

FISCAL DEFICITS AND THE MONETARY SECTOR IN ETHIOPIA: IMPLICATIONS FOR REFORM

Shibeshi Ghebre

1. INTRODUCTION

Ethiopia is one of the countries with the lowest per capita income. About 40 per cent of GDP at factor cost comes from agriculture, while industry, construction and public utilities contribute only 16 per cent of GDP. GDP growth over the last 15 years averaged only 2 per cent per annum. In 1990, GDP growth dropped to zero, and in 1991 it turned negative.

Because of slow growth in exports and a deteriorating trading position, the economy is now suffering the consequences of foreign exchange shortages, mounting external debt obligations and an overvalued exchange rate. Although domestic savings and fixed investment were low, 3-5 per cent of GDP and 10-15 per cent of GDP respectively, external finance ranging from 7-10 per cent of GDP, to some degree, facilitated internal balance.

It was against this background that macroeconomic imbalances developed in the fiscal and monetary sectors. In fiscal year 1990 the fiscal deficit deteriorated to 15 per cent of GDP with bank borrowing of about 10 per cent, while broad money grew by 18 per cent. In 1991 inflation as measured by the retail price index for Addis Ababa reached about 21 per cent.

The growth in reserve money was dramatic. It rose from -3 per cent in 1975 to 23 per cent in 1991. The percentage shares of M1 and M2 in GDP rose from 15 per cent and 21 per cent respectively in 1975 to 51 per cent and 68 per cent respectively in 1992. The velocity of circulation ($GDP/M2$), however, consistently declined from 4.8 to 1.5 during the same period. Thus, while steady monetary deepening was underway, a simultaneous decline in the velocity of money to some degree eased the inflationary impact of budget deficits. However, with the semi-liberalization of the economy and favorable opportunities for the private sector to spend its money holdings, the change in velocity of money could reverse itself and induce severe inflationary conditions in the coming years.

Recent developments in the budget also favor this hypothesis. Despite the decrease in government expenditures due to the decrease in defence spending following the overthrow of the previous regime, the advantage that could have been reaped from this has virtually been eradicated by an offsetting decline in government receipts, leaving the deficit and bank financing at more or less the same situation. For example, total expenditure in 1992 fiscal year declined by 23 per cent, while revenue fell by 20 per cent. The overall deficit, therefore, remained at about 12 per cent of GDP and bank financing at about 9 per cent of GDP.

These developments show that the government has been using its taxing, borrowing and spending powers to influence aggregate economic performance. With the continued legacy of budgetary expansion, a fiscal analysis of the macroeconomy would be necessary. Hence, the rationale for the need to focus on fiscal policy both as a tool of sustained growth and as a means to avoid sources of macroeconomic imbalances in the Ethiopian economy.

This study takes up one aspect of fiscal policy, the management of fiscal deficits in Ethiopia. It is organized as follows: The next section outlines the major measures of fiscal deficits followed by a section discussing causes and consequences of fiscal deficits. The fourth section attempts to measure the effect of fiscal deficits on monetary, price and debt variables using econometric techniques. After raising major issues for reform in the fifth section, the paper concludes with a summary.

2. CONCEPTS OF FISCAL DEFICITS

Any attempt to assess budgetary impact on macro variables such as money supply, balance of payments, public debt and aggregate economic activity requires a specific measure of the fiscal deficit. Several concepts of the fiscal deficit, however, seem to be in circulation. Notwithstanding this, a deficit has tended to be viewed as a summary of government receipts and payments in a single budget year. In this context the conventional deficit is defined as follows:

Fiscal deficits as conventionally defined on a cash basis, measure the difference between total government cash outlays, including interest outlays, but excluding amortization payments on the outstanding stock of public debt and total cash receipts, including tax and non-tax revenue and grants but excluding borrowing proceeds... In this manner fiscal deficits reflect the gap to be covered by net government borrowing including borrowing from the central bank. (Tanzi, et al., 1988: 5)

Although the cash versus the accrual accounting methods of calculating the deficit bring conceptual variations and result in significant differences in policy making, it is sufficient for our purpose to take the conventional deficit measure as a core concept of fiscal deficits. Having done that, it would be relevant to move to certain major purpose-oriented deficit measures. The most widely used purpose-oriented deficit measures are the current account deficit, the structurally adjusted deficit, the primary deficit, and the operational deficit.

2.1 Current Account Deficit

The current account deficit of the government is the excess of non-capital expenditures over non-capital revenues. It depicts government dissaving and could be used as a measure of the extent to which the government exercises prudence in its financial management.

