3 Performance of Commercial Banks during 1990s

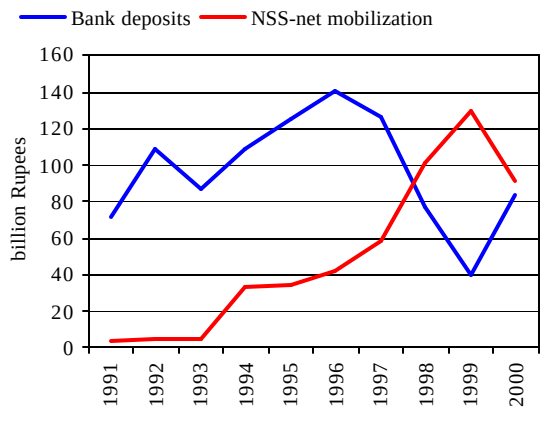
The health of banking sector is discussed in this chapter under CAMELS framework, which involves the analysis of following six groups of indicators: (1) capital adequacy, (2) asset quality, (3) management soundness, (4) earnings and profitability, (5) liquidity, and (6) sensitivity to market risk (for details see **Annex 3.1**). For the purpose of analysis, banks are divided in three groups, namely: state-owned banks, private banks and foreign banks. After analyzing these groups separately, banking sector as a whole is discussed at the end of the chapter. List of all banks under review in their respective groups is given in **Annex 1.1**.[1] Glossary of important terms used in the chapter is given in **Annex 3.2**

3.1 Overview

During 1990s, total assets of commercial banks grew at a compound annual growth rate of 14.4 percent, from Rs 426 billion at the beginning of decade to Rs 1,641 billion by the end of 2000 (see **Annex 3.3**). However, the growth trend indicated a structural break at the end of 1997. Specifically, annual average growth in the first period, up to 1997, was in double digit at 17.8 percent and decelerated to 7.0 percent in the last three years. Higher growth in the first phase was spurred by the entrance of new banks in the private sector and permission for residents to open foreign currency accounts. Whereas the deceleration in the second phase was largely brought about by the overall slowdown in macroeconomic growth; increased returns on NSS instruments; painful phase of golden handshake and branch closure program; crisis of confidence triggered by the freezing of FCAs following nuclear detonation; and the accountability drive of late 1999 that further tightened the credit expansion with slackening demand. However, with the inception of wide ranging banking reforms and rationalization of interest rate structure towards the end of the decade, pace of dis-intermediation had largely been arrested, as reflected in only 0.6 percentage point erosion of deposits in terms of GDP in 2000 compared with 2.6 percentage point observed a year earlier (see **Table 3.1**).

Amongst different groups, assets of private banks showed fastest growth during 1990s, followed by foreign banks. Assets of foreign banks experienced a significant drop in 1998 and 1999 following the freeze of FCAs in May 1998. However, during 2000, these banks managed to build their assets by 2.7 percent. Asset composition showed that advances remained the largest single item (around 45 percent on average) in total assets of commercial banks during1990s. Although its share in total assets remained stable, growth of advances declined for all three groups during second half of decade. This is understandable due to declining deposit mobilization by banks. In addition, huge infected loan portfolio was the major predicament for banks, particularly state-owned banks. These bad loans not only severely damaged the profitability and capital base of this group but also constrained the growth of net advances. Loans and advances are followed by investment, having an average share of 29.2 percent in total assets; however, its share (average) declined in the last three years of 1990s to 25.4 percent from 30.6 percent during 1990-97. This was primarily because of a drop in

Figure 3.1: Bank Deposits Vs NSS



[1] Banks closed during 1990s are not included in the analysis.

investment during 1999 by all groups and very nominal increase in 2000 (see **Annex 3.3**), at the back of decrease in yield on government securities.[2]

Table 3.1: Assets and Liabilities of Banking Sector During 1990s

percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Share in total assets											
State-owned banks											
Advances	51.3	45.9	41.6	46.1	42.7	44.7	44.4	42.3	40.3	43.2	46.9
Investment	26.5	28.6	34.3	30.8	33.3	31.6	29.9	29.6	30.6	25.6	22.9
Others assets	22.2	25.5	24.1	23.1	24.0	23.7	25.7	28.1	29.1	31.2	30.2
Private banks											
Advances			35.2	35.1	40.6	46.5	44.8	47.3	47.1	48.4	54.0
Investment			41.4	34.4	30.0	22.4	24.5	35.2	32.3	23.7	21.6
Others assets			23.4	30.4	29.4	31.0	30.6	17.5	20.6	27.9	24.3
Foreign banks											
Advances	52.0	41.6	41.8	37.7	40.6	46.0	42.0	44.7	45.8	49.5	51.6
Investment	21.8	32.0	35.9	37.3	33.6	25.7	31.2	29.1	26.8	12.9	20.5
Others assets	26.3	26.4	22.2	25.1	25.8	28.2	26.9	26.2	27.3	37.6	27.8
All banks											
Advances	51.3	45.4	41.4	44.3	42.3	45.0	44.0	43.4	42.1	44.8	48.7
Investment	26.2	29.0	34.8	31.9	33.1	30.0	29.6	30.1	30.3	23.3	22.3
Others assets	22.5	25.6	23.9	23.8	24.6	25.0	26.4	26.5	27.8	31.9	29.0
Share in total liabilities											
State-owned banks											
Deposits	87.4	88.0	87.8	88.0	87.6	88.3	88.2	86.2	87.5	86.4	87.8
Borrowing	6.0	4.9	5.1	4.8	5.4	5.2	5.0	5.3	5.2	6.5	5.0
Others	6.6	7.1	7.1	7.2	7.0	6.5	6.8	8.5	7.4	7.1	7.2
Private banks											
Deposits			72.5	72.3	75.1	75.4	78.3	83.3	82.3	77.5	77.3
Borrowing			15.5	13.7	13.8	12.2	10.7	12.0	14.6	18.8	19.0
Others			12.0	14.0	11.2	12.4	10.9	4.6	3.1	3.7	3.7
Foreign banks											
Deposits	80.7	84.7	84.6	85.3	86.9	87.8	90.0	89.4	88.7	80.3	79.6
Borrowing	10.5	8.2	9.4	8.4	7.5	6.6	5.8	5.7	7.3	15.7	16.0
Others	8.8	7.0	6.1	6.3	5.6	5.6	4.2	4.9	4.0	4.0	4.4
All banks											
Deposits	86.9	87.6	86.9	86.8	86.7	87.2	87.6	86.5	87.1	84.4	85.1
Borrowing	6.3	5.3	6.0	5.7	6.2	5.9	5.6	6.1	6.6	9.3	8.5
Others	6.8	7.1	7.2	7.4	7.1	6.9	6.7	7.4	6.3	6.3	6.3
As percent of GDP											
Assets	49.7	49.6	53.1	56.0	56.1	54.6	55.8	54.5	54.5	52.6	51.5
Deposits	41.4	41.7	44.1	46.4	46.5	45.5	47.0	45.7	44.8	42.2	41.6

On the liability side, deposits have remained the single largest source (almost 87 percent) of funds of the banking industry in Pakistan. Being prime support for the banks, fluctuations in deposits had direct bearing upon the constitution of asset portfolio and, thereby on profitability of the banks. Although its share in total liabilities remained stable over the period under review except for the slight fall in last two years, growth of deposits declined significantly after 1996. Besides all the factors discussed above, an important reason for this slow growth in banks' deposits was the diversion towards NSS instruments, with the increasing returns on these schemes from 1996 (see **Figure 3.1**). Downward revisions in yields on NSS in 1999 and ban on institutional investment in March 2000, helped banks in increasing their deposit base towards the end of the decade (for details see **Section 4.2**).

