

Impact of Fiscal Deficits on Economic Growth in Bangladesh: Some Policy Implications

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Introduction

Fiscal policy is a dominant policy instrument of governments in developing countries. Although the fiscal balance is a useful indicator of macroeconomic health, developing countries in general run persistent budget deficits as a matter of policy. However, fiscal policy in a country like Bangladesh must be designed to maintain or achieve the goals of high employment, a reasonable degree of price level stability, soundness of foreign accounts and an acceptable rate of economic growth. A higher rate of growth may call for a higher rate of capital formation, which calls for increased savings and investment. The relationship between fiscal deficits and macroeconomic variables (such as growth, interest rates, trade deficit, exchange rate, among others) represents one of the most widely debated topics among economists and policy makers in both developed and developing countries (Ali Salman Saleh, 2003).¹

Recently, substantial attention has been made in macro theory, particularly in the area of growth effects of fiscal deficits. The size of budget deficit a country registers, how it leads to change in the growth rate of the economy, is a pertinent question to ask.

What is Budget Deficit?

In most cases, the central bank co-ordinates its monetary policy with fiscal policy and maintains policy consistency. When revenue fall short of recurrent and capital outlays, the government incurs a deficit, which requires financing from monetary and non-monetary sources.

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The government budget deficit can be defined and linked with changes in government net debt as follows:

$$D_g - D_{g-1} = (C_g + I_g - T) + rD_{g-1} \dots\dots\dots(1)$$

Where:

$D_g - D_{g-1}$ = Change in government net debt between the current and previous period.

C_g = Government consumption spending.

I_g = Government investment spending.

T = Taxes net of transfers and

r = Nominal interest rate.

The right hand side of equation measures the budget deficit and the equation shows that the change in government net debt is equal to the budget deficit.

Deficit financing

$$D_g - D_{g-1} = (D_{gc} - D_{gc-1}) + (D_{gp} - D_{gp-1}) + E (FR_c - FR_{c-1}) \dots\dots\dots(2)$$

The effect of a budget deficit on the money supply can be shown from the following equation for changes in the monetary base (MB):

$$MB - MB_{-1} = (D_{gc} - D_{gc-1}) + E (FR_c - FR_{c-1}) \dots\dots\dots (3)$$

Therefore,

$$(D_g - D_{g-1}) = (MB - MB_{-1}) + (D_{gp} - D_{gp-1}) - E (FR_c - FR_{c-1}) \dots\dots\dots(4)$$

There are three ways to finance government budget deficit, which is equal to the changes in the government's net debt ($D_g - D_{g-1}$):

by an increase in the monetary base, $MB - MB_{-1}$;

by an increase in the public's holdings of treasury bills or bonds, $D_{gp} - D_{gp-1}$; or

by a loss of foreign reserves at the central bank, $E (FR_c - FR_{c-1})$.

The relationship between budget deficits and any indicator of macroeconomic imbalance is not straightforward but depends on how budget deficits are financed and for how long. In general, budget deficits can be financed from at least the

above noted three sources : by selling bonds to the public, by overseas borrowings, by printing money or by some mixture of these three. Over reliance on any of these sources of finance is likely to create macroeconomic imbalances. Over reliance on domestic borrowing, if practicable, may cause a rise in the real interest rate which may lower private investment. Over reliance on foreign borrowing can cause appreciating real exchange rates, widening current account deficits, unsustainable external indebtedness and dwindling foreign exchange reserves. Over reliance on money creation may cause high inflation. This is known as inflationary finance of budget deficits.

We have made an attempt here to find out the real effects of budget deficits on economic growth in Bangladesh as well as in other SAARC countries. We have also tried to pinpoint some implementable policy suggestions in light with the findings of the study under the present situation in Bangladesh.

Objectives of the Study

The objectives of the study are:

1. To examine whether the fiscal deficit causes the economic growth in Bangladesh and in other SAARC countries; and
2. To derive some policy suggestions according to the findings.

Data and Methodology

Data Period: **1973-2003** for Bangladesh and 1997-2004 for other SAARC countries. Classical **OLS estimation procedure** will be applied to assess the impact of fiscal deficits on economic growth of Bangladesh. The following equation will be used to estimate the relationship among the **GDP growth, M₂** and **fiscal deficits**. *The general Growth Equation used in this study is:*

$$GDPG = \hat{a}_0 + \hat{a}_1 GDEF + \hat{a}_2 M_2 + \hat{i} \dots\dots\dots(5)$$

Where :

- GDPG = The GDP growth rate as dependent variable;
 GDEF = Government budget deficits
 M₂ = Broad Money Supply
 \hat{i} = Disturbance term

Organization of the Policy Paper

The study contains four **sections**. The **first section** is an introductory one. Importance, objectives and methodology of the study have been discussed in this chapter. Literature review has been done in the **second section**. The **third section** is devoted to review the impact of deficits on the economic growth in Bangladesh. An overview of fiscal performance of the SAARC countries has also been provided in this section. Finally, the **fourth section** provides a summary of the study and major policy implications on the basis of the findings for consideration of the concerned authorities.