However useful the current account deficit may be, the problems surrounding its calculation are intractable. A case in point is the treatment of depreciation in enterprise accounts on accrual basis, which contradict public sector accounts that tend to be first available on a financial basis. Moreover, the accounting treatment of investment in human capital as current outlay despite its importance in explaining growth is at odds with the economic treatment (Chelliah, 1973: 749). Furthermore, the recurrent component of any capital project is likely to be manipulated in many ways to give different pictures of government saving. Finally, in the context of economic adjustment, the difficulty of separating adjustment induced effects on the budget from those introduced by external shocks limits the use of the current account deficit as a measure of fiscal stance.

2.2 Cyclically Adjusted Deficit or Trend Deficit

That the budget and aggregate demand influence each other hardly needs evidence. The cyclically adjusted deficit cleans the budget from the effects of business cycles. It is used by practitioners as a tool to assess the adequacy of the stance of fiscal policy (de Leeuw and Holloway, 1985: 232).

In practice an assessment of the adequacy of the stance of fiscal policy involves three, albeit simple steps.

First, definition of the cyclically adjusted budget (CAB). This involves developing a budget profile that allows for the impact of the economy on the budget. It should be noted that the choice of a base year when the budgetary position was consistent with a satisfactory level of economic performance is central to the CAB. Thus the CAB can be formalized as follows:

$$CAB = g_0 PGDP - t_0 AGDP \quad (1)$$

where CAB = cyclically adjusted budget

PGDP = potential GDP

AGDP = actual GDP

g_0 = base year ratio of government expenditure to GDP

t_0 = base year ratio of revenue to actual GDP.

Note that relating expenditure and taxes to potential GDP and actual GDP, respectively allows the budget to vary with the cyclical position of the economy. That is the deficit will rise during a recession and fall during a boom.

Second, calculating the cyclical effect of the budget. This is accomplished by comparing the actual deficit with the cyclically neutral budget. Thus,

$$CEB = (G - T) - CAB \quad (2)$$

where CEB = cyclical effect of the budget

G = government expenditure

T = government revenue

Whether fiscal policy was expansionary or contractionary is indicated by the sign of the CEB. A positive CEB points to the former while a negative one indicates the latter.

Third, assessing the stance of fiscal policy. The appropriateness of fiscal policy is evaluated by comparing the CEB with the cyclical situation. For example, an expansionary CEB would be considered countercyclical if the economy was in a slump and procyclical if the economy was in a boom.

Sometimes the fiscal impulse, i.e., the change in the impact rather than the impact itself, is used to assess the adequacy of fiscal stance. The fiscal "impulse" is measured by the change in CEB. A positive movement of the CEB indicates fiscal injection while a negative change shows a withdrawal of fiscal stimulus. The reason for using the fiscal impulse was to get around the problem of the choice of a base year.

The need for other deficit measures free from the assumption of the existence of cycles around a stable trend was recognized later (Tanzi, 1982; Blanchard, 1990). Accordingly, the conventional deficit was adjusted for interest payments and for inflation.

2.3 Primary and Operational Deficits

Recall that the CAD includes an important non-discretionary variable, interest payments, which usually depends on previous deficits. The primary deficit (non-interest deficit) is a measure of the fiscal deficit adjusted for interest payments. It is computed by subtracting net interest payments by the government from total government expenditure. The implication is that the primary balance should eventually turn surplus to provide at least in part the wherewithal for interest on current debt.

This, however, is not required in a situation where government revenue and GDP grow faster than the real interest rate. What is required is similar growth rates for interest payments, debt and GDP so that they remain constant in relative terms (World Bank, 1988: 56). In any case, it is difficult for debt and GDP to grow faster than the real interest rate.

One basic problem with the primary deficit is that it does not exclude the part of interest payments induced by inflation. This is particularly important in high inflation situations. To alleviate this problem the effect of inflation on interest payment should be removed to get an inflation-corrected deficit known as operational deficit.

The economic underpinning of the operational deficit is that inflation-induced interest payments are similar to amortization in that they are a return of capital rather than a return to it and do not affect aggregate demand in real terms. Thus the question is whether inflation-generated interest payments are used to buy new bonds or to finance consumption.

Although the practical significance of this deficit measure is clear, it has a macroeconomic deficiency: by correcting the deficit for the impact of inflation on it, the ability to assess the impact of the deficit on inflation is lost (Blejer and Cheasty, 1991: 1657). Nevertheless, it is useful as a guide for practitioners, because it brings out the size of overstatement of the fiscal imbalances given by the conventional deficit during high inflation and high nominal interest rates.

