Performance of Commercial Banks in Pakistan: A Study in Risk Analysis

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Introduction

The financial sector in Pakistan has evolved over the years in response to the growth of the economy and the government's plans for the growth and development of the country. The sector as on 31 March 2002 comprises the State Bank of Pakistan, 4 state-owned banks, 2 newly privatised banks, 4 specialised banks, 14 private scheduled banks, about 30 leasing companies, 45 Modarabas, 14 investment banks, 3 stock exchanges, 58 insurance companies, and Government Saving Centers.

Commercial banks were nationalised in 1974 and are now in the process of being privatised. Two nationalised commercial banks have been privatised since 1990: Muslim Commercial Bank was sold by auction/ negotiation, while Allied Bank was sold to its employees .The market share of the nationalised commercial banks has been declining with the introduction of new private banks.

The three nationalised commercial banks in Pakistan—Habib Bank Limited, United Bank Limited, and National Bank of Pakistan—have a large branch network that allows them to expand and compete with the private banks in deposit mobilisation. The newly privatised banks have acquired the branch network that will allow them to expand and compete with the state-owned banks. While these institutions play an important role in financing short-term credit requirements, their success in raising deposits ensures that they have a significant surplus of funds that can be lent or invested in government securities.

There are 19 foreign banks which have been established from time to time. The foreign banks in Pakistan are branch operations; they are not separate legal entities. Much of their success can be attributed to their superior management skills and better access to international financial markets. A large fraction of foreign currency deposits are with foreign banks, partly because of their marketing efforts and partly because of their credibility as international banks. Foreign banks are only allowed four branches within the country.

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In recent years, as external credit flows to developing countries have declined, the need for an efficient and viable financial sector has grown. An efficient financial system collects domestic savings and allocates the collective resources to the best possible investment opportunities, allowing for better domestic resource mobilisation and utilsation, and reducing the reliance on external financing.

Throughout the 1980s, Pakistan was able to achieve strong growth with low inflation. The banking sector operated inefficiently because of nationalisation.[1] Financial intermediation was geared towards the financing needs of the government and those of the targeted sectors of the economy to which credit was officially directed. Although Pakistan's economy opened up internationally in 1990, the government had a tight hold on entry to financial markets. The situation changed during the 90s with the entry of private banks in the country and subsequent competition. Financial reforms were initiated with a strong commitment to market-oriented development of the financial sector. These reforms are still underway and will need to be strengthened substantially if modern, competitive financial markets are to be developed.

Foreign banks have shown the highest growth rate in terms of deposits in the last three years. State-owned banks averaged an annual growth of 12.7 per cent over the three-year period 1998-2001, while the recently privatised nationalised commercial banks averaged 18.2 per cent and foreign banks, 31.4 per cent. Foreign banks are also more efficient in terms of controlling administrative costs per branch. For example, growth of administrative costs averaged 19.7 per cent for state-owned banks, 18.3 per cent for the recently privatised banks, and 17.6 per cent for foreign banks. As a percentage of assets, administrative costs are the lowest for foreign banks.

The gross revenues of foreign banks have grown at a much faster pace than the rate of growth of their costs. For Pakistani banks, the difference in the growth rates is extremely narrow, if not negative. Bank deposits have grown significantly in recent years primarily because of the rapid growth of money supply, which increased by around 18 per cent and 20.6 per cent during 1999-2000. Money has also flowed into the banking system from the informal economy with the change in incentives following the recent slide of the stock market and the significant slump in the real estate market. Demand deposits constitute about 47-50 per cent of total

[1] Khan Bashir Ahmad, Financial Markets and Economic Development in Pakistan: 1947-1995, p.224

bank deposits which is much higher than other countries. This also explains why the cost of funds have been low for commercial banks.

Profitability and Productivity of Commercial Banks

The profit earned by the commercial banks is the difference between the deposit rate and the lending rate, called the spread. In nominal terms, the spread has risen steadily from 5 per cent in 1986-87 to 6.2 per cent in 1992-93, but then fell to 2.8 per cent in 1997 and increased to 3.3 per cent in 2000. In real terms, the weighted average yield on deposits fell from 3.9 per cent in 1986-87 to –4.6 per cent in 1990-91, and –1.1 per cent in 1992-93.The weighted average yield on loans also declined; after declining from 8.9 per cent in 1986-87 to 1.1 per cent in 1990-91.Thereafter, it climbed rapidly to 5.14 per cent by 1992-93.[2]

Foreign banks seem to be the main beneficiaries of the relatively large spreads, especially as the nationalised banks have to deal with problems of large overheads, increasing inefficiencies and nonperforming loans.