Sections II

Literature Review: Impact of Fiscal Deficits on Economic Growth

Empirical Studies: *Budget deficits have positive impact on economic growth*

Devereux and Love (1995)² in a study concluded that there is a positive relationship between lump sum financial government spending and growth rates. **Kelly** (1997)³ argues that public investment and social expenditures may promote economic expansion by reducing social conflict and, hence, creating a climate conducive for investment in human and physical capital. He also contends that social expenditures enhance growth by fostering welfare and productivity improvements. Kelly (1997) continues to argue that the complementarity of public and private action is likely to be important in developing nations where such factors as severe income disparity, asset concentration, the disparate nature of production in the agricultural and industrial sectors, and fragmented financial markets which characterize most developing countries, may warrant substantial public investment programs. In such instances, public investment is likely to be a central determinant of successful private sector activity and economic growth (e.g. infrastructure capital; social expenditures). The complementary hypothesis is crucial because it implies that public investment has direct and indirect influences on economic growth. These indirect effects may be channeled through private investment and national output. Public investment may directly raise growth by adding to the stock of total social capital. Public investment may indirectly enhance growth by improving the climate for private investment through public good provision. Furthermore, public investment may increase current national output, which in turn stimulates higher private investment and higher growth. Public investment is likely to be a central determinant of successful private sector activity and economic growth (e.g. infrastructure capital; social expenditures). Therefore, higher public investment may raise the marginal productivity of private capital and, thereby, “crowd-in” private investment (**Aschauer, 1989**).⁴

Empirical Studies: *Budget deficits have negative impact on economic growth*

Easterly, William, Schimt-Hebbel, Klaus (1993)⁵ found that ‘fiscal deficits received much of the blame for the assorted economic ills that beset developing countries in the 1980s. Overindebtedness and the debt crisis, high inflation and poor investment performance and attempts to regain macroeconomic stability through fiscal adjustment achieved uneven success, raising questions about the macroeconomic consequences of public deficits and fiscal stabilization — or fiscal deterioration. **IMF’s Fiscal Affairs Department** (1995)⁶ concludes in a

study that ‘Indeed, it is likely that overly expansionary fiscal policies may lead to increased distortions in the economy and ultimately, a reduction in growth. **Guess and Koford** (1984)⁷ used the Granger causality test to find the causal relationship between budget deficits and inflation, GNP, and private investment using annual data for seventeen OECD countries for the period 1949 to 1981. They concluded that budget deficits do not cause changes in these variables. Furthermore, there are other studies that examine the relationship between government spending and economic growth using cross-country data in attempts to explain the observed differences in growth rates across countries. For example, **Landau** (1983)⁸ in a cross-sectional study of over 100 countries reported evidence of a negative relationship between the growth rate of real per capita GDP and the share of government expenditure in GDP. **Kormendi and Meguire** (1985)⁹ found no significant relationship between the growth rate of real GDP and the growth rate of government consumption spending on output. Using annual data for the US over the period 1953-1986, **Aschauer (1989b)**¹⁰ empirically examined the effect of public expenditure on private investment and the rate of return to private capital. He argues that an increase in public investment may be expected to reduce private investment nearly one-to-one as the private sector utilizes the public capital for its required purposes rather than expand private capacity. At a deeper level, a distinctive feature of public infrastructure capital is that it complements private capital in the production and distribution of private goods and services. Hence, public investment might be thought to raise private investment as the former raises the profitability of private capital stock. The empirical results indicate, “that while both channels appear to be operating, the latter comes to dominate, so the net effect of a rise in public investment had a positive effect on private investment”(**Aschauer, 1989, p. 186**). This means that government investment had a positive effect on private investment and caused “crowding-in” rather than “crowding-out”.

Barro (1991)¹¹ examined 98 countries during the period 1960—1985 and reported a negative relationship between the output growth rate and the share of government consumption expenditures. When the share of public investment was considered; however, Barro (1991) found a positive but statistically insignificant relationship between public investment and the growth rate. Miller and Russek (1997)¹² consider a sample of developed and developing countries from 1975 to 1984. They find that both the method of financing and the component of government expenditure can have different effects. Debt-financed increases in defence, health, and social security and welfare expenditures negatively affect the growth of real per capita GDP in developing countries, while debt-financed

increases in education expenditure positively affected growth in developed countries. Miller and Russek (1997)¹³ differ from prior studies in that they separate the effects of government expenditure based on the method of financing—tax or debt financing. Argimon et al. (1997)¹⁴ separates private from public investment. Using annual data for fourteen OECD countries for the period 1978 to 1989, they consider the effects, if any, of public consumption and public investment on private investment. They find that public consumption and public investment are negatively associated with private investment although only the public consumption effect is significant.

Kelly (1997)¹⁵ investigated the effects of public expenditure on economic growth among 73 nations (including developing and developed nations) over the period 1970- 89. This study used OLS to estimate economic growth as a function of various public expenditures (such as social expenditure, educational expenditure and other expenditures) and certain variables, which have been prominent in the empirical growth literature such as private investment, and the trade openness variable. This study found that public investment, and particularly housing expenditure, registers a uniformly positive and frequently significant relationship with growth. Although the results do not support a robust relationship between public investment and growth, they nevertheless conflict with the crowding out thesis that dominates the theoretical literature. Social security expenditures are positively related to growth in each specification of the model and significantly so in several versions. The results are important because they suggest that nations may pursue social welfare and growth simultaneously. The results indicate that health expenditures are negatively and sometimes significantly related to growth, while those for education vary in sign and significance.

