6 Impact Analysis of Financial Reforms

The objectives and nature of reforms in the financial sector during 1990s have been discussed in the first four chapters. How these changes have transformed the financial markets was also discussed in the previous chapter. This chapter assesses the impact of reforms on financial structure, deepening, intermediation, and efficiency by using macro-financial indicators. It also reviews developments in debt management, monetary transmission mechanism, and banking supervision. Sequencing issues have also been discussed briefly. The first section of this chapter gives a review of macroeconomic indicators of the economy and the subsequent sections appraise the reforms. The last section presents an evaluation of financial developments in peer countries.

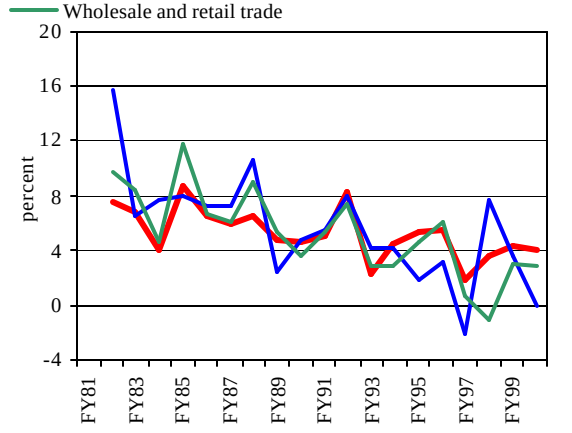
6.1 Role of Macroeconomic Factors

The extent of financial sector transformation depends not only on the quality of reforms and implementation process, but also on overall macroeconomic environment. A conducive growth environment is likely to provide a better support to the reform process, besides permeating the spirit of reforms across the entire financial sector. It is, therefore, important to examine the behavior of various macro economic variables during the decade, before assessing the impact of reforms.

6.1.1 Economic Growth

In 1990s the country witnessed real GDP growth rates lower than those of 1980s. Growth rate was 6.1 percent (on average) during 1980s, which fell to 4.4 percent in 1990s (see **Table 6.1** and **Figure 6.1**).[1] Low growth rates often weaken the debt-servicing capacity of the domestic borrowers, worsen the problem of loan defaults and increase credit risk. This was exactly the case in Pakistan where loan defaults grew tremendously during the last decade despite the process of financial reforms and liberalization.

Figure 6.1: Growth in Real Sector



Besides the aggregate growth rate, the sectoral performance of GDP is also very important for financial sector. A slump in sectors where financial institutions' loans and investment are concentrated, has an adverse impact on the soundness of the financial system. In Pakistan, large-scale manufacturing sector, mainly financed by banks' credit, slowed down during last decade. The sectoral slumps deteriorated the quality of financial institutions' portfolio and profitability margins, besides lowering their cash flows and reserves.

6.1.2 National Savings

Public and private savings are among the major sources of funds for the banking sector. During 1990s, average national savings in Pakistan declined significantly (see **Table 6.1**). National savings, which was 14.8 percent of GDP during 1980s, declined by one percentage point to 13.8 percent during 1990s. Major reduction was in private savings, by about one-half of a percentage point from 13.0 percent of GDP in 1980s to 12.4 percent in 1990s. Public savings also declined but with lesser extent. However, public savings witnessed a significant reduction during the second half of 1990s.

[1] Average growth rate of GDP during first half of 1990s was 3.7 percent against 6.8 percent in the first half of 1980s.

Table 6.1: Macroeconomic Factors Affecting the Financial Sector

	1980s	1990s	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00
Economic Growth (%)													
Real GDP	6.1	4.4	4.6	5.1	8.2	2.3	4.5	5.3	5.5	1.7	3.5	4.2	3.9
Major crops	3.3	4.0	-0.1	5.7	15.5	-15.6	1.2	8.7	6.0	-4.3	8.3	0.0	15.1
LS manufacturing	7.8	3.5	4.7	5.4	7.9	4.1	4.1	1.7	3.1	-2.1	7.6	3.6	-0.2
W & R trade	7.2	3.5	3.5	5.3	7.3	2.9	2.8	4.7	6.1	0.7	-1.1	3.0	2.9
National savings (% of GDP)													
Public	1.8	1.5	2.8	0.7	4.3	1.6	2.5	1.9	1.5	1.00	0.1	0.9	0.3
Private	13.0	12.4	11.4	13.5	12.8	12.0	13.2	12.5	10.3	10.8	14.5	10.8	13.5
Total	14.8	13.9	14.2	14.2	17.1	13.6	15.7	14.3	11.8	11.8	14.7	11.7	13.8
Inflation	7.3	9.7	6.0	12.7	10.6	9.8	11.3	13.0	10.8	11.8	7.8	5.7	3.6
Money supply (M_2 growth)	14.0	15.2	17.5	17.4	26.2	17.8	18.1	17.2	13.8	12.2	14.5	6.2	9.4
Fiscal sector													
Tax to GDP ratio	13.8	13.4	14.0	12.7	13.6	13.3	13.2	13.7	14.4	13.4	13.2	13.4	12.8
Budget deficit (% of GDP)	-7.0	-6.9	-6.5	-8.7	-7.4	-8.0	-5.9	-5.6	-6.5	-6.3	-7.7	-6.1	-6.4
External sector													
CAD (% of GDP)	-2.7	-3.9	-3.4	-3.0	-1.8	-6.4	-3.2	-3.5	-6.9	-5.6	-2.7	-3.8	-0.4
Liquid foreign exchange													
Reserves[1](billion US$)	0.8	1.2	0.4	0.4	0.5	0.8	1.2	2.6	1.6	1.0	1.3	1.2	1.5
Equivalent weeks of imports	7.3	6.2	2.9	2.4	2.9	4.2	7.1	13.2	7.2	4.5	6.7	6.6	7.6
:ternal debt to GDP ratio	34.7	49.4	38.5	41.4	40.4	44.3	47.7	48.5	50.5	51.8	55.4	57.7	56.2
ortfolio investment/FPI[2] (%)	10.4	24.6	-2.2	-3.8	39.5	30.9	44.9	34.0[3]	15.7	28.2	26.9	5.5	13.5
evaluation	-8.3	-8.2	-3.2	-10.3	-3.3	-7.5	-11.3	-1.3	-11.7	-13.2	-12.0	-10.5	-1.2

[1] 12-month end period average

[2] FPI: Foreign private investment

[3] Excluding PTC vouchers

6.1.3 Inflation

Inflation is one of the major factors affecting the performance of the financial system. High inflation reduces the demand for money, persuading people to prefer real assets over monetary assets. During 1990s, inflation was very high at around 10 percent on the average compared with 7 percent during a decade earlier. Although inflation was low during the last couple of years of 1990s, but the people remained reluctant to adjust their behavior accordingly, due to other economic and political factors.

6.1.4 Balance of Payments

Current Account Deficit

A rise in the ratio of current account deficit to GDP is generally associated with large external inflows that are intermediated by the domestic financial system and enhance turnover of banking services. However, a large current account deficit also signals vulnerability to a currency crisis with negative implications for the liquidity of the financial system, especially if this deficit is financed by short-term capital inflows. Financial crisis may occur if investors consider current account deficit to be unsustainably large. In Pakistan current account deficit (CAD) remained high during 1990s as compared with 1980s, which made the financial sector vulnerable to external shocks. At the same time, banks also enjoyed flow of foreign funds in this period, especially up to May 1998.

After the nuclear detonation and freezing of foreign currency accounts, financial institutions faced liquidity problems. CAD declined in FY98, due to imposition of dual exchange rate regime to tightly manage payments and receipts of foreign exchange. Later decline in CAD largely reflects the restructuring of external debt agreed with international financial and commercial institutions.

Foreign Exchange Reserves Position

A low level of international reserves is seen, particularly by investors, as a major indicator of vulnerability. The domestic financial system also comes under pressure due to possible actions taken by the central bank to contain external outflows and preserve foreign exchange reserves. Reserves position in Pakistan seldom remained satisfactory. Foreign exchange reserves could finance around six weeks of imports, on average, during the last two decades. Inadequate level of reserves has a bearing on the business of banks that may face restrictions and constraints on forex based activities.

A high external debt to GDP ratio indicates stress on the external sector of the economy. Increasing need for payments on account of debt servicing leaves a small amount with the domestic financial system for other transactions. External debt to GDP ratio also had an increasing trend in Pakistan. During 1980s, this ratio was 34.7 percent, which increased to 49.4 percent in 1990s. Another potential source of risk for the financial system is higher proportion of portfolio investment in total foreign investment. In Pakistan this share increased from 10.4 percent in 1980s to 24.6 percent in 1990s. Similarly, the volatility in the exchange rate can also increase the risk for the financial system. Volatility in the exchange rate could cause difficulties for financial institutions by creating currency mismatches between banks assets and liabilities and making decision process difficult. Exchange rate in Pakistan remained highly volatile during the last decade. The level of variance of monthly exchange rate during 1980s was 10.5, which increased to 95.5 during 1990s, indicating an increase in volatility after implementation of financial reforms.

6.1.5 Fiscal Position

A low tax to GDP ratio coupled with high budget deficit forces the government to take recourse to the banking system. High government borrowing from the central bank could lead to inflationary pressures and affect the financial system. However, government borrowing directly from the scheduled banks has a favorable implication for banks' asset quality and also for their profitability if it is done on market-based rates of return. Increased borrowing may, however, crowd out the private sector credit. During 1990s, both tax to GDP ratio and budget deficit were almost at the same level as during 1980s. But as rates of return on T-bills were liberalized during 1990s, the banking sector of Pakistan benefited from this development.

6.2 Impact on Financial Structure, Deepening and Intermediation

6.2.1 Impact on Financial Structure

Financial reforms that permitted private sector to establish banks, and the process that led to privatization of MCB and ABL in early 1990s (see **Section 2.1.1**) began to transform the structure of not only the banking sector but the overall financial system as well. Both the asset composition and deposit shares changed dramatically during the decade of 1990s. Within the banking sector, ownership structure changed radically. Asset share of banking institutions in the private sector jumped from 7.8 percent in 1990 to 46.0 percent in 2000.[2] Moreover, the pace of growth of assets and deposits in private sector banking institutions was even more dramatic. Compound annual growth rates of the assets and deposits in private sector were more than fourfold that of public sector. Consequently, the dominance of public sector was reduced from 92.2 percent in 1990 to 54.0 percent in 2000 as shown in **Table 6.2**. In terms of GDP, assets of private banking institutions leapt from only 3.9 percent in 1990 to 23.7 percent in 2000. Deposit structure also underwent a similarly remarkable transformation during the decade under review as shown in **Table 6.2**.

[2] Share of private sector banking assets is likely to go up to 55.5 percent after the envisaged privatization of UBL in 2002.

Overall financial system, including banks, NBFIs and CDNS also experienced a significant transformation in terms of ownership between private and public sector. Asset share of private sector financial institutions increased from 5.3 percent in 1990 to 30.0 percent in 2000 as shown in **Table 6.3**. Although the share of public sector financial institutions was reduced from 94.7 percent in 1990 to 70.0 percent in 2000, it is still high due to the dominant share of CDNS in resource mobilization (see **Tables 4A.10** in **Annex 4**).