[2] Investment in government securities remained more then 80 percent of total investment during 1990s.

In group-wise analysis, both private and foreign banks were taking the lead in growth of deposit base till freeze of foreign currency accounts in May 1998. This apparent higher growth in private banks' deposits was primarily due to their eagerness to expand their low deposit base by offering relatively higher return. High growth in deposits of foreign banks was explainable given their reliance on Foreign Currency Accounts (FCAs). Compound average growth in the deposits of state-owned banks was significantly lower than the other two groups till 1997; however, comparatively higher growth recorded during next two years was mainly attributed to lottery schemes introduced by few banks in this group to capture the Rupee withdrawals from frozen FCAs. With the exception of these two years, performance of foreign and domestic banks was relatively better on this account.

Borrowing has remained a supplementary source of funding for the banking industry in Pakistan. Its share in total liabilities of the banking system increased during the period under study, especially after 1997, which added to financial cost of banks and, thereby affected the profitability in this period.[3]

3.2 State-owned Banks[4]

Being the largest group, performance of state-owned banks significantly affects overall indicators of the banking industry. However, its relative size declined continuously during the last decade, mainly due to the entry of new banks, especially domestic banks in the private sector after 1992. Moreover, if two privatized banks were excluded from this category, the share of state-owned banks declined even further (see **Table 3.2**). With growing competition from private sector, the state-owned banks were finding it difficult to maintain their market shares in terms of assets, deposits, advances and investment. In addition, political intervention, over-staffing, over-branching and inefficiencies in this group had led to the problems of large non-performing loans, high administrative expenses, huge losses and eroding capital base. Some of these inadequacies for the two large banks were addressed through capital injections and institutional restructuring measures (see **Chapter 2**).

Table 3.2: Share of State-owned Banks in Banking Sector

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000adj
Assets	92.2	89.1	83.7	80.1	78.4	76.7	72.3	68.7	70.5	71.8	70.6	54.0
Advances	92.1	90.0	84.1	83.4	79.3	76.1	73.0	67.0	67.6	69.2	68.1	50.2
Investment	93.5	87.9	82.6	77.2	78.8	80.9	73.0	67.4	71.7	78.9	72.3	54.8
Deposits	93.0	89.8	85.4	82.1	80.2	78.8	74.1	69.9	71.7	74.6	73.7	56.2
Capital	85.4	80.4	65.5	60.6	57.8	52.6	41.7	20.8*	56.6	50.6	55.6	47.1
NPLs	95.0	95.8	92.6	94.4	95.8	94.1	92.5	91.7	90.9	88.9	88.1	72.1

*: This low ratio is due to the intensity of capital erosion in 1997 due to Rs 35 billion loss shown by two large banks.
adj: Excluding two privatized banks (MCB and ABL).

3.2.1 Capital Adequacy

Capital adequacy focuses on the total amount of bank capital, which is vital in reducing the risk of insolvency and potential cost of bank's failure. In other words, this determines the robustness of financial institutions against shocks to their balance sheets. Although it is useful to track capital adequacy ratios that take into account major financial risks (like credit risk,

Table 3.3: Capital Adequacy Indicators

percent

	1997	1998	1999	2000
Capital to risk-weighted assets	0.6	10.8	10.0	9.5
No. of banks below 8 percent CRWA	4	0	1	1

[3] It is important to note that higher share of borrowing after 1997 was primarily due to private and foreign banks, as these two groups took the main toll of the freeze of FCAs.

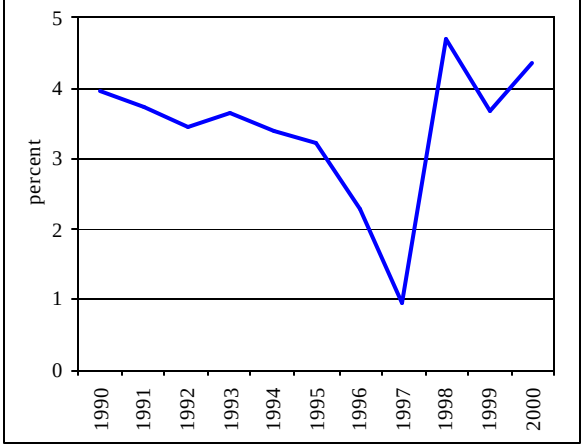
[4] Banks having government's equity greater then zero are included in this category. This includes Nationalized Commercial Bank (NCBs) i.e., NBP, HBL, UBL and FWBL; denationalized commercial banks including MCB and ABL; and two provincial banks namely Bank of Punjab and Bank of Khyber.

foreign exchange risk, interest rate risk, and risks involved in off-balance sheet operations), due to data limitation we have used two basic indicators for capital adequacy: (1) capital to risk-weighted assets (CRWA) ratio; and (2) capital to liabilities (CL) ratio.

In CRWA, which is the most commonly used indicator of capital adequacy, assets are calculated on the basis of risk weights determined under Basel Accord for each balance sheet item. This ratio is available since 1997 only, when SBP introduced the risk-based system for capital adequacy consistent with the BASEL Committee requirements.[5] As shown in **Table 3.3**, CRWA ratio was only 0.6 percent in 1997, considerably lower than the 8 percent benchmark set by the BASEL Committee and indicated severe solvency problem in that year. Although four out of eight banks in this group were below the criterion, the prime reason for this low ratio was huge losses suffered by two major banks of the group. As a result, in 1998 both the banks required capital support of Rs 30.7 billion from SBP, in addition to revaluation of fixed assets by Rs 13.9 billion, thereby raising the CRWA to 10.8 percent. Unfortunately, growing non-performing loans continued to erode the capital base of one of these banks during the 1999, thus leading to a gradual decline in this ratio. SBP had to again provide capital support of Rs 8 billion to that bank during 2000.

Another measure of capital adequacy is the bank's capital to its liability ratio that shows the extent to which capital and reserves of a bank provide coverage to liabilities (primarily to depositors). Although there is no benchmark, a high CL ratio signals strong position of a bank. As evident from **Figure 3.2**, CL ratio was declining from the very beginning of the decade, indicating erosion of capital base. However, the crunch came in 1996 and became more severe in 1997, when CL ratio reached its lowest point. All the four Nationalized Commercial Banks (NCBs) suffered losses in 1996 (Rs 5.0 billion), while huge losses by two of these banks in 1997 were responsible for this sharp decline. Capital injection and revaluation of fixed assets in the next year explain the subsequent recovery in 1998. However, SBP again supported one of NCBs through capital injection in 2000 that posted a loss in 1999. This resulted in the improvement in CL ratio in that year (see **Figure 3.2**).

Figure 3.2: Capital to Liability Ratio



It is important to note that the increase in capital along with profit earned (see **Section 3.2.4**) could not prevent CRWA from declining in 2000 (see **Table 3.3**). This may be due to rising share of riskier assets in their portfolio.[6] In overall terms, the frequent support from SBP to two large banks was one of the main factors that helped in arresting the erosion of capital of these banks and set it in the right direction only at the end of 1990s.

3.2.2 Asset Quality

The solvency risk of a financial institution often originates from the quality of its asset portfolio. Therefore, it is important to examine the asset quality by using indicators, such as earning assets to

[5] BPRD Circular No. 36, dated 4th November 1997.

[6] In 2000, as shown in **Table 3.1**, share of advances (riskier asset) increased to 46.9 percent of total assets against 43.2 percent a year earlier. This was possible mainly due to subsequent decline in the share of investment (mainly in government securities).

total assets, NPLs to advances, loan defaults to advances, and recovery to default ratios (see **Table 3.4**).