Ghali (1997)¹⁶ investigated the relationship between government spending and economic growth in Saudi Arabia using annual data over the period 1960-1996. It should be noted here that this study builds on Barro's (1990)¹⁷ endogenous growth model, to untangle the nature of the relationship between these variables. The conclusion of this study “found no consistent evidence that changes in government spending have an impact on per capita real output growth” (Ghali, 1997, p. 171).¹⁸ Ghali and Al-shamsi (1997)¹⁹ utilized cointegration and Granger-causality to investigate the effects of fiscal policy on economic growth for the small oil producing economy of the United Arab Emirates over the period 1973:1-1995:4. They decomposed public spending into consumption and investment expenditures and show how multivariate cointegration techniques can be used to test for the long-run relationships and the intertemporal causal effects between

government spending and economic growth. This study provides evidence that government investment has a positive effect on economic growth, whereas the effect of government consumption is insignificant (Ghali and Al-Shamsi, 1997, pp. 530-31).

Monadjemi and Huh (1998)²⁰ utilized the error correction model (ECM) to examine the relationship between private investment and government spending in Australia, UK, and the US over the period 1970:1-1991:4. Empirical results provide limited support for “crowding out” effects of government investment on private investment. The rate of interest and corporate profitability showed significant effects on private investment in two out of three cases (p. 102). Ghali (1998)²¹ used multivariate co-integration techniques to develop a vector error-correction model to investigate the long-run effects of public investment on private capital formation and economic growth. It is worth noting here that this study used a neoclassical production function where the private and public capital stocks are treated as separate inputs. They apply their methodology to data from Tunisia over the period 1963-93. This study found that in the long run, public investment is found to have a negative impact on growth and private investment. In the short-run, public investment had a negative impact on private investment and no effect on growth. Bahmani (1999)²² investigated the long-run relationship between U.S. federal real budget deficits and real fixed investment using quarterly data over the 1947:1-1992:2 period. The methodology in this study is based on the Johansen-Juselius cointegration technique. Their empirical results indicated that real budget deficits have crowded in real investment, supporting the Keynesians who argue for the expansionary effects of budget deficits, by raising the level of domestic economic activity, “crowd- in” private investment (Bahmani, 1999, p. 639). Ahmed and Miller (2000)²³ examined the effects of disaggregated government expenditure on investment using OLS, fixed-effect, and random-effect methods. This study introduced a government budget constraint; it also distinguished between tax- and debt-financed expenditure. They used pooled time-series, cross-section data (39 countries: 23 developing countries and 16 developed ones) over the period 1975-1984. It is worth noting here that this study ran two sets of regressions. One set uses total government expenditure while the other uses disaggregated expenditure items. The different categories of government expenditure include defense expenditure to GDP, education expenditure to GDP, health expenditure to GDP, social security and welfare expenditure to GDP, economic affairs and service expenditure to GDP, transportation and communication expenditure to GDP, and other expenditure to GDP. This study also included a trade variable, defined as the import plus export

share of GDP, because they argue that trade variables (such as the import plus export share of GDP and other measures of openness) explain investment robustly. Their empirical results produce several conclusions. First, the openness variable has a significantly positive effect on investment only for developing countries. For developed countries, openness does not significantly affect investment. Second, expenditure on transportation and communication, crowds in investment for developing countries only. Third, tax financed government expenditure, in general, crowds out investment more frequently than debt-financed government expenditure. That finding may suggest the existence of liquidity constraints within the economy. Finally, expenditure on social security and welfare crowds out investment for both tax and debt-financed increases and in both developing and developed countries. This is the only category of government expenditure that had such a consistent (negative) effect across all specifications.

It can be concluded from the empirical studies presented in this section that there are some similarities and differences between these studies dealing with the impact of public investment on private investment and economic growth. The similarities are that some of them focus either on cross-section or static analysis, and used the same estimation technique. For example Barro (1991); Arora and Dua (1993)²⁴; Nelson and Singh (1994)²⁵; Kelly (1997); among others estimated their economic model by using the OLS method. Furthermore, many other studies resulted in a similar conclusion in both developed and developing countries and lent support to the existence of a significant crowding-in effect of private investment by public investment, through the positive impact of infrastructure on private investment productivity (e.g. Aschauer (1989b); Kelly (1997); Miller and Russek (1997); Argimon et al. (1997); Ghali and Al-shamsi (1997); Bahmani (1999); Ahmed and Miller (2000); among others).

In contrast other studies suggest different conclusions. Studies such as Landau (1983), Barro (1991), Ghali (1998), among others, found support for a negative relationship between public investment and economic growth. It is worth noting here that one of the important outcomes from these studies indicates that cross-section analysis cannot capture the country specific nature of the government spending and growth relationship. Moreover, time series analysis allows revealing the causal relationship between variables, while cross-section analysis can identify correlation but not causation between variables. It is worth noting as well that, in general, the key outcomes from the studies presented in this section showed that both the method of financing and the components of government expenditure could have different effects. Therefore, it is crucial to distinguish

between current and capital expenditure when evaluating the impact of fiscal policy on private investment and output growth. Thus, overall results from the empirical literature with respect to the impact of public investment on private investment and growth are ambiguous, but the bulk of the empirical literature finds a significantly negative effect of public consumption expenditure on growth while the effects of public investment expenditure are found to be positive although less robust.

Therefore, with the above divergent results of the studies conducted on the assessment of impact of fiscal deficit on the economic growth in view, the pertinent question is that whether the persistent fiscal deficits causes economic growth for the country like Bangladesh.

A summary of the results of the studies done in this field has been given in Table-1.