6.2.2 Financial Depth

The most commonly used indicator of financial sector deepening is the ratio of monetary assets (defined as M_2 in case of Pakistan) to Gross Domestic Product.[2] A higher M_2/GDP ratio represents a more developed and efficient financial sector. Clearly people will prefer to hold monetary assets only when they feel convenient to keep their wealth in monetary instruments with underlying nature of liquidity, risk, return and efficiency in payments. Such types of instruments are offered by a well-developed financial sector.

In Pakistan, M_2/GDP ratio is not only low but also has remained stagnant for the last couple of decades. During the 1980s, monetary assets (on average) were around 40 percent of GDP while during 1990s, about 44 percent. There was only a one-time jump in the monetary assets from 41.7 to 44.4 percent of GDP, during FY93, mainly due to the introduction of resident foreign currency deposits in FY91. Signs of further improvement in M_2 to GDP ratio were not visible during the rest of the decade (see **Table 6.4 and Figure 6.2**). Things would be even worse if we consider the underground economy.[4] Thus, despite the process of liberalization and other reform measures, the financial sector of Pakistan was unable to strengthen and widen its scope in the economy. As a result, a large part of the economy is still non-monetized.

Table 6.2: Dynamics of Banking Sector during 1990s

	Amt. (bln Rs)		CAGR (%)	Shares (%)		As % of GDP	
	1990	2000		1990	2000	1990	2000
Assets							
Private	33	755	36.6	7.8	46.0	3.9	23.7
Public	392	885	8.5	92.2	54.0	45.8	27.8
Total	***426***	***1641***	***14.4***	***100.0***	***100.0***	***49.7***	***51.5***
Deposits							
Private	25	579	37.0	7.0	43.8	2.9	18.2
Public	330	744	8.5	93.0	56.2	38.5	23.4
Total	***355***	***1323***	***14.1***	***100.0***	***100.0***	***41.4***	***41.6***

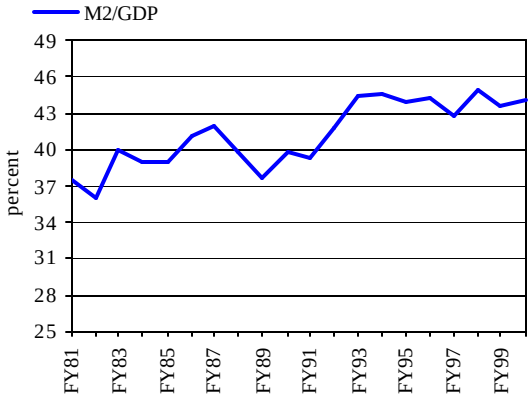
Notes: Private sector includes private banks, MCB, ABL and foreign banks; the public sector excludes MCB and ABL.
CAGR: Compound annual growth rate.

Table 6.3: Dynamics of Financial Sector during 1990s

	Amt. (bln Rs)		CAGR (%)	Shares (%)		As % of GDP	
	1990	2000		1990	2000	1990	2000
Assets							
Private	43	856	34.9	5.3	30.0	5.0	26.9
Public	649	1771	10.6	94.7	70.0	75.8	55.6
Total	***691***	***2626***	***14.3***	***100.0***	***100.0***	***80.8***	***82.5***
Deposits							
Private	27	614	36.7	6.2	32.6	3.2	19.3
Public	482	1436	11.5	93.8	67.4	56.3	45.1
Total	***509***	***2050***	***15.0***	***100.0***	***100.0***	***59.5***	***64.4***

Notes: Same as those of Table 6.2 a

Figure 6.2: Monetary Assets to GDP Ratio



[3] M_2 = currency in circulation + demand deposits + time deposits + residence foreign currency deposits.

[4] If underground economy is taken into account then M_2/GDP ratio becomes 24.1%, 26.8%, and 29.7% during 1980-81, 1990-91 and 1999-00 respectively (Ref: "A Non-linear Model to Estimate the Underground Economy in Pakistan", an in-house study of Research Department by Aslam Khan, Farooq Arby, and Amin Lodhi).

Money Multiplier is another important indicator of financial sector deepening. High but stable multiplier indicates a well-developed and active financial sector. A low money multiplier, on the other hand, indicates a shallow and passive financial sector, having low responsiveness to central bank policy changes. An unstable money multiplier renders the results of monetary policy measures unpredictable and thus makes monetary management more difficult. Low and unstable multiplier, therefore, indicates a weak mechanism of monetary policy transmission.

Table 6.4: Indicators of Financial Sector Deepening (percent)

	M_2/GDP	MM	CC/TD	CC/RD
FY81	37.6	2.5	50.1	50.1
FY82	35.9	2.5	48.1	48.1
FY83	40.1	2.6	45.9	45.9
FY84	38.9	2.6	47.1	47.1
FY85	39.0	2.6	44.5	44.5
FY86	41.0	2.7	43.1	43.1
FY87	41.9	2.4	45.5	45.5
FY88	39.9	2.5	48.6	48.6
FY89	37.7	2.4	51.4	51.4
FY90	39.9	2.4	51.4	51.4
FY91	39.3	2.4	52.6	54.6
FY92	41.7	2.4	43.3	49.4
FY93	44.4	2.8	39.3	46.0
FY94	44.7	2.9	36.0	43.9
FY95	43.8	2.7	35.7	43.2
FY96	44.3	3.0	33.6	42.4
FY97	42.9	3.2	30.4	42.2
FY98	45.1	3.3	29.4	42.1
FY99	43.6	3.2	29.2	33.2
FY00	44.0	2.8	34.3	38.5
Averages				
1981-85	38.3	2.6	47.1	47.1
1986-90	40.1	2.5	48.0	48.0
1991-95	42.8	2.6	41.2	47.4
1996-00	44.2	3.1	31.4	39.7

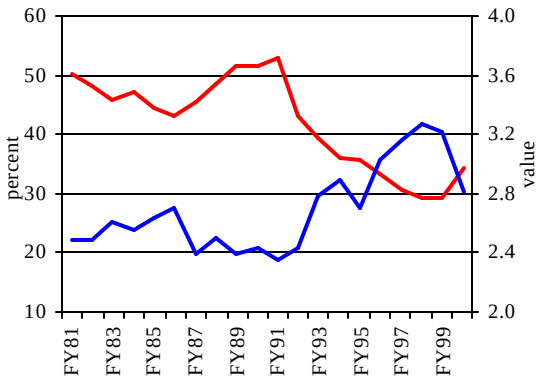
MM = Money Multiplier, CC/TD = Currency in Circulation to Total Deposit Ratio, CC/RD = Currency in Circulation to Rupee Deposit Ratio

Value of money multiplier showed rising trend during last two decades (see **Table 6.4).** A significant jump in the money multiplier may be noted during mid 1990s **(**see **Figure 6.3)** because of frequent devaluation of domestic currency during this period, which made holding of Pak Rupee less attractive; as a result currency to deposit ratio declined and money multiplier increased. This could also be due to the removal of caps on maximum lending rates of banks and NBFIs, together with the elimination of credit to deposit ratio that resulted in quicker expansions in domestic credit. As far as stability of money multiplier is concerned, it witnessed high fluctuation during the 1990s compared with the 1980s. Variance of monthly money multiplier was 0.1261 during 1990s compared with 0.0915 during 1980s. These fluctuations were mainly due to frequent policy changes undertaken during the decade of 1990s.

6.2.3 Financial Intermediation

The extent of financial intermediation can be assessed by the currency to deposit ratio. Currency and bank deposits are two competing financial assets. People like to keep both currency and deposits in a certain proportion depending upon their taste, spending habits, cost of holding currency in terms of interest rates and inflation, quality of financial services, and efficiency of payment system. A low currency to deposit ratio indicates public preference towards bank deposits and vice versa. In Pakistan, currency to deposit ratio generally had a declining trend during 1990s (see **Table 6.4** and **Figure 6.3**). It declined from 50.1 percent in FY81 to 29.2 percent in FY99. If resident foreign currency deposits are excluded, then currency to rupee deposit ratio declined to 33.2 percent in FY99. However, during

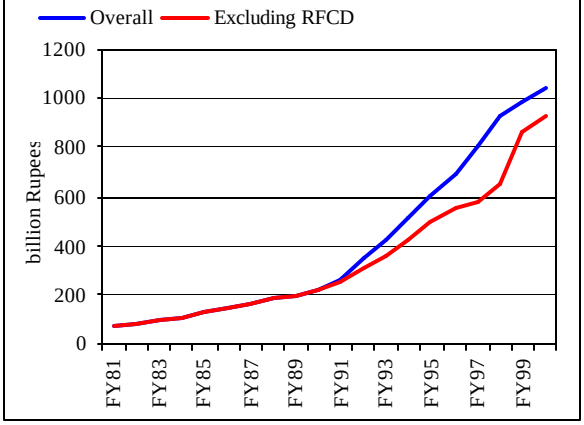
Figure 6.3: Money Multiplier and Currency to Deposits Ratio



FY00, both the ratios -- currency to total deposit as well as currency to rupee deposits -- increased significantly.

The reversal of trend in currency to deposit ratio is witnessed despite high real interest rates on deposits in recent years. The whole decade of 1990s, except the last two years, witnessed negative real interest rates due to high inflation. During the last two years, real interest rates were positive. It seems puzzling that when real interest rates were negative, currency to deposit ratio was declining, but as the real rates of returns became positive, it has gone up. The solution of this puzzle may be linked to other macroeconomic, social and political developments in the economy. Some of the possible factors behind this phenomenon may include: (1) the fall in inflation in FY00, which reduced the opportunity cost of hoarding money; and (2) the accountability drive launched in October 1999 created a clear incentive to hide personal wealth, and cash is clearly the most convenient and untraceable avenue for this purpose.

Figure 6.4: Bank Deposits



Deposits of commercial banks increased steadily during 1990s, although growth slowed down after FY98 (see **Figure 6.4**). Introduction of resident foreign currency account scheme went a long way in boosting the deposit base of commercial banks. Rupee deposits also grew with generally increasing rate during the period, except for some sluggishness in FY97 and FY00. The growth in deposits also benefited from entrance of new banks in the banking industry. However, the thrust of deposit growth came from RFCDs and the dollarization. Nevertheless, deposit growth was only marginally ahead of the nominal growth in GDP during the decade. Consequently, the ratio of deposits to GDP has gone up from 29.5 percent in FY90 to 33.8 percent in FY00.[5]

6.2.4 Financial Savings

Financial savings can be defined as the amount of deposits and other savings held by the financial institutions for the households, business organizations and other institutions. Four major components of financial savings are deposits of scheduled banks, deposits of NBFIs, investment in government debt instruments by non-bank, and currency in circulation. Greater availability of savings and checking deposits and other financial instruments contribute to the expansion of financial savings. However, the structure of financial savings shown in **Table 6.5** depicts a falling share of banks deposit in total financial savings in the second half of 1990s. The same trend was witnessed in terms of deposits of NBFIs. Although the share of currency in circulation declined during 1990s, this healthy development was countered by an intense pressure of financial dis-intermediation, which caused the share of government debt instruments (non-bank investment, mostly in CDNS schemes) in financial savings to increase from 25.8 percent in 1995 to 35.1 percent in 2000.

The alarming strength of dis-intermediation during 1990s was also visible clearly in terms of trends in growth rates of components of financial savings, as well as their ratios to GDP. Investment in government securities by non-banks showed an increasing trend at the expense of deposits of both banks and NBFIs that showed a declining trend in growth. These trends not only resulted in a virtually stagnant ratio of stocks of financial savings in term of GDP, but a markedly declining trend in the

[5] The value of deposit to GDP ratio reported here will not tally with those in other sections. Deposits used here are part of M_2 and exclude deposits of government and non-residents.