The different deficit measures outlined above are used for different purposes. One can therefore use any of them depending on the purpose to be served. In particular, where an economic adjustment program is underway, it would be useful to measure the fiscal deficit from different angles. This being the purpose for reviewing the main variants of the fiscal deficit, the conventional deficit measure has been used in the analysis of the macroeconomic imbalances in the Ethiopian economy to be presented in the following sections.

3. FISCAL DEFICITS: CAUSES AND CONSEQUENCES

3.1 Causes of Fiscal Deficits

The government's attempt to influence aggregate demand through changes in the fiscal balance is an area of increasing concern in developing and formalizing a consistent and desirable macroeconomic policy, particularly in the context of economic adjustment programs. Although fiscal indiscipline is considered a major factor underlying the expansion of fiscal deficits, there are other structural variables which play no lesser role in explaining budgetary developments. Ethiopia's experience in fiscal policy during the last seventeen years attests to the importance of structural variables in the expansion of budget deficits.

Morrison (1982) defines structural variables as factors that are unchangeable in the short run. Such factors are strongly rooted in the state of the economy. The government is, therefore, unable to control them or to reverse the process underway in the short term. Hence, in the spirit of Morrison, we shall, in what follows, list and review the factors considered to be relevant to the Ethiopian economy:

- (a) level of economic growth;
- (b) size of government;
- (c) growth rate of revenues; and
- (d) government control over expenditures.

3.1.1 Level of Economic Growth

Countries with low level of economic development (as measured by per capita income) are likely to face difficulties in bringing their fiscal balance to reasonable levels. Three factors are at play against this objective. Excessive pressures on spending, low private savings, and (even if potential private savings are high) poor financial systems and low tax revenues. This has often led governments to impose savings through deficit financing even if its perceived inflationary costs and debt burden are onerous.

In Ethiopia, average per capita GDP at market prices during 1975-1991 stood at Birr 215.1. This puts the country in the lowest category of level of economic growth. Such a low level of per capita income leaves very little for savings. It was with this background that the fiscal deficit soared to about 15 per cent of GDP in the late 1980s.

3.1.2 Size of Government

The relative size of the government sector tends to be highly correlated with increased government role in production, consumption and distribution of goods and services. This induces an upward pressure on spending and is a difficult process to reverse in the short run.

The extent of government participation in economic management in Ethiopia has been extensive following the "revolution" of 1974. This factor as estimated by the share of total government expenditure in GDP reached over 40 per cent in the late 1980s and had a significant influence on the fiscal balance.

3.1.3 Government Revenue Growth

The need for deficit financing decreases when revenues grow rapidly while expenditures grow less or are constant or decrease. However where a sound fiscal management is not underway, revenue growth may induce higher deficits, particularly if the government is a "revenue follower."

3.1.4 Government Control over Expenditures

The government's ability to control expenditures is often influenced by institutional, ideological and structural factors. Among the factors which put upward pressure on spending are lack of coordination between financial and physical plans, development theorizing, high share of recurrent expenditures and revenue and expenditure instabilities.

3.2 Consequences of Fiscal Deficits

Fiscal deficits provide a measure of the excess of the government's spending over its revenue and, as such, indicate budgetary addition to domestic demand. A simple accounting relationship

can be established between budget deficits, private investment - investment-savings, savings balance, and the external balance. Recall that GDP can be defined in terms of expenditure components as:

$$GNP = C_p + I_p + G + X - M = C_p + S_p + T + NTR \quad (3)$$

where C_p = private consumption
 I_p = private investment
 G = Government spending
 X = exports of goods and services
 M = imports of goods and services
 S_p = private savings
 T = Government revenues
 NTR = net current transfers

Rearranging,

$$G - T = (S_p - I_p) + (M - X + NTR) \quad (4)$$

Fiscal deficit = Net private savings + Foreign savings

Equation (4) shows the fiscal balance as the counterpart of the private sector's savings-investment balance and the current account balance. At a simple level it can be seen that an increase in the fiscal deficit must be matched by an increase in private savings (increase in net private savings or decrease in private investment or both) and an increase in the current account deficit or a combination. The specific behavioral relationship will depend on the impact of fiscal deficits on private sector's investment-savings balance and the relation between budget deficits and current account deficits, since budget deficits respond to, as well as influence, external balances.