Table 1: Selected Empirical Studies of Budget Deficits and Growth of the Economy^{2,6}

Study/Relationship tested	Estimation Period	Country	Methodology/ Econometric Technique	Major finding
Budget deficit/Public spending and growth/investment				
Aschauer (1989b)	1953-1986	US	Maximum likelihood	-The net effect of a rise in public investment had a positive effect on private investment.
Barro (1991)	1960-1985	Cross-sectional(98)	OLS	-A negative relationship between output growth and the share of government consumption expenditures.
Arora and Dua (1993)	1980-1989	US	OLS	-Higher budget deficits crowd out domestic investment and increase trade deficits.
Nelson and Singh (1994)	1970-1979 1980-1989	Cross-sectional (70)	OLS	-The budget deficit variable exercised little or no impact of any statistical significance on economic growth in LDCs during the 1970s and 1980s.
Kelly (1997)	1970-1989	Cross-sectional (73)	OLS	-Public investment (particularly housing expenditure) registers a uniformly positive and frequently relationship with growth. Although the results do not support a robust relationship between public investment and growth.
Argimon et al. (1997)	1978-1989	OECD (14)	IV	-Evidence found that public consumption and public investment are negatively associated with private investment.
Ghali and Al-Shamsi (1997)	1973 : 1 - 1995.4	United Arab Emirates	Cointegration- Granger-	Causality -Evidence that government investment has a positive effect on economic growth, whereas the effect of government consumption is insignificant.

Ghali (1997)	1960-1996	Saudi Arabia	VAR	-No consistent evidence found that changes in government spending have an impact on per capita real output growth.
Ghali (1998)	1963-93	Tunisia	Granger causality test, OLS	-Public investment is found to have a negative short-run impact on private investment and a negative long run impact on both private investment and economic growth.
Monadjemi and Huh (1998)	1960-1991	Australia, UK, US	ECM	-The empirical results provide limited support for "crowding out" effects of government investment on private investment.
Ahmed and Miller (2000)	1975-1984	Cross sectional (39)	OLS	-In general, tax-financed government expenditure crowds out more investment than debt-financed expenditure. Expenditure on social security and welfare reduces investment in all samples while expenditure on transport and communication induces private investment in developing countries.
Dwyer (1982)	1952-1978	US	VAR	-No evidence is found that larger government deficits increase prices, spending, interest rates, or the money stock.
Guess and Koford (1984)	1949-1981	OECD (17)	Granger causality test	-Budget deficits do not cause changes in inflation, GNP, and private investment.
kARRAS (1994)	1950-1980	Cross-sectional(32)	OLS, GLS	-Deficits do not lead to inflation, deficits are negatively correlated with the rate of growth of real output and increased deficits appear to retard investment.
Al-Khedair (1996)	1964-1993	G-7	VAR	-Budget deficits led to higher short-term interest rates in the seven countries. The budget deficit did not manifest any impact on the long-term interest rates. The trade balance was worsened by the budget deficit and economic growth improved in all seven countries.

Note: In all cross-country studies the number of countries given in parenthesis; OLS=ordinary least squares; IV=instrumental variables; VAR=vector autoregressive model; 2SLS=two stage least squares; SUR=seemingly unrelated regressions; GLS=generalised least squares; ECM=error correction model.

Section III

Impact of fiscal deficits on the economic growth in Bangladesh:

An overview of Bangladesh economy

Bangladesh is essentially a dualistic economy with a rising industrial sector and a dominant subsistence agricultural sector. Agriculture is still dominating in terms of employment and export earnings. Within the relatively small industrial sector, medium and small-scale industries occupy an important place. They are basically family-oriented enterprises with low capital intensity and traditional technology. The early 1970s were a period of economic and political turbulence. This is reflected in the fall of real output by 9 percent per year during 1971-75. The war-ravaged economy that the country inherited was structurally weak and the wholesale nationalization of manufacturing industries and financial institutions during the early 1970s led to inefficiencies, shortages and economic decline.²⁷ By the late 1970s the economy was stabilized and various market-oriented reform measures were introduced. However, it was only in the 1980s that the economy started to grow at a steady pace of about 4.5 percent per annum. Data for the past few years suggest that the economy has moved to a higher growth path of about 6 percent per annum. Thus the 1980s and 1990s represented a phase of high economic growth for the country. The steady economic growth since the mid-1980s has brought about significant change in the economy in favour of the non-agricultural sector. Agriculture, which was traditionally the dominant sector, presently contributes only 23.50 percent of GDP.²⁸ With this transformation process, the services sector gained the most (49.40 percent in FY2002-03) while the shares of large and medium-scale manufacturing and construction sectors (11.20 percent and 8.60 percent respectively) increased steadily. The share of small-scale manufacturing did not increase much. An implication is that with the diminishing share of agriculture in output, floods and other supply shocks to agriculture will have a relatively less direct impact on GDP growth in the future.

Fiscal Policy Stance in Bangladesh²⁹

Bangladesh is at a difficult juncture in terms of its overall fiscal situation. There are enormous challenges to bring down the levels of poverty in the country, and the Government faces continued pressures to increase the involvement of the state in the economy (public sector employment, public services in education and health and the like). On the other hand, Bangladesh seems unable to mobilize the capacity to launch much-needed reforms across the economy, with the

consequence that it is unable to tap the domestic and foreign resources available to the country. As a result, the fiscal situation has deteriorated slowly but dangerously. After independence, fiscal policy stance in Bangladesh was expansionary due to reconstructing the war-damaged economy. During that period the government's expenditure grew on average by 14.79 percent of GDP, whereas revenue earnings grew by only 7.19 percent and the level of fiscal deficit was 7.6 percent during 1970s. The major portion of this high fiscal deficit was financed mainly from the banking system. Such fiscal deficits were within a tolerable limit, as they did not create any major economic problem, except during the early 1970s. It appears that the better than expected fiscal performance in Bangladesh during that period was essentially due to binding constraints on the financing of fiscal deficits. Since Bangladesh is keen not to create any serious debt – servicing problem by borrowing from foreign commercial banks, it adjusts development expenditures to match the inflows of foreign grants and subsidized loans.