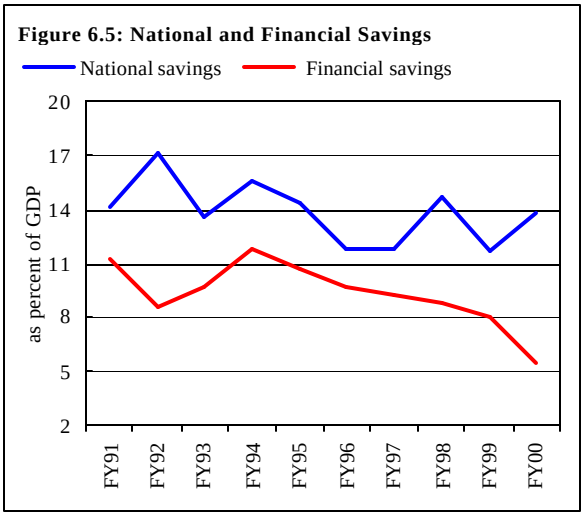
yearly flows of financial savings to GDP. Financial savings, being a subset of national savings (see **Figure 6.5**), therefore, caused the latter to decline as well.

Table 6.5: Components of Financial Savings

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00
Financial savings (billion Rupees)	724	828	958	1143	1346	1552	1777	2016	2251	2427
Stocks as percent of financial savings										
Deposits of schedule banks	47.5	50.3	51.2	51.9	53.0	53.3	52.9	52.1	49.4	47.0
Deposits of NBFIs	3.5	4.0	5.2	5.6	5.3	5.4	6.6	5.0	4.1	3.2
Govt. debt instruments (non-bank)	30.1	27.3	26.1	26.4	25.8	26.2	26.8	29.4	33.6	35.1
Currency in circulation	18.9	18.3	17.4	16.2	16.0	15.1	13.7	13.5	12.8	14.7
Financial savings	100	100	100	100	100	100	100	100	100	100
Stocks as percent of GDP										
Deposits of schedule banks	33.8	34.4	36.6	37.7	37.9	39.0	38.7	39.2	37.9	35.8
Deposits of NBFIs	2.5	2.7	3.7	4.0	3.8	4.0	4.9	3.7	3.2	2.4
Govt. debt instruments (non-bank)	21.5	18.7	18.6	19.2	18.4	19.2	19.6	22.1	25.8	26.8
Currency in circulation	13.5	12.5	12.4	11.7	11.5	11.0	10.1	10.2	9.8	11.2
Financial savings	71.3	68.3	71.4	72.7	71.5	73.2	73.2	75.3	76.6	76.2
Flows as percent of GDP										
Deposits of schedule banks	6.4	6.0	5.5	6.5	6.4	5.4	4.6	4.2	2.1	0.9
Deposits of NBFIs	0.6	0.7	1.3	0.9	0.4	0.6	1.4	-0.7	-0.2	-0.5
Govt. debt instruments (by non-bank)	2.2	0.6	1.8	3.3	2.4	2.8	2.8	4.3	5.6	3.0
Currency in circulation	2.1	1.2	1.1	1.1	1.6	0.9	0.4	1.1	0.5	2.1
Financial savings	11.3	8.5	9.7	11.8	10.8	9.7	9.3	8.9	8.0	5.5
National savings	14.2	17.1	13.6	15.7	14.3	11.8	11.8	14.7	11.7	13.8

The process of dis-intermediation was fuelled by the increasing distortions in the term structure of interest rates, as a result of introduction of new costly schemes by CDNS in 1993 and drastic upward revision in profit rates of its main certificates. For example, compound annual average rate of profit of DSCs was revised upward from 15.6 percent set in June 1981 to 16.0 percent in November 1993, and then again to 18.0 percent in November 1996. It was only in May 1999 that a process of rationalization of profit rates of NSS was started that reduced the DSC rate first to 15.9 percent, and then to 14.0 percent in July 2000. Unfortunately, the rate was again revised upwards to 15.0 percent in July 2001, and later reduced to 14.1 percent after linking it to the yield of ten-year PIB from January 2001.

Figure 6.5: National and Financial Savings



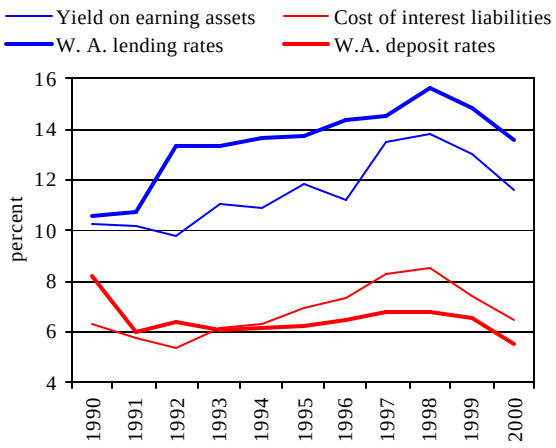
6.3 Impact on Financial Efficiency

The efficiency of the financial system can be measured by two important indicators: (1) interest rate spread; and (2) distribution of bank credit among various sectors. The trend in both of these indicators is discussed below.

6.3.1 Interest Rate Spread

The spread between lending and deposit rates (the banking spread) is the measure of intermediation cost of banks, which has increased over time in case of scheduled banks in Pakistan (see **Table 6.6** and **Figure 6.6**). It was 2.4 percentage points in FY90, which increased sharply to 7.9 and then to 8.1 percentage points in FY96 and FY00 respectively. Although during 1990s lending rates increased significantly, the banks were unable to pass on their interest earnings to depositors to the same extent. The increase in spread between lending and deposit rates can be linked to high administrative cost, overstaffing, higher risk of business default, increasing volume of bad loans of financial institutions, and to a lesser extent the volatility of interest rate.

Figure 6.6: Interest Rate and Banking Spread



Increase in banking spread should, however, be interpreted with caution. In pre-reform period, interest rates were controlled from both sides, with the floors on deposit rates and ceilings on lending rates. Their widening after the reforms largely indicated the change from a repressed to a liberalized interest rate regime. In addition, computed weighted average lending rates do not reflect the true market rate and have downward bias. Since the share of this concessional credit in total credit to private sector has gone down substantially from 44.2 percent in the beginning of 1990s to 31.4 percent at end June 00, the simple comparison of weighted average lending rates over the decade might be misleading.

Interest rate spread is comparatively a better measure than the banking spread, because the former takes into account lending as well as investment whereas the latter does not (see **Section 3.2.3)**. Nevertheless, interest rate spread also widened from 4.0 percent in 1990 to 4.5 percent in 2000, showing that the reforms did not succeed in increasing the efficiency of banking sector.

Table 6.6: Indicators of Financial Efficiency

	Banking spread	Concessionary credit as % of total credit
FY90	2.4	44.2
FY91	4.8	45.5
FY92	6.9	44.8
FY93	7.2	47.5
FY94	7.5	45.9
FY95	7.5	43.9
FY96	7.9	40.8
FY97	7.8	38.1
FY98	8.8	34.8
FY99	8.3	33.4
FY00	8.1	31.4
Averages		
1980-85	4.7	58.7
1985-90	2.7	48.9
1990-95	6.8	45.5
1995-00	8.2	35.7

6.3.2 Credit Allocative Efficiency

The credit allocative efficiency can be assessed by the share of concessional and mandatory credit in the private sector credit, and diversification of asset portfolio. There are two dimensions of portfolio diversification: (1) by economic sectors like industry, agriculture, etc.; and (2) by different economic agents like government, public sector enterprises, private sector, etc.

Concessional and Mandatory Credit

An increase in the share of concessionary and mandatory credit leads to an increase in the shadow cost of intermediation to banks. The mandatory credit discourages market forces to determine the

allocation of resources while concessionary credit deprives the banking institutions of earning market rates of return. Thus in both cases, distortions in the market mechanism are created and efficiency is lost. A decline in the share of concessionary and mandatory credit, on the other hand, indicates improvement in the allocative efficiency of credit. It shows that the banks are giving more loans to those sectors, which offer competitive rates of returns. The average share of concessionary and mandatory credit in the total private sector credit declined from 58.7 percent during 1980-85 to 35.7 during 1995-00 (see **Table 6.6**). Although the performance of banking system in Pakistan is admirable in this regard, share of concessional credit is still too high.

Sectoral Distribution of Credit

Efficient allocation of credit also requires diversification of asset portfolio. Concentration of credit in few sectors of the economy makes the financial sector vulnerable to the performance of these sectors. Financial reforms in Pakistan did not appropriately address this problem. In total credit, the share of large-scale manufacturing sector, which was highest in the pre-reform period, further increased during later half of 1990s (see **Table 6.7**). It is worth noting that the share of manufacturing in real GDP is less than that of agriculture but its share in banks' credit is more than twice compared with the credit share of agriculture. Declining share of agriculture in banks' credit also has unfavorable implications for the health of overall economy.

Table 6.7: Allocation of Credit Among Different Sectors and their Share in GDP

	1980-85	1985-90	1990-95	1995-00
A. Percentage share in total credit - 5 year average				
Agriculture, forestry, &	13.2	22.2	20.4	14.7
Mining & quarrying	1.4	1.0	1.2	1.9
Manufacturing	47.9	42.0	42.5	50.9
o/w				
Textile	34.2	33.4	39.7	41.5
Chemical products	3.3	4.9	5.4	6.9
Construction	2.6	3.3	2.4	1.8
Electricity, gas & sanitary services	2.2	2.1	2.1	2.2
Commerce	21.4	20.7	19.4	14.9
Transport, storage & communications	1.8	1.3	2.9	4.5
Services	3.8	1.1	1.2	1.2
Others	5.8	6.3	8.0	8.0
B. Percentage shares of sectors in real GDP - 5 year averages				
Agriculture, forestry, &	28.9	26.3	25.0	25.8
Mining & quarrying	0.4	0.5	0.5	0.5
Manufacturing	16.0	17.2	18.1	16.8
Construction	4.3	4.2	4.1	3.7
Electricity, gas & sanitary services	2.3	2.8	3.6	4.2
Commerce	18.2	18.9	18.7	18.1
Transport, storage & communications	9.9	9.8	10.0	10.0
Others	19.9	20.1	20.1	20.8

During the pre-reform period, agriculture sector was receiving mandatory and concessional credit to fulfill its needs. However, after the introduction of reforms, banks failed to substitute the concessionary and mandatory credit with the credit on commercial basis. It was largely due to: (1) inability of commercial banks to introduce new financial instruments for the agriculture sector where credit risk management required a different type of approach vis-à-vis industry and commerce; (2) lack of commercialism and competitiveness on the part of agriculturalists; (3) legal impediments such as a clear land title and difficulties in collateral enforcement; and (4) presence of sizeable informal financial markets in the agriculture sector.

Looking at **Table 6.7**, construction seemed to be an underserved sector, as its credit share remained significantly lower than its share in GDP. Since construction sector includes loans and advances for buildings, roads, harbors, water channels etc., declining share of credit may have adverse implications for the economy as a whole. Within construction, it is difficult to specify the share of housing sector, as it is merged with loans and advances for buildings. However, besides the banking sector HBFC is also catering to the credit needs of this sector.

