The Pakistan Development Review
42 : 3 (Autumn 2003) pp. 177–195

An Analysis of Budget Deficits, Debt Accumulation, and Debt Instability

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In Pakistan all the macro indicators have been adversely affected by the persistently high deficits and the strategy adopted to finance them in the last two decades. The excessive domestic borrowing at high rates to finance deficits without any attempts at domestic resource mobilisation and controlling of the deficits over extended periods absorbed all available domestic and external resources. The resulting debt-trap led to increased external borrowings at high rates with short-term maturity. This, coupled with massive exchange rate depreciation throughout the last two decades, resulted in rapid debt accumulation. The recent fiscal space created in the wake of events of 9/11, resulting in high reserves, follows considerable debt relief and availability of massive funds on very soft terms. However, the decline in budget deficit continues to occur at the expense of development expenditure, along with some increase in tax revenues. This trend in expenditure needs to be reversed if serious progress in debt reduction is the aim.

I. INTRODUCTION

Appropriate management of the budget deficit is crucial for the stability of the economy and has been the major benchmark for the countries to join the Euro. Continued high deficits tend to aggravate other macro indicators like interest rates, savings, investment, growth, current account deficit, etc. Since 1987-88, when Pakistan's budget deficit increased sharply to 8.5 percent of GDP, there has been a serious discussion between Pakistan and the multilateral institutions. Whereas in the 1990s the deficit was reduced to the range of 6 to 7 percent of GDP, it has been brought down to around 5 percent in recent years.

High deficits in Pakistan have their origin in the complete neglect of domestic resource mobilisation. In the face of rising public expenditures, excessive domestic and external borrowings piled up the public debt. Furthermore, heavy reliance on non-inflationary but expensive non-bank borrowing, and the continued depreciation of the exchange rate, inflated the debt burden enormously. The growing deficits (the-revenue-minus-expenditure gap), coupled with low domestic resource

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Author's Note: I am grateful to the two anonymous referees of the *PDR* for their very useful comments and suggestions on the first draft of the paper. I would also like to thank Dr A. R. Kemal, Director, PIDE, for his valuable guidance at every stage in the preparation of this paper.

mobilisation, accentuated the savings-investment gap (S-I). The strategy of expensive but non-inflationary borrowing from the non-bank and external sources to finance both the development and non-development expenditures not only increased the domestic debt tremendously, it mortgaged the export earnings, thus widening the export-import gap (X-M).

A significant aspect of the debt burden in Pakistan has been the policy of domestic borrowing at very high rates of returns. Since the Government wanted to avoid inflationary tendencies, it focused, especially in the 1980s, on the non-bank borrowing. The resulting increase in interest payments on domestic debt exceeded the interest payments on the external debt, which in turn accentuated the budget deficit.

The objectives of this paper are: to test for the contribution of the various factors to the acceleration of debt burden over two decades (1980s and 1990s); and to trace the factors responsible for the high budget deficits and the resulting debt accumulation with respect to the trends in the three gaps. The paper also focuses on the changing composition of the domestic and external debt with reference to the availability of financing as well as relative interest costs.

The paper is structured as follows: Section II presents an overview of the impact of budget deficits by different schools of thought. In Section III we look at the trends in the debt burden of Pakistan—both domestic and external over time, to assess the impact of interest rate–growth differential, the exchange rate depreciation effect, and the effect of budget deficits. Factors responsible for the accumulation of public debt with respect to the three gaps are discussed in Section IV. Section V is about the factors responsible for the changing composition of public debt; and finally, Section VI concludes the paper with some policy recommendations.

II. IMPACTS OF FISCAL DEFICIT: AN OVERVIEW

In economic literature fiscal deficits have been regarded as good, bad, and irrelevant. The Keynesians maintain that a reduction in taxes or an increase in public expenditure would stimulate aggregate demand. If there is excess capacity and unemployment, this would lead to higher income and output, and also have a positive effect on savings and investment. However, this argument is valid only if unemployment and excess capacity is due to demand limitations only. The Ricardians hold that fiscal deficits can be substituted for taxes without any impact on aggregate demand. The households save more to pay higher future taxes if the government reduces current taxes without reducing current expenditure; national savings are independent of taxation. The Ricardian paradigm is not very relevant in the case of a developing country like Pakistan because of its other equally stringent assumptions such as the existence of perfect capital markets, non-distortionary tax systems, fully rational and foresighted consumers, etc.

The neoclassicals maintain that substitution of fiscal deficit for taxation leads to an expansion of aggregated demand. Consequently, the desired private savings rise by less than the tax cuts, and hence the national savings decline. It requires an increase in real interest rate to equate desired savings and desired investment. However, the high interest rates crowd out private sector, resulting in lower investment in the long run. This, is turn, leads to higher deficits, requiring borrowing from abroad, which leads to current account deficits. The current account

deficit in the long run shows up as low stock of national wealth, and higher claims by foreigners—the debt burden.

The continuous rise in deficits, the consequent rise in public debt, and the decline in investment coupled with the widening trade gap over an extended period, suggest that the impact of Pakistan's fiscal deficits may be close to the neoclassical paradigm. Furthermore, these also suggest that countries with high deficits may be facing three (not two) gaps: the S-I gap, the X-M gap, and the R-E gap.

III. DEBT BURDEN AND TRENDS IN COMPONENTS OF DEBT

Persistent deficits financed through borrowings pile up the national debt. It will be seen from Table 1 that Pakistan's public debt increased from Rs 144.9 billion in 1980-81 to Rs 709 billion in 1989-90, and stood at Rs 3478.6 billion in 2002-03.

While both the external and domestic debt have been rising, the latter has risen much faster; the foreign debt increased from Rs 86.7 billion in 1980-81 to Rs 324 billion in 1989-90, and to Rs 1666.4 billion in 2002-03. Domestic debt increased from Rs 58 billion to Rs 381 billion and amounted to Rs 1812 billion over the three time-periods. External debt as a percent of total debt declined over time from 60 percent in 1980-81 to 48 percent in 2002-03, while domestic debt increased from 40 percent to 52 percent over the same period.