Though the fiscal policy stance remained expansionary, the fiscal deficit was slightly moderated at 6.93 percent in 1980s. The government expenditure grew on average by 15.48 percent of GDP, whereas revenue earnings grew by 8.53 percent. During that period an important development in public spending is that the share of defense spending in total expenditure has been rising. It has increased from about 5 percent in 1970s to about 10 percent in 1980s. This rise was associated mainly with the two military regimes of Bangladesh. The rise in defense spending contrasts sharply with the falling share of spending on economic services and social overhead items, such as education, health and housing which may be viewed as an unhealthy fiscal development. Another fiscal development in 1980s has been the sharp decline in the share of subsidies in government's expenditure. As a proportion of total expenditure, the level of subsidies was declined from 11 percent in 1970s to 1 percent in 1980s. Such a reduction in government's subsidies is a healthy fiscal development but resources released have been used for financing increased defense spending.

The fiscal deficit was maintained below 5 percent of GDP until the late 1990s. But in the absence of a strong medium term strategy and institutional mechanisms the country has remained vulnerable to inappropriate policy decisions, as evidenced by the weakened fiscal stance in 1999-2000, when fiscal deficit reached at more than 6.1 percent of GDP. As a result of this fiscal deterioration domestic bank financing of the budget deficit has increased considerably, and the stock of public debt rose to 1.50 percent of GDP in 1999-2000 which was less than 1 percent in early 1990s. In this context the shedding of unnecessary expenditure burdens by

the government, such as budgetary support to the unproductive SOEs, assumes added significance. Thus, financial losses in the public enterprises have often been the root cause of consolidated fiscal deficits. The share of public sector enterprises in Bangladesh is still high, and in all the public sector enterprises, nationalized banks and autonomous bodies, there has been a persistent waste of resources and unscrupulous expenditure (Habibullah, 1991). The financial situation of the non-financial public sector enterprises has deteriorated massively during 1991-95, primarily because of unresponsive domestic pricing policies and poor internal governance. The increasing trend in the public credit ratio during 1999-2001 in Bangladesh leads to an identical reduction in bank credit available to the private sector and causes a major rise in the real lending rate. Consequently, the private investment ratio falls, and per capita GDP growth decline substantially. Therefore, an expansionary fiscal policy crowds out the private sector and leads to large negative long-term effects on private investment and aggregate growth in Bangladesh.

Recent Developments in Fiscal Policy Stance

The fiscal policy stance in recent years shows that, the central government deficit reduced from 5.1 percent of GDP in FY01 to 4.7 percent in FY02, on account of both revenue measures and expenditure discipline. In particular, Annual Development Program (ADP) spending was cut by 0.9 percentage points of GDP (8 percent in nominal term). The FY'03 budget targets a further reduction in the deficit to 4.2 percent, and the government is expected to keep budget deficit at this level. Budget deficits are projected to decline to 4 percent by 2007-2008. As the government is keen to increase pro-poor spending for the next few years, the additional revenues would be raised through improvement of the tax administration and some new taxes. Such an increased revenue effort is vital for the budget to adequately support human capital, physical infrastructure, and anti-poverty programs on a sustainable basis without threatening debt sustainability over the medium-term³⁰.

Insofar financing of deficits, the share of foreign financing has gradually fallen and the share of domestic financing has been rising. The government has taken steps to improve the deficit financing strategy and the management of contingent liabilities. For example, revenue measures announced in the budget included withdrawal of tax holidays for expansion of existing enterprise units, lowering the income tax threshold, abolition of zero duty rates and supplementary duties in many imports, lowering the top customs duty rate, withdrawal of some income tax exemptions, and extension of the VAT net. Moreover, budget management has

been improved, through monthly monitoring of fiscal performance based on a computerized budgeting and accounting system, and systematic monitoring of releases of ADP related funds.

Most recent budget is drawn up with specific reference to the National Strategy for Economic Growth, Poverty Reduction and Social Development and its Medium Term Macroeconomic Framework (MTMF). The budget sees itself in the role of creating an enabling environment for private sector investment to lead in driving growth and job creation, allocating resources to growth supporting infrastructure and to programs, which have an impact on human development, poverty reduction and employment generation. To improve the pro-poor focus on government expenditure, government has increased spending for human capital development, health and social safety nets. Such spending is targeted to increase by at least 1 percentage point of GDP in 2003-2004, primarily reflecting higher maintenance expense for the social sectors and targeted social protection programs. The government is trying all possibilities of cutting down other expenditures such as non-interest and non-wage recurrent expenditures and ensuring strict discipline on ADP spending. Within this fiscal year no new unapproved projects will be added to the ADP and projects to be included in the ADP will be closely scrutinized to ensure best use of available funds, as this could undermine the fiscal sustainability. Adequate funding will be ensured to cover the costs of reforming the SOEs and NCBs depending on recovery rates in the NCBs and assuming a curtailment of new NPLs (non-performing loans) and appropriate pricing in energy sector. The policy measures undertaken by the government suggest that it is keen to maintain fiscal discipline and is aware of its obligations under the ongoing IMF-PRGF program.

