The Pakistan Development Review
35 : 4 Part II (Winter 1996) pp. 773—786

Macroeconomic Policies and Management of Debt, Deficit, and Inflation in Pakistan

MOHAMMAD ASLAM CHAUDHARY and SHAHID WASEEM ANJUM

The study attempts to analyse the sustainability of fiscal policy in Pakistan. Alternative foreign debt and domestic debt strategies were analysed for formulating meaningful policy guidelines. Such analysis was made consistent with other macro-economic variables like growth of GNP, inflation, and interest rates on debt. Alongwith the identifications of sustainable deficit, required deficit reduction in the actual fiscal deficit under appropriate assumptions was also estimated for three time periods: the 1980s, 1985–95 (recent past), and 1993–98 (the 8th plan period). The averages of the sustainable deficits for the above- cited periods under alterantive scenarios were estimated by utilising a sustainable deficit model for Pakistan.

Our empirical findings indicate that Pakistan has been following such macro-economic policies pertaining to fiscal deficit as are not consistent with sustainable deficit. For instance, during the 1980s, deficit of about 4.2 percent of GNP was sustainable against the actual fiscal deficit of 6.5 percent. During the recent past, sustainable deficit was about 5.4 percent of GNP against the actual deficit of 7.4 percent. It was planned that during 1993–98, fiscal deficit will be restricted to 5.5 percent of GNP and GNP growth was expected 7 percent per annum. However, during the first three years of the 8th plan, GNP growth was only 3.6 percent per annum. Our estimates indicated that sustainable fiscal deficit was only 2.7 percent of GNP for this period, given the above actual growth of the economy. The above discussion provides important information regarding unsustainability of fiscal deficit in Pakistan. Throughout the period under analysis, fiscal deficit was not sustainable. As a result, negative impacts of fiscal deficit on the economy were bound to emerge.

Our findings regarding sustainability of fiscal deficit have important bearing on macro-economic policies. Inflation, unemployment, increasing burden of debt and debt-servicing are linked with fiscal deficit. Thus, there is a need to keep the fiscal deficit within a limit; consistent with other macro-economic variables like inflation and debt, etc. Doing so may help to stabilise the economy and to solve the related economic problems. In brief, fiscal deficit need to be reduced for sustainability of the fiscal system and for stable economic growth.

INTRODUCTION AND STATEMENT OF THE PROBLEM

Pakistan has experienced large fiscal deficits for the last decade or so. Being a manifestation of fiscal indiscipline, these deficits have led to increased inflation and

Mohammad Aslam Chaudhary is Chairman, Department of Economics, Quaid-i-Azam University, Islamabad. Shahid Waseem Anjum is a graduate student in the Department of Economics, Quaid-i-Azam University, Islamabad.

Authors' Note: We are thankful to Dr Zafar Mahmood for his valuable comments. The views expressed here are entirely the authors' responsibility.

debt [Chaudhary and Ahmed (1996)]. It has jeopardised the growth and stability of the national economy. In fact, the growing fiscal deficit has served as the basis for international lending institutions to propose Structural Adjustment Programme (SAP), commonly named as IMF-IBRD conditionalities. Specifically, SAP proposed a decline of 3 percentage points in the overall budget deficit from 8 percent in 1992-93 to 5 percent of GDP in 1993-94 followed by continued reduction subsequently. Since the revenue-expenditure structure of Pakistan is inflexible, the curse of growing deficit for such an economy would essentially be like what Eisner (1984) stated, as given below:

> "The budget deficit is like a sin, to most of the public it is morally wrong, ... but always easy to identify and susceptible to considerable bias in measurement".

The consolidated budgetary (federal and provincial) expenditures for 1993-94 were Rs 370.2 billion, which exceeded its level in the previous year by Rs 18.1 billion. However, the development expenditures which were at Rs 70 billion; reduced by Rs 5.4 billion in these period. As a result of excessive increase in general expenditure over the development expenditures. As a result the development plans have consistently failed to achieve vicious objectives.[1] Similarly, how budget outlays for 1993-94 were financed also show how they contributed to deficit. About 56 percent of total budget outlays were financed from tax receipts, 19 percent from non-tax receipts and half a percent from the proceeds of privatisation. The rest of outlays of 24.6 percent or Rs 91 billion were not met from revenue receipts but were financed with net internal bank borrowing of Rs.12.9 billion, non-bank borrowing of Rs 55 billion and external borrowing of Rs 22.9 billion. As such, the excess of the growing recurrent expenditures under the conditions of inflexible revenue structure has accentuated the deficit in Pakistan. In spite of government's efforts, although budget decreased over time, as percentage of GDP, but hardly ever the targets were achieved. The large budget deficits have not only adversely affected the growth but also aggravated its debt burden in line stated by Eisner: every dollar of deficit of government adds a dollar to debt. Besides, increased debt burden, deficits have also depreciated exchange rate, which led to increase the monetary indiscipline in Pakistan. Presently, foreign debt is over $30 billion. Total internal and external debt is about 88 percent of GNP, which is creating debt servicing problem.