An important point to note is that budget deficits in themselves do not imply automatic macroeconomic difficulties. An efficient and productive employment of resources can meet debt servicing requirements easily. Deficits induced by natural disasters or wars can be accepted as a way of inter-generational distribution of costs. Hence deficits can be easily borne by efficient economies with high private savings and well-developed financial markets. However, in a highly distorted and low-saving economies, even a small deficit may be destabilizing (World Bank, 1988: 55).

The link between Ethiopia's low savings rate and the deteriorating fiscal situation and the possible spill-over to the current account deficit can be seen from Table 1.

Table 1: Public, Private and External Sectors Resource Balances (% of GDP)

Fiscal Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Public Sector:										
Government Revenue	19.7	20.5	21.7	22.9	23.5	25.9	26.1	28.7	29.9	24.4
Consumption a/	21.7	23.6	32.4	27.5	33.5	31.0	31.0	38.3	36.7	35.8
Savings	-2.0	-3.1	-10.7	-4.6	-10.0	-5.1	-4.8	-9.5	-6.8	-11.6
Investment	3.8	4.1	4.9	3.8	4.7	5.5	4.2	2.1	2.9	3.3
Balance	-5.8	-7.2	-15.5	-8.4	-14.7	-10.6	-9.0	-11.6	-9.8	-15.0
Public Enterprises:										
Savings	1.7	1.8	1.4	2.2	2.4	2.0	3.0	3.1	2.8	2.7
Investment	4.1	5.1	3.9	6.3	7.1	5.2	8.4	11.3	8.7	7.2
Balance	-2.3	-3.3	-2.4	-4.1	-4.7	-3.3	-5.4	-8.2	-5.9	-4.5
Total Public Sector: Balance	-8.1	-10.5	-17.9	-12.5	-19.4	-13.9	-14.4	-19.8	-15.7	-19.4
Private Sector:										
Savings	3.2	3.3	11.7	4.3	9.7	4.8	4.5	9.8	6.4	8.6
Investment	2.5	2.6	2.5	2.7	2.2	2.0	2.0	1.9	1.7	1.5
Balance	0.7	0.7	9.2	1.6	7.6	2.8	2.5	7.9	4.8	7.1
External Sector: Current Account Balance	-7.2	-9.1	-7.6	-8.6	-8.8	-5.8	-9.0	-9.8	-5.7	-4.9

a/ Government consumption is defined as central government current expenditure plus non-investment capital expenditure.

Sources: World Bank, *Ethiopia: Financial Sector Review 1990* and IMF, *Recent Economic Developments in Ethiopia*.

Although the private sector consistently maintained positive resource balances, the dissaving by the government added to negative public enterprises resource balances brought the overall public sector balance to an average of about -15.1 per cent of GDP over the ten-year period (see Table 1). This was mainly driven by the growth of government consumption which averaged 32.2 per cent of GDP per annum. It is also interesting to note that while private sector investment fell from 2.7 per cent of GDP in 1984 to 1.5 per cent of GDP in 1990, it was the major source of surplus funds to the government and the public enterprise sector. However, since private sector surplus alone often cannot cover additional public deficits, a spill-over to the current account of the balance of payments is bound to occur. It is, nevertheless, difficult to separate the effect of the budget on the current account and its response to the current account.

Having reviewed the broad macroeconomic relationships of the budget, the private sector balance and the external balance, we shall now analyze the effects on monetary aggregates and the public debt of the budget deficit from the financing side.

4. FINANCING THE DEFICIT

Once budgetary gaps are created, whether they promote desired macroeconomic goals such as controlling inflation, boosting private investment and growth and maintaining external credit worthiness, or induce adverse effects on these goals, to a very large extent, depends on the way they are financed.

There are two options for the government to finance its deficit: domestic financing and external financing. The former includes borrowing from the domestic bank and non-bank sectors including printing new money and the latter refers to borrowing from the rest of the world from part of its savings.

Government borrowing from the central bank directly affects reserve money and the total money supply. Recourse to commercial bank finance may also have similar effects, if banks are not forced to constrain credit to other borrowers. In this context the government sector would be the primary source of monetary expansion, and excessive growth in the money supply is likely to induce higher inflation and external imbalances. In Ethiopia, when the fiscal deficit soared to 15 per cent of GDP in the 1990 fiscal year, broad money growth reached an all time high of 18 per cent compared to the preceding years.