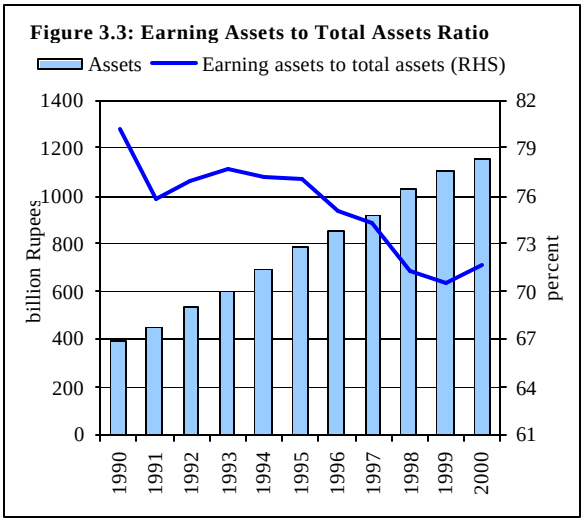
Table 3.4: Asset Quality Indicators

percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Earning assets to total assets	80.2	75.8	77.0	77.8	77.2	77.0	75.0	73.4	71.3	70.6	71.6
NPLs to gross advances	18.0	19.9	18.6	22.1	25.6	23.3	23.5	26.5	25.4	27.7	24.4
Loan defaults to gross advances	10.7	10.8	11.4	11.2	12.8	12.2	13.2	21.9	18.9	16.0	14.8
Provisioning to gross advances	6.6	7.4	9.3	8.1	8.0	7.6	9.0	14.1	13.7	12.7	13.2
Cash recoveries to total default	12.0	6.8	6.5	5.3	8.2	8.6	9.1	9.5	6.3	8.0	8.4

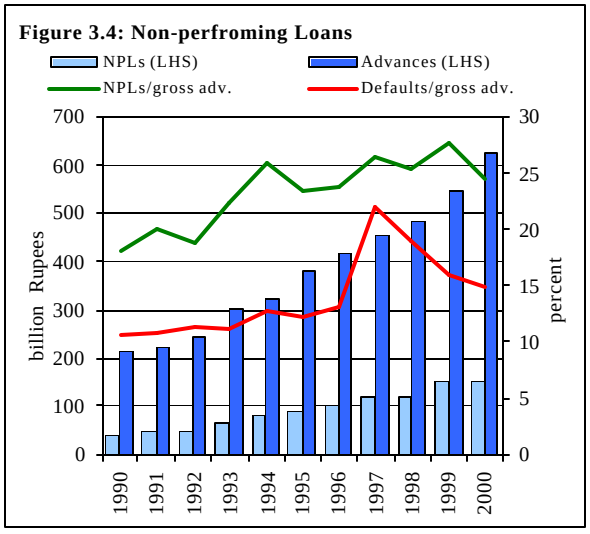
More specifically, a larger share of earning assets would lead to higher profitability at given level of expenses.[7] As shown in **Figure 3.3**, earning assets to total assets ratio has been declining continuously during 1990s except for the last year.[8] Advance tax payment to CBR, accounted in other assets, was one of the important factors behind larger increase in non-earning assets.[9] In 2000, this ratio showed some improvement due to relatively larger increase in advances that was partly offset by Rs 18.9 billion decline in investment. Had the investment not declined, this ratio would have been much higher.

Figure 3.3: Earning Assets to Total Assets Ratio



Another indicator of asset quality is the ratio of non-performing loans to total loans (gross). An increasing trend in this ratio signals deterioration in the quality of asset portfolio and, consequently, in financial institutions' cash flows, net income, and solvency.[10] State-owned banks had the largest share in total non-performing loans of the banking sector, which was much greater than their share in assets or deposits (see **Table 3.2**). Although this share declined in later part of 1990s, this was more due to increase in NPLs of private banks rather than any improvement in state-owned banks (see **Section 3.3.2**).

Figure 3.4: Non-perfroming Loans



As shown in **Figure 3.4**, the ratio of non-performing loans to gross advances increased from less than 17 percent in 1990, to 27.7 percent in 1999. This was due to substantial

[7] The earning assets are defined as the sum of net advances, net investment and money at call.
[8] The assets are net of provision.
[9] Cash and bank balances, operating fixed assets, income receivables and other assets are taken as non-earning assets.
[10] Adequate loan classifications are essential to have meaningful ratio of non-performing loans to total advances. The ratio may lose its importance if banks tend to reschedule their loans that otherwise should become non-performing – a practice also described as 'ever greening'.

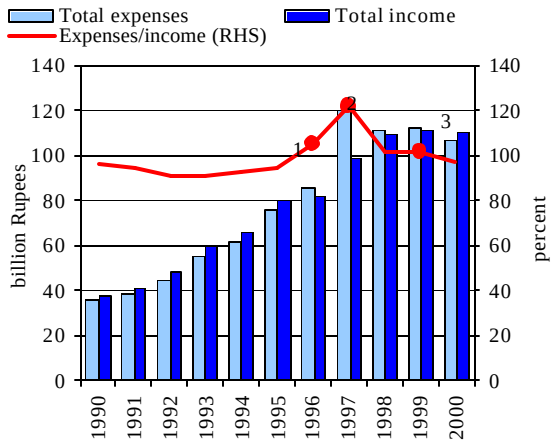
loans provided by NCBs on political grounds, especially during the early and mid 1990s that resulted in NPLs after a time lag. Furthermore, banks were reluctant in writing off the 'historically' bad loans mainly because of: (1) poor quality of underlying collateral, and (2) to avoid any possible legal complication due to lacunas in the respective judicial framework. This also contributed in pilling up of bad loans in the asset portfolio of these banks. In addition, strict disclosure requirement put in place by SBP in 1997, forced banks to disclose the true classification of their loans, hitherto undeclared as NPLs. This disclosure resulted in a substantial rise in NPLs. However, a larger increase in advances and almost stagnant value of NPLs at 1999 level, led to a fall in this ratio during 2000.[11] Nevertheless, the volume of NPLs severely constrained the earning capacity of these banks as depicted by declining share of earning assets in total assets (see **Figure 3.3**). Cash recoveries to defaults ratio, however, witnessed some signs of improvement, mainly attributed to steps taken with regard to internal restructuring of these banks to strengthen their loan recovery mechanism, and accountability and recovery drive initiated in October 1999 (see **Table 3.4**).

3.2.3 Management Soundness

A sound management is one of the most important pre-requisites for the strength and growth of any financial institution. Since indicators of management quality are primarily specific to individual institution, these cannot be easily aggregated across the sectors. In addition, it is difficult to draw any conclusion regarding management soundness on the basis of monetary indicators, as characteristics of a good management are rather qualitative in nature. Nevertheless, total expenses to total income, operating expense to total expenses, earnings and operating expense per employee, and interest rate spread are generally used to gauge management soundness.

In particular, a high and increasing expenses to income (EI) ratio indicates the operating inefficiency that could be due to flaws in management. As shown in **Table 3.5,** EI ratio for state-owned banks, which was already very high, increased further from 95.7 percent in 1990 to 96.8 percent in 2000. However, during 1996-99 this exceeded 100 percent mark, primarily due to the provisioning against NPLs (see **Figure 3.5)**. It is important to note that 1997 was the only year when operating expenses were greater than interest expenditures, mainly because of, Rs 26.5 billion increase in provisioning against NPLs and, to some extent, Golden Hand Shake (GHS) schemes offered by three major nationalized banks.[12]

Figure 3.5: Expenditure to Income Ratio



1. Interest income ? by Rs 2.2 bln due to ? in NPLs by Rs 9.8 bln and provisioning (expense)?? by Rs 8.3 bln.
2. Operating expenses? due to ? in provisioning (Rs 26.5 bln) and GHS.
3. Provisioning?? by Rs 20.6 bln.