Earlier studies/comments on the fiscal deficits and economic growth in Bangladesh:

Hossain (1995)³¹ conducted an empirical study on the government revenue and expenditure in Bangladesh for the period 1974-85 and found that 'in Bangladesh, the income elasticity of government revenue is not significantly different from unity, but the income elasticity of government recurrent expenditure is significantly greater than unity. An implication of these results is that Bangladesh has a tendency to experience income-induced fiscal deficits. The high-income elasticity of government expenditure relative to the income elasticity of government revenue is self-destabilizing in the sense that the budget deficit resulting out of it may be inflationary if financed by money creation.

Habibullah (1991)³² found that despite the denationalization of some industries during both Zia and Ershad regimes, the share of public sector enterprises in Bangladesh is still high, and in all the public sector enterprises, nationalized banks and autonomous bodies, there has been a persistent waste of resources and unscrupulous expenditure. As a result, the rate of return in public sector enterprises has been low. A World Bank study³³ showed that 'growth in the 1990s was driven by private investments, but private investment appears to have leveled off after 1998. Weak governance resulting from institutional inadequacies, infrastructure constraints, worsening performance of the financial sector and deterioration in macroeconomic management have all contributed to the loss of momentum. While delivering lecture before the FICCI meeting held in Dhaka on July 28, 2002 the World Bank country director for Bangladesh, Mr. Frederick T. Temple remarked³⁴ that 'progress on the expenditure side has been less encouraging. While the government was able to reduce planned ADP expenditures during the last fiscal years by not spending budgeted funds, the FY'03 budget includes a large ADP with too many projects, many with weak justification.

Findings of the Present Study

The estimated results of the OLS regression presented in Table-2 show that the monetary growth has positive impact on real output growth although the coefficient is not significant at desired level. This needs further investigation. If the M2 grows 1 percent then the GDP will grow by 1.03 percent. On the other, budget deficits show negative impact on GDP growth, which is significant at 10 percent level. If the budget deficit grows by 100 percent then the GDP will decline by 44 percent. However, the present estimated results need further investigation to eliminate auto-correlation among the residuals.

Impact of fiscal deficits on GDP in the SAARC countries

Fiscal deficits remained a common practice throughout the Asian region. Fiscal consolidation marked a slow progress in South Asia because of political uncertainties. Fiscal deficits were assumed to be persisting and financed by increased public borrowing that might add to the public debt burden, potentially jeopardizing fiscal sustainability and hindering economic performance. According to the Asian Development Outlook, 2003: 'persistent fiscal deficits have been the norm in South Asia because of weak revenue collection and government's inability (or reluctance) to cut expenditures.'³⁵

An analysis of the impact of fiscal deficits on the other six SARRC countries GDP

growth indicates mixed trend. None of the variables (budget deficits and broad money) is significant to explain the GDP growth for Bhutan, India, Nepal and Pakistan. On the other, in case of Maldives, it is depicted that budget deficits has

Table 2

Dependant Variable	Constant	Estimated Coefficients on		Equation Statistics	
	C	M2_gr	GDEF_gr	R2	D.W
GDP	6.59	0.03	- 0.44*	0.12	2.80
GDP_gr	(4.86)	(0.55)	(- 1.83)		

1. Figures in the parenthesis are t-ratios.
2. *=Significant at 10% level

positive and significant impact on GDP growth, but M2 does not have any significant impact on GDP. But, in contrast, budget deficits showed a negative and significant impact on GDP growth for Sri Lanka while M2 does not show any significant impact on GDP. This result of budget deficits on economic growth of Sri Lanka seems to be close to Bangladesh.

Section IV

Figure 1 : Bangladesh: Trends in the growth of GDP, Budget Deficits and Broad Money

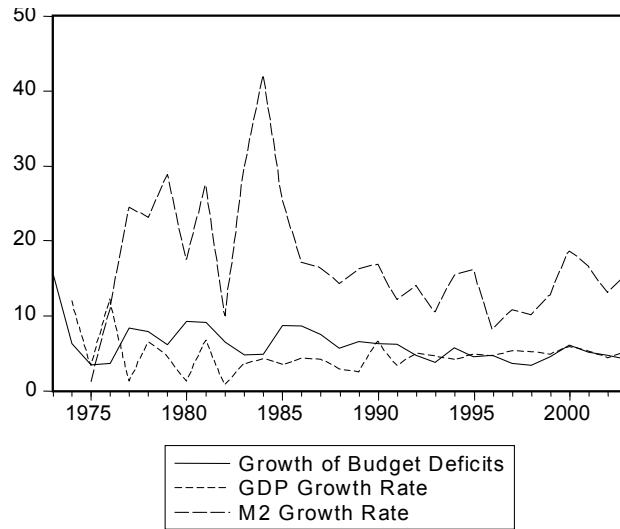
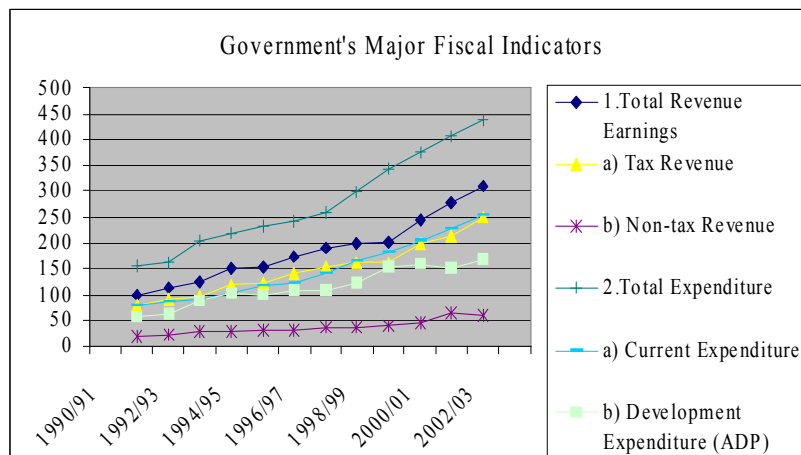