Reliance on non-bank finance adversely affects the structure of demand and growth potential. In a world of administered interest rates and controlled credit supplies, private investment would be retarded not through the cost-of-capital route but by the limit to the availability of credit to the private sector (Chhibber, et al. 1990).

Excessive resort to foreign borrowing leads to overvalued exchange rates, deteriorating current account deficits, higher external debt (and the consequent debt service burden which may constrain domestic investment and growth) and dwindling foreign exchange reserves. Financing through the accumulation of arrears has similar macroeconomic effects to other forms of public borrowing endangering future financing and the integrity of the budget as well (Edward, 1989).

It is interesting to note that the worsening budget deficit in Ethiopia and the higher external finance (ranging between 7 and 10 per cent of GDP) occurred side by side with appreciating exchange rate, higher external debt (over 50 per cent of GDP) and falling foreign exchange reserves. Recent developments in the budget also indicate that external debt as a share of GDP, including arrears has reached around 90 per cent.

So far, we have considered and analyzed the options available for the government to finance its deficit and partly touched on parallel developments in other variables. An attempt is made, in the next sub-section, to measure the effects of the fiscal deficit and/or its financing components on monetary and debt variables using regression techniques. Data on the relevant variables were compiled from the Ministry of Finance and the National Bank of Ethiopia and

ordinary least squares(OLS) regression analysis undertaken. Only equations that had passed the standard tests of significance have been reported (see appendix).

4.1 Fiscal Deficits, Money and Inflation

Fiscal deficits when financed through credit expansion obviously result in increased money supply. Regression results between narrow money and deficits, broad money and deficits, and reserve money and deficits, indicate that there exists a fairly significant relationship between the monetary aggregates and the fiscal deficit. The Durbin-Watson statistic also indicates that first order serial correlation is not serious at all (see appendix).

The impact of the fiscal deficit on inflation has been measured by running OLS regression of the Addis Ababa CPI on its one-year lagged value and the fiscal deficit lagged similarly. The results show that while the lagged CPI value significantly explains the inflationary situation (pointing to the role of expectations in price developments), the lagged fiscal deficit tends to be a contributory factor to inflation, though at 15 per cent level of significance.

However, in an economy with a shallow monetary depth, the impact of money creation brought about by the need to finance fiscal deficits is cushioned by the growth in demand for money.

The government can, therefore, finance itself by expanding the monetary base and increased monetary deepening without causing inflation. Inflation would occur to the extent that the rate of money creation exceeded the growth in money demand. Monetary deepening was significant in Ethiopia over the last fifteen years. The M1/GDP and M2/GDP ratios grew from 15 and 23 per cent in 1977 to 51 and 68 per cent in 1991, respectively. Moreover, the velocity of circulation ($GDP/M2$) consistently declined from 4.3 to 1.6 during the same period.

All these developments indicate that the Ethiopian Government was to some degree able to finance its deficits without causing full inflation. According to the World Bank Financial Sector Review for Ethiopia (1990) seignorage revenues - the government's claim on resources in return for issuing currency - of the order of 2 per cent of GDP per annum on average were raised over the last decade.

Having put this caution - the dampening effect of seignorage on inflation - one can tentatively conclude that inflation in Ethiopia is partly expectations motivated and partly a fiscal phenomenon.

4.2 Fiscal Deficits and Public Debt

The fiscal deficit has a direct effect on domestic debt through borrowing from the non-bank and banking sectors. The external borrowing to finance the deficit is also expected to influence external debt.

Regressing government domestic debt (GDDT) on its lagged value and the current fiscal deficit produced significant results. The Durbin h-test was also found to be acceptable.

While external borrowing seemed to have partly influenced changes in external debt, other factors tended to have been at play in largely causing its evolution.

All said, the fiscal deficit has been the major cause for creating an unsustainable debt situation, which increases the debt service burden and jeopardizes access to future financing. Moreover, if the debt service burden is excessive, it constrains domestic investment and growth. In the Ethiopian situation, fiscal retrenchment is a necessary condition for controlling inflation, encouraging private investment and growth, easing the debt service burden, and facilitating access to foreign finance.

5. ISSUES FOR REFORM

Recall that resource use in Ethiopia over the last decade centered on the financing of the fiscal deficit (see Table 1). The deficit was financed from three sources: the financial sector National Bank of Ethiopia and Commercial Bank of Ethiopia (NBE) and (CBE), the rest of the world and public enterprises. The CBE finances the government through purchases of treasury bills and treasury bonds by mobilizing private sector savings. NBE lends the government through its Ways and Means Advance from its holdings of CBE's excess reserves. Public enterprises' surplus charges finance government spending. External borrowing and grants also constituted one component of financing the deficit.