Interest rate spread could also be used as an important indictor of management efficiency, when seen in relation to profitability of the banks. This is because higher spread may be caused either by higher operating cost reflecting management inefficiencies, or by banks' desire to earn more profit. It is important to note that this interest rate spread is not the simple difference between weighted average lending and deposit rates, rather it reflects the difference between effective returns on earning assets and interest expense on interest paying liabilities (see **Annex 3.2**). This indicator covers all the

[11] Although quality of these advances could be judged only after couple of years, falling CRWA in this year may indicate riskiness of these assets.
[12] The trend shows major provisioning in 1996 and 1997, though NPLs were rising in earlier years as well.

interest earnings and interest paying activities of banks, whereas the spread between weighted average lending and deposit rates ignores the interest earned on investment and interest cost of borrowing, etc. Interest rate spread, therefore, is a better indicator than the spread between weighted average lending and deposits rates.

Table 3.5: Management Soundness Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total expenses to total income	95.7	94.2	91.2	90.9	92.8	94.0	105.7	122.0	101.7	101.8	96.8
Operating expenses to total expenses	39.1	38.5	39.5	40.0	39.4	39.6	36.6	51.3	38.5	41.7	42.9
Earnings per employee (million Rs)	0.4	0.4	0.5	0.6	0.7	0.8	0.8	1.2	1.4	1.4	1.5
Interest rate spread	3.9	4.2	4.2	4.6	4.4	5.0	3.4	5.0	5.3	5.6	5.5
Operating expense per employee (million Rs)	0.15	0.15	0.18	0.22	0.24	0.29	0.30	0.67	0.54	0.61	0.63

It was expected that entrance of new banks in the private sector would increase competition for state-owned and foreign banks, thereby compelling them to improve efficiency. However, the rising trend in this spread with low and further deteriorating profitability indicated the growing inefficiencies of state-owned banks, which could also be retraced to higher operating expenses to total expenditure ratios. As discussed earlier, significantly large proportion of non-performing loans and provisioning thereon (required by SBP as a part of reform process) affected the earning profile of these banks negatively, and resulted in higher banking spread during second half of 1990s.[13] More importantly, sizeable deduction of advance tax from the banking industry was another factor behind rising interest rate spread, as these advance taxes were non-earning assets and treated as expense in income statements.

3.2.4 Earnings and Profitability

Strong earnings and profitability profile of a bank reflects its ability to support present and future operations. More specifically, this determines the capacity to absorb losses by building an adequate capital base, finance its expansion and pay adequate dividends to its shareholders. Although there are various measures of earnings and profitability, the best and widely used indicator is Return on Assets (ROA), which is supplemented by Return on Equity (ROE) and Net Interest Margin (NIM).[14]

As shown in **Table 3.6**, the profitability of state-owned banks deteriorated, especially after mid 1990s. This was the upshot of falling share of earning assets, mounting burden of NPLs coupled with increased provisioning requirements and, to some extent, cut in rates on government securities. On the expenditure side, the rising share of borrowing in total liabilities (partly due to slow growth in deposits), caused expenses to rise faster than income and, hence, reduced the profitability.

Table 3.6: Earnings and Profitability Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net profit to asset ratio	0.4	0.5	0.5	0.7	0.2	0.2	-0.3	-2.3	0.5	-0.7	0.1
Net profit to equity ratio	10.5	13.4	15.3	19.2	7.5	5.9	-14.8	-243.9	11.5	-19.8	2.8
Net interest margin	3.2	3.2	3.3	3.7	3.4	3.9	1.9	3.2	3.5	3.8	4.1
Total income to total assets	9.6	9.1	8.9	10.0	9.6	10.2	9.6	10.7	10.6	10.0	9.5

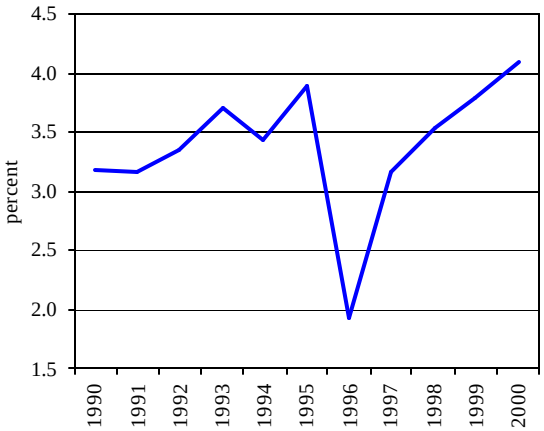
[13] It is important to note that NPLs not only constrain the earning opportunities of banks, but provisioning against these also increase the operating expenses, thereby compelling them to maintain profitability by increasing the spread.

[14] NIM is the net interest yield on net earning assets. It is calculated as the difference between net earning asset yield (total interest income / net earning assets) and break-even yield (total interest expenses / net earning assets).

In addition, banking has remained a heavily taxed industry in Pakistan and high tax deduction also contributed towards low after-tax profit. More distressing thing for state-owned banks has been the problem of advance taxes. Since banks had to pay 30 percent withholding tax on T-bills and 10 percent on FIBs, a significant increase in the volume of their transactions during 1990s created a serious advance tax burden for banks.[15] It is important to note that advance tax is a common practice in many countries, however the fact that CBR is currently assessing the actual tax liabilities of mid 1990s for these banks, shows the intensity of this problem.

In terms of net interest margin, the ratio over the period increased gradually from 3.2 percent in 1990 to 4.1 percent in 2000, except 1996 (see **Figure 3.6**). The higher provisioning in this year led to a fall in interest income, which in turn, brought about a sharp drop in NIM to 1.9 percent in 1996 from 3.2 percent a year earlier.

Figure 3.6: Net Interest Margin



The return on equity reflects the yield on holding bank's capital. Since a higher ratio may indicate more profitability as well as low capitalization, this needs to be interpreted with caution, preferably in combination with the capital adequacy ratio. Similarly, a higher return on assets ratio indicates that banks are earning more on their assets, thus giving way to increase in profitability. In terms of state-owned banks, both ratios have remained low throughout the last decade. More specifically, in 1996 these ratios had turned negative due to provisioning (see **Figure 3.7** and **3.8**). However, stable trend of total income to total assets indicated that expenses increased disproportionately.

Figure 3.7: Return on Equity

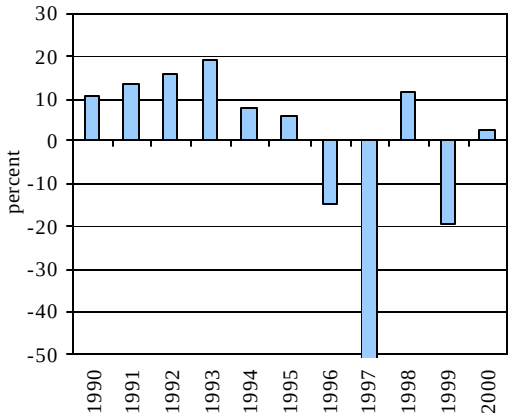
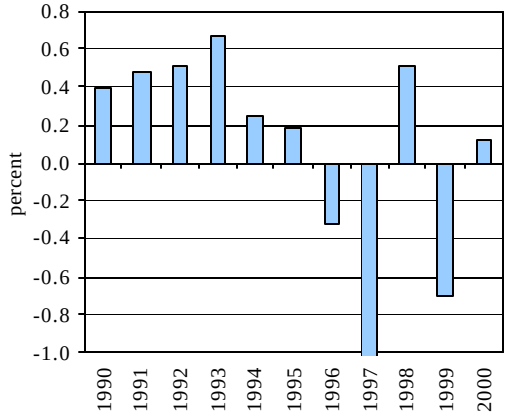


Figure 3.8: Return on Assets



3.2.5 Liquidity and Sensitivity to Market Risk

In terms of liquidity position, a falling liquid assets ratio or a rising loans to deposits ratio indicates problems for banks. As shown in **Table 3.7**, these two ratios seem to indicate some signs of difficulty for these banks after 1998 (see **Figure 3.9**). However, signs of stress should be interpreted with

[15] For foreign banks withholding tax on T-bills was 50 percent till June 1998, however, the actual tax paid by these banks was closed to their true tax liabilities. Private banks also did not face this problem.

caution, as this was consciously brought about by the monetary policy changes by SBP. In FY99, both the cash reserve requirement (CRR) and the statuary liquidity requirement (SLR) were reduced to tackle the increased withdrawals of deposits due to freezing of FCAs. These steps were reinforced by decline in SBP's discount and T-bill yields during FY00.

