tr>
<tr>
<td>4</td>
<td>52.85199</td>
</tr>
<tr>
<td>5</td>
<td>53.30620</td>
</tr>
<tr>
<td>6</td>
<td>53.99190</td>
</tr>
<tr>
<td>Source: Research Data (Eviews - aided)</td>
<td></td>
</tr>
</tbody>
</table>
4. Findings & Discussion
The co-integral regression results based on the ordinary least square (OLS) method are presented in Table 2:

Table 2: OLS Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>79.04564</td>
<td>837.1613</td>
<td>0.094420</td>
<td>0.9254</td>
</tr>
<tr>
<td>GE</td>
<td>-5.174944</td>
<td>2.390668</td>
<td>-2.164643</td>
<td>0.0385</td>
</tr>
<tr>
<td>PI</td>
<td>12.03452</td>
<td>5.710413</td>
<td>2.107410</td>
<td>0.0435</td>
</tr>
<tr>
<td>XM</td>
<td>0.229973</td>
<td>0.990687</td>
<td>0.232135</td>
<td>0.8180</td>
</tr>
<tr>
<td>CIF</td>
<td>12.01103</td>
<td>29.38413</td>
<td>0.408759</td>
<td>0.6856</td>
</tr>
<tr>
<td>COF</td>
<td>-49.82896</td>
<td>128.4156</td>
<td>-0.388029</td>
<td>0.7007</td>
</tr>
<tr>
<td>DUM</td>
<td>-72.60524</td>
<td>880.6157</td>
<td>-0.082448</td>
<td>0.9348</td>
</tr>
</tbody>
</table>

R-squared 0.737935 Mean dependent var. 635.8338
Adjusted R-squared 0.685522 S D dependent var. 2762.764
SE of regression 1549 311 Akaike info criterion 17.69767
Sum squared resid. 720.10928 Schwarz criterion 18.00243
Log likelihood -320.4068 F-Statistic 14.07926
Durbin-Watson stat. 2.695342 Prob. (F-Statistic) 0.000000

Source: Research Data (Eviews - aided)

The resultant analytical coefficients of the regression model are as follows:

<table>
<thead>
<tr>
<th>Aggregate</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>a₀</td>
<td>17.11 (0.93)</td>
</tr>
<tr>
<td>a₁</td>
<td>-5.17 (0.039)</td>
</tr>
<tr>
<td>a₂</td>
<td>12.03 (0.044)</td>
</tr>
<tr>
<td>a₃</td>
<td>0.23 (0.82)</td>
</tr>
<tr>
<td>a₄</td>
<td>12.01 (0.69)</td>
</tr>
<tr>
<td>a₅</td>
<td>-49.83 (0.70)</td>
</tr>
<tr>
<td>a₆</td>
<td>-72.61 (0.94)</td>
</tr>
</tbody>
</table>

R² = 0.74 Adjusted R² = 0.69

The above regression results indicate an adjusted coefficient of determination (R²) of 0.69; which implies that 69 percent of changes in the criterion variable (balance of payments) are explained by Nigeria’s fiscal aggregates such as government expenditure, private investments, net export, foreign capital inflow, and foreign capital outflow. Overall regression model is statistically fit, having recorded F-statistic of 14.08 at the 0.05 level. Accordingly, there is significant relationship between balance of payments and fiscal aggregates in Nigeria in the study period. With this fiscal policy potency, macroeconomic vitality and sustainability could be synergistically attained through strategic financial management. Borrowing, in particular, should be a complementary instrument of fiscal policy when fiscal operations run into deficit. Government revenue and expenditure as basic fiscal policy instruments should be targeted at enhancing and sustaining competitive macroeconomic fundamentals (Iwayemi, 2007; Gbosi, 2005).

Onoh (2007) identifies the vital economic areas of focus in Nigeria to include agricultural production, manufacturing/quarrying, transport/communication, education, health, general administration, subsidy/capital transfer to firms, transfers to foreigners; transfers to households, government purchases and payment of wages and salaries, transfer payments to foreigners and taxes. Nigeria’s government revenue profile encapsulates property tax, inheritance tax, transfer payments from abroad, interest/repayments, mining royalties, rents, corporate earnings, fines/fees, and crude oil sale. Fiscal policy implementation should, therefore, bring about better employment generation and other indices of economic growth. Nigeria’s government decision to generate revenue through combination of taxes should be justified by the channeling of proceeds into:
Building new roads and other infrastructure,
Promoting human betterment/development programmes, and
Discharging wages/salaries and other administrative overheads.