As reviewed in the preceding section, the fiscal deficit had adverse effects on monetary aggregates, prices and the public debt. It was also shown that private investment declined consistently in the 1980s when the fiscal deficit was rapidly expanding. One can therefore assess the appropriateness of the deficit by relating it to the promotion of private investment and growth, the control of inflation and the maintenance of a serviceable debt level to ensure credit worthiness.

The relationship between the fiscal deficit and monetary expansion in Ethiopia can be seen from the following identities:

$$\Delta MS = \Delta IR + \Delta DC \quad (5)$$

$$\Delta DC = \Delta DC_p + \Delta DC_g \quad (6)$$

where MS = end-of-year money stock
 IR = international reserves
 DC = domestic credit (net)
 DC_p = credit to the private sector

DC_g = credit to the government
 Δ = a one period change.

The external debt situation can also be presented by

$$\Delta ED = \Delta ED_p + \Delta ED_g \quad (7)$$

where ED is national external debt and ED_p and ED_g are the private and public held components of the national external debt. Introducing the government budget constraint gives the following relationship:

$$G-T = \Delta DC_g + \Delta ED_g \quad (8)$$

where G = total government expenditure
 T = total government revenue
 $G-T$ = fiscal deficit.

It is clear that the last three identities [(6), (7) and (8)] establish the relationship between monetary growth and the fiscal position of the government. This provides a rationale for controlling the public sector deficit through imposing ceilings on both the magnitude of external borrowing (ED_g) and the amount of bank financing (DC_g) carried out by the government (Kelly, 1982). This being the principal means of monitoring the public sector financial balance from the financing side, the policies underlying that balance are essentially concerned with expenditures and revenues. For lack of space and as a matter of relative practical expediency the former will be dealt with here, without, of course, disregarding the importance of the latter in fiscal reforms. Moreover, the issue of revenue vitalization in Ethiopia belongs to long-run economic policy reform programs, while the immediate concern of this paper is to raise issues of fiscal reform relevant to the short and possibly medium term.

Policies regarding public spending structures can be summarized in three main sub-headings:

- a) Expenditure Reductions;
- b) Expenditure Rationalization; and
- c) Budget Planning and Control.

5.1 Expenditure Reductions

Faced with a serious resource constraint, the public sector in Ethiopia should carefully consider the areas where its involvement are necessary. This issue has been deeply debated and has produced what are known as the "crowding-out" and "crowding-in" effects of public spending.

In this context, Ogura and Yohe (1977) distinguish between three types of public spending:

- a) those that provide direct consumption benefits to the private sector;
- b) those that provide services that are direct substitutes for goods and services provided by the private sector; and
- c) those that are complementary to private investment.

Accordingly, it is suggested that the expenditure-cutting priorities should first concentrate on category (b) before touching category (a) or (c). The implication is that category (b) has an outright "crowding-out" effect on private investment, while the remaining two categories should be carefully analyzed as to their "crowding-in" effects.

Studies by Blejer and Khan (1984), Chhibber (1988) and Bainswanger (1988) have shown that public investment in infrastructure is complementary to private investment and hence has a "crowding-in" effect on private investment. Moreover, these studies favor the hypothesis that non-infrastructure public investment has a negative effect on private investment.

If Ethiopia is to launch an economic adjustment program, fiscal stimulus to aggregate demand through increased public spending should be controlled by first considering withdrawal from the areas of public spending that have replaced the private sector. This would be one factor that would contribute eventually to bringing the fiscal deficit to a sustainable level. The need for a gradual phasing out of programs as opposed to a shock-therapy or quick-fix solutions is considered to be superior and effective without taking gradualism as a means to delay the introduction of adjustment programs.

5.2 Expenditure Rationalization

Expenditure reform can greatly contribute to higher productivity and greater utilization of existing capacity. Government investment that is productive should be encouraged. Projects should be subjected to a number of economic tests and those that are found to be unproductive must be eliminated. These assessments should be made in the context of general policies to correct distortions in relative factor and commodity prices (Goode, 1984).

The issue of funding operations and maintenance should also be addressed. In many cases, the maintenance and repair of existing capital could be more effective than undertaking new capital investment. Inadequate spending operations (whether supplies or personnel costs) can lead to low levels of effectiveness in areas such as education and health. Add to that the possibility of a rapid deterioration of physical capital owing to inadequate spending on maintenance and repair (World Bank, 1988).