Table 3.7: Liquidity and Sensitivity Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Liquid assets to total assets	32.2	40.5	44.8	41.8	46.1	43.9	42.6	39.8	40.1	38.3	34.3
Loans to deposits	61.0	54.1	49.0	54.3	50.5	52.2	51.4	49.6	48.2	51.8	55.8
Gap (billion Rs)	-37.6	-62.1	-68.9	-70.6	-88.3	-106.6	-137.9	-158.2	-176.9	-210.3	-199.9
RSA/RSL	89.3	84.6	85.7	86.9	85.8	85.1	82.3	81.0	80.6	78.8	80.6

Note: GAP = RSA – RSL; RSA = Rate sensitive assets ; RSL = Rate sensitive liabilities

In addition to liquidity problems, banks faced other risks as well. For example, a large investment in volatile assets would make banks more vulnerable to fluctuations in the prices of those assets. Similarly, a concentration of advances in a few sectors would increase default risks if these sectors do not perform well. Furthermore, interest rate and foreign exchange risk tend to have significant impact on financial institutions' assets and liabilities. However, due to data limitations, we have focused only on interest rate risks, i.e., the gap between rate sensitive assets (RSA) and rate sensitive liabilities (RSL) and their ratio.

In this regard, a higher RSL than RSA indicates that banks are risk sensitive to changes in interest rates; an increase in interest rate may affect them negatively, and vice versa (see **Table 3.7**). Looking at state-owned banks, the growing gap (or declining ratio) during 1990-98 shows their exposure to rising interest rates (see **Figure 3.10**). Although the gap was reduced during the last two years of 1990s, this was due to higher growth in rate sensitive assets, primarily in advances, and relatively slower growth in deposits (the largest component of RSL).

Figure 3.9: Liquidity Indicators

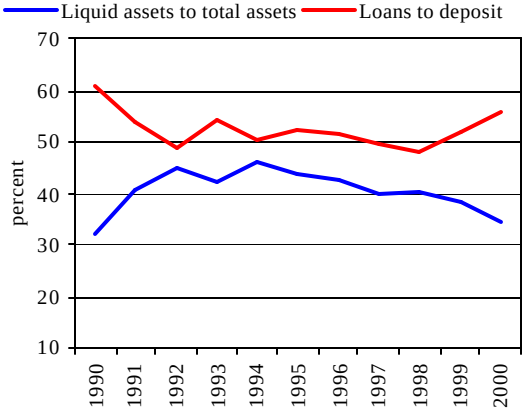
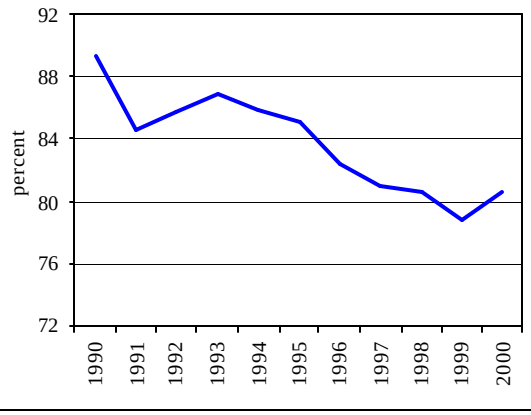


Figure 3.10: RSA/RSL



3.2 Private Banks

One of the objectives of banking reforms was to improve efficiency of the banking sector by instilling competition among banks. Accordingly, in August 1991, permission for opening of ten new banks was granted, of which eight started functioning. Subsequently, one more bank in FY94 and three in FY95 were established, thus raising the number of banks in the private sector to twelve. Afterward, Mehran bank was merged with NBP in February 1995. As shown in **Table 3.8**, these banks have firmly established their niche in the banking industry.

Table 3.8: Share of Private Banks in Banking Sector
percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Assets	3.8	5.2	6.3	8.5	9.7	11.3	11.4	11.9	13.6
Advances	3.2	4.2	6.1	8.8	9.9	12.3	12.8	12.8	15.1
Investment	4.6	5.6	5.7	6.3	8.0	13.2	12.2	12.2	13.2
Deposits	3.0	4.1	5.2	6.9	8.2	10.3	10.6	10.6	12.2
Capital	10.0	10.5	12.4	18.4	22.0*	28.3 *	14.8	17.8	16.5
NPLs	3.5	2.1	2.0	2.5	2.9	3.6	4.2	7.2	7.8

*: These high value of this ratio is due to capital erosion of state-owned banks

3.3.1 Capital Adequacy

Table 3.9: Capital Adequacy Indicators
percent

	1997	1998	1999	2000
Capital to risk-weighted assets	15.5	14.7	13.2	11.1
No. of banks below 8 % CRWA	0	0	0	2

Although the capital to risk-weighted assets ratio for private banks has remained well above the required level of 8 percent (see **Table 3.9**), this has been persistently declining during last three years of 1990s. However, this has to be seen in the context of post-detonation scenario, where a monetary ease resulted in a fall in yield of government securities, and hence banks' investment therein. Disinvestments of government securities (being zero-risk weighted asset) coupled with higher provisioning against NPLs and aggressive lending practices of these banks to expand their share in the banking industry, led to a fall in this ratio.[16]

Similarly, capital to liability ratio also showed downward trend during 1990s (see **Figure 3.11**).[17] However, compared to state-owned banks, private banks still enjoy stronger position (see **Section 3.2.1**).

Figure 3.11: Capital to Liability Ratio

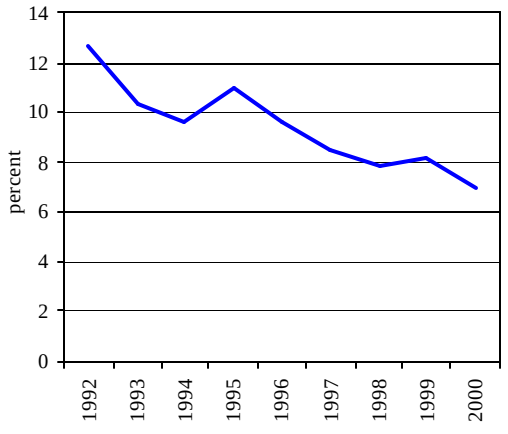
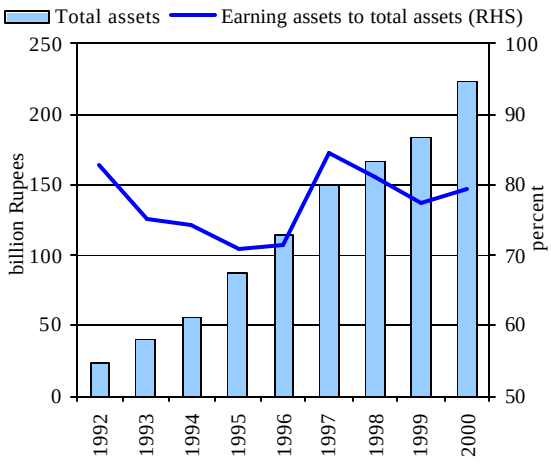


Figure 3.12: Earning Assets to Total Assets Ratio



3.3.2 Asset Quality

It might be misleading to rely on asset quality indicators of private banks till mid 1990s. Erratic trends therein are mainly due to opening of new banks. Earning assets to total assets ratio was continuously declining till 1995 (see **Figure 3.12**). However, the improvement during 1997 reflects a

[16] Higher provisioning negatively affects the capital base through profit and loss account, while higher growth in advances may increase the weight of risky assets in assets portfolio. Both lead to decline in CRWA ratio.
[17] The increase in 1995 was due to entry of three new banks in the industry.

sudden shift in asset composition. More specifically, better returns on government securities attracted large investment despite a fall in SLR from 25 to 20 percent in May 1997. As a result, share of investment in total assets jumped from less than 25 percent in 1996 to 35 percent in 1997.[18] However, the EI ratio again started declining after 1997 (see **Table 3.10**).