User Distribution of Credit

There was only a nominal change in the share of users, in the credit of scheduled banks during the past decade (see **Table 6.8**). In terms of allocation of resources, it can be argued that larger the share

of private sector in credit, more efficient will be the allocation. The financial reforms of 1990s did not succeed in this regard as no noteworthy reallocation of resources took place during this period.

Table 6.8: Allocation of Gross Domestic Credit among Different user Groups (Shares)

	Scheduled banks credit			SBP credit		Gross domestic credit		
	Government	PSEs	Private sector	Government	Private *	Government	PSEs	Private sector
FY82	33.5	11.3	55.3	81.9	18.1	46.6	8.2	45.2
FY83	33.2	12.6	54.2	85.0	15.0	48.4	8.9	42.7
FY84	26.8	11.5	61.7	85.3	14.7	44.9	7.9	47.2
FY85	25.1	11.4	63.5	85.5	14.5	45.0	7.6	47.4
FY86	23.0	11.3	65.7	83.2	16.8	40.8	7.9	51.3
FY87	23.2	8.0	68.8	80.2	19.8	38.8	5.8	55.4
FY88	29.6	6.8	63.6	81.0	19.0	43.8	4.9	51.3
FY89	27.8	5.3	66.9	80.5	19.5	42.6	3.8	53.6
FY90	24.4	5.0	70.6	82.1	17.9	41.5	3.5	55.0
FY91	27.6	4.3	68.1	82.9	17.1	43.5	3.1	53.4
FY92	31.8	4.4	63.8	92.6	7.4	48.6	3.2	48.2
FY93	34.0	3.4	62.6	92.2	7.8	49.8	2.5	47.7
FY94	36.3	3.1	60.6	90.3	9.7	48.6	2.4	49.0
FY95	34.4	3.5	62.0	89.7	10.3	47.2	2.7	50.1
FY96	36.2	3.7	60.1	90.1	9.9	48.8	2.9	48.3
FY97	35.6	4.6	59.7	92.0	8.0	49.2	3.5	47.3
FY98	38.1	5.2	56.8	91.1	8.9	48.3	4.2	47.6
FY99	33.7	5.1	61.3	89.8	10.2	48.3	3.7	48.0
FY00	29.3	6.2	64.5	93.1	6.9	51.6	4.0	44.4
Averages								
FY80-85	29.6	11.7	58.7	84.4	15.6	46.2	8.2	45.6
FY85-90	25.6	7.3	67.1	81.4	18.6	41.5	5.2	53.3
FY90-95	32.8	3.8	63.4	89.5	10.5	47.5	2.8	49.7
FY95-00	34.6	5.0	60.5	91.2	8.8	49.2	3.7	47.1

* credit to NBFIs

6.4 Impact on Domestic Debt Management

Objectives of the debt management reforms, undertaken from the beginning of 1990s, were to rationalize the cost of domestic debt servicing over the long run, eliminate segmentation in government debt market, establish a market based rate of return structure for government securities, and provide a supporting environment for reorientation of monetary policy from direct towards indirect monetary control.

In order to achieve the aforementioned objectives, important steps undertaken included: (1) replacing the tap system of sale of government securities with that of auction; (2) establishment of 3-Day repo window in lieu of discount window; (3) introduction of six-month market treasury bills and a long-term auctionable government paper; (4) introduction of SBP purchase of T-bills at market determined rates in lieu of adhoc T-bills at only 0.5 percent; and (5) discontinuation of highly expensive Khas Deposit Certificates (KDCs).[6]

6.4.1 Impact on Cost and Sustainability of Debt

At the start of reforms in the beginning of 1990s, both the level and cost of servicing were quite high, a legacy that started in mid 70s due to introduction of costly national saving schemes and subsequent

[6] For a comprehensive coverage of debt management reform measures, see section 2.2 of Chapter 2.

unabated flow of resources in these. It was expected that various measures would help in stabilization of domestic debt to a sustainable level in the long run. However, interest costs as well as debt levels continued to rise at a fast pace in post-reform decade, albeit at a pace lower than that observed in pre-reform decade. Some of the measures taken in the early years of reform did succeed in decelerating the interest costs, but others worked in opposite direction resulting in an unchecked increase in domestic debt and servicing burden. Increasing burden of domestic debt from the pre to post-reform decade is shown in **Table 6.9.**

Table 6.9: Burden of Domestic Debt

	Pre-reform		Beginning	Post-reform	
	FY80	**FY85**	**FY90**	**FY95**	**FY00**
Outstanding debt levels	59.7	153.0	381.3	807.67	1641.4
end period, billion Rupees					
As percent of GDP					
Domestic debt	25.5	32.4	44.5	42.9	51.6
Permanent debt	5.6	7.8	11.5	15.4	10.2
Floating debt	15.0	15.5	16.9	15.6	20.4
Unfunded debt	4.9	9.1	16.1	11.9	21.0
As % of total revenue					
Domestic debt	155.2	197.6	240.1	254.0	305.8
Permanent debt	34.4	47.6	62.1	91.3	60.5
Floating debt	91.1	94.4	91.3	92.5	120.6
Unfunded debt	29.7	55.6	86.7	70.2	124.7

Burden in terms of GDP, which was 44.5 percent in FY90, rose to 51.6 percent in FY00. Burden in terms of revenue reveals a still more worrisome picture. It was about two and a half times the revenue in FY90 and grew to over three times the total revenue in FY00. However, it must be acknowledged at the outset, that the domestic debt burden was already very high when reforms started, and the rates of increase in debt levels were extremely high in pre-reform decade as shown in **Table 6.10**.

Reforms had a favorable impact in decelerating the nominal as well as real debt levels. The pre-reform decade of 1980s witnessed a per annum growth rate of 20.4 percent, whereas post-reform decade of 1990s registered 15.7 percent per annum increase in domestic debt.

If we look at growth rates of components of domestic debt in **Table 6.10**, and compare first half of post-reform decade with second half of pre-reform decade, a significant decline can be seen in the growth rate of unfunded debt from 26.2 percent to 10.2 percent.[7] This was due to the discontinuation of Khas Deposit Certificates (KDCs) from February 1990, which accounted for about 68 percent of unfunded debt as on end June 1989. However, this deceleration could not be sustained in the second half of post-reform decade due to introduction of Special Saving Certificates and Accounts in FY91 and Regular Income Certificates in FY94, and upward revision in rates of return on these and other saving schemes in second half of post-reform decade. Failure of reforms, as far as unfunded debt is concerned, was due more to their effective reversal just after the successful measure of discontinuation of KDCs.[8]

Indicators of the servicing burden of domestic debt are shown in **Table 6.11**. At the start of reforms in FY90, servicing burden was 4.3 percent of GDP and 23.2 percent of revenue, which could hardly be labeled as sustainable. After five years of reform process, servicing burden increased to 4.8 percent and further five years down the road to almost 7.0 percent in FY00. In terms of debt components and burden on GDP, a success could be discerned, again in unfunded debt, whose servicing burden declined from 2.0 percent to 1.3 percent during first five years, due to the reasons described above, but later increased to 2.8 percent of GDP in FY00 because of effective reversal of reforms in national saving schemes.

[7] Domestic debt is categorized in Pakistan into permanent, floating and unfunded. Permanent debt can also be labeled as long-term debt; floating debt as short-term debt; and unfunded can also be labeled under another name. The word 'unfunded' seems superfluous, but used traditionally.

[8] The possibility that ceiling on government borrowing from the banking system, under IMF conditionality, might have forced the government to reverse these measures, can not be ignored.

Table 6.10: Expansion Rates of Domestic Debt
percent per annum

	Pre-reform period			Post-reform period		
	1st half 1980-85	2nd half 1985-90	1980-90	1st half 1990-95	2nd half 1995-00	1990-00
Nominal debt						
Domestic debt	20.7	20.0	20.4	16.2	15.2	15.7
Permanent debt	22.7	21.8	22.2	24.1	2.3	12.6
Floating debt	15.8	14.7	15.2	15.2	17.1	16.1
Unfunded debt	30.4	26.2	28.3	10.2	24.6	17.1
Real debt						
Domestic debt	11.3	12.9	12.1	4.5	6.8	5.6
Permanent debt	13.1	14.5	13.8	11.6	-5.2	2.8
Floating debt	6.8	7.8	7.3	3.6	8.5	6.0
Unfunded debt	20.3	18.6	19.4	-0.9	15.4	6.9

Although a part of negative impact on burden and servicing of unfunded debt could be attributed to effective reversal of measures related to NSS, rest of the measures did contribute negatively. Reform measures taken in respect of permanent debt and floating debt played an important role in worsening the servicing debt burden (see **Table 6.11**). Servicing burden in terms of GDP, for permanent debt rose from 1.3 percent in FY90 to 1.9 percent in FY00 due to introduction of Federal Investment Bonds at very high coupon rates, which contributed to increase the effective interest rate on permanent debt from 11.5 percent in FY90 to 18.6 percent in FY00.[9] It may be noted that comparable 10-year Federal Government Market Loans were being issued through subscription at around 10.5 percent per annum before the introduction of FIBs.

Table 6.11: Servicing Burden of Domestic Debt

	Pre-reform years		Beginning	Post-reform years	
	FY80	FY85	FY90	FY95	FY00
Nominal debt costs					
As percent of GDP					
Domestic debt	1.1	2.3	4.3	4.8	7.0
Permanent debt	0.4	0.7	1.3	1.8	1.9
Floating debt	0.3	0.4	0.7	0.8	1.5
Unfunded debt	0.3	1.0	2.0	1.3	2.8
As percent of total revenue					
Domestic debt	7.0	13.8	23.2	28.6	41.3
Permanent debt	2.4	4.2	7.1	10.6	11.2
Floating debt	2.1	2.5	3.5	5.0	9.2
Unfunded debt	1.6	6.0	10.7	7.9	16.8
As percent of debt level					
Domestic debt	4.5	7.1	9.6	11.3	13.5
Permanent debt	7.0	9.0	11.5	11.6	18.6
Floating debt	2.3	2.9	3.9	5.4	7.6
Unfunded debt	5.4	11.6	12.3	11.3	13.5

Note: Domestic debt includes interest payments on provincial and other obligations.

Similar is the case in respect of servicing burden for floating debt in terms of GDP, which rose from 0.7 percent in FY90 to 1.5 percent in FY00 due mainly to the replacement of tap T-bills (with yield of 6 percent), to auction T-bills (with yields ranging from 8 to 17 percent), and also due to replacement of adhoc T-bills held by SBP (at a yield of only 0.5 percent) to auction determined yields. Effective

[9] FIBs carried coupon rates of 13, 14 and 15 percent respectively for bonds of three, five and ten-year maturities.

interest rate on floating debt rose from 3.9 percent in FY90 to 7.6 percent in FY00. Expansion rates of domestic debt servicing are shown in **Table 6.12**.