Macro variables affecting the change in the stock of public debt include the interest rates, the exchange rates, budget deficits, and GDP growth. The impact of these factors on the growth of public debt in Pakistan over the two decades is assessed with respect to the interest rate–growth differential, the exchange rate changes, and the primary budget deficit. The debt ratio rises when the real interest rate exceeds the real GDP growth, when the exchange rate depreciates, and when the primary budget is balanced or in deficit. The debt dynamics equations for these three indicators are derived as follows:[1]

[1]The author gratefully acknowledges the debt dynamics equations provided by the second referee for this paper.

Table 1

Trends in Domestic and Foreign Public Debt

Year	Rs Billion			Percentage Share in Total Debt	
	Domestic Debt	Foreign Debt	Total Debt	Domestic	Foreign
1980-81	58.1	86.7	144.9	40.10	59.90
1981-82	81.3	87.2	168.5	48.27	51.73
1982-83	104.2	118.3	222.6	46.82	53.18
1983-84	124.2	127.6	252.5	48.50	51.50
1984-85	153.0	147.4	300.5	50.93	49.07
1985-86	203.1	179.2	382.4	53.12	46.88
1986-87	248.5	206.4	454.9	54.62	45.38
1987-88	290.1	227.3	517.5	56.06	43.94
1988-89	333.2	272.3	605.9	54.99	45.01
1989-90	381.3	323.6	704.9	54.09	45.91
1990-91	448.2	346.9	795.0	56.37	43.63
1991-92	531.5	431.8	963.3	55.18	44.82
1992-93	615.3	494.8	111.0	55.43	44.57
1993-94	711.0	612.9	132.9	53.71	46.29
1994-95	807.7	683.1	149.1	54.17	45.83
1995-96	920.3	748.3	1668.1	55.15	44.85
1996-97	1056.1	878.1	1934.1	54.60	45.40
1997-98	1199.7	986.9	2186.5	54.87	45.13
1998-99	1452.3	1272.4	2724.7	53.31	46.69
1999-00	1641.3	1312.8	2955.0	55.56	44.44
2000-01	1788.2	1496.4	3292.6	54.64	45.36
2001-02	1757.6	1671.7	3429.3	51.26	48.73
2002-03	1812.2	1666.4	3478.6	52.08	47.89

Source: Pakistan Economic Survey (Various Issues).

The stock of public debt at time t is given by:

$$B_t = (1 + r)\ B_{t-1} - PD = (1 + r)\ [B_{Dt-1} + E_{t\,B\$t-1}] - PD_t$$

Where

B_t = Public debt at time t in domestic currency.
B_{Dt} = Domestic public debt at time t in domestic currency.
$B_{E\,\$,t}$ = External public debt at time t in U.S. dollars.
E_t = Exchange rate at time t, domestic currency per U.S. dollars.
r = Average nominal interest rate on public debt.
PD_t = Primary deficit at time t.

Scaling by nominal GDP (Y_t), and letting lower-case letters denote share of GDP yields

$$b_t = \frac{(1+r)}{(1+g)}\left[b_{D,t-1} + (1+\eta_t)b_{E,t-1}\right] - pd_t \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

where

g = Nominal GDP growth

$$\eta_t = \frac{E_t}{E_{t-1}} - 1$$

Using the share of external debt in total public debt (denoted by α_t), Equation 2 can be rewritten as:

$$b_t = \frac{1+r}{(1+g)}\left[(1-\alpha_{t-1}) + (1+\eta_t)\alpha_{t-1}\right]b_{t-1} - pd_t = \frac{(1+r)}{(1+g)}$$
$$\left[1+\eta_t\alpha_{t-1}\right]b_{t-1} - pd_t \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (3)$$

Subtracting b_{t-1} from both sides and collecting terms finally yields:

$$\Delta b = \frac{(r-g)+\eta_t\alpha_{t-1}(1+r)}{(1+g)}b_{t-1} - pd_t \quad \ldots \quad \ldots \quad (4)$$

This allows us to decompose the change in public debt as a percentage (share) of GDP into:

Interest rate–growth differential: $\frac{(r-g)}{(1+g)}b_{t-1}$ the debt ratio rises when the real interest rate exceeds real GDP,

Exchange rate effect: $\frac{\eta_t\alpha_{t-1}(1+r)}{(1+g)}b_{t-1}$, the debt ratio rises as exchange rate depreciates,

Primary budget deficit effect: $-pd_t$, the debt ratio increases when the primary budget is balanced or is in deficit.

However, Δb may also generate residuals the effect of which may be positive or negative. Estimates of these four effects of Δb are reported in Table 2. While Section 2a of the table gives estimates based on nominal interest rates and output, Section 2b of the table uses real interest and output growth. However, the outcome on the four effects does not differ very significantly.

The interest rate–growth differential would push the Δb ratio up if real interest rate exceeded the real output. However, this effect is negative throughout the two decades whether nominal or real interest rates and output are used. The primary