Table 3.10: Asset Quality Indicators

percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Earning assets to total assets	82.8	75.1	74.2	71.0	71.7	84.5	81.1	77.5	79.2
NPLs to gross advances	-	-	7.6	5.9	5.9	6.3	6.8	13.5	10.7
Loan defaults to gross advances	0.0	11.2	6.6	4.4	4.2	5.5	6.1	10.4	8.3
Cash recoveries to total default	-	-	14.0	13.5	19.4	8.1	3.4	3.5	8.4

The ratio of NPLs to gross advances remained below 10 percent except in the last two years of 1990s (see **Figure 3.13**). As mentioned earlier, the sharp increase after 1998 was on account of aggressive lending undertaken by these banks. In terms of loan defaults to gross advances, the ratio has moved upward with the development of their loan books after inception of their operations in early 1990s. This ratio seemed to be settling around 8 percent at the end of the decade, which was much lower than that of state-owned banks.

3.3.3 Management Soundness

Selected indicators of management soundness represent mixed trend over time (see **Table 3.11**). Total expenses to total income ratio showed a rising trend especially after 1996. This was primarily because of higher growth in expenses (see **Figure 3.14**). In order to maintain a momentum in advances against a slowdown in deposit growth, these banks resorted to borrowings, which was a prime reason for high interest expenditures after 1996.

Table 3.11: Management Soundness Indicators

percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total expenses to total income	66.6	62.8	66.5	73.4	74.4	81.3	89.9	87.2	88.8
Operating expenses to total expenses	51.4	31.7	29.3	27.1	26.7	26.9	27.8	23.0	29.4
Earnings per employee (million Rs)	0.6	1.7	1.9	2.2	2.5	3.1	3.4	3.1	3.1
Interest rate spread	2.2	5.4	5.2	4.9	4.5	4.2	4.5	3.9	3.8
Operating expense per employee (million Rs)	0.2	0.3	0.4	0.4	0.5	0.7	0.8	0.6	0.8

However, after rising in 1993, interest rate spread has been falling overtime. Anecdotal evidence suggests that these banks, being new entrants, are offering relatively higher returns to carve out their niche in the banking industry and to compete for a larger share of deposits. Share of operating expenditures in total expenditures depicted mixed trend; the rising value during 1996-98 may be linked to provisioning against mounting NPLs and defaulted loans.

3.3.4 Earnings and Profitability

The declining spread and rising share of NPLs and defaulted loans in gross assets have played a major role in reducing the profitability of private banks (see **Table 3.12**). In particular, a drop in earning assets to total assets ratio coupled with continuously diminishing net interest margin is the reflection of falling return on assets and equity, especially after 1997.

[18] In contrast, shares of cash and bank balances and other assets declined.

Table 3.12: Earnings and Profitability Indicators

percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net profit to assets ratio	0.7	1.9	1.5	1.4	1.5	1.0	0.6	0.6	0.3
Net profit to equity ratio	6.3	20.0	17.2	14.4	16.6	13.3	8.0	8.4	4.6
Net interest margin	2.3	5.2	4.7	4.0	3.4	3.9	3.5	2.6	2.8
Total income to total assets	4.3	10.3	10.5	11.7	12.3	12.7	13.1	11.5	10.2

Figure 3.13: Non-performing Loans

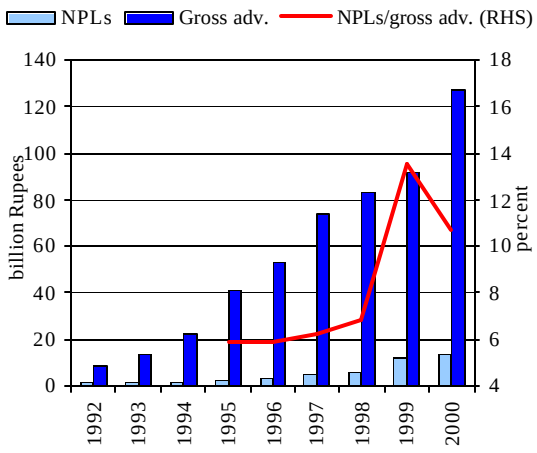
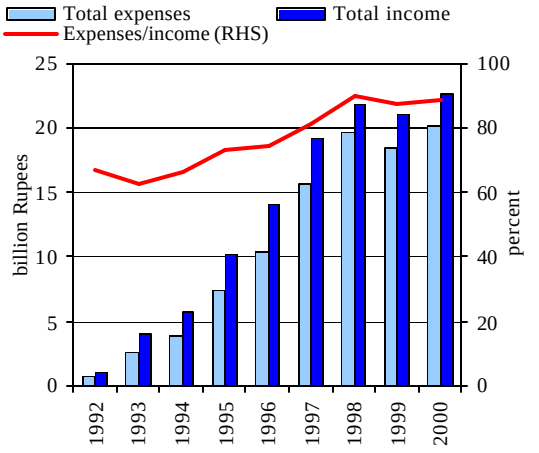


Figure 3.14: Expenditure to Income Ratio



3.3.5 Liquidity and Sensitivity to Market Risk

Liquid assets to total assets ratio of private banks saw a rapid decline in first half of the 1990s primarily due to reduction in SLR from 45 percent in early 1990s to 25 percent in 1994. Further cuts in SLR during 1995 to 1998 did not precipitate a sharp decline in the ratio as the period saw an increase in the yields of government securities. However, during the last two years not only the SLR was reduced to 15 percent but also yields witnessed a fall, leading to a decline in this ratio due to lower investment.

The negative gap between RSA and RSL is showing risk sensitivity towards liability side. Except for 1997, this gap constantly widened over the period (see **Table 3.13**). In 1997, the gap showed an abrupt contraction due to sharp increase in investment, especially in government securities.

Table 3.13: Liquidity and Sensitivity Indicators

percent

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Liquid assets to total assets	55.4	53.1	49.0	41.6	40.4	40.0	41.7	38.8	33.3
Loans to deposits	54.7	53.6	59.3	68.5	62.8	61.6	61.7	67.6	74.8
Gap (billion Rs)	1.2	-1.1	-3.8	-7.0	-10.9	-5.1	-14.6	-21.2	-24.4
RSA/RSL	106.0	96.4	91.6	89.8	88.2	96.2	90.3	87.0	87.9

Note: Gap = RSA – RSL; RSA = Rate sensitive assets ; RSL = Rate sensitive liabilities

Although the financial indicators of these banks have been deteriorating especially after 1997, performance of this group was far better than that of state-owned banks. Relatively low level of non-performing loans enabled these banks to keep interest rate spread relatively low, which was necessary for them to compete as an infant in the industry.