Sources of low productivity in the public sector should also be taken into account in an attempt to rationalize expenditures. Low pay and inadequate salary differentials and the public sector acting as the employer of last resort may discourage work effort and contribute to low productivity in the public sector. This has a particular importance in the Ethiopian economy. It needs to be underscored that an efficient civil service that is commensurate with the capacity of the economy is a precondition for development.

Government objectives of income distribution, external or internal security and self-sufficiency need also to be attached to cost-effective expenditure policies. In this regard consideration of replacing general food subsidies by target schemes is necessary on matters of cost-effectiveness as well as fulfillment of government objectives.

Constraining government consumption to raise national savings and to reduce the need to raise taxes is also a matter of importance. A restraint to gradually diminish less productive forms of government consumption could contribute largely to financing growth.

5.3 Budget Planning and Control

In the medium term, efficiency and effectiveness of public spending can be raised by undertaking fiscal planning, budgeting, implementing and monitoring of government operations. Fiscal planning involves the formulation of a phased investment program, the projection of current spending needs and assessing revenue availability and borrowing requirements consistent with other macroeconomic objectives in the medium term. The annual budget should then be a one-year slice of the medium-term plan emphasizing firm budget constraints. With a strong and increased transparency and timeliness of fiscal reporting, effective fiscal management and the ability to monitor the public sector including public enterprises can be facilitated.

In summary, the fiscal deficit in Ethiopia has been the major source of monetary expansion, and hence inflation and unsustainable growth in the public debt. Increased fiscal deficits financed through domestic credit expansion, particularly credit going to the government produced inflationary conditions and were associated with a fall in private investment and growth. This also resulted in the growth of domestic debt. Higher external borrowing to finance part of the deficit raised the external debt level. The emergence of arrears in financing the budget, though a recent phenomenon, has put the country at the risk of deteriorating external credit worthiness.

At this juncture, it is argued that a sound fiscal management that attempts to demonetize the deficit in the short run, to phase out the deficit by setting a limit on government borrowing from the banking system as well as borrowing from external sources (approaching the budget from the financing side) and one that simultaneously reforms the expenditure side in the medium term is crucial for controlling inflation, promoting growth and maintaining external credit worthiness in the country.

A critical problem in the short run is the size of the bank financed component of the fiscal deficit which is about 7-8 per cent of GDP. This problem must be addressed immediately if the deficit is to be brought to a controllable level within the medium term. To eliminate the bank financed part of the deficit the government must "demonetize" it. This can be attained through selling publicly-owned urban houses to the private sector and using the proceeds to cover the deficit. The government, in so doing, loses nothing in terms of asset ownership because government-owned assets in the form of urban houses would now be owned in other forms.*

The act of selling public urban houses to the private sector should, however, be well thought of as part of an overall program to privatize urban land and housing and not as quick-fix solution to the budgetary problem. With such caution this measure would contribute much to the overall effort of easing the incipient upward pressure on inflation that otherwise could materialize given the persistence of the monetized deficit at its current level.

*I owe this to Ato Taye Mengistae, AAU, Economics Department.

ABBREVIATIONS

- M_2 = end of year stock of broad money, defined as the sum of currency outside banks, demand deposits and quasi-money.
- M_1 = M_2 less quasi-money (i.e. time and saving deposits).
- RM = reserve money, defined as the sum of currency outside bank and bank reserves.
- BR = bank reserves which are equal to cash in the Commercial Bank plus reserve requirements with the National Bank.
- COB = currency outside banks.
- DF = fiscal deficits (conventional measure).
- CPI = consumer price index for Addis Ababa.
- CPI_{-1} = the CPI lagged by one year.
- DF_{-1} = the Fiscal Deficit lagged by one year.
- GDDT = government domestic debt.
- $GDDT_{-1}$ = GDDT lagged by one year.
- BD = domestic borrowing, including borrowing from the National Bank.
- d = GDP deflator.
- DTE = external public debt.
- BE = external borrowing used to finance the deficit.