Figure 2 : Bangladesh: Government's Major Fiscal Indicators



Concluding Remarks and Policy Implications

Concluding Remarks

The paper suggests that the fiscal deficits have no positive impact on the growth of the economy of Bangladesh. Then the question emerges on the effectiveness of the sectoral distribution of the government expenditures. During 1990s, an important development in public spending was that the share of defense spending in total expenditure rose substantially from about 5 percent in 1970s to about 10 percent in 1980s and again geared up in 1990s. This rise was associated mainly with the two military regimes of Bangladesh. The rise in defense spending contrasts sharply with the falling share of spending on economic services and social overhead items, such as education, health and housing which may be viewed as an unhealthy fiscal development. However, due to the greater magnitude in the non-development expenditure, the result showed negative impact on growth of the GDP. Therefore, paradigm shift in the nature of government expenditure may be an important area to be addressed by the policy makers. The government may opt for gradual shifting to the balanced budget approach or find some avenue for greater domestic resource mobilization to fill the gap.

The data for budget deficits show that they increased from 4 percent of GDP in 1998 to 5 percent of GDP in 2000. Since then they were brought down to 4 percent of GDP in 2003. The government is expected to keep budget deficits at this level. As the government is keen to increase pro-poor spending by about 2.5 percent of GDP for the next few years, the additional revenues would be raised through improvement of the tax administration and some new taxes. Such an increased revenue effort is vital for the budget to adequately support human capital, physical infrastructure, and anti-poverty programs on a sustainable basis without threatening debt sustainability over the medium term.³⁶ The recent policy measures undertaken by the government suggest that it is keen to maintain fiscal discipline and is aware of its obligations under the ongoing IMF-PRGF program. However, the government is yet to adopt any specific fiscal rule either in case of government outlays or the mode of deficit financing. In particular, the loss-making public enterprises remain a drag on the economy. To consolidate the fiscal sector, lately the government has initiated a four-year program to phase-out the state-owned enterprises, starting with the closure/privatization of key loss-making units. In addition to the Adamjee Jute Mill, another 24 out of total 150 state-owned enterprises have been closed in 2003.

Policy Implications

1. The examination of the fiscal system of Bangladesh reveals the need for fiscal reforms so that the fiscal sector can perform a positive role in economic growth and development. Any fiscal reforms in Bangladesh are somewhat synonymous with tax reforms. Tax reform experiences in developing countries suggest that it is not easy to implement tax reform measures without any commitment on the part of the government. For a successful structural change in the fiscal system, the government needs to use some of its political capital. In fact, successful tax reform requires an equilibrium between political objectives, tax policy changes, and administrative development and all of these have to move together (Tanzi, 1991).³⁷ Therefore, the revenue mobilization effort needs to be strengthened and steps should be taken to modernize the tax administration system. In addition, the government should adjust the administered prices of public utilities and prioritized expenditures, turning those which are unproductive.

2. Besides tax reforms, there is a need for government expenditure reforms for the creation of an efficient fiscal system. Financial losses in the public sector enterprises have often been the root cause of consolidated fiscal deficits. Despite the denationalization of some industries during both the Zia, Ershad and Khaleda Zia regimes, the share of public sector enterprises in Bangladesh is still high, and in all the public sector enterprises, nationalized banks and autonomous bodies, there has been a persistent waste of resources and unscrupulous expenditure, which should be checked.

3. Besides the revenue increasing initiatives, wide scope of expenditure rationalization measures should be sought for. The financing pattern of the Annual Development Program (ADP) projects of high priority and high poverty reduction impact may be reshaped creating enough scope for social fund's participation. The rich people of the country may also participate in these projects by providing the necessary finance. Moreover, the budget making process may be started from the root level i.e., bottom-up approach may be followed to encourage the local resource participation.

4. To increase private investment for accelerated growth would require the efficient mobilization and allocation of savings by the banking system and the capital market. Moreover, private sector investment for the expected higher output growth rates in the future would require demand signals. With macroeconomic balances restored in the recent years, the challenge now is to move to a higher growth path, forefronted with private sector led growth.

5. The macroeconomics of budget deficits is inter-wined with the state of national

policies. The ruling government finds it optimal to issue debt because it can transfer easily the resources raised through borrowing (not through raising taxes) to its constituency because it does not have to bear the future cost of debt-servicing. The non-accountability of the politicians to the public for the consequences of policy decisions leads the economy into imbalances. To avoid such a situation, there is a need for development of both economic and political institutions that would improve macroeconomic policy making.

6. The credibility of government's fiscal and monetary policy lies ultimately in the accountability and transparency of the budgetary process. An independent fiscal board (IFB) headed by a 'Fiscal Ombudsman' seems to be important to review government expenditure progress and all new initiatives and it can be made mandatory to take clearance from this board. The idea of an independent fiscal board is akin to an independent judiciary. Just as an independent judiciary system monitors political interference with institutions for greater political efficiency, an IFB will ensure that the budgetary process is not influenced by political considerations and will enhance efficiency in macroeconomic management.