Table 2

Trends in Factors Affecting the Debt/GDP Ratios

	2a					2b				
Year	Δb	Foreign Exchange Effect	Primary Budget Deficit	Nominal Interest –Nominal Growth Differencies	Residual	Δb	Foreign Exchange Effect	Primary Budget Deficit	Nominal Interest –Nominal Growth Differencies	Residual
1980-81			3.13					3.13		
1981-82	–0.002		2.93	–2.95	0.011	–0.003		2.93	–5.60	2.658
1982-83	0.216	0.186	3.98	–5.67	1.716	0.228	0.196	3.98	–3.43	–0.526
1983-84	0.043	0.045	2.62	–2.35	–0.277	0.040	0.043	2.62	–5.41	2.785
1984-85	0.079	0.076	4.29	–2.84	–1.449	0.077	0.074	4.29	–3.99	–0.291
1985-86	0.043	0.038	4.26	–2.40	–1.852	0.043	0.038	4.26	–2.32	–1.932
1986-87	0.039	0.037	3.97	–3.54	–0.435	0.038	0.037	3.97	–4.18	0.209
1987-88	0.010	0.012	3.60	–7.57	3.966	0.010	0.012	3.60	–8.07	4.465
1988-89	0.040	0.039	2.44	–2.21	–0.228	0.038	0.038	2.44	–5.27	2.832
1989-90	0.051	0.049	1.09	1.50	–2.594	0.047	0.046	1.09	–2.88	1.781
1990-91	0.014	0.015	3.85	–6.93	3.081	0.013	0.015	3.85	–8.97	5.121
1991-92	0.028	0.028	2.29	–5.90	3.614	0.027	0.028	2.29	–7.61	5.323
1992-93	0.011	0.011	2.15	–4.70	2.544	0.012	0.012	2.15	–2.59	0.439
1993-94	0.035	0.035	0.08	–7.28	7.193	0.035	0.035	0.08	–7.20	7.116
1994-95	0.004	0.004	0.43	–8.80	8.366	0.004	0.004	0.43	–8.89	8.453
1995-96	0.014	0.014	0.25	–6.14	5.892	0.014	0.014	0.25	–4.66	4.406
1996-97	0.024	0.023	–0.19	0.00	0.188	0.022	0.022	–0.19	–4.49	4.678
1997-98	0.015	0.015	0.10	0.00	–0.098	0.015	0.015	0.10	–0.19	0.096
1998-99	0.012	0.011	–1.39	0.79	0.609	0.011	0.010	–1.39	–1.29	2.686
1999-00	0.015	0.014	–1.60	0.87	0.731	0.015	0.014	–1.60	1.59	0.013
2000-01	0.016	0.015	–1.78	–2.66	4.438	0.016	0.015	–1.78	–1.53	3.306
2001-02	0.006	0.006	–1.70	0.92	0.778	0.006	0.006	–1.70	–0.01	1.702
2002-03	–0.004	–0.005	–0.65	–3.18	3.829	–0.004	–0.005	–0.65	–3.18	3.829

budget deficit is an important factor affecting the budget deficits because government consumption exceeds government revenues for almost all the periods except for very early 1980s. Since primary budget is in deficit between 1980-81 and 1995-96, it leads to higher Δb. In the remaining period it is in surplus except for 1997-98, and hence has a dampening effect. The foreign exchange effect is the strongest effect pulling up the debt ratio. In fact it equals the Δb for a number of years, (1988-99, 1992-93 to 1997-98, and 2001-02), and even exceeds the debt ratio in some cases. In case of the residual effect, we do not know for certain what these residuals are, but it appears from Table 2 that the positive savings of the government and the remittances may be exerting a negative effect on the debt ratio in the early Eighties. However, for the remaining period they bear a positive sign. In Table 2b, however, the negative effect of residuals on the debt ratio extends from 1983-84 to 1989-90, excluding 1987-88, and again in 1995-96 they bear a negative sign. This may be due to some privatisation proceeds accruing from the sale of shares of the Pakistan International Airlines in the late Eighties. However, the positive effect is considerably higher in the 1990s to 2002 period than the negative effect of the 1980s. Since the exchange rate depreciation in the later period has been quite rapid and significant, the positive effects of the residuals may be attributed to the exchange rate effect.

The impact of changes in exchange rates on the growth of debt are also analysed in Table 3 by comparing foreign debt in rupee terms at the annual prevailing exchange rates, and at the constant rate of 1980-81. Foreign debt at the prevailing exchange rates increased from 29 percent of GNP in 1980-81 to 48 percent in 2000-01. When calculated at the constant rate of Rs 9.9/$, it would actually have declined to 15 percent in 1989-90. Beyond 1995-96, it would be in single digit, and was 7.5 percent of GNP in 2000-01. In the 1990s the foreign debt at the prevailing exchange rates is twice the size of the debt at constant rates during the period from 1989-90 to 1995-96; three times in the following two years; and greater than five times in the last five years. The gap continues to widen, and in the last three years the debt at prevailing exchange rates is more than five times the debt at constant exchange rate.

However, this fixed exchange rate scenario is not very plausible since after 1981-82 no debt was contracted at the same exchange rate. Similarly, all the cumulative debt over the year was not contracted at the new exchange rate. Therefore, we estimate the impact of exchange rate on debt by adjusting the foreign debt only for the difference in the previous and current cumulative debt as shown in Column 5 of Table 4. This difference is multiplied with the prevailing exchange rate at which the new loan is actually contracted in a particular year and added to the previous year's total as shown in Table 4, Column 6.

Table 3

The Impact of Changes in Exchange Rate on the Foreign Debt

Year	Foreign Debt ($ Million)	Exchange Rate	Foreign Debt at Prevailing Exch. Rate (Rs Million)	Foreign Debt at Rs 9.9 to a $ (Rs Million)	Impact of Exchange Rate Changes on Foreign Debt
1980-81	8765	9.90	86773.5	86773.5	0.00
1981-82	8799	9.91	87198.1	87110.1	87.99
1982-83	9312	12.71	118355.5	92188.8	26166.72
1983-84	9469	13.48	127642.1	93743.1	33899.02
1984-85	9732	15.15	147439.8	96346.8	5193.00
1985-86	11108	16.14	179283.1	109969.2	69313.92
1986-87	12023	17.17	206434.9	119027.7	87407.21
1987-88	12913	17.61	227397.9	127838.7	99559.23
1988-89	14190	19.22	272731.8	140481.0	132250.80
1989-90	15094	21.44	323615.4	149430.6	174184.76
1990-91	15471	22.42	346859.8	153162.9	193696.92
1991-92	17361	24.87	431768.1	171873.9	259894.17
1992-93	19044	25.98	494763.1	188535.6	306227.52
1993-94	20322	30.16	612911.5	201187.8	411723.72
1994-95	22117	30.89	683194.1	218958.3	464235.83
1995-96	22292	33.57	748342.4	220690.8	527651.64
1996-97	22509	39.01	878076.1	222839.1	655236.99
1997-98	22844	43.20	986860.8	226155.6	760705.20
1998-99	25423	50.05	1272421.2	251687.7	1020733.45
1999-00	25359	51.77	1312835.4	251054.1	1061781.33
2000-01	25555	51.44	1493434.0	252994.5	1240439.50
2001-02	27215	61.42	1671545.0	269428.5	1402117.00
2002-03	28365	58.75	166644.4	280813.5	1385630.00

Source: Estimated from *Pakistan Economic Survey* (Various Issues).