REFERENCES

- Bainswanger, H. (1988). *The Impact of Infrastructure and Financial Institutions on Agricultural Output and Investment in India*. The World Bank, Washington, D.C.
- Blanchard, Oliver J.(1990). *Suggestions for a New Set of Fiscal Indicators*. OECD, Economics and Statistics Department, Working Papers, No. 79, April.
- Blejer and Cheasty (1991). The Measurement of Fiscal Deficits: Analytical and Methodological Issues. *Journal of Economic Literature*, Vol. XXIX.
- Blejer and Khan (1984). Government Policy and Private Investment in Developing Countries. *IMF Staff Papers*, 31 (2).
- Chelliah, Raja, J. (1973) Significance of Alternative Concepts of Budget Deficit. *IMF Staff Papers*, 20(3).
- Chhibber, A. (1988). The Aggregate Supply Response in Agriculture: A Survey. In S. Commander, (ed.), *Structural Adjustment in Theory and Practice*. London, J. Cuvier Publishers.
- de Leeuw and Holloway (1983). Cyclical Adjustment of the Federal Budget and Federal Debt. *Survey of Current Business*, Dec. 1983, 63 (12).
- Edwards, S.(1989). Exchange Rate Misalignment in Developing Countries. *The World Bank Research Observer*, 4.
- Ecsner, R. (1988). Deficits, Monetary Policy and Real Economic Activity. In Kenneth S. Arrow and Michael B.Beskia (eds.) *The Economic of Public Debt*. Macmillan.
- Goode, R. (1984). *Government Finance in Developing Countries*. Washington, The Brookings Institution.
- Gujarati, D. (1987). *Basic Econometrics*. New York, McGraw-Hill Inc., International Student Edition.
- Kahan, M. (1987). Macroeconomic Adjustment in Developing Countries. *The World Bank Researcher Observer*, 2(1).
- Lim, D.(1983). Government Recurrent Expenditure and Economic Growth in Less Developed Countries. *World Development*, 11(4).
- Linduaer, et al. (1992). Government Spending in Developing Countries: Trends, Causes and Consequences. *The World Bank Research Observer*, 7(1).
- Morrison, T. (1983). Structural Determinants of Government Budget Deficits in Developing Countries. *World Development*, 10 (6), June.
- Stephano, M. (1991). Foreign Exchange Shortages: An Econometric Approach to Ethiopia. *Savings and Development*, Vol.XV, No. 2.
- Serven, et al. (19). Private Investment and Macroeconomic Adjustment: A Survey, Ibid.

The Ethiopian Economy: Problems of Adjustment

Tanzi, V. (1992). Fiscal Disequilibrium in Developing Countries. *World Development*, 10 (12), Dec.

____ (1990). *Fiscal Issues in Adjustment Programs*. IMF, Economic Research Report, April/Sept.

____ (ed.) (1990). *Fiscal Policy in Open Developing Economies*. IMF, Washington D.C.

Taylor, L. (1979). *Macro-Models for Developing Countries*. New York, McGraw-Hill.

The World Bank (1988). Public Finance in Development. *World Development Report 1988*.

____ (1991). Fiscal Policy for Stabilization and Adjustment.

____ (1984). *Ethiopia: Financial Sector Review*. Washington, D.C.

____ (1984). *Ethiopia: Recent Economic Developments and Future Prospects*. Washington, D.C.

Annex
OLS Regression Results

Equation	r^2/R^2	F	DW
1. $M_1 = 664.2157 + 3.8137 DF$ (13.792)	0.931	190.2	1.70
2. $M_2 = 419.3335 + 2.9884 DF$ (12.932)	0.928	167.2	2.10
3. $RM = 510.8130 + 2.2612 DF$ (10.569)	0.889	111.7	1.70
4. $COB = 351.8176 + 1.6048 DF$ (10.870)	0.894	118.2	2.03
5. $CPI = 61.3795 + 0.8243CPI_1 + 0.0466FD_1$ (6.494) (1.562)	0.917 (R^2a)	83.9	0.60 (Dh)
6. $CPI = 274.9730 + 0.2337BD$ (4.104)	0.529	16.3	0.83
7. $d = 90.5408 + 0.0285BD$ (3.859)	0.498	14.9	0.67
8. $CPI = 256.3447 + 0.2014DF_1$ (5.648)	0.70	31.89	1.6
9. $GDDT = -74.9533 + 0.9271GDDT_1 + 0.7947DF$ (26.214) (7.331)	0.996 (R^2a)	1780	0.58 (Dh)
10. $DTE = -25.2953 + 1.4428BE$ (3.509)	0.468	12.3	2.10

Note: Figures in brackets are t-ratios.

All the regression coefficients are significant at the 1% level of significance except the coefficient of DF_1 in equation (5) which is significant at the 15% level.

Sources: Estimation based on data from Ministry of Finance and National Bank of Ethiopia.