Table 6.12: Expansion Rates of Domestic Debt Servicing

percent per annum

	Pre-reform decade			Post-reform decade		
	1st half	2nd half	Full	1st half	2nd half	Full
	1980-85	1985-90	1980-90	1990-95	1995-00	1990-00
Nominal debt costs						
Domestic debt	31.7	28.1	29.9	19.8	19.5	19.7
Permanent debt	28.2	28.5	28.3	24.3	12.4	18.2
Floating debt	19.1	23.6	21.3	23.0	25.5	24.3
Unfunded debt	49.6	29.5	39.2	8.3	29.0	18.2
Real Debt Costs						
Domestic debt	21.4	20.4	20.9	7.8	10.8	9.3
Permanent debt	18.2	20.8	19.5	11.8	4.2	7.9
Floating debt	9.8	16.2	13.0	10.6	16.3	13.4
Unfunded debt	38.0	21.8	29.6	-2.6	19.6	7.9

A decline is visible both in expansion rates of nominal and real domestic debt servicing, from pre-reform decade to post-reform decade. However, in case of floating debt, rates of expansion for nominal as well as real cost went up from pre-reform to post-reform period.[10] Increasing burden of domestic debt and its servicing in the post-reform decade affected the fiscal account adversely. **Table 6.13** presents fiscal indicators for selected pre-reform and post-reform years. It is difficult to spot any improvements except for the appearance of surplus in primary balance.

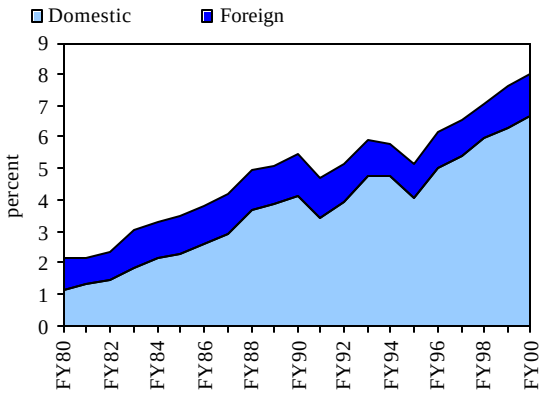
All other indicators, both as percentage of GDP and revenue, show either a continuous deterioration, or at best no improvement at all. Budget deficit in terms of GDP in FY00 stood almost at the same level as that of the beginning of reforms. In terms of revenue it had deteriorated a little. Revenue deficit has worsened, indicating the increasing reliance of government to finance its current expenditure. A declining trend is alarmingly visible in development expenditure, and a perverse increasing trend in interest expenditure. Government was spending a little over one-third of its revenues on development, and a little less than that on interest payments at the beginning of reforms. However, in FY00, it ended up paying almost one-half of revenues as interest on accumulated debt and less than one-fifth on development expenditure. Interest expenditure rose to 8.3 percent of GDP in FY00 from 5.5 percent of GDP in FY90, which forced the government to reduce development expenditure. Revenue effort did not improve, due to difficulty in implementing fiscal reforms, and debt management reforms pushed interest expenditure on upward direction, with disastrous consequences amply, reflected in various fiscal indicators.

Interest expenditure on total public debt as percent of GDP has shown phenomenal growth over the period FY80 to FY00 increasing from 2.1 percent to 8.3 percent of GDP (see **Table 6.13** and **Figure 6.7**). However, it is important to take notice of the fact that almost all of the increase in interest expenditure is brought about by increase in interest payment on domestic debt, which shot from 1.1 percent in FY80 up to 6.7 percent in FY00. Contrary to the popular view, interest expenditure on external debt has shown little increase during the same period, from 1 percent to 1.4 percent of GDP. During the decade of 1980s as well as 1990s, comparatively higher rates of return on domestic debt were mainly responsible for the growing trend in total public debt. Furthermore, during 1990s as the

[10] High government borrowing from the banking system through T-bills was mainly responsible for acceleration in floating debt.

sources of concessional external borrowing dried up, a heavier reliance on domestic debt sources was witnessed.

Figure 6.7: Interest Expenditure (as % of GDP)



We can draw two conclusions from the above discussion. Firstly, the reform measures related to permanent and floating debt resulted in rapidly surging servicing burden, which, in the absence of major restraint over current expenditures, severely affected the government's ability to undertake development expenditures. And secondly, the initial measures related to unfunded debt which could have contributed to lessening of servicing burden, were reversed quickly resulting in further mounting pressure on domestic debt servicing. Pakistan's experience is not unique in this respect. Cole and Slade (1999) have shown that premature liberalization of government debt markets in less developed countries does not lead to fiscal restraint, rather it becomes easier for these countries to get into trouble through rapidly rising interest expense on domestic debt.[11]

Table 6.13: Fiscal Indicators

	Pre-reform Years		Beginning	Post-reform Years	
	FY80	**FY85**	**FY90**	**FY95**	**FY00**
As percent of GDP					
Total revenue	16.2	16.4	18.6	16.9	16.9
Total expenditure	23.0	24.7	25.9	22.8	23.4
Interest expenditure	2.1	3.5	5.5	5.2	8.3
Non-interest expenditure	20.9	21.2	20.4	17.6	15.0
Current expenditure	13.8	17.7	19.3	18.4	20.4
Development expenditure	9.2	7.0	6.5	4.4	3.0
Budget deficit	6.2	7.8	6.5	5.6	6.5
Revenue deficit	(2.4)	1.3	0.8	1.5	3.3
Primary deficit	4.0	4.3	1.1	0.4	(1.9)
As percent of total revenue					
Total expenditure	141.9	150.9	139.6	134.7	138.5
Interest expenditure	13.2	21.4	29.4	30.6	49.5
Non-interest expenditure	128.7	129.6	110.2	104.1	89.0
Current expenditure	85.3	108.2	104.3	108.8	120.7
Development expenditure	56.6	42.7	35.3	25.9	17.8
Budget deficit	38.1	47.5	35.3	33.1	38.5
Revenue deficit	(14.7)	8.2	4.3	8.8	19.8
Primary deficit	24.9	26.2	5.9	2.5	(11.0)

Note: 1. Figures in parentheses indicate a surplus in the corresponding year.
2. Net lending to PSEs has been included in Current Expenditure.

Mounting of domestic debt and rising servicing burden can be attributed to the improper sequencing followed in design and implementation of economic reforms. Within the broader set of economic reforms encompassing the real, financial, fiscal and trade sectors, the supply side reforms may

[11] Cole, David C. and Betty F. Slade, "Premature Liberalization of Government Debt Markets", Conference paper for Research workshop "Financial Liberalization: How Far? How Fast?", World Bank, March, 1999.

precede others (as was witnessed in case of Pakistan in early 1980s) and the fiscal reforms should precede financial reforms. However, opposite sequencing was followed in case of Pakistan with regard to the latter. Among the financial and fiscal reforms, and within the financial sector reforms, liberalization of domestic debt is, perhaps, the easiest to implement. Main and direct stakeholders of domestic debt reforms are only four -- government, central bank, commercial banks, and non-bank financial institutions, with the latter three as beneficiaries. Government is the loser, so is the private sector, which is only an indirect stakeholder, but also deeply affected by the reform process. Fiscal reforms are the hardest to implement affecting almost every agent in the economy. Neglect of fiscal reforms in the initial stages of financial reforms proved disastrous for fiscal deficits and domestic debt.[12]

Administrative exigencies, and implementation of conditionalities under various agreements with IFIs, rather than a carefully chalked out plan of reforms, were perhaps the overriding factors that resulted in the implementation of debt management reforms. These reforms failed in almost every objective except that of providing supporting environment for reorientation of monetary policy from direct to indirect control. Cost of domestic debt seemed to have been escalated instead of being rationalized. Segmentation from government debt market could not be eliminated, although reforms did succeed in establishing a market-based yield structure of government securities.

6.5 Impact on Reorientation of Monetary Policy

One of the objectives of debt management reforms, supported by various institutional and monetary management measures was the reorientation of monetary policy away from direct control, towards indirect control through market-based instruments. This reorientation triggered two important changes. First is the increasing assertiveness of the SBP in initiating and implementing its monetary policy, albeit within the framework of Annual Credit Plans, and second is the significant alteration in monetary policy transmission mechanism.

6.5.1 Impact on SBP's Conduct of Monetary Policy

Effectiveness of a central bank depends on its professional competence and independence in the conduct of monetary policy. Professional competence largely depends on quality of its human resources in the areas of banking, finance, economics and management. Independence can be in goal setting, or target independence, if central bank fixes for itself the monetary policy target, which is usually inflation; or it can be operationally independent, if central bank is free to use its instruments independently to achieve a target set outside central bank. Independence in decision-making can come from law, practice, or both. A central bank can be de facto independent, because of tradition, without being de jure independent. On the other hand, it is possible for a central bank to be de jure independent but def acto not independent. This situation can arise because of three interrelated issues: first relates to operational independence in managing its own currency, second to operational independence in managing its foreign exchange reserves, and third, to financing arrangement between itself and the exchequer.

Independence encompassing above three issues can come from a combination of legislative as well as extra legislative processes. In the post-reform period, State Bank of Pakistan has made tremendous strides in the first two. In the pre-reform period, monetary policy was largely subservient to government's objectives of directed credit to priority sectors, with the highest priority given to the government sector itself. Important monetary policy changes, like those in SLR or CRR were communicated to the SBP by Finance Division with SROs rather than initiated and implemented through SBP Circulars. SBP was empowered to change these instruments only after its legislative

[12] For further detail see Yaqub, Muhammad, "Financial Sector Reforms in the Emerging Market-based Economies", Opening Remakes at the symposium of SEANZA Central Banks' Governors in Karachi, November 1994. Reprinted in "Major Policy Issues in Pakistan", State Bank of Pakistan, 1998.

independence in 1994, through amendments in SBP Act, 1956. In the beginning of 1995, another important step, which strengthened the independence of SBP in its conduct of monetary policy was that the auction cut-off decision was given to SBP. By that time, a supporting infrastructure in terms of a well developed primary market of T-bills and a fairly developed repo market in these bills and FIBs was well in place. Monetary policy objectives, since then, are being achieved through changes in SBP Repo Rate (discount rate), auctions of T-bills, open market operations and less frequent use of CRR or SLR. SBP is now instrument independent in the area of managing its currency.

It is also important to keep in mind that the exchange rate policy was exercised by the Government of Pakistan through Foreign Exchange Regulation Act, 1947, both in pre-reform and post-reform period. It was only in July 1999 when an amendment in the State Bank of Pakistan Act enabled it to purchase foreign exchange from any entity in Pakistan, and after the unification of exchange rate in May 1999, that SBP got the effective power to intervene in the interbank market of foreign exchange. After removal of the cap imposed in floating inter-bank market, link of money market and forex market was established and put SBP under pressure to defend Pak-Rupee through monetary policy measures. Government can still take independent measures legally under Foreign Exchange Regulation Act, 1947; however, the practice has already been changed and SBP is taking all the measures to control foreign exchange reserves. Therefore, SBP is now de facto independent in managing its forex reserves.

Third area of independence, which relates to direct financing arrangements between SBP and Ministry of Finance, has not changed significantly in the post-reform period. An automatic system of replenishment of federal government account is still in place, practically without any limits, through the creation of treasury bills. Direct financing arrangements can weaken the independence easily. It should also be kept in mind that for countries having perennial budget deficits, direct financing arrangements can not change in the short-term. Until and unless revenues of the government become commensurate with its expenditure, legislative measures to control direct financing may prove fruitless.

In sum, SBP is now operationally independent, both de jure and de facto, in managing its currency and operationally independent, (de facto but not de jure) in managing its foreign exchange reserves. Moreover, level of professional competence, which is required to assert independence in an effective and useful manner, has also increased in the post-reform period through restructuring of its departments, merit based recruitment and training of its existing human resources.