Table 4

Impact of Exchange Rate Changes on Debt

Year	Foreign Debt ($ Million)	Exchange Rate	Foreign Debt at Prevailing Exch. Rate (Rs Million)	Changes in Foreign Debt ($ Million)	External Debt at the Exchange Rate at which the New Loan was Contracted	Impact of Exchange Rate Depreciation on Foreign Debt
1980-81	8765	9.90	86773.5	107.0	86773.50	0.0
1981-82	8799	9.91	87198.1	34.0	87110.4	88.0
1982-83	9312	12.71	118355.5	513.0	93630.63	24725.0
1983-84	9469	13.48	127642.1	157.0	95746.99	31895.0
1984-85	9732	15.15	147439.8	263.0	99731.44	47709.0
1985-86	11108	16.14	179283.1	1376.0	121940.08	57343.0
1986-87	12023	17.17	206434.9	915.0	137650.63	68784.0
1987-88	12913	17.61	227397.9	890.0	153323.53	74074.0
1988-89	14190	19.22	272731.8	1277.0	177867.47	94865.0
1989-90	15094	21.44	323615.4	904.0	197249.23	126366.0
1990-91	15471	22.42	346859.8	377.0	205701.57	141159.0
1991-92	17361	24.87	431768.1	1890.0	252705.87	179062.0
1992-93	19044	25.98	494763.1	1683.0	296430.21	198332.9
1993-94	20322	30.16	612911.5	1278.0	334974.40	277937.0
1994-95	2217	30.89	683194.1	1795.0	390422.24	292772.0
1995-96	22292	33.57	748342.4	175.0	396296.92	352045.0
1996-97	22509	39.01	878076.1	217.0	404762.16	473314.0
1997-98	22844	43.20	986860.8	335.0	419234.16	567627.0
1998-99	25423	50.05	1272421.2	2579.0	548313.11	724108.0
1999-00	25359	51.77	1312835.4	64.0	544999.77	767836.0
2000-01	25555	58.44	1493434.0	132.0	552713.80	940720.0
2001-02	27215	61.42	1671545.0	1660.0	654671.10	1016874.0
2002-03	28365	58.75	1666444.0	1150.0	722233.60	944210.0

Source: Estimated from *Pakistan Economic Survey* (Various Issues).

Although the impact of exchange rate in Table 4 is considerably less with this adjustment, yet it is still very significant particularly in the late Nineties. The adjusted change in the exchange rate accounts for 39 percent foreign debt in 1989-90 and 63 percent in 2000-01, as compared to 53 and 83 percent with non-adjusted exchange rate over the two periods. This shows that the decline in foreign debt in the later years as shown in Table 1 is absorbed by the depreciation of the exchange rate, and the total public debt increases.

IV. BUDGET DEFICITS AND DEBT ACCUMULATION

The impact of continuously rising budget deficits on public debt in Pakistan can be explained with reference to the three-gap model: the revenue–expenditure (R-E) gap; the saving–investment (S-I) gap; and the trade (X-M) gap. The revenue-expenditure gap of the last two decades has its origins in the complete neglect of domestic resource mobilisation of the earlier periods due to the easy availability of cheaper external resources and flow of remittances from the Middle East. The trends in government revenues are reported in Table 5.

Table 5

Gross Net Revenues of the Government

(Percent of GDP)

Year	Total Govern-ment Revenue	Tax Revenue	Non-tax Revenue	Transfers from Govern-ment	Net Income Transfer to Govern-ment	Private Disposable Income	Private Con-sumption	Private Con-sumption Ratio
1980-81	17.7	14.0	3.7	3.3	14.4	93.8	82.6	88.1
1981-82	16.6	13.3	3.3	3.5	13.1	94.7	81.3	85.9
1982-83	16.9	13.5	3.4	4.4	12.5	98.4	80.1	81.5
1983-84	17.8	12.8	5.1	4.7	13.2	96.3	80.2	83.3
1984-85	17.0	11.9	5.1	6.5	10.5	97.6	81.6	83.6
1985-86	18.0	12.3	5.8	6.9	11.2	96.8	76.3	78.8
1986-87	15.6	12.3	3.4	4.7	11.0	79.2	61.5	77.7
1987-88	15.9	12.1	3.8	5.5	10.4	81.1	63.2	77.9
1988-89	16.9	12.9	4.0	6.5	10.4	82.8	63.5	76.6
1989-90	16.2	11.7	4.5	5.8	10.4	77.1	59.9	77.7
1990-91	14.2	10.7	3.5	5.0	9.2	77.0	57.6	74.8
1991-92	17.3	12.2	5.0	5.6	11.6	79.6	62.9	79.0
1992-93	15.3	11.3	4.0	5.7	9.6	76.3	61.2	80.2
1993-94	14.5	11.1	3.4	5.6	8.9	74.9	59.0	78.7
1994-95	17.0	13.6	3.4	5.8	11.2	88.8	71.3	80.3
1995-96	17.8	14.3	3.5	6.7	11.0	88.6	72.1	81.4
1996-97	15.6	13.2	2.4	6.9	8.8	90.5	74.0	81.8
1997-98	16.0	13.2	2.8	8.0	8.1	91.0	72.1	79.2
1998-99	15.9	13.3	2.7	8.1	7.9	91.3	75.7	82.9
1999-00	17.1	12.9	3.4	9.2	7.9	90.7	74.4	82.1
2000-01	16.7	12.9	3.3	8.0	8.7	89.8	75.0	83.5
2001-02	17.2	13.2	4.0	8.0	9.2	83.5	74.4	89.0

Source: Based on Appendix Table 1.