The three-year (1998-2001) averages of the profitability indicators for nationalised commercial banks and private commercial banks are illuminating. In the case of nationalised commercial banks, total administrative costs were 2 per cent of total assets compared with 0.85 per cent in the case of foreign banks, 0.6 per cent in the case of private banks. Pre-tax profits as a percentage of deposits are 0.6 per cent for nationalised commercial banks, 5 per cent for foreign, and 2.5 per cent for new private banks.

Over the years, the capital base of nationalised commercial banks has been severely affected by the poor quality of bank loans made on political and uneconomic grounds. As a result, the single most formidable problem facing the banks is the heavy burden of nonperforming loans. Pakistan introduced Prudential Regulations in 1993 to ensure that credit is not misused and the infected portfolio was minimum. However, the infected portfolio has increased to significant proportions (see Table 1 below). On June 30, 2001, the Non-Performing Loans (NPLs) amounted to Rs. 279 billion, i.e., 8.2 per cent of GDP, 18.6 per cent of domestic assets, and 32.5 per cent of total credit made available to the private sector and public enterprises. Non-Performing Loans of the Commercial Banking sector were Rs. 221 billion,i.e, 6.5 per cent of GDP and 22.1 per cent of total deposits.

[2] Ul Haque, Nadeem, and Shahid Kardar, 1995 " Development of the Financial Sector in Pakistan., p. 448.

Out of NPLs, the defaulted loans of the financial institutions and the commercial banking sector were Rs. 172 billion and Rs. 141 billion respectively. Because of such a large infected portfolio, the spread between lending and deposit rate has remained high. Though rescheduling of loans is common, the total advances of nationalised commercial banks categorised as bad and doubtful debts are Rs. 56 billion of which Rs.46 billion are classified as advances related to the private sector. Just under 23 per cent of the private sector's classified debt pertains to advances under mandatory targets and concessional credit schemes. In 1998, the State Bank of Pakistan estimated that around 14.2 per cent of the loan portfolio of nationalised commercial banks were made up of nonperforming loans.

Table 1: Non-Performing and Defaulted Loans (Rs. billion)

	Non-Performing Loans	Defaulted Loans
June 1998	207.9	146.1
June 1999	212.1	143.1
June 2000	239.5	148.1
June 2001	279.1	172.4
February 2002	278.6	168.1

Source: Unpublished data, cited in Pakistan Human Conditions Report 2002

The problem of debt recovery is not simply a technical issue. Not only have political pressures affected the quality of the loan portfolio of banks, they have also been instrumental in preventing banks to proceed against persistent defaulters and have resisted attempts to improve the enforcement mechanism.

Measures of Performance

. A total of 16 nationalised, privatised, private, and foreign banks were selected for the study. The standard tests used to measure the performance of commercial banks are applied. There are four ratios used in Risk analysis.

These are:

1. Capital Risk

Capital base of financial institutions facilitates depositors in forming their risk perception about the institution. Also, it is the key parameter for financial managers to maintain adequate levels of capitalisation. Besides

absorbing unanticipated shocks, it signals that the institution will continue to honour its obligations. In order to protect the interest of depositors and shareholders of commercial banks, the State Bank of Pakistan introduced the risk-based system for capital adequacy in November 1998 and asked banks to maintain 8 percent Capital to Risk Weighted Assets (CRWA) ratio. This is the benchmark set by the BASLE (Bank Supervision Regulation Committee) of Bank for International Settlements. Additionally, banks are required to achieve a minimum paid-up capital of Rs. 1 billion vide BSD circular No. 31 dated December 6, 2000.

Capital Risk is measured by the ratio of Equity Capital to Total Assets. This ratio for our sample of 16 banks is shown in Table 2. A higher percentage means that the bank is safer because it can withstand a sharper decline in the value of its assets. The table shows that this ratio has improved for most banks over the year 2000 to 2001. However, it is below the target of 8 per cent for all except Faysal bank, Prime Commercial bank, and Emirates Bank. The ratio has been low for nationalised commercial banks and foreign banks. This suggests a high degree of capital risk or inadequate capitalisation for the existing level of lending. Only four banks, Faysal Bank, Prime Commercial bank, the Bank of Punjab, and Emirates Bank had this ratio greater than 8 per cent. This lower ratio can be attributed to a fall in yield of government securities, and hence fall in returns on banks' investment. Being zero-risk weighted, disinvestment of government securities inevitably led to a slight fall in the capital adequacy ratio. In addition, higher provisioning against Non-Performing Loans (NPL), which affects the capital base through profit/loss accounts, has further contributed to the decline of this ratio.

This had three implications. First, lending rates probably did not adequately reflect the prevailing risk premiums in the market and affected the spreads between lending and borrowing rates. Second, loan recovery was poor and the rate of default high with a corresponding write-off of losses and lower earnings. Third, volume growth did not adequately compensate for the reduced spreads over the long run.