It has been estimated that if the fiscal deficit is not controlled effectively, debt servicing of Pakistan may rise to 6.6 percent of GNP in the year 2009-10 exceeding even the expected GNP growth rate. Similarly, the total real debt outstanding will increase to 70 percent of GNP by the year 2000 which is more than double in less than

[1]Pakistan was growing over 6 percent, on average, from last thirty years i.e. 1960 to 1990. During early 1990s, this growth rate has fallen below 5 percent. Presently, in 1996-97, the growth is less than 4 percent. It was even lower during 1992-93. However, inflation continue to grow at double digit. For more details see *Economic Survey, 1996-97.*

a decade [Chaudhary and Ali (1996)]. Further, the combined domestic and foreign debt will exceed the GNP by the beginning of the 21st century. Such a situation calls for immediate actions on the part of the policy-makers to avoid such eventualities.

This study attempts to work out the sustainable level of deficit keeping stable economic growth, optimal inflation, and interest on foreign loans in view. It analysis how the imposition of some rational restrictions on the financing methods affect the range of feasible expansion in domestic and foreign debt, and inflation. Under alternative rational debt strategies, a scheme of deficit reduction is given while keeping other major macroeconomic variables at sustainable level. Three time periods are analysed i.e. 1980–89, 1985–93 and 1993–98. To this end, the study is organised as under. Part-II briefly reviews the relevant literature and describes the theoretical background and abridged version of the model, and debt strategies. Part-III discusses empirical results and scenarios under alternative debt strategies. Part-IV concludes the study and suggests certain policy implications of the analysis.

II. REVIEW OF LITERATURE AND THEORETICAL BACKGROUND

Fiscal deficit has for some time been one of the major economic problems of Pakistan. However, hardly any study has examined its sustainability. Some studies did discuss its impacts on the economy but they did not analyse it in macroeconomic framework. Paucity of specific literature, notwithstanding the above, there exists a good body of literature which has analysed this issue at the international level. Boskin (1982) focused on the fiscal deficit as a cause of deterioration in economic conditions and pointed out factors which appeared as its significant determinants for the sake of controlling it. Eisner (1984) measured budget deficits from national income accounts, adjusted deficit for macro-economic policies and identified stable price paths. His procedure is of help to reach a true deficit figures for any economy. Besides, Buiter (1985) has in his pioneering article discussed on the basis of exhaustive public sector balance sheet the real effects of public sector deficits and the issues of government budget constraint, solvency constraint and different types of fiscal deficits like permanent deficit, constraint net worth deficit and permanent income deficit for U. K. It pointed out that the changes in fiscal deficits and debt in managing financial affairs of the country. Following this study, we have identified scenarios for Pakistan, under which targets are fixed for specific variables for calculating sustainable deficits considering government's assets net of its liabilities as government's net worth (GNW), permanent deficit amounts then to real annuity value of GNW. Similarly, constant net worth deficit (CNWD), which keeps the net worth of the government constant or the real public sector consumption (CG), is equal to the current expected real rate of return (r) times of (GNW). Thus permanent Income deficit is CG = (r x GNW) – g GNW, where 'g' is

growth of output. These deficit measures the magnitude of the long-run inconsistency in government's Fiscal-Financial-Monetary plans.

Different modes of financing have different economic impacts. Fischer and Easterly (1990) estimated Seignorage of 2.5 percent of GNP, not sustainable for LDCs. Moreover, Seignorage can not permanently used as financing method since it is inflationary. Inflation is fiscal phenomenon [Chaudhary and Ahmed (1996)] and fiscal deficit creates inflation. Haque and Montill (1991) and Haque and Montiel (1992) calculated optimal deficit, different than our technique and variables. He used real base money rather demand for real base money. They found 5.5 percent (of GNP) as optimal deficit for the 1980s and 5.6 percent, 3.8 percent and 4 percent for 1990s.