6.5.2 Pre-reform Transmission Mechanism

Monetary transmission mechanism (see **Box 6.1**), prior to reforms, was largely determined by the instruments of direct control. Statutory liquidity requirement determined the allocation of credit between the government and private sector supported by the system of bank-by-bank credit ceilings. Monetary policy set in Annual Credit Plans worked its way mainly through availability of credit, while interest rates played a secondary role because of various controls on lending as well as deposit rates. Indirect instruments like discount rate, cash reserve requirement and open market operations were not relied upon because of lack of a well-functioning market for government securities. Directed and subsidized credits were used to promote various activities in agriculture, industry and export.

The result of these direct control measures was that although sectors like agriculture and manufacturing were given priority, the distribution of credit within them was not commensurate with their demand. Thus, the scope of monetary policy had been limited and made ineffective in stimulating activities in all sectors of the economy. The priority sectors became more and more

Box 6.1

Monetary Transmission Mechanism

One of the most important objectives of any central bank is to maintain price stability without jeopardizing the growth and employment prospects for the economy. The effectiveness of a monetary policy requires the impact of policy changes to be felt on macroeconomic variables like consumption, investment and net exports. Implementation of monetary policy, through any or a combination of its instruments triggers a chain of reactions, or impacts, in various sectors of the economy. These impacts can be felt only if a robust transmission mechanism is present. Immediate impacts become visible in the financial markets, especially in money market. Later reactions work through banks, non-bank financial institutions, firms and households and end with an effect on the price level, after having transient effects on growth and employment. This chain of reactions, or impacts, is known as the transmission mechanism of monetary policy.

Various channels have been explored and discussed by the economists both theoretically and empirically, mainly in the context of developed countries. These channels can be divided into four groups, namely, money channel, credit channel, exchange rate channel and asset price channel.

Money channel

It is also known as the interest rate channel, as a chain of reactions is stimulated after a change in the interest rates. Major components of GDP, i.e., investment and consumption expenditures are affected by a change in interest rates. A strong interest rate channel, with significant interest rates effects on consumer spending and investment is empirically found to be present in industrial countries.[1] This channel is usually weak in developing countries with shallow financial sectors.

Credit Channel

The credit channel works through the bank lending operations and balance sheet effects.[2] It is suggested that open market sales by a central bank drain reserves and, hence, limit their ability to make loans and vice versa. A fall in loans from banks reduces the credit availability in the market, thereby reducing investment expenditure and aggregate demand. The balance sheet effect, on the other hand, is the result of direct and indirect influence of monetary policy on the balance sheet of a borrower. Both the direct and indirect effects lead to two results. First, a decline in net cash flow of a firm, as a result of an increase in outstanding short-term debt ensuing from an increase in interest rates. Second, an increase in interest rates shrinks the asset prices, thereby reducing the value of the collateral. The credit channel, however, is not supposed to be a distinct channel but is regarded as a set of factors shoring up the interest rate effects.

Exchange Rate Channel

Exchange rate channel is the standard effect of a change in monetary policy through interest rates on exchange rate and, therefore, on net exports and aggregate demand. An increase in money supply lowers the interest rates and depreciates the domestic currency. The lower value of domestic currency makes foreign goods more expensive, thereby promoting domestic production. This increases net exports and aggregate output leads to increase in average price level.

Asset Price Channel

This works through two channels: first, the Tobin's *q* theory of investment and second, the wealth effects on consumption. Tobin's *q* theory provides a mechanism through which monetary policy affects the economy via its effect on the valuation of equities. The wealth effect, on the other hand, is based on Modigliani's famous life cycle consumption model. This model suggests that the lifetime resources of consumers, which are made up of human capital, real capital and financial wealth, determine consumption spending. A major component of financial wealth is common stocks. When stock prices fall, the value of financial wealth decreases, thus decreasing the lifetime resources of consumers, and consumption should, accordingly, fall.

[1] See John B. Taylor, "The Monetary Transmission Mechanism: An Empirical Framework." The Journal of Economic Perspective, Vol. 9, No. 4, Fall 1995.

[2] See Ben Bernanke and Mark Gertler, "Inside the Black Box: The Credit Channel of Monetary Policy Transmission." The Journal of Economic Perspective, Vol.9, No.4, Fall 1995.

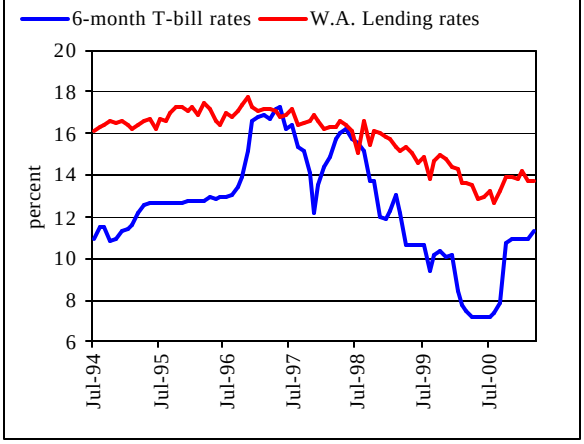
dependent on concessionary financing, and lethargic in generating their own resources. These concessional funds tried to make them artificially competitive and hence hindered improvement in their efficiency. Any change in the concessional rates or the availability of credit through such direct measures had a direct bearing on the economic activity through changes in direct investment expenditures or net exports. Since the economy was not open for foreign portfolio investment and domestic portfolio investment was limited, credit controls had little effect on portfolio investment. On the other hand, banks were also tied up for lending to specific sectors, which limited their efforts to achieve optimal credit allocation and compromised their carefulness in credit distribution, resulting in increasing bad loans.

In short, pre-reform transmission of monetary policy was taking place primarily through credit channel but without the efficacy of interest rates, which were controlled. Exchange rate channel was also working, but not through interest rates. Impact on net exports was coming through the changes made in the exchange rate independently of interest rates. Money channel and asset price channel were almost non-existent. **Figure 6.8** shows the pre and post-reform transmission mechanism.

6.5.3 Post-reform Transmission Mechanism

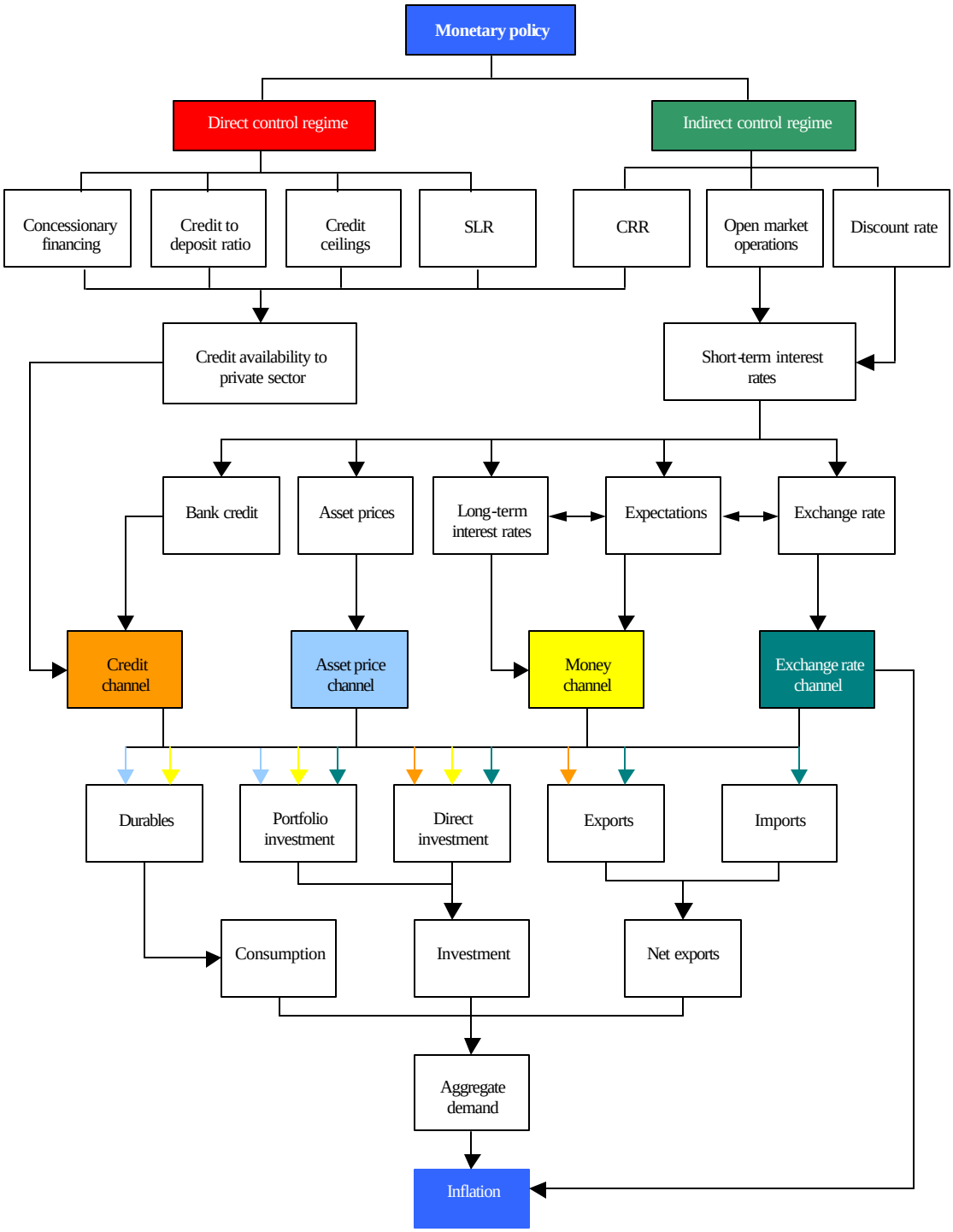
The financial sector reforms initiated in FY90 with the objective of transforming the existing financial structure from a controlled regime to a market-based system, has had a deep impact on the transmission mechanism of monetary policy. A diversion from direct to indirect control, alongwith the opening up of the external sector and a market-based exchange rate regime, has made the task of monetary policy all the more complicated, especially given the volatility in exchange rates. However, the distribution of resources is becoming more realistic and banks are becoming more independent in their credit allocation decisions. After the introduction of financial sector reforms, the effects of monetary policy changes through interest rates were not so visible since the credit market was controlled through the ceilings and then credit-deposit ratio (CDR) till September 1995 while the exchange rate was on managed float.

Figure 6.9: T-bill and Lending Rates



After the removal of caps on maximum lending rates of banks and NBFIs for trade related modes of financing in March 1995, and for project financing in October 1995 along with the abolition of CDR, the changes in interest rates have become all the more important. Consequently, the earlier mode of transmission through credit channel underwent a transformation to reflect increasing efficacy of interest rates in influencing volume of bank lending. In this context, the effects of changes in SBP 3-Day Repo Rate and the T-bill rates are being increasingly reflected in corresponding induced changes in lending rates of commercial banks -- albeit, with lags and diluted by the perceived notions of the market about persistence of these changes. **Figure 6.9** shows that despite a sharp hike in T-bill rates during the first half of the 1990s, commercial lending rates did not change much. In the second half, however, fall in T-bill rates have been followed more vigorously by the commercial lending rates. **Figure 6.9** also shows that it is the persistent or durable changes in interest rates that are transmitted to lending rates.