In Table 5 the conventional estimates of the total government revenues have been adjusted for the "Transfers from the Government" to arrive at net revenues. This adjustment is necessitated in view of the fact that all government expenditures are not discretionary. In Table 6 government expenditures are disaggregated into discretionary (non-obligatory) and non-discretionary (obligatory) expenditures. The former are classified as current expenditures, and the latter as government consumption. Expenditures under the head "Government Consumption" are netted out of the total government revenues. This is essential because we know that these are compulsory non-discretionary entities and must be paid out, while in the case of current expenditures the government can use its discretion to postpone or delay expenses on any head in the face of a revenue constraint. It can be seen from Table 5 that during the first half of the Eighties, transfers from the government almost doubled from 3.3 percent in 1980-81 to 6.5 percent in 1984-85, and averaged 6 percent in the second half of the Eighties and the first half of the Nineties. However, in the second half of the Nineties, they increased more rapidly from 7 percent to 9 percent during the period from 1995-96 to 1999-00, and averaged 8 percent in the last two years of the period.

Table 6
Government Expenditures

(Rs Million)

	1980-81	1982-83	1984-85	1986-87	1988-89	1990-91	1992-93	1994-95	1996-97	1998-99	2000-01	2001-02
Current Expenditures	**38079**	**61958**	**92490**	**113398**	**162485**	**192660**	**276725**	**345482**	**340157**	**549183**	**630712**	**651126**
General Administration	2873	4079	6518	7784	12343	13571	19603	31627	41995	38679	79690	85082
Defence	15300	24566	31886	38899	51053	63273	87461	100221	12744	143471	131637	151669
Law and Order	2031	2810	4087	5533	7225	8902	13619	20098	21707	24864	30836	34065+
Community Services	1422	2100	3013	4354	5097	5356	8404	10327	12416	14019	15161	16147
Social Services	4904	7085	10292	16222	21901	27340	37332	51097	56729	63713	71336	77860
Economic Services	2243	5199	6110	7682	8637	12029	13853	15586	19109	19944	25571	27966
Unallocables	129	26	93	1312	773	1945	6955	6267	6385	7007	2768	2090
Government Consumption	**28902**	**45865**	**61999**	**81786**	**107029**	**132416**	**187227**	**235223**	**171085**	**311697**	**356999**	**360814**
Current Subsidies	2449	2799	5360	5809	13277	10712	7269	6452	11920	15035	29028	30895
Grants to Provinces	1297	2644	9095	2613	4654	822	3552	2756	2098	9192	8645	8803
Domestic Interest	3152	6276	10173	15817	28093	35710	62733	77865	126532	175273	185511	189477
Foreign Interest	2279	4374	5863	7373	9432	13000	15944	23186	28522	37986	50529	61137
Current Transfers	9177	16093	30491	31612	55456	60244	89498	110259	169072	237486	273713	290312
Capital Expenditures	**30820**	**51149**	**57192**	**76186**	**95106**	**119065**	**167060**	**265990**	**320385**	**392253**	**304703**	**395691**
Annual Development Plan	**26137**	**28354**	**32653**	**42815**	**48000**	**83112**	**119890**	**153712**	**139744**	**152707**	**150325**	**130000**
Development Expenditure	23658	26374	31152	40635	46830	81888	119298	153665	0	0	0	
Development Subsidies	2479	1980	1501	2180	1170	1224	592	47	0	0	0	
Loans and Investment	1976	2461	1706	2260	4407	5767	7558	11498	12418	19441	15300	9385
Others	100	149	469	711	3860	2490	2318	0	–3188	–1425	22	30
Domestic Debt Amortisation	1453	13431	14834	20793	21673	5405	8821	40486	70784	98551	51120	91371
Foreign Debt Amortisation	3633	8734	9031	11787	18336	23515	29065	60341	100627	122979	87936	164905
Total Government Expenditures	**68899**	**113107**	**149682**	**189584**	**257591**	**311725**	**443785**	**611472**	**660542**	**941436**	**935415**	**1046817**

Source: Compiled from *Pakistan Economic Survey*; *Statistical Year Book of Pakistan*; and *Annual Budget Statement* (Various Issues).

Total government expenditures during this period averaged 22 percent of GDP despite the sharp decline in development expenditures from 6.3 percent to 3.5 percent. It is interesting to note that current subsidies always rising before and after the SAPs declined significantly during the programme period (Table 6). However, the most rapid and significant increase in current transfers has mainly been due to the interest payments on domestic debt. Interest payments on external debt increased sharply in the Nineties, but always remained significantly lower than the domestic debt payments. As a result of these increases in the obligatory current transfers, the net income transfer to the government was significantly lower than the conventional estimates of total revenues, as shown in Table 5. Total revenues amounting to 17.7 percent of GDP in 1980-81 were reduced to 14.4 percent when adjusted for transfers as shown in Columns 2 and 6 of Table 5. However, this decline was more gradual in the Eighties as compared to the Nineties. In fact, the net income of the government became single digit after 1995-96. On the other hand, government consumption (total current expenditures less current transfers) increased from 10 percent to 15 percent during 1980-81 to 1988-89, but declined to 10 percent by 1993-94. It averaged 12 percent in the following four years, and declined further to around 10 percent (Table 7). Overall, the increasing government consumption was matched by a higher net income of the government only in the first four years; beyond 1983-84 it exceeded the net income. As a result, public savings, which were positive with a declining trend in the first four years, became negative for the remaining period. Increased government consumption and/or increased investment with declining and negative savings were responsible for the continued widening of the S-I gap. This gap has serious implications for the revenue–expenditure gap and the trade gap.