We have developed a model and debt strategies for formulating alternative scenarios for fiscal deficit. The main model developed is not a part of this paper due to space limitation. Only brief version of the model is given here.[2] Final version of estimated equations are presented. The strategies incorporated in the model are discussed below:

Prudent Debt Strategies

Any government can perhaps finance its deficits with domestic or foreign debt. The funds generated through these sources of finance depend, however, upon creditworthiness of the government, willingness of lenders and absorptive capacity of the country. Even if lenders are willing to lend, debt must not be obtained at very hard conditions and beyond a certain limit, because it may lead to unsustainable debt burden which could ultimately lead to insolvency. Thus, a country must follow a feasible strategy of sustainable deficit and debt. For this purpose, following alternative strategies are analysed.

(a) Foreign Debt Strategy

A prudent debt strategy would be not to let the debt burden to rise above a certain value of current debt, subject to current debt is within limits. Different measures of sustainable debt and deficit like maintaining constant ratios of debt to export and debt to output are cited in the literature. Besides, since weighted foreign resources are considered an invariant measure of wealth of an economy, weights depend upon export earnings and GNP. The elasticities needed to calculate weights for the weighted foreign resource measure may be estimated from trend value of exports and GNP. The following strategies may be fixed for estimation of sustainable deficit.

Strategy 1 (Constant Debt/GNP Ratio)

According to constant debt/GNP ratio, foreign debt must remain constant in

[2]For detailed description of the model see Chaudhary and Waseem (1996), Working Paper, Department of Economics, QAU.

order to remain creditworthiness. The above strategy may be incorporated in our model as following.

$$(ny - ne)(\acute{u}^* - \acute{a}^*)e \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

where: '*ny*' and '*ne*' are growth of GNP and foreign exchange rates. * stands for foreign and '*ú*' for foreign debt. '`' stands for ratio to GNP. '*á*' is foreign assets and *e* is exchange rate.

Strategy 2 (Constant Debt/Weighted Foreign Resource Constant)

Keeping the foreign debt to weighted foreign resource constant is another measure of creditworthiness

$$nR^* (u^* - a^*)e \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

Where '*nR*' is growth of weighted foreign assets.

Strategy 3: Constant Debt Export Ratio Constant

Another measure of creditworthiness is to keep foreign debt/exports ratio constant. By incorporating this into over model:

$$(nx - ne)\ (u^* - a^*)e \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (3)$$

where *nx* is the growth rate of exports. The above strategies will be incorporated to find out sustainable deficit in Pakistan.

(b) Domestic Debt Strategies

The domestic debt of the Pakistan has grown rapidly during the last decade. Out of total annual deficit of Rs 108 billion (1992-93), the domestic debt accounted for Rs 83.6 billion or over 44 percent of GDP. Further, the government borrows from the public by issuing saving and long term certificates and pays high interest, which has led to increased debt servicing. Keeping in view the growing trend of domestic debt, a strategy, which is proposed to keep domestic debt/GNP ratio constant, is as given below:

Strategy 4

(i) i/y = constant i.e. nyi ... ... (4)

(ii) Another strategy could be to keep this debt constant to domestic revenue. '*i*' stands for domestic debt, '*y*' indicates growth rate.

Strategy 5

i/t = Constant ... ... (5)

i.e. $n_t i$; *nt* is growth rate of tax revenue.

These strategies will be incorporated in the model for the analysis of sustainable debt and deficit.

Integrated Model

Sustainable deficit may be estimated by incorporating debt strategies in the following model:

$$ó + rí + r^*(ú^* - á^*)e = n_i i + (ú^* - á^*)e + nM/P \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

$$ó + rí + r^*(ú^* - á^*) = Zi + wi + nm + IIm \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

where: Zi = Column vector of non-monetised domestic debt,
wi = Column vector of foreign debt strategies.

The monetary base (m) is taken as ratio to GNP.

r = Interest rate, nm = Growth of monetary base,
o = Deficit, II = Inflation,
n = Growth rate, ‘’’ = Ratio to GNP,
i = Domestic Debt, u = Foreign Debt.

The above Equation (2) is utilised to estimate different scenarios for sustainable deficit.