Table 2: Capital Adequacy of Commercial Banks in Pakistan

Capital Risk (per cent)

		2000	2001
1.	Habib Bank Limited	3.81	3.84
2.	United Bank Limited	3.79	4.33
3.	Muslim commercial Bank Ltd.	3.20	3.68
4.	Askari Commercial Bank Ltd.	5.06	5.05
5.	Bank Al-Falah Ltd.	4.0	3.27
6.	Bolan Bank Ltd.	1.5	1.6
7.	Faysal Bank Ltd.	9.64	9.38
8.	Platinum Commercial Bank Ltd.	5.65	1.14
9.	Prime Commercial Bank Ltd.	9	10.3
10.	Soneri Bank Ltd.	6.21	7.57
11.	The Bank of Punjab	10	11
12.	Union Bank Ltd.	3.65	3.78
13.	ABN AMRO Bank NV	2.14	1.4
14.	Citi Bank NA	1.37	0.24
15.	Emirates Bank International Ltd.	9.6	10.2
16.	Standard Chartered Grindlays Bank Ltd.	2	1

Source: Calculated from financial statements as on 31.12.2001.

2. Credit Risk

Asset quality determines the robustness of financial institutions against loss of value in the assets. The deteriorating value of assets, being the prime source of banking problems, directly pour into other areas, as losses are eventually written –off against capital, which ultimately jeopardises the earning capacity of the institution. With this backdrop, the asset quality is gauged in relation to the level and severity of non-performing assets, adequacy of provisions for bad loans, recoveries of loans, distribution of assets, etc. Although the banking system is infected with a large volume of Non-Performing Loans (NPLs), the severity of this problem has stabilised to some extent. This is not to say that the problem of NPLs has taken a secondary position. Unfortunately, it still remains the most dominant factor affecting the earning capacity of banks. Popular indicators include non-performing loans to advances, loan default to total advances, and recoveries to loan default ratios. We have used total loans to assets ratio to judge

credit risk. It shows what percentage of assets are more risky because loans are the most risky assets on which default occurs. For a less risky bank, this ratio should be low and must decline overtime. The results for the years 2000 and 2001 are given in Table 3.The table shows that all the banks had above average credit risk, ranging from 30 to 60 per cent. Technically, a high credit risk should be associated with higher returns.

In the case of nationalised commercial banks, this ratio has declined for Habib Bank. It fell from 53.19 in 2000 to 50.10 in 2001. This shows that fresh loans are being extended much more prudently than was the case earlier. In other words, the percentage of loans out of total assets given to clients has fallen. In the case of private and privatised banks, this ratio has increased. The ratio for UBL increased from 39.95 to 47.77. For MCB, it increased from 42.5 to 52.73. For Bank Al-Falah, it increased from 49.13 to 55.27. Similarly, for Prime Commercial Bank, this ratio increased from 47.07 to 57.35. The same is the situation for Emirates Bank and Standard Chartered Bank. This ratio was very high for Platinum Bank, ABN-Amro, and Citi bank, although it has declined over the year 2000 to 2001.This improvement is much more pronounced given their share in total NPLs. It shows a marked improvement in recovery efforts by the private banks. The ratio is lowest for Bank of Punjab and Bolan Bank indicating that the banks are risk averse.

Table 3: Asset Quality of Commercial Banks in Pakistan
Credit Risk (per cent)

		2000	2001
1.	Habib Bank Limited	53.19	50.10
2.	United Bank Limited	39.95	47.10
3.	Muslim commercial Bank Ltd.	42.5	52.73
4.	Askari Commercial Bank Ltd.	46.53	45.69
5.	Bank Al-Falah Ltd.	49.13	55.27
6.	Bolan Bank Ltd.	33.91	35.55
7.	Faysal Bank Ltd.	52.10	56.75
8.	Platinum Commercial Bank Ltd.	65.35	39.71
9.	Prime Commercial Bank Ltd.	47.07	57.35
10.	Soneri Bank Ltd.	54.34	49.65
11.	The Bank of Punjab	33.77	30.43
12.	Union Bank Ltd.	49.27	46.03
13.	ABN AMRO Bank NV	61	57.37
14.	Citi Bank NA	49.56	44.04
15.	Emirates Bank International Ltd.	48.60	52.13
16.	Standard Chartered Grindlays Bank Ltd.	49.04	53.14