The negative public savings and the positive but insufficient private savings resulted in the use of all available external resources to finance the budget deficits as shown in the last Column of Table 7. External resources in excess of 5 percent were used in 1981-82, 1984-85, 1992-93, 1995-96, and 1996-97. Debt servicing as a percentage of foreign exchange earnings during the Eighties increased from 20.4 percent in 1980-81 to 31.6 percent in 1984-85, and averaged 27 percent in the next five years. Similarly, it increased as a percentage of foreign exchange earnings from 10.6 percent in 1980-81 to 15.6 percent in 1986-87. During the Nineties it averaged around 18 percent [see *Pakistan Economic Survey (2002-03)*].

V. CHANGING COMPOSITION OF PUBLIC DEBT

It will be seen from Table 1 that domestic debt was less than 50 percent of the total debt until 1983-84, when public savings were positive (Table 7). It increased from 51 percent in 1984-85 to 56 percent in 1990-91, and fluctuated between 53 percent to 56 percent until 2002-03. Overall, it exceeded the foreign debt by 13 percent during the period from 1980-81 to 2002-03. One major factor responsible for this increase in domestic debt was the limited availability of external resources in the Eighties due to excessive borrowings in the earlier periods. Pakistan borrowed heavily

Table 7

Investment, Savings and Borrowings

Year	Government Sector					Non-Government Sector						Govt.+ Non-govt. Net Borrowing = CAB
	Net Income Transfer to Government	Government Consump-tion	Government Savings	Government Investment	Net Lending/ Borrowing	Private Disposable Income	Private Consump-tion	Private Savings	Develop-ment Sudsidies	Private Investment	Net Lend-ing/ Borro-wing	
1980-81	14.4	10.4	4.0	8.5	–4.1	93.8	82.6	11.1	0.9	10.7	0.4	–3.6
1981-82	13.1	10.3	2.8	7.9	–4.7	94.7	81.3	13.4	0.6	13.7	–0.3	–5.0
1982-83	12.5	11.4	1.0	7.2	–5.5	98.4	80.1	18.2	0.5	14.6	3.7	–1.8
1983-84	13.2	12.1	1.1	6.4	–5.0	96.3	80.2	16.0	0.3	14.3	1.8	–3.2
1984-85	10.5	12.1	–1.6	6.6	–6.3	97.6	81.6	16.0	0.3	15.1	0.9	–5.4
1985-86	11.2	12.8	–1.6	7.1	–6.6	96.8	76.3	20.6	0.5	17.8	2.8	–3.9
1986-87	11.0	11.5	–0.5	6.0	–6.1	79.2	61.5	17.6	0.2	13.3	4.3	–1.8
1987-88	10.4	13.6	–3.2	5.8	–8.5	81.1	63.2	17.9	0.3	13.2	4.7	–3.8
1988-89	10.4	15.1	–4.7	5.5	–9.6	82.8	63.5	19.3	0.3	14.0	5.3	–4.3
1989-90	10.4	12.7	–2.3	5.5	–7.5	77.1	59.9	17.2	0.1	13.6	3.6	–4.0
1990-91	9.2	12.0	–2.8	6.8	–9.5	77.0	57.6	19.4	0.1	14.0	5.5	–4.0
1991-92	11.6	11.6	0.0	6.8	–6.6	79.6	62.9	16.7	0.1	12.8	3.8	–2.8
1992-93	9.6	11.1	–1.5	7.6	–8.8	76.3	61.2	15.1	0.1	12.4	2.7	–6.1
1993-94	8.9	10.0	–1.2	7.3	–8.3	74.9	59.0	16.0	0.0	10.8	5.1	–3.1
1994-95	11.2	11.6	–0.3	8.1	–8.3	88.8	71.3	17.5	0.0	13.3	4.3	–4.0
1995-96	11.0	12.5	–1.5	8.1	–9.5	88.6	72.1	16.5	0.0	14.2	2.3	–7.2
1996-97	8.8	11.8	–3.0	5.7	–8.6	90.5	74.0	16.5	0.0	13.9	2.5	–6.1
1997-98	8.1	11.3	–3.2	5.3	8.2	91.0	72.1	19.0	0.0	20.1	–11.2	–3.1
1998-99	7.9	10.4	–2.5	5.2	–7.4	91.3	75.7	15.6	0.0	12.1	3.5	–3.9
1999-00	7.7	11.2	–3.5	4.7	–7.9	90.7	74.4	16.3	0.0	10.2	6.0	–1.9
2000-01	8.6	10.2	–1.6	4.4	–6.9	89.8	75.0	14.8	0.0	9.9	4.9	–2.0
2001-02	9.2	11.3	–2.1	4.8	–6.9	83.5	74.4	9.2		8.3	5.3	–1.6

Source: Based on Appendix Table 2.

both at low rates with longer maturity and at high rates with low maturity, ending up in a debt-trap in the late Eighties and Nineties. Secondly, domestic borrowings, mainly from the non-bank debt sources under the National Savings Schemes (NSS), were used excessively to finance the budget deficits because they were non-inflationary. Compared to the banking sector, deposits in the non-bank sector earned very high rates of return, and a wide range of instruments with varied returns and maturities were available. Furthermore, these deposits are fixed in terms of returns, while in the case of bank deposits the investors and banks have to share the profit and loss equally. Finally, almost all the profits of NSS are exempt from tax, as shown in Table 8.

Table 8

Nominal Rates of Returns of Non-bank Debt Instruments and Commercial Banks

	National Savings Schemes											
	Defence Saving Certificate* (Maturity Period)					National Deposit Certificate	Khas Deposit Certificate	Mahana Amadni*** Accounts**		Commercial Bank Fixed Deposit (Maturity Period)		
	1 Years	3 Years	5 Years	7 Years	10 Years			1 Years	5 Years	1 Years	3 Years	5 & above Years
1988-89	12.0	12.6	13.5	15.4	15.6	14.6	13.4	12.0	14.0	7.3	10.1	12.3
1998-99	14.5	15.2	15.8	16.7	180.0	13.0	13.0	12.0	14.9	5.7	6.7	8.0
1999-00	12.0	14.5	14.9	15.3	16.0	seized	seized	12.0	14.9	5.4	6.3	8.9
2002-03	7.0	–	–	–	11.6			7.0	8.5	4.8	5.7	8.1

Source: National Directorate of Savings (1999-2000), Islamabad.