Required Deficit Reduction and Scenarios

Required deficit reduction (RDR) may be obtained based upon a sustainable rate of inflation, economic growth rate, interest rate on loans and by incorporation of strategies described earlier. The optimal inflation, growth and deficits are targeted based upon historical sustainable stable rates. In the light of above RDR is estimated for three time periods: For 1980s, recent past (1985–93) and Eighth Five-Year Plan period, (1993–98).

The equations for estimations duly incorporating strategies are given below:

CASE A

$$RDR = ó+rí+(r^*+ne)(ú^* - á^*) - [ny\,í+ny\,(ú^* - á^*) + nym+IIm] \quad \ldots \quad \ldots \quad (1)$$

CASE B

$$RDR = ó+rí+r^*(ú^* - á^*) - [nyi + nR^*(ú^* - á^*) + nym + IIm] \quad \ldots \quad \ldots \quad (2)$$

CASE C

$$RDR = ó+rí+(r^*+ne)\,(ú^* - á^*) - [nti + nx\,(ú^* - á^*) + nym + IIm] \quad \ldots \quad \ldots \quad (3)$$

CASE D

$$RDR = ó + rí + (r^* + ne)\,(ú^* - á^*) - [nyi + nx\,(ú^* - á^*) + nym + IIm] \quad \ldots \quad \ldots \quad (4)$$

In the above cases, Case A is related to debt strategy one, Case B pertains to domestic debt/GNP ratio constant. Case C relates to domestic debt/tax revenue constant and Case D pertains to exports earning to GNP ratio constant.

III. EMPIRICAL FINDINGS

The model presented in the previous section is used to assess the consistency between fiscal deficits, output growth, rate of inflation and other major macroeconomic variables. The model is estimated for the cases stated in the previous Section. The variables were combined alternatively to highlight different perspective given certain sustainable level of major variables.

Table 1 depicts results for the period 1980–89. Case A in this table is the first debt strategy by keeping domestic and foreign debt/GNP ratio constant. The estimates

Table 1

Sustainable Deficit and Economic Targets

CASE A **(Strategy)** (The Eighties)

S. No.	Assumptions	RDR^{+} (% of GNP) @	SD^{++} (% of GNP)@
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	3.7	2.8
(ii)	Growth rate of GNP = 6.2 % Inflation rate = 7.2 % Interest rate on foreign debt = 3 %	3.02	3.55

CASE B

(The Eighties)

S. No.	Assumptions	RDR^{+} (% of GNP)@	SD^{++} (% of GNP)@
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	2.39	4.19
(ii)	Growth rate of GNP = 6.2 % Inflation rate = 7.2 % Interest rate on foreign debt = 3 %	1.96	4.62

+ Required deficit reduction.

++ Sustainable fiscal deficits.

@ These are the mean values of the period 1980-89.

indicate that required deficit reduction (RDR), as percentage of GNP was 3.7 percent. Under this strategy, the sustainable deficit (SD), as percentage of GNP, was 2.8 percent. However, when the increased rates of GNP growth and inflation, as mentioned in Case A are considered, the sustainable deficit increases to 3.6 percent and RDR was reduced to 3 percent. As such, higher rates of GNP growth and inflation enable the economy to sustain higher level of deficit. It may be noted that during the 1980s, actual inflation and GNP growth were 7 percent and 6.2 percent per annum, respectively,[3] whereas the average per annum fiscal deficit was 6.5 percent of GNP, which was not sustainable.

Case B (Table 1) pertains to the results of scenario B, which is based upon the strategy of domestic debt to GNP and of foreign debt to weighted foreign resources (R) as constant. Under the assumption (i), the model used for analysis indicated that the domestic economy could sustain 4.2 percent deficit, of GNP, and therefore, RDR was 2.4 percent. Under option (ii) with higher rates of GNP growth and inflation, sustainable level of deficit increased to 4.6 percent and RDR reduced to about 2 percent of GNP. Thus, under the both strategies, the actual deficit of 6.5 percent of GNP was not sustainable which was under fiscal policy followed in the country. For optimal performance of the economy, RDR was 2.5 percent.

Under the debt strategy in which the ratio of domestic debt to tax revenue is kept constant (Case C) and under the strategy under which the ratio of the foreign debt to export earning is kept constant, (Case D), incorporated strategies 3–5 (Table 2) indicate the RDR was 2.3 percent and SD as 4.4 percent of GNP for Case C. However, under assumptions C (ii), of higher GNP and inflation rate, RDR reduced to 2.1 percent and SD to 4.5 percent. It again indicated that actual deficit and inflation during this period was not sustainable.