Figure 6.8: Transmission Mechanism of Monetary Policy in Pakistan



The change in exchange rate regime to a free float in July 2000 also defined a new chain of transmission. A change in short-term interest rates began to affect the exchange rate and vice versa, creating additional volatility in exchange rate induced by variability in very short-term interest rates. Consequently, during the recent episodes of exchange rate volatility, monetary operations have been extensively used to bring stability in foreign exchange market. Exchange rate channel is, therefore, fully functional now via the interest rates, although the inflation pass-through effects and net export effects were, of course, strongly present earlier.

In developed countries, monetary policy has a strong influence on the capital markets. A change in the interest rates is keenly followed by a change in stock prices. This relationship, however, is not so strong in the developing countries. This is due to the reason that equity markets are not yet well entrenched in the domestic investment culture. In Pakistan, the capital market is accessible, largely, to big companies, and to a small fraction of the population living in big cities. Moreover, people have little knowledge about capital markets. Although monetary policy changes are not reflected directly on the stock prices, they do have a weak relationship through the *badla* rates.[13]

Other avenues of investment for public include real estate, gold, and government securities. Government paper is an attractive option for general public and is considered to be the safest investment with high returns. Since the differential between return on government paper and bank deposits is quite high, a small change in interest rates hardly initiates a substitution of government paper with bank deposits and vice versa. As a result, government expenditures are rarely affected through this channel. Similarly, other assets like real estate or gold also have a weak relationship with the interest rates.

With the increasing trend in consumer banking, banks have been moving towards financing of consumption expenditures especially of durables. Housing finance, credit cards and personal loans are becoming more popular and, quite obviously, these financing activities are affected by changes in the interest rates. So far, banks have been offering such finances at relatively higher rates and only a negligible fraction of the population is having benefit of these credit schemes. Still, other sources like personal savings and loans from close relatives or friends are used for the purpose of durable purchases. Therefore, it is believed that the effect of changes in interest rates on such expenditures is not so significant.

To reap the full benefits of a market-based financial sector in stimulating growth in the economy, we still have to go a long way. Financial sector deepening is the only way to achieve this, but it will require a change of mindset of the public in favor of financial savings, and expansion and modernization of the financial services.

6.6 Impact on Banking Supervision

A crucial set of reforms that started to have a significant impact on banking industry, was initiated quite late in 1997 in the reform process. Impact of many of these is yet to be realized due to the medium to long-term nature of their objectives on the one hand, and inherent complexities and dynamics of institutional reforms, on the other. These reforms encompassed not only the institutional strengthening and restructuring of banks and DFIs, but also those of supervisory authorities (see **chapter 2**).

After the regulatory and supervisory powers of SBP were consolidated by dissolving the Pakistan Banking Council in May 1997, disclosure standards for banks and NBFIs were revised by SBP in August 1997 to bring them in conformity with International Accounting Standards, and consequently

[13] Badla is an informal source of financing, widely used in Pakistan's stock exchanges. For detail see page 109, **Annual Report** 2000-2001, SBP.

Box: 6.2: Core Principles for Effective Banking Supervision[1]

Basel Committee on Banking Supervision has prepared a set of twenty-five core principles, after years of consultations and deliberations with banking supervisors in every part of the world. These principles were released in September 1997 and the Basel Committee encouraged the supervisory authorities throughout the world to endorse the Basel Core Principles. These principles set out minimum requirements that need to be complied by a supervisory system to be effective. In many cases, minimum requirements may need to be supplemented by other measures designed to address particular conditions and risks in the financial systems of individual countries. The twenty-five Core Principles are categorized into seven major areas.

Preconditions For Effective Banking Supervision – Principle 1
The first principle emphasizes the need for having clear objectives and responsibilities for every supervising agency of banking organizations. It further highlights the need for having a suitable legal framework and arrangements for sharing information between supervisors. Operational independence for supervising agencies has also been highlighted in the first principle.

Licensing and Structure – Principles 2 to 5
These principles delineate the importance of having a standard licensing process by the authorities for establishment of banks and limiting the use of word 'bank' to prevent confusion amongst depositors. The licensing process must include an assessment of ownership structure, management, operating plan and projected financial condition. Supervisors must have the authority to review major acquisitions or investments by a bank.

Prudential Regulations and Requirements – Principles 6 to 15
Focus of these principles is on the need for establishing a comprehensive system of risk management for banks. Principles highlight the necessity of developing and enforcing prudential regulations to monitor and minimize the risks confronted by banks. Regulations relate to capital adequacy, asset quality, loan loss provisioning, portfolio concentration, connected lending, risk management and internal controls.

Methods of Ongoing Banking Supervision – Principles 16 to 20
These principles emphasise the necessity of adopting both on-site and off-site supervision, with the latter based on analysis of reports and return from banks, and the former on independent validation through on-site inspection and regular contact with bank management. Supervisors must also be able to supervise the banking group on a consolidated basis.

Information Requirements – Principle 21
This principle points to the need for banks to maintain adequate records with consistent accounting policies and disclose regular statements that truly reflect their financial conditions and profitability.

Formal Powers of Supervisors – Principle 22
This principle states that banking supervisors must have adequate enforcement and corrective action powers including recommendation to, or revoking of banking license.

Cross-border Banking – Principles 23 to 25
These principles highlight the need for supervising banks, both their domestic and international operations, on global consolidated basis through cooperation of home and host supervisors.

[1] Complete list of these principles is reproduced in Annex 6.1.

a CAMELS framework was adopted by SBP to assess their performance on the basis of off-site surveillance and on-site inspection. Furthermore, SBP moved very quickly to implement the core principles of effective banking supervision, or the Basel core principles (see **Box 6.2**).

Implementation status of these principles is shown in **Table 6.14**. Banks were also asked to comply with the core principles of banking, in addition to applying the system of risk-weighted capital prescribed by the Basel Committee.

Foreclosure standards of banks have considerably improved since then. All four nationalized commercial banks are now largely compliant in terms of having reliable financial statements and evaluating asset quality; three are largely compliant in managing country and transfer risk; and two in managing market and all material risk, having adequacy of internal controls and MIS to identify

concentration, and in knowing their customer rules. Two privatized banks are in compliance with all of the above core principles, so do a greater part of private banks. Only three, out of 39 banks had lower than 8 percent capital to risk-weighted assets ratio by the end of 2000. Banks and NBFIs were also asked to get themselves credit rated by 30th June 2001 and by now, out of 80 financial institutions, ratings of some 50 banks/NBFIs have been completed.

Table 6.14: Basel Core Principles: Implementation Status

Status*	Core Principles													
Compliant	1	2	4	7	10	16	17	18	19	21	22	23	24	25
Largely compliant	3	5	6	8	9	12	14	15						
Materially non-compliant	11	13	20											
Non-compliant	Nil													

* Compliant-- essential criteria met without any significant deficiencies; Largely compliant-- essential criteria met with minor shortcomings; Materially non-compliant-- sufficient short comings but substantive progress towards compliance; Non compliant– No substantive progress towards compliance.

With the adoption of CAMELS framework by SBP in December 1997, and strengthening of its on-site inspection and off-site surveillance capabilities, SBP had become more adept in finding the weaknesses of banks and NBFIs, besides becoming proactive in taking concrete actions for their resolution. Capabilities of SBP in problem bank management have significantly improved after 1997. For example, the board of directors and management of Bankers Equity Limited (BEL) were removed in August 1999 by SBP under section 41-A and 41-B of Banking Companies Ordinance, 1962, after it was found guilty of mismanagement, concealment of information, falsification of the balance sheet, mis-reporting of data to SBP, provision of loan without proper securities, writing-off of loans without adhering to the due process, failure to comply with instructions of SBP etc.

SBP made interim arrangements for prudent management of BEL during its petition in Sindh High Court and subsequent order for winding-up of BEL and appointment of an official liquidator in April 2001. Depositors of BEL were allowed to withdraw a maximum of Rs.100,000 against their investment from October 1999. In February 2000, it was decided that depositors be paid principal amount in phases on the basis of recoveries in each quarter. Subsequently, principal amount was paid to all such depositors whose total investment with BEL did not exceed Rs 10 million, and only 33 depositors with larger balances remained unpaid.

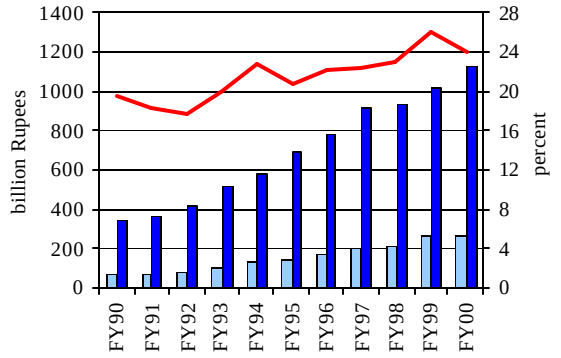
Similarly, quick resolution action was taken with regard to Indus Bank Limited (IBL) after on-site and off-site surveillance system of SBP reported unsatisfactory state of affairs. The license of IBL was cancelled on September 21, 2000 and it is now in the process of liquidation. Supervision system of SBP also found Prudential Commercial Bank Limited (PCBL) operating in a highly questionable and non-transparent manner. In view of this imprudent management, the federal government issued 180 days moratorium order against the bank on SBP's request, which was effected from March 19, 2001. After successful negotiations, management and control of PCBL was handed over to Saudi-Pak group, which commenced operation with a new name "Saudi-Pak Commercial Bank" on 20th September 2001.

Above examples elucidate the increasing quality of off-site surveillance by SBP supplemented with in-depth probing through on-site inspection. Human resource quality of SBP inspectors has considerably been improved through extensive training. With the creation of a subsidiary -- State Bank of Pakistan Banking Services Corporation (SBPBSC) -- SBP will be able to concentrate more on its core functions of banking supervision and regulation, monetary policy and research, and foreign exchange and debt management. Capacity of SBP is likely to further improve in near future with regard to its core functions.

6.7 Impact on Non-performing Loans

Non-performing loans (NPLs) of financial institutions continued to mount throughout the decade, from Rs 66.1 billion in December 1990 to Rs 271.4 billion in December 2000. However, their annual average rate of increase has come down from 17.4 percent during the first seven years of the decade to 10.1 percent during January 1998 to December 2000. As shown in **Figure 6.10** the ratio of NPLs to gross advances has also been gradually increasing, except for a temporary fall in 1995, and a decline towards the end of 1990s that is likely to be sustained in near future in view of the reasons discussed below.