3.4 Foreign Banks

The number of foreign banks, interestingly, is almost equal to that of domestic banks at the end of 2000. This shows the degree of openness of the banking system in Pakistan. Although the share of foreign banks had been growing till 1997, freezing of foreign currency accounts in May 1998 severely affected their performance (see **Table 3.14**).

Table 3.14: Share of Foreign Banks in Banking Sector

percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Assets	7.8	10.9	12.5	14.7	15.2	14.8	18.0	20.1	18.1	16.3	15.8
Advances	7.9	10.0	12.6	12.5	14.6	15.2	17.2	20.7	19.7	18.0	16.8
Investment	6.5	12.1	12.9	17.1	15.4	12.7	18.9	19.4	16.1	9.1	14.5
Deposits	7.0	10.2	11.6	13.7	14.6	14.3	17.7	19.7	17.8	14.8	14.1
Capital	14.6	19.4	24.5	28.8	29.8	29.0	36.3*	50.9*	28.5	31.6	27.9
NPLs	5.0	4.2	3.8	3.5	2.2	3.4	4.6	4.7	5.0	3.8	4.0

*: The high value of this ratio is only due to capital erosion of state-owned banks

3.4.1 Capital Adequacy

Table 3.15: Capital Adequacy Indicators

percent

	1997	1998	1999	2000
Capital to risk-weighted assets	14.6	15.6	18.6	18.0
No. of banks below 8 % CRWA	1	0	0	0

The CRWA of foreign banks was well above the required level during the last four years of 1990s (see **Table 3.15**). However, the rising ratio in 1998 and 1999 was more due to a contraction in their assets following freeze in FCAs and resulting fall in deposits (see **Annex 3.3**). Nevertheless, rising trend in capital to liability ratio (almost throughout the decade) showed improvement in capital adequacy overtime (see **Figure 3.15**).

3.4.2 Asset Quality

As shown in **Table 3.16**, earning assets to total assets ratio remained stable (around 75 percent), except for 1999 when it fell to 64.9 percent. Since more than 95 percent investment of foreign banks were in government securities, a decline in interest rates thereon resulted in sharp fall in earning assets to total assets ratio in 1999 (see **Figure 3.16**).

Table 3.16: Asset Quality Indicators

percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Earning assets to total assets	77.2	76.7	80.1	77.1	76.0	72.9	74.4	74.4	73.7	64.9	75.0
NPLs to gross advances	11.8	8.3	5.6	5.9	3.4	4.5	5.3	5.0	5.3	5.1	5.1
Loan defaults to gross advances	12.3	8.8	4.7	5.3	2.7	3.7	3.8	4.1	5.4	5.0	3.7
Cash recoveries to total default	0.7	18.8	2.7	4.9	7.0	4.9	18.2	8.4	1.3	2.9	12.2

As regard NPLs, these had increased from Rs 2.1 billion in 1990 to Rs 7.0 billion in 2000. However, its ratio to gross advances remained stable in the range of 4 to 6 percent for most of the period (see **Figure 3.17)**. Besides, low defaults to advances ratio and relatively high recovery rate against defaulted loans helped this group in maintaining the quality of their assets.

3.4.3 Management Soundness

In terms of indicators for management soundness, the sharp increase in expenses to income ratio during 1998 was due to freezing of FCAs (see **Table 3.17**). It is important to note that after 1998, both income and expenditure declined in almost equal proportions (see **Figure 3.18**).

During second half of 1990s, operating expenses to total expenses ratio of foreign banks was the lowest among all the groups. This ratio declined during the first half of 1990s, but started increasing during the last three years of the decade. Earnings per employee were not only the highest for this group but also increased over the period. As regards expense per employee, their high levels showed that foreign banks offered lucrative packages to their employees compared to the first two groups.

Table 3.17: Management Soundness Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total expenses to total income	71.0	57.3	53.9	69.4	76.4	83.4	80.5	81.2	88.6	86.8	87.2
Operating expenses to total expenses	30.6	33.1	31.7	32.5	28.4	21.9	25.7	22.9	23.3	26.1	29.2
Earnings per employee (million Rs)	1.6	2.2	3.1	4.0	4.5	4.8	6.3	9.0	9.7	9.3	8.4
Interest rate spread	4.4	5.5	6.6	5.8	5.3	4.2	4.8	6.3	5.7	7.4	4.6
Operating expense per employee (million Rs)	0.3	0.4	0.5	0.9	1.0	0.9	1.3	1.7	2.0	2.1	2.1

Figure 3.15: Capital to Liability Ratio

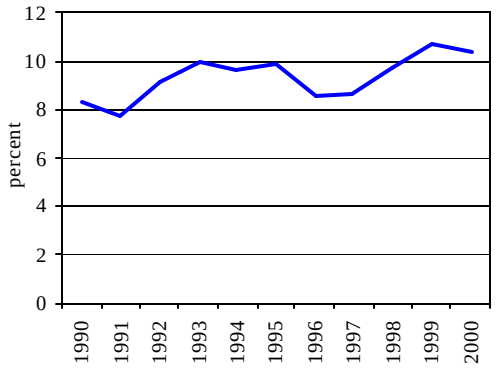


Figure 3.16: Earning Assets to Total Assets Ratio

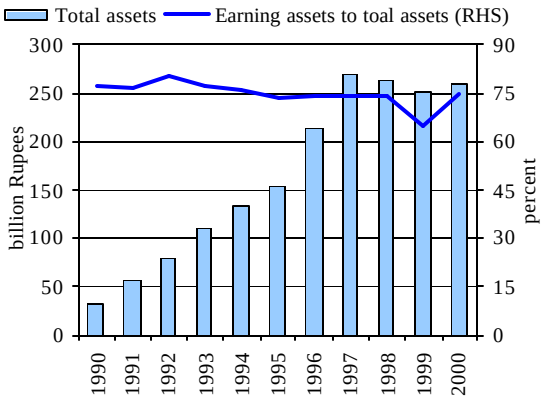


Figure 3.17: Non-performing Loans

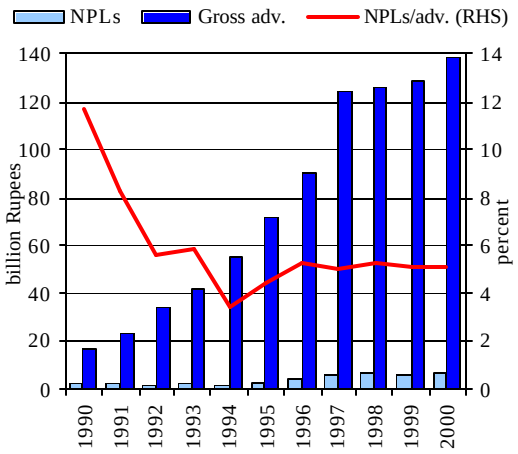
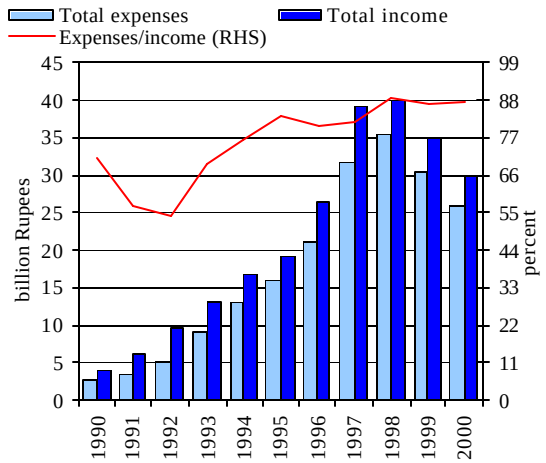


Figure 3.18: Expenditure to Income Ratio



3.4.4 Earnings and Profitability

Despite showing better asset quality, adequate capital base and sound management, foreign banks failed to retain their profitability during 1990s. Despite indicating comparatively better position than competitors in the banking industry, the first three indicators showed declining earning capacity and thereby constraining profitability for this group, especially after 1997 (see **Table 3.18**). Given the

fact that they were mainly dealing in foreign currency accounts, their freezing in May 1998 severely affected the earning capacity of foreign banks.