The results under Case D (Table 2) for export strategy showed RDR at 2.7 percent of GNP and SD at about 4 percent, (assumption (i)). However, under a higher rates of GNP growth and inflation, (assumption (ii)), the RDR decreased to 2.3 percent of GNP whereas the SD improved to 4.3 percent. An important point to note is that under all these alternative strategies, the actual deficit of 6.5 percent of GNP followed under the fiscal policy regime was not sustainable. On an average, the actual deficit exceeded the unsustainable deficit by about 2 percent of GNP. Therefore, it was bound to have negative impacts upon the economy in terms of higher inflation, increased debt burden and financial squeeze. Based upon the above findings, it may be stated that fiscal policy followed in Pakistan did not target the optimal level of macroeconomic variables. The fiscal deficit was unsustainable, as a result the economy did perform at optimal level i.e. high inflation, slow growth and high debt burden. Therefore, it is necessary that fiscal deficit may not exceed 4.5 percent of GNP, since higher deficit is not sustainable.

[3]There are official figures, however, actual figures are believed

Table 2

Sustainable Deficits and Economic Growth

CASE C	**(Strategy 3 and 5)**		(The Eighties)
S. No.	Assumptions	RDR^{+} (% of GNP)@	SD^{++} (% of GNP)@
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	2.24	4.33
(ii)	Growth rate of GNP = 6.2 % Inflation rate = 7.2 % Interest rate on foreign debt = 3 %	2.13	4.45

CASE D			
	(Strategy 4 and X/GNP Constant)		(The Eighties)
S. No.	Assumptions	RDR^{+} (% of GNP)@	SD^{++} (% of GNP)@
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	2.68	3.9
(ii)	Growth rate of GNP = 6.2 % Inflation rate = 7.2 % Interest rate on foreign debt = 3 %	2.26	4.32

X Exports.
\+ Required deficit reduction (RDR).
++ Sustainable fiscal deficits (SD).
@ These are the mean values of the period 1980-89.
The average value of actual overall fiscal deficit for this period was 6.5 percent of GNP.

Sustainable Deficit during Recent Past (1985–93)

The economy registered average annual inflation rate of over 6 percent during the late 1980s and over 10 percent in the early 1990s. However, GDP grew on average by 5.2 percent per annum in this period, as compared to over 6 percent in the long run for last 25 years. The average annual fiscal deficit was 7.42 percent of GNP, during 1985–93. It was even higher than 7.4 percent for some years. Keeping in view the historical stable economic conditions, alternative assumptions were made regarding GNP growth, inflation rate and interest rate to calculate sustainable fiscal deficit.

Table 3.1, Case A, indicates that an average RDR, under different assumptions, was about 3.3 percent of GNP. It shows that sustainable deficit was much less than that of the 1980s. Therefore, RDR increased during this period. It may also be noted that actual growth of GDP decreased and fiscal deficit increased during this period,

Table 3.1

Sustainable Deficits and Economic Targets
The Recent Past

CASE A

S. No.	Assumptions	RDR^{+} (% of GNP)@	SD^{++} (% of GNP)@
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	3.59	3.83
(ii)	Growth rate of GNP = 6 % Inflation rate = 6 % Interest rate on foreign debt = 3.15 %	3.2	4.2
(iii)	Growth rate of GNP = 5.85 % Inflation rate = 7.5 % Interest rate on foreign debt = 3.15 %	3.2	4.2

compared to the 1980s. Therefore inflation almost doubled during early 1990s, much in excess of that in the 1980s, and has since then been increasing. It also shows that in spite of worsening economic conditions, government continued to follow a policy of unsustainable fiscal deficit.

Under the debt strategy (Case B), the SD scenarios indicated a little better position. It shows that under alternative assumptions RDR reduced to 1.2 percent and, therefore, SD increased to 6 percent of the GNP.