**OLS Estimation results of the impact of budget deficits
on the economic growth of the SAARC countries:**

Impact of budget deficits on the economic growth in Bangladesh

Dependent Variable: GDP_GR

Method: Least Squares

Date: 07/15/04 Time: 14:04

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDEF_GR	-0.435214	0.238399	-1.825569	0.0794
M2_GR	0.029082	0.053018	0.548519	0.5880
C	6.592332	1.355781	4.862388	0.0000
R-squared	0.115474	Mean dependent var		4.547586
Adjusted R-squared	0.047434	S.D. dependent var		2.105550
S.E. of regression	2.055006	Akaike info criterion		4.376132
Sum squared resid	109.7993	Schwarz criterion		4.517576
Log likelihood	-60.45391	F-statistic		1.697146
Durbin-Watson stat	2.804846	Prob(F-statistic)		0.202878

Impact of budget deficits on the economic growth in Bhutan

Dependent Variable: Y_BH

Method: Least Squares

Date: 07/15/04 Time: 14:50

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_BH	0.091765	0.187292	0.489956	0.6449
M2_BH	-0.035539	0.066886	-0.531332	0.6179
C	7.995735	2.284393	3.500157	0.0173
R-squared	0.053661	Mean dependent var		6.800000
Adjusted R-squared	-0.324875	S.D. dependent var		0.778276
S.E. of regression	0.895821	Akaike info criterion		2.897844
Sum squared resid	4.012478	Schwarz criterion		2.927635
Log likelihood	-8.591378	F-statistic		0.141759
Durbin-Watson stat	2.508949	Prob(F-statistic)		0.871198

Impact of budget deficits on the economic growth in India

Dependent Variable: Y_IN

Method: Least Squares

Date: 07/15/04 Time: 14:52

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_IN	-0.533353	0.548814	-0.971829	0.3758
M2_IN	0.179005	0.263081	0.680420	0.5265
C	-2.325516	8.443985	-0.275405	0.7940
R-squared	0.160121	Mean dependent var		5.512500
Adjusted R-squared	-0.175831	S.D. dependent var		0.859298
S.E. of regression	0.931786	Akaike info criterion		2.976569
Sum squared resid	4.341124	Schwarz criterion		3.006359
Log likelihood	-8.906276	F-statistic		0.476619
Durbin-Watson stat	2.304668	Prob(F-statistic)		0.646460

Impact of budget deficits on the economic growth in Maldives

Dependent Variable: Y_MD

Method: Least Squares

Date: 07/15/04 Time: 14:53

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_MD	1.151442	0.253782	4.537125	0.0062
M2_MD	0.095527	0.067546	1.414250	0.2164
C	9.726144	1.718399	5.660004	0.0024
R-squared	0.851028	Mean dependent var		5.875000
Adjusted R-squared	0.791439	S.D. dependent var		2.907503
S.E. of regression	1.327812	Akaike info criterion		3.684938
Sum squared resid	8.815423	Schwarz criterion		3.714729
Log likelihood	-11.73975	F-statistic		14.28167
Durbin-Watson stat	2.419544	Prob(F-statistic)		0.008566

Impact of budget deficits on the economic growth in Nepal

Dependent Variable: Y_NP

Method: Least Squares

Date: 07/15/04 Time: 14:57

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_NP	0.038322	1.500880	0.025533	0.9806
M2_NP	0.251983	0.136302	1.848717	0.1238
C	-0.218975	5.206696	-0.042056	0.9681
R-squared	0.452997	Mean dependent var		3.475000
Adjusted R-squared	0.234196	S.D. dependent var		2.135248
S.E. of regression	1.868560	Akaike info criterion		4.368210
Sum squared resid	17.45759	Schwarz criterion		4.398001
Log likelihood	-14.47284	F-statistic		2.070362
Durbin-Watson stat	2.105317	Prob(F-statistic)		0.221296

Impact of budget deficits on the economic growth in Pakistan

Dependent Variable: Y_PK

Method: Least Squares

Date: 07/15/04 Time: 14:58

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_PK	0.175289	0.523913	0.334577	0.7515
M2_PK	-0.117681	0.151960	-0.774416	0.4737
C	5.896250	3.103436	1.899910	0.1159
R-squared	0.157694	Mean dependent var		3.612500
Adjusted R-squared	-0.179228	S.D. dependent var		1.072297
S.E. of regression	1.164432	Akaike info criterion		3.422340
Sum squared resid	6.779508	Schwarz criterion		3.452131
Log likelihood	-10.68936	F-statistic		0.468043
Durbin-Watson stat	1.713617	Prob(F-statistic)		0.651140

Impact of budget deficits on the economic growth in Sri Lanka

Dependent Variable: Y_SL

Method: Least Squares

Date: 07/15/04 Time: 14:59

Sample: 1997 2004

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEF_SL	-0.325745	0.060236	-5.407812	0.0029
M2_SL	0.497232	0.462477	1.075151	0.3314
C	-4.632690	6.312523	-0.733889	0.4960
R-squared	0.855173	Mean dependent var		4.175000
Adjusted R-squared	0.797242	S.D. dependent var		2.479487
S.E. of regression	1.116479	Akaike info criterion		3.338233
Sum squared resid	6.232624	Schwarz criterion		3.368024
Log likelihood	-10.35293	F-statistic		14.76199
Durbin-Watson stat	1.822103	Prob(F-statistic)		0.007982

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