Table 3.18: Earnings and Profitability Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net profit to assets ratio	0.8	1.9	2.6	1.2	0.8	0.4	1.0	1.3	0.4	0.7	0.6
Net profit to equity ratio	10.9	27.1	30.8	13.5	8.7	4.9	12.8	15.9	4.8	7.0	6.5
Net interest margin	3.5	4.8	6.2	5.1	4.2	2.5	3.2	4.4	3.5	4.0	3.4
Total income to total assets	11.9	11.1	12.1	12.1	12.6	12.5	12.5	14.6	15.2	13.9	11.5

3.4.5 Liquidity and Sensitivity to Market Risk

The freezing of FCAs in May 1998 led to a decline in deposits of foreign banks, thereby affecting their liquidity position (see **Table 3.19**). Both the loans to deposits and liquid assets to total assets ratios were indicating liquidity problem for this group after 1998. However, foreign banks continued to hold larger securities than the minimum required under SLR. This showed their relative reluctance in undertaking credit extension compared with their local competitors.

Table 3.19: Liquidity and Sensitivity Indicators

Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Liquid assets to total assets	37.5	50.6	50.7	54.9	51.0	44.3	48.5	47.6	46.0	40.3	39.3
Loans to deposit	69.7	52.9	54.0	48.6	51.3	57.6	50.6	54.3	56.7	68.2	71.6
Gap (Rs billion)	-2.3	-5.3	-4.8	-8.9	-13.5	-19.9	-29.4	-35.4	-36.3	-55.2	-30.2
RSA/RSL	91.6	88.9	93.0	90.6	88.3	84.8	84.3	85.0	84.2	74.8	86.6

Note: Gap = RSA – RSL; RSA = Rate sensitive assets ; RSL = Rate sensitive liabilities

3.5 The Banking Industry

Performance indicators of overall banking industry (see **Table 3.20**) depict a trend similar to that of state-owned banks, which is understandable due to their predominant share. It is, however, important to note that the financial performance of private and foreign banks was far better than that of overall banking industry, especially before the freezing of foreign currency accounts in May 1998.

In terms of the health of the banking industry, very small improvements, or arrests in earlier declines, could be discerned in some of the CAMELS indicators after 1997. These improvements need to be seen in the context of various negative factors that affected the banking industry after 1997. While SBP, in that year, required banks to enhance capital adequacy, strengthen asset quality, improve management, increase earnings and reduce sensitivity to various market risks; the freezing of foreign currency accounts in May 1998 instilled new pressures of capital and deposit erosion, and dis-intermediation in the financial system. Persisting environment of low economic growth had also added a dampener to demand for credit, and at the same time the supply of credit was negatively affected, due to over cautious attitude of the banks during the drive for accountability and loan recovery that began in October 1999.

Pakistan banking industry has remained heavily taxed. Although the tax rate on banking system was gradually brought down from 66 percent at the beginning of 1990s to 58 percent towards the end, it was still very high compared to other sectors, like 45 percent for corporate and 35 percent for individuals. Since the provision against NPLs and the interest income in the suspense account was not exempted while calculating the tax liabilities, this was another source of concern for the banking business in Pakistan. Moreover, the problem of advance tax further drained the funds available to the banks; however, this problem basically pertained to the state-owned banks (for detail see **Section 3.2.4**).

Table 3.20: Performance Indicators of Banking Industry
Percent

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Capital Adequacy											
CRWA	-	-	-	-	-	-	-	6.0	12.5	12.2	11.4
No. of banks below 8% CRWA	-	-	-	-	-	-	-	5	0	1	3
Capital to liability ratio	4.3	4.2	4.5	4.9	4.7	4.8	4.0	3.2	5.9	5.3	5.6
Asset Quality											
Earning assets to total assets	80.0	75.9	77.6	77.6	76.8	75.9	74.6	74.9	72.8	70.5	73.2
NPLs to gross advances	17.6	18.9	17.4	20.0	21.7	19.3	19.2	20.1	19.5	22.0	19.5
Loan defaults to gross advances	10.8	10.7	10.3	10.5	11.1	10.3	10.8	16.6	14.9	13.5	12.2
Recoveries to total default	11.0	7.8	6.3	5.1	8.3	8.5	10.0	9.4	5.8	7.3	8.5
Management Soundness											
Total expense to total income	93.4	89.3	84.6	85.7	88.0	90.2	96.3	106.8	97.1	96.8	93.9
Operating expense to total expense	38.5	38.1	38.9	38.6	37.1	35.8	33.8	40.2	34.0	36.6	38.7
Earnings per employee (million Rs)	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.7	1.9	1.9	1.9
Interest rate spread	4.0	4.4	4.4	4.8	4.6	4.9	3.8	5.2	5.3	5.6	5.1
Operating expense per employee (million Rs)	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.7	0.6	0.7	0.7
Earnings and Profitability											
Net profit to assets ratio	0.4	0.6	0.8	0.8	0.4	0.3	0.1	-1.2	0.5	-0.3	0.2
Net profit to equity ratio	10.5	15.8	18.2	17.6	9.1	7.2	2.1	-38.8	9.1	-6.3	4.1
Net interest margin	3.2	3.3	3.7	4.0	3.6	3.7	2.3	3.5	3.5	3.7	3.8
Total income to total assets	9.8	9.3	9.2	10.3	10.1	10.7	10.4	11.7	11.7	10.8	9.9
Liquidity and Sensitivity to Market Risk											
Liquid assets to total assets ratio	32.6	41.6	46.0	44.4	47.0	43.7	43.4	41.4	41.3	38.7	34.9
Loans to deposits	61.6	54.0	49.7	53.4	51.0	54.1	52.2	51.8	51.2	55.9	60.3
Gap (billion Rs)	-40	-67	-73	-81	-106	-134	-178	-199	-228	-287	-255
RSA/RSL	89.5	85.1	87.3	87.8	86.5	85.4	83.2	83.5	82.3	79.2	82.5

Note: Gap = RSA – RSL; RSA = Rate sensitive assets ; RSL = Rate sensitive liabilities

3.6 Conclusion

Our analysis of performance of commercial banks during the reform process strongly points toward the need for continuity of banking sector reforms. Despite a radical change in the ownership structure of the banking sector, which had resulted in reduction in share of state-owned banks (excluding MCB and ABL) in total assets from 92.1 percent in 1990 to 54.0 percent in 2000, solid signs of improvements are difficult to spot. However, the problem of capital erosion has been addressed in addition to some improvements in recovery of defaulted loans.

In order to improve the health of banking industry further, following areas require focused attention:

?? More vigor is required to deal with the mounting burden of non-performing and defaulted loans, especially historical loans. Further improvement in judicial and legal framework is needed to define the fate of historical bad debts. This will help banks in reducing their operating cost and ultimately the spread between lending and deposits rates. In this regard, CIRC has already been formed, which will purchase the NPLs of the banking institutions.[19]

[19] The Corporate and Industrial Restructuring Corporation Ordinance dated September 22, 2000.

- There is a need to speed up the undergoing restructuring process of Nationalized Commercial Banks (NCBs) to make them viable for privatization. This will help in insulating these banks from undue interference and political pressures in credit and investment decision-making.
- It is important to reduce the tax rate on banking industry. Moreover, the issue of advance taxes paid by banks needs attention.
- It is vital to further rationalize the yields on NSS instruments in order to minimize the possibility of dis-intermediation occurring in future.