Table 3.2 indicates the scenarios under Case B. On average, RDR was 1.5

Table 3.2

CASE B

S. No.	Assumptions	RDR^{+} (% of GNP)	SD^{++} (% of GNP)
(i)	Growth rate of GNP = 5.43 % Inflation rate = 6.38 % Interest rate on foreign debt = 3.68 %	1.26	6.15
(ii)	Growth rate of GNP = 6 % Inflation rate = 6 % Interest rate on foreign debt = 3.15 %	1.25	6.17
iii)	Growth rate of GNP = 5.85 % Inflation rate = 7.5 % Interest rate on foreign debt = 3.15 %	1.14	6.28

\+ Required deficit reduction.
++ Sustainable fiscal deficits.
@ These are the mean values of the period 1985-93.
The average value of targeted overall fiscal deficit in this period (as a percent of GNP) is 7.42.

percent while SD was about 6 percent of GNP. The results of Cases B and C (not reported here) are quite similar to each other. In these cases RDR was about 1.25 percent, while sustainable deficit was about 6 percent of GNP.

Sustainable Deficit during the 8th Plan (1993–98)

It was planned that fiscal deficit will remain around 5.5 percent of GNP and the inflation rate will be brought down to the level of a single digit during the 8th Plan. The actual performance, as per mid-plan review, indicated that neither the target of fiscal deficit was achieved nor inflation was brought down. In fact, the inflation kept on increasing throughout the 8th Plan period. Actual growth of GDP during the first three years of the plan was 4 percent and inflation reached to double digits. Such a performance is consistent with our findings which show that to achieve high growth and low inflation, substantial level of fiscal deficit has to be brought down.

Table 4 (Case A) indicates that, RDR was on average, about 2.8 percent and SD around 2.7 percent of GNP. Details under alternative assumptions are given in Table 4.

Table 4

Sustainable Deficits and Economic Target
The Eighth Plan (1993–98)

CASE A

S. No.	Assumptions	RDR^{+} (% of GNP)	SD^{++} (% of GNP)
(i)	Growth rate of GNP = 7 % Inflation rate = 7 % in = 7 % io = 3 %	2.28	3.16
(ii)	Growth rate of GNP = 7 % Inflation rate = 4 %	3.73	1.71
(iii)	Growth rate of GNP = 5.5 % Inflation rate = 7 %	3.72	1.72
(iv)	Growth rate of GNP = 3 % Inflation rate = 12 %	3.89	1.81
(v)	Growth rate of GNP = 6 % Inflation rate = 6 %	2.53	3.17
(vi)	Growth rate of GNP = 5 % Inflation rate = 10 %	2.91	2.79
(vii)	Growth rate of GNP = 7 % Inflation rate = 10 %	0.89	4.55

+, ++ and @: See as footnote for previous tables.

Scenarios under Case B, the debt strategy indicated similar results to that of Case A. It indicates that RDR on average was 2 percent of GNP. Thus, sustainable deficit was 3.5 percent of GNP against the plan target of 5.5 percent. Actual average annual fiscal deficit during this period was around 6 percent, even higher than the plan target. As a result, actual inflation was over 10 percent per year. The continuous failure to achieve the desired level of reduction in fiscal deficit appears a continuous problem of fiscal policy in Pakistan. Thus, lower GNP growth, higher rate of inflation and thereby destabilisation of the economy continued. Other scenarios (cases) for RDR and SD were also estimated given different debt strategies. However, these are not reported here. The results of those estimates were similar to the results reported above.

IV. CONCLUSION

The study was focused to analyse sustainability of fiscal deficit in Pakistan. Alternative foreign debt and domestic debt strategies were formulated for meaningful policy analysis. The analysis was made consistent with other macro-economic variables like growth of GNP, inflation and interest rates on debt. Along with the identification of sustainable deficit, required deficit reduction in the actual fiscal deficit under appropriate assumptions was also estimated for three time periods: the 1980s, 1985–95 (recent past) and 1993–98 (the 8th plan period). The averages of the sustainable deficits for the above cited periods, under alternative scenarios, were estimated by utilising sustainable deficit model for Pakistan.

The empirical findings indicated that Pakistan has been following fiscal policies which are not consistent. For instance, during the 1980s, deficit of about 4.2 percent of GNP was sustainable against the actual fiscal deficit of 6.5 percent. During the recent past, sustainable deficit was about 5.4 percent of GNP against the actual deficit of 7.4 percent. It was planned that during 1993–98, fiscal deficit will be restricted to 5.5 percent of GNP and GNP growth was expected 7 percent per annum. However, during the first three years of the 8th plan, GNP growth was around 4 percent and fiscal deficit emerged over 6 percent per annum. Our estimates indicated that sustainable fiscal deficit was only 2.7 percent of GNP for this period, given the above actual growth of the economy. The above discussion provides important information regarding unsustainability of fiscal deficit in Pakistan. Throughout the period under analysis, fiscal deficit was not sustainable. As a result, negative impacts of fiscal deficit on the economy were bound to emerge. No wonder, the high inflation, financial squeeze, low economic growth, slow down of exports and increasing unemployment were the outcome of inconsistent fiscal policies followed in Pakistan.