Figure 6.10: Non-performing Loans



Reform process up to 1996 did not really address the banking sector problems, although the attempts to streamline the loan recovery process were started in 1992. It was only in July 1997 that the focus of reforms shifted to arrest the weakening health of public sector financial institutions, with the implementation of the most crucial set of reforms as already explained in **Section 6.6**. Adoption of a vigorous standard of loan classification in 1997, and their strict enforcement by SBP first caused a temporary rise in the volume of NPLs in FY99. Prior to that, some of the public sector banks and DFIs were reporting only default or overdue position of their

Table 6.15: Volume and Concentration of NPLs [1]

billion Rupees

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
All banks & NBFIs	**66.1**	**67.3**	**74.9**	**101.1**	**130.5**	**142.6**	**172.3**	**203.4**	**213.5**	**263.7**	**271.4**
All banks	*41.1*	*46.8*	*50.3*	*71.2*	*86.5*	*94.9*	*106.7*	*130.9*	*134.3*	*170.0*	*173.6*
State-owned banks	39.0	44.8	46.6	67.2	82.8	89.3	98.7	120.0	122.1	152.3	153.0
Private banks	-	-	1.8	1.5	1.7	2.4	3.1	4.7	5.6	11.1	13.6
Foreign banks	2.1	2.0	1.9	2.5	1.9	3.2	4.9	6.2	6.7	6.6	7.0
NBFIs[2]	***25.0***	***20.5***	***24.6***	***29.9***	***44.1***	***47.7***	***65.6***	***72.4***	***79.1***	***93.7***	***97.8***
DFIs	22.8	17.5	20.9	25.2	38.2	39.6	56.5	62.3	68.0	80.0	83.4
HFC	0.6	1.4	2.0	2.7	3.4	4.3	5.3	6.3	7.6	8.6	9.3
Others	1.6	1.5	1.7	2.0	2.3	3.7	3.5	2.9	2.8	3.4	3.0
Share in NPLs (percent)											
All banks & NBFIs	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
All banks	***62.1***	***69.6***	***67.1***	***70.5***	***66.2***	***66.5***	***61.9***	***64.4***	***62.9***	***64.5***	***64.0***
State-owned banks	59.0	66.7	62.2	66.5	63.5	62.6	57.3	59.0	57.2	57.7	56.4
Private banks	-	-	2.4	1.5	1.3	1.7	1.8	2.3	2.6	4.2	5.0
Foreign banks	3.1	2.9	2.6	2.5	1.5	2.3	2.8	3.1	3.1	2.5	2.6
NBFIs	***37.9***	***30.4***	***32.9***	***29.5***	***33.8***	***33.5***	***38.1***	***35.6***	***37.1***	***35.5***	***36.0***
DFIs	34.6	26.1	28.0	24.9	29.3	27.8	32.8	30.6	31.9	30.4	30.7
HFC	1.0	2.0	2.7	2.7	2.6	3.0	3.1	3.1	3.6	3.3	3.4
Others	***2.4***	***2.3***	***2.2***	***1.9***	***1.9***	***2.7***	***2.2***	***1.9***	***1.6***	***1.9***	***1.9***
memorandum item:											
State-owned Institutions	96.9	97.1	95.0	96.0	97.1	96.0	95.2	94.2	93.9	92.6	91.6

[1]: Data for Schedule banks and NBFIs are of end calendar and fiscal year respectively
[2]: *Leasing, Modaraba* and *Venture Capital Companies* are excluded due to non-availability of data.

NPLs instead of total outstanding amounts of such loans. This adjustment alone has added to the volume of non-performing loans.

Although credit culture is changing very slowly, nevertheless, decrease in growth of NPLs and ratio of NPLs to gross advances in the last two years is encouraging. This trend shows that new loans are being disbursed relatively more prudently; leading us to conclude that perhaps the ratio of NPLs to gross advances has reached a plateau and thus likely to decline in future--albeit slowly. However, the volume of NPLs may continue to rise in near future because the credit culture is unlikely to change dramatically in a short period of time.

Another reason that points to the likely continuation of decline in the ratio of NPLs to gross advances is the structure of concentration of NPLs. As shown in **Table 6.15**, state-owned banks and DFIs together held 87.1 percent of total NPLs in FY00. With the merger of the largest DFI, i.e., NDFC with NBP, liquidation of BEL and restructuring plan of rest of public sector DFIs, new project loaning is less likely to turn into bad loans. Capital adequacy of state-owned banks is now much better than earlier even after incorporation of full provisioning. Therefore, these banks are also likely to show substantial improvement in their ratios of NPLs to gross advances in near future.

6.8 Financial Development in Peer Countries

Many of the problems in the financial sector of Pakistan were common to other countries of comparable development and financial structure like India, Bangladesh, Sri Lanka, Philippines, Malaysia and Turkey. This section provides a short comparative evaluation of transformation in their macro-financial landscapes during 1990s. Comparison is based on two points in that period -- 1990 and 2000. Their macroeconomic environment is discussed first, followed by a comparison of financial deepening and intermediation indicators.

6.8.1 Macroeconomic Environment

At the beginning of the decade, except for Malaysia, inflation was a serious challenge for all countries of this group with Turkey having anomalously higher inflation of about 60 percent per annum (see **Table 6.16**). Fiscal deficit was high in South Asian Countries. Philippines and Pakistan had severe problems of current account imbalances compared with other countries. Foreign exchange reserves positions were also not very encouraging in most of the countries. Only Malaysia and Turkey had high reserve positions among this group.

Table 6.16: Macroeconomic Indicators

	Pakistan	India	Bangladesh	Sri Lanka	Philippines	Malaysia	Turkey
1990							
GDP per capita (US$)	351.6	389.1	194.4	472.7	720.7	2,478.8	2,682.2
Inflation	9.1	9.0	6.1	21.5	13.2	2.6	60.3
Fiscal deficit *	-5.4	-7.6	n.a	-7.8	-3.5	-2.9	-3.0
Current account balance *	-4.2	-2.2	-1.9	-3.7	-6.1	-2.0	-1.7
Foreign exchange reserves **	0.3	1.2	0.6	0.4	0.9	9.3	6.0
Exchange rate (per US$)	21.8	18.1	35.8	40.2	28.0	2.7	2,930.0
2000							
GDP per capita (US$)	437.0	460.7#	264.9	842.2	979.2	3,840.1	3,024.7
Inflation	4.4	4.0	2.3	6.2	4.4	1.5	54.9
Fiscal deficit *	-5.9	-4.2#	-	-6.9#	-4.1	-3.2#	-12.2#
Current account balance *	-0.4	-0.7#	-0.8	-6.5	12.2	16.0#	-4.8
Foreign exchange reserves **	1.5	3.7	1.5	1.0	12.9	28.6	22.3
Exchange rate (per US$)	58.0	46.8	54.0	82.6	50.0	3.8	673,385.0

* % of GDP; ** Billion US$, # for 1999, (Source: IFS year book 2001)

At the end of 1990s, the macroeconomic indicators of these countries gave a mixed picture of their economies. Except for Turkey, inflation in all other countries was under control. Current account balances were also at sustainable levels. However fiscal deficits remained high and deteriorated over the decade for most of the countries, especially in Turkey.

6.8.2 Financial Deepening and Intermediation

At the beginning of reforms in Pakistan, all countries in the group, except for Malaysia, had shallow financial sectors with a low M_2 to GDP ratio. Pakistan was close to the level of financial depth as that of India, but better than that of Philippines, Turkey, Sri Lanka and Bangladesh **(Table 6.17)**. However, even after a decade of far-reaching reforms, financial depth, in terms of M_2 to GDP ratio in Pakistan improved only marginally from 39.2 percent in 1990 to 46.5 percent in 2000 and its relative position within the peer group worsened.

One of the factors that limited the deepening of financial markets in Pakistan seems to be the large size of informal financial and non-financial markets, which has not yet been addressed directly by the financial sector reforms. Currency to GDP ratio is indicative of the size of informal economy. Pakistan was the only country in 1990, which had this ratio at double-digit level (i.e., 14.7 percent). After a decade of reforms, the ratio has gone down only to 12.9 percent, still indicative of fairly large size of informal economic sector. Interestingly, this ratio for India has gone up from 8.8 to 9.9 percent during this period, again indicating the presence of a large informal financial and non-financial sector in India.

Table 6.17: Indicators of Financial Depth and Efficiency

percent

	Pakistan	India	Bangladesh	Sri Lanka	Philippines	Malaysia	Turkey	Median	
1990								**Value**	**Country**
M_2 / GDP*	39.2	42.7	31.8	28.5	34.2	64.4	23.9	34.2	Philippines
Currency / M_2	37.6	20.7	12.8	24.1	16.8	14.6	12.1	16.8	Philippines
Currency / GDP	14.7	8.8	4.1	6.9	5.7	9.4	2.9	6.9	Sri Lanka
Money multiplier	2.2	3	3.9	2.8	2.6	4.2	3.3	3	India
Demand deposits[1]	61.3	17.6	17.5	25.4	8.9	21.6	31.1	21.6	Malaysia
Time deposits[1]	38.7	82.4	82.5	74.6	91.1	78.4	68.9	78.4	Malaysia
Credit to government[2]	48.5	49.4	10.6	41.3	1.7	4.5	1.7	10.6	Bangladesh
Credit to private sector[2]	51.5	50.6	89.4	58.7	98.3	95.5	98.3	89.4	Bangladesh
2000									
M_2 / GDP	46.5	56.9#	43.3	38.2	62.5	102.6	44.6	46.5	Pakistan
Currency / M_2	27.8	17.5	14.2	13	9.3	6.4	5.6	13	Sri Lanka
Currency / GDP	12.9	9.9#	6.2	5	5.8	6.6	2.5	6.2	Bangladesh
Money multiplier	3.2	4.1	4.6	4.7	4.7	4.1	5.6	4.6	Bangladesh
Demand deposit[1]	43.2	14.9	14.5	13.3	10.6	17.4	12	14.5	Bangladesh
Time deposit[1]	56.8	85.1	85.5	86.7	89.4	82.6	88	85.5	Bangladesh
Credit to government[2]	41.8	44.5	22.2	27.8	23.4	-2.2	52.7	27.8	Sri Lanka
Credit to private sector[2]	58.2	55.5	77.8	72.2	76.6	102.2	47.3	72.2	Sri Lanka

* M_2 is money plus quasi money; [1] percent of total deposits; [2] percent of total credit; # for 1999 (Source: IFS Year Book 2001)

Comparison of money multiplier reveals a contrasting picture in terms of values, but similar in terms of deepening. Value of money multiplier for Pakistan although marginally increased from 2.2 in 1990

to 3.2 in 2000, but had remained the lowest vis-à-vis other six countries, indicating the shallowest financial system.

In terms of one of the intermediation indicators, share of demand deposits to total deposits, Pakistan again stood out as the odd country with the highest share both in 1990 and 2000. Not only these shares were highest in Pakistan, but also the difference from peer country average (excluding Pakistan) was huge. Preference for demand deposits over time deposits in Pakistan is extremely pronounced, although it has decreased from 61.3 percent in 1990 to 43.2 percent in 2000.

While the above ratio describes a qualitative characteristic of mobilization side of intermediation, share of credit to private sector indicates the crowding out phenomenon from the credit extension side. This ratio is again on the lower side among peer countries, both in the beginning and at the end of reform decade. However, a minor improvement was witnessed from 51.5 percent in 1990 to 58.2 percent in 2000. Malaysia, in terms of this share stands out as the best performer. **Table 6.18** summarizes the qualitative change during the decade in financial deepening and efficiencies in Pakistan in absolute term as well as in relation to the group of peer countries.

Table 6.18: Financial Deepening and Efficiency in Pakistan vis-à-vis Peer Countries

	Qualitative change during 1990s		Rank*	
	Absolute	**Relative to group**	**1990**	**2000**
M_2 / GDP	Improvement	Deterioration	3	4
Currency / M_2	Improvement	No change	7	7
Currency / GDP	Improvement	No change	7	7
Money multiplier	Improvement	No change	7	7
Demand deposits	Improvement	No change	7	7
Time deposits	Improvement	No change	7	7
Credit to government	Improvement	Improvement	6	5
Credit to private sector	Improvement	Improvement	6	5

* 1 is for best and 7 is for worst

Above evaluation shows that although the level of financial development in Pakistan is much lower in comparison with most of peer group of countries, financial reforms nevertheless had a measurable, though small improvement on financial deepening and intermediation. Needless to say that not only much remains to be done, but keeping the reform process going is also necessary.