Source: Calculated from financial statements as on 31.12.2001

3. Liquidity Risk

An adequate liquidity position refers to a situation where the institution can obtain sufficient funds, either by increasing liabilities or by converting its assets quickly at a reasonable cost. It is, therefore, generally assessed in terms of overall assets and liability management, as mismatching of maturities of assets and liabilities gives rise to liquidity risk. Efficient fund management refers to a situation where a spread between rate sensitive assets (RSA) and rate sensitive liabilities (RSL) is maintained. The most commonly used tool to evaluate interest rate exposure is the gap between RSA and RSL, while liquidity is gauged by liquid assets to total asset ratio. We have used investment in short-term securities to deposits as a measure of liquidity risk. A higher ratio shows that the bank has liquid assets available to meet deposit withdrawals. However, there is a tradeoff between liquidity and profitability. A bank that maintains higher liquidity is not investing its funds in long-term and risky projects. This is shown in Table 4. Foreign Banks have the lowest liquidity risk. For Standard Chartered, the liquidity ratio increased from 41.4 to

50.95, for Citibank, it increased from 12.9 to 19.75, for ABN AMRO, it increased from 15 to 25. The ratio decreased for private commercial banks showing increased liquidity risk. For Bank Alfalah the ratio fell from 32 to 28.6. For Bolan Bank the ratio fell fram 48 to 32. For Prime Commercial Bank the ratio also fell from 34 to 26.5. However it increased for Bank of Punjab from 19 to 33. For the banking sector as a whole, the ratio is quite low due to the after effects of freezing of Foreign Currency Accounts as the banks had less resources to invest in liquid funds. An alternative explanation is decreasing yields on short-term securities which render investment in such securities unattractive. Generally, declining ratio would imply that a smaller percentage of deposits are invested in liquid assets, thus raising the liquidity risk.

Table 4: Liquidity of Commercial Banks in Pakistan
Liquidity Risk (per cent)

		2000	2001
1.	Habib Bank Limited	16	16
2.	United Bank Limited	9.47	8.54
3.	Muslim commercial Bank Ltd.	12	14
4.	Askari Commercial Bank Ltd.	18.6	21.1
5.	Bank Al-Falah Ltd.	32	28.6
6.	Bolan Bank Ltd.	48	32
7.	Faysal Bank Ltd.	13.66	13.45
8.	Platinum Commercial Bank Ltd.	11	27
9.	Prime Commercial Bank Ltd.	34	26.5
10.	Soneri Bank Ltd.	49.27	50.05
11.	The Bank of Punjab	19	33
12.	Union Bank Ltd.	12.6	18.39
13.	ABN AMRO Bank NV	15	28
14.	CitiBank NA	12.9	19.75
15.	Emirates Bank International Ltd.	38.9	32.5
16.	Standard Chartered Grindlays Bank Ltd.	41.4	50.95

Source: Calculated from financial statements as on 31.12.2001

4. Interest Rate Risk

The diversified nature of bank operations makes them vulnerable to various kinds of financial risks. Sensitivity analysis reflects the institution's exposure to interest rate risk, foreign exchange volatility and equity price risk. Risk sensitivity is mostly evaluated in terms of the management's ability to monitor and control market risk. For interest risk we have used a ratio of

interest sensitive assets to interest sensitive liabilities. This is shown in Table 5. RSAs has diverged from RSLs, in absolute terms. Higher interest rate sensitivity of spread is reflected in less than 100 value of ratio between RSA and RSL. For most of the banks, this ratio declined between 2000 and 2001 indicating a rise in interest rate sensitivity. Only three banks had a ratio of more than 100. The highest is 588 per cent for Askari Commercial Bank during 2001. Faysal Bank had 200 per cent during 2000, the Bank of Punjab had 100 per cent during 2001 and Soneri Bank had 111 per cent during 2000.

Table 5: Market Risk of Commercial Banks in Pakistan

Interest Rate Risk (per cent)

		2000	2001
1.	Habib Bank Limited	93	89
2.	United Bank Limited	94.7	85.4
3.	Muslim commercial Bank Ltd.	95	85
4.	Askari Commercial Bank Ltd.	534.6	588
5.	Bank Al-Falah Ltd.	87.98	89.37
6.	Bolan Bank Ltd.	83	71
7.	Faysal Bank Ltd.	200	114
8.	Platinum Commercial Bank Ltd.	81	72
9.	Prime Commercial Bank Ltd.	82.9	89
10.	Soneri Bank Ltd.	111	107
11.	The Bank of Punjab	95	100
12.	Union Bank Ltd.	34.49	28.49
13.	ABN AMRO Bank NV	81	86
14.	Citi Bank NA	82.21	88
15.	Emirates Bank International Ltd.	68	67
16.	Standard Chartered Grindlays Bank Ltd.	63	80

Source: Calculated from financial statements as on 31.12.2001

A discussion of all the four risk ratios for the 16 banks shows that the Bank of Punjab is performing well as far as the risk dimension is concerned.

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