Our findings regarding sustainability of fiscal deficit have important bearing on macro-economic policies. Inflation, unemployment, increasing burden of debt and debt-servicing are linked with fiscal deficit. Thus, there is a need to keep the fiscal deficit within a limit, consistent with other macro-economic variables like inflation and

debt, etc. Doing so it may help to stabilise the economy and to solve the related economic problems. In brief, fiscal deficit need to be reduced for sustainability of the fiscal system and stable economic growth. Fiscal policy must take into account fiscal deficit, keeping in view optimal economic growth, debt and inflation.

REFERENCES

Ahmad, Naveed (1994) Monetary and Structural Sources of Inflation in Pakistan. Unpublished M. Phil. dissertation. Islamabad: Department of Economics, Quaid-i-Azam University.

Boskin, Michael (1982) Structural Determinants of Government Budget Deficit in Developing Countries. *World Development* 10:6.

Buiter, William H. (1985) A Guide to Public Sector Debt and Deficit. *Economic Policy, A European Forum* 1:1 (Nov.).

Chaudhary M. Aslam, and Naveed Ahmed (1996) Inflation in Pakistan. Islamabad: Department of Economics, Quaid-i-Azam University.

Chaudhary M. Aslam, and Sh. Shahbaz Ali (1993) Pakistan's Foreign Dependence, its Capacity for Debt Repayment and Future Prospects. *Pakistan Economic and Social Review* 31:1.

Chaudhary M. Aslam, and Shahid Waseem (1996) Fiscal Policy and Sustainability of Debt, Deficit and Inflation in Pakistan. Islamabad: Department of Economics, Quaid-i-Azam University. (Working Paper.)

Chaudhary, M. Aslam (1988) International Debt and Foreign Dependence: Policy Options for Pakistan. *The Pakistan Development Review* 27:4 829–836.

Eisner, Robert (1984) Which Budget Deficit? Some Issues of Measurement and their Implications, *American Economic Review* 74:2 138–143.

Fischer, S., and Easterly W. (1990) The Economics of the Government Budget Constraint. *The World Bank Research Observer* 5:2.

Haque, Nadeem ul, and Peter J. Montiel (1992) Fiscal Policy in Pakistan since 1970. Washington, D. C.: Research Department. (IMF Working Paper.)

Haque, Nadeem ul, and Peter Montiel (1991) The Macroeconomics of Public Sector Deficits: The Case of Pakistan. Country Economics Department, (The World Bank Working Paper No. 673.)

Pakistan, Government of (Various Issues) *Economic Survey.*

Pakistan, Government of (Various Issues) *Eighth Five Year Plan (1993–98)*, Islamabad: Planning Commission.

Comments

I have two main comments; one on the statement of the problem and the other on the model.

Since the subject of the paper is quite technical and subtle too, any statement or generalisation made with reference to fiscal deficit needs to be very carefully thought out. I am sorry to say that at several places the statement of the problem is written in a very careless and casual way, and fails to stand an empirical scrutiny. Here are few examples:

(i) At page 1, it has been said that large fiscal deficit in Pakistan during the last two decades "have increased inflation and debts which, in turn, have jeopardised the growth and stability of the national economy." This is too incorrect. In the 7th Plan period, fiscal deficit was recorded at 7.6 percent of GDP with inflation at 9.6 percent and GDP growth at 5 percent. Compared to this, in the 6th plan, despite a fiscal deficit slightly higher (7.7 percent), the inflation was as low as 5.4 percent and GDP growth as high as 6.3 percent. So, it is not the overall magnitude of deficit *per se*, but the way this deficit was caused and the way it was financed, which determines its impact on macroeconomic stability. It is only after looking into the revenue budget balance, the composition of development expenditure, the modes of financing of deficit, etc., that one can make any statement on the impact of fiscal deficit on growth and inflation.

(ii) On the same page, the Structural Adjustment Programme (SAP) has been described as "commonly known as IMF-IBRD conditionalities." This is nothing but disinformation. I wish the author had referred to some specific literature in which the SAP is used the synonymous to conditionalities.

Shaukat Ali

The Planning Commission,
Islamabad.