Note: *Non-taxable until 2000.

**Taxable in instalment.

***Mahana Amadni is monthly return on savings.

The bias in favour of the non-bank finances at the expense of the banking sector is also reflected in the comparison between the real rates of returns on NSS deposits and the commercial banks (Table 9).

The real rates of return on commercial banks' one-year maturity deposits were largely positive in the Eighties with the exception of 1980-81 and 1988-89. The situation is reversed in the Nineties because they are positive only for one year, 1999-00, and are equal to the inflation rate in 2000-01. However, the rates are negative for the deposits of 5 years and above maturity for only three years in the Nineties—1990-91, 1993-94, and 1996-97. In fact, the rates of return on commercial banks' longest maturity deposits move fairly close to the National Savings Schemes' shortest maturity deposits of the Defence Saving Certificates (DSCs) in the last three years. The coefficient of correlation between these two series is 0.67. The DSCs long-maturity deposits are positive throughout the two decades despite the periodic revision of the rates and its linking with the returns on the Pakistan Investment Bond. The impact of this most adverse term structure is reflected in the sharp increase in the share of domestic debt as a percentage of total debt, as shown in Table 1. The use of non-bank debt instruments to finance the deficits was preferred because it remained outside the purview of the conditionality of the SAPs; it was available on tap, there

Table 9

Real Rates of Interest

Year	Inflation Rate	Commercial Banks		Defence Saving Certificate	
		1 Year - Maturity	5 Year- Maturity	1 Year - Maturity	10 Year- Maturity
1980-81	–	–	–	–	–
1981-82	11.10	–0.80	1.30	0.90	4.50
1982-83	4.70	5.80	7.70	7.30	10.90
1983-84	7.30	3.20	5.20	4.70	8.30
1984-85	5.70	4.70	6.70	6.30	9.90
1985-86	4.40	5.00	7.60	7.60	11.20
1986-87	3.60	4.80	8.60	8.40	12.00
1987-88	6.30	1.80	5.80	5.70	9.30
1988-89	10.40	–3.10	1.90	1.60	5.20
1989-90	6.00	2.40	5.50	6.00	9.60
1990-91	12.70	–5.80	–1.50	–0.70	2.90
1991-92	10.87	–4.50	2.20	2.40	6.00
1992-93	8.67	–4.30	2.10	2.70	6.30
1993-94	12.86	–5.30	–0.30	1.80	4.80
1994-95	16.16	–8.90	–3.10	–1.70	1.29
1995-96	8.04	–4.30	0.60	2.20	5.19
1996-97	11.13	–5.20	–1.60	2.70	6.24
1997-98	7.80	–0.20	1.20	6.70	10.24
1998-99	5.70	–0.30	3.20	8.80	10.27
1999-00	3.85	1.55	5.05	5.15	10.16
2000-01	5.40	0.00	4.20	4.60	9.41
2001-02	4.90	–0.10	3.20	4.60	9.40

Source: Pakistan Economic Survey (Various Issues).

was no legislation to prevent its excessive use, and it was non-inflationary. However, the successive governments chose to ignore its negative consequences. It enabled the rich to benefit most from the NSS that were meant to benefit the small savers, resulting in rapid and massive debt accumulation. At the same time, it created serious distortions in the term structure of interest rates, with serious implications for the banking industry and the potential investors.

VI. SUMMARY AND CONCLUSIONS

Accumulation of budget deficits and the resulting public debt in Pakistan has its origins in the early neglect of domestic resource mobilisation. This deficit-debt scenario conforms to the neo-classical paradigm whereby the revenue-expenditure constraint impacts both the S-I and the X-M gaps. The change in the debt-to-GDP ratio is accounted for by the interest rate-growth differential, the foreign exchange effect, and the primary budget deficit. The primary deficits are responsible for higher budget deficits, which due to higher government consumption compared to

its resources leads to higher domestic as well as external borrowings. Excessive external borrowing with limited repayment capacity results in exchange rate depreciation, and consequently the exchange rate exerts a very strong effect on the debt ratio. Primary budget deficits also exert a positive effect on the debt ratio. However, after mid- Nineties the primary budget is surplus. The interest-growth differential does not affect the debt ratio because the interest rates, both nominal and real, have always been controlled and hence remained lower than the growth rate. The residuals exert both positive and negative effects on the ratio, but it is not certain what these residuals are. The high and positive values of the residuals in the period between mid-Nineties to 2002-03 suggest that they may represent variables related to the exchange rate effects, such as the impact of freezing of the foreign currency accounts in the late Nineties, and floating of the currency during 2002-03. Trends in public and private consumption reveal an outflow of capital largely due to the rapid loss of the value of Pakistani currency. Furthermore, the inconsistency of the investment and trade policies and the deterioration in the law and order situation also fuelled this outflow.

The policy of non-bank financing of the budget deficits, to avoid conditionality on the bank finance, led to the accumulation of short-term domestic debt and at the same-time diverted private resources away from investment to the non-bank instruments or abroad. Moreover, this policy led to distortions in the term structure of interest rates with serious consequences for the banking industry—and its negative ramifications for investment and the economy as a whole.