Increase in government spending or reduction in taxes may stimulate aggregate demand in the economy. This relates to *expansionary* fiscal policy potency. On the other hand, reduction in government or increase in taxes may curtail aggregate demand. This relates to *contractionary* fiscal policy potency. Increase in public expenditure especially during depression increases aggregate demand for goods and services, leading to large increase in income through the multiplier process. Reduction in taxes enhances disposable income thereby increasing consumption and investment expenditure. Furthermore, by increasing spending or cutting taxes, government leaves individuals and businesses with more money to purchase goods or invest. When purchases increase, aggregate demand also rises as additional production is required. This ultimately leads to better employment generation which is highly desirable in the Nigerian economy. Thus, increased government spending in Nigeria should result in higher human betterment opportunities and eventual more competitive economy (Gbosi, 2008; Agundu, 2008).

Gbosi (2008) also contends that people tend to save part of the increase in their disposable income resulting from tax cut instead of indulging in spending spree; a position which favours reduction in taxes in Nigeria. However, if fiscal policy is tight, it restricts demand and slows down the economy. If inflation is high, tight fiscal policy is elicited to help reduce the amount of money available to purchase goods in the economy, so as to curtail spending, demand, and pressure on prices. With restrictive fiscal policy potency, aggregate output drops and in turn reduces excess demand (the cause of inflation under Keynesianism). With built-in stabilizers and systemic frugality, the economies of fiscal inflows will not merely stream into drains of fiscal outflows, leaving the nation with little or no net fiscal synergy.

5. Conclusion
With bi-faceted possibilities of fiscal policy potency, there is need for discretionary fiscal policy in the Nigerian economy. The justification of this flexible paradigm further hinges on timing and forecasting precision. The time required to define a problem and take the right decision occasion *decision lag*, while the long time taken to approve expenditure outlay and allocate requisite funds for execution occasion *execution lag*. Working with built-in stabilizers under discretionary fiscal policy framework in Nigeria requires:

- Refocusing selective import restrictions to discourage indiscriminate demand for foreign consumer goods, which overrides demand for capital goods and effectuates unfavourable balance of payments;
- Refocusing fiscal expenditures to encourage critical industrial and commercial activities, which transform a nation into more productive and competitive economy, with real sector innovation taking centre stage; and
- Refocusing government expenditure in favour of creating enabling productive environment, which also fosters public-private partnership that equally engage socially responsive human development activities.

Where the turning point of a business cycle is already underway, discretionary fiscal policy helps to strengthen built-in stabilizers (Saunders, 2006; Iyoha, Oyefusi & Oriakhi, 2003). Accordingly, swings in the Nigerian economy should be automatically followed by adjustments in expenditures and taxes, while changes in the budget become spontaneous and manifest as automatic stabilization. Corporate income tax, excise tax, social and allied relief payments are examples of such automatic stabilizers. Tax yields vary directly as national income, while unemployment relief, social security benefits and similar social expenditures of government automatically increase. In an upward phase of the business cycle (where national income increases), tax rate and yield automatically increase, while unemployment relief, social security benefits and similar social expenditures of government decline automatically. These tendencies strategically elicit a budget surplus to automatically contain the inflationary pressures. In this vein, built-in stabilizers help to cushion private purchasing power when it falls, thereby reducing the period’s hardship on the people. In the Nigerian situation, strategic management of these realities should meaningfully:

- Prevent national income and consumption spending from falling to a low (crisis) level;
- Prevent delay in administrative decisions due to automatic budgetary changes which are permissible in this mechanism; and
Prevent adversity of wrong forecasting and timing of fiscal measures, while enhancing the integration of short-run and long-run fiscal policy.

Nonetheless, built-in stabilizers are not without limitations. Majorly, their effectiveness as compensatory mechanism depends on elasticity of tax receipts and flexibility of public expenditures (Gbosi, 2013; Jhingan, 2010). The elasticity of tax receipts may not reasonably act as an automatic stabilizer in some environments with peculiar macroeconomic circumstances, even if it is high. They may, therefore, reduce downswing severity but not eliminate other attendant business cycle tendencies. Also, their impact during recovery from recession may be unfavourable. All these underscore the imperativeness of strategic financial management with respect to the Nigerian experience (Agundu, 2012; Andabai, 2011; The Institute of Chartered Accountants of Nigeria, 2006; Robinson, 2003). The strategic financial management process should, therefore, critically refocus:

- Government internal financing,
- Government external borrowing,
- Government operational spending, and
- Government institutional partnering.

In all of these, fiscal authorities in Nigeria and their support analysts should be quite meticulous and conscientious to avoid defective projections and interventions which rather aggravate cyclical consequences.

References


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