Ignoring the positive fallout of the events of 9/11 on some of the macro indicators without any corresponding positive impact on the micro indicators, which would have led to some decline in poverty, the present situation is not viable for long. The decline in the budget deficit to 4.4 percent in 2002-03 was made possible to some extent by the rise in tax revenues, but at the same time the fall in the development expenditures was disappointing. Despite the improvement in the fiscal sector, Pakistan still remains heavily burdened by the debt incurred in the past, and therefore needs to generate sustained primary surpluses for the coming years. The economy's ability to carry debt needs to be improved through acceleration in the developmental expenditures and a reduction in the current expenditures. In other words, it requires the elements of "proper fiscal governance" to be put in place. This involves clearly laid out rules and procedures for coordination between the Ministries of Commerce and Industry and the Central Board of Revenue to encourage investment and exports, leading to improved revenue generation. The policy of rationalisation of rates of return between the bank and non-bank finance is a step in the right direction, and therefore must be pursued further. Equalisation of the rates of return between the bank and non-bank sectors would lead to a flow of funds into the banking sector and into productive investments either directly or through the stock markets. Taking the non-bank finance off the tap would also help reduce the dependence on this source; it is also essential to put the banking industry on a sound footing. Decline in the budget deficits and debt in the backdrop of 9/11 must be considered a one-time opportunity to overcome the deficit-debt-trap, and serious efforts should be made to prevent a repeat of this situation.

Appendices

Appendix 1

Private Disposable Income and Consumption Ratio

Year	Govt. Revenue	Tax-Revenue	Non-tax Revenue	Transfers from Govt.	Net Income Transfers to Govt.	Private Disposable Income	Private Consump-tion	Private Consump-tion Ratio
1980-81	49201	38846	10175	9177	40024	260864	229879	88.1
1981-82	53839	43003	10836	11343	42496	307012	263658	85.9
1982-83	61467	49029	12438	16093	45374	358408	291942	81.5
1983-84	74855	53646	21209	19573	55282	404115	336747	83.3
1984-85	80042	55963	24079	30491	49551	460917	385346	83.6
1985-86	92819	63083	29736	35246	57573	498318	392532	78.8
1986-87	105692	82927	22765	31612	74080	534777	415674	77.7
1987-88	122352	92998	29354	42131	80221	624263	486565	77.9
1988-89	144297	110338	33959	55456	88841	708909	543297	76.6
1989-90	165585	119435	46150	59312	106273	786570	611015	77.7
1990-91	171777	129640	42137	60244	111533	932975	697448	74.8
1991-92	231503	164307	67196	75315	156188	1067734	843939	79.0
1992-93	241128	178391	62737	89498	151630	1199959	962419	80.2
1993-94	272734	208410	64324	105841	166893	1410192	1109980	78.7
1994-95	322932	257892	65040	110259	212673	1683441	1351371	80.3
1995-96	380260	305580	74680	144154	236106	1898600	1545228	81.4
1996-97	384331	324641	59689	169072	215259	2222772	1818213	81.8
1997-98	429454	354754	74700	213300	216154	2437138	1929702	79.2
1998-99	468601	390726	77875	237486	231115	2681717	2223998	82.9
1999-00	536832	405824	106900	288844	247988	2854273	2342417	82.1
2000-01	570600	441600	111400	273713	296887	3075484	2567321	83.5
2001-02	624100	478100	146000	290312	333788	3031634	2698992	89.0

Source: Estimated from *Pakistan Economic Survey* and the *Annual Reports of the State Bank of Pakistan* (Various Issues).

Appendix 2

Investment, Savings and Borrowings

Year	Net Income Transfer to Government	Government Consump-tion	Government Savings	Government Investment	Net Lend-ing/Borro-wing	Private Disposable Income	Private Consump-tion	Private Savings	Private Investment	Net Lend-ing/Borro-wing	Govt.+ Non-govt Net Borrowing
1980-81	40024	28939	11085	23658	–11276	260864	229879	30985	29846	1139	–10137
1981-82	42496	33522	8974	25767	–15217	307012	263658	43354	44330	–976	–16193
1982-83	45374	41606	3768	26374	–19962	358408	291942	66466	53019	13447	–6515
1983-84	55282	50741	4541	26747	–20892	404115	336747	67368	59957	7411	–13481
1984-85	49551	57126	–7575	31152	–29632	460917	385346	75571	71408	4163	–25469
1985-86	57573	65662	–8089	36548	–34116	498318	392532	105786	91607	14179	–19937
1986-87	74080	77482	–3402	40635	–41424	534777	415674	119103	90024	29079	–12345
1987-88	80221	104754	–24533	44376	–65507	624263	486565	137698	101793	35905	–29602
1988-89	88841	129201	–40360	46830	–82536	708909	543297	165612	120248	45364	–37172
1989-90	106273	129562	–23289	56482	–76866	786570	611015	175555	139251	36304	–40562
1990-91	111533	145575	–34042	81888	–115108	932975	697448	235527	169093	66434	–48674
1991-92	156188	155567	621	91354	–88685	1067734	843939	223795	172360	51435	–37250
1992-93	151630	174680	–23050	119298	–138796	1199959	962419	237540	194472	43068	–95728
1993-94	166893	189102	–22209	137073	–155690	1410192	1109980	300212	203794	96418	–59272
1994-95	212673	219125	–6452	153665	–157361	1683441	1351371	332070	251345	80725	–76636
1995-96	236106	268098	–31992	172816	–202466	1898600	1545228	353372	304481	48891	–153575
1996-97	215259	288813	–73554	139744	–211200	2222772	1818213	404559	342419	62140	–149060
1997-98	216154	301614	–85460	141495	218746	2437138	1929702	507436	538781	–300693	–81947
1998-99	231115	304419	–73304	152707	–216819	2681717	2223998	457719	354554	103165	–113654
1999-00	242298	351303	–109005	148767	–248930	2854273	2342417	511856	322100	189756	–59174
2000-01	294796	350376	–55580	150325	–237167	3075484	2567321	508163	339314	168849	–68318
2001-02	333788	408939	–75151	174192	–249343	3031634	2698992	332642	301207	190531	–58812

Source: Estimated from *Pakistan Economic Survey* and the *Annual Reports of the State Bank of Pakistan* (Various Issues) .

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