Journal of Management and Social Sciences
Vol. 3, No. 2, (Fall 2007) 63-69

Financial Sector Reforms & Soundness of Banks Operating in Pakistan

Azam Ali *
Statistics & DWH Department, State Bank of Pakistan
Ishaque Ahmed Ansari *
Statistics & DWH Department, State Bank of Pakistan

ABSTRACT

This study assesses the impact of Financial Sector Reforms on the Soundness of Banks Operating in Pakistan over the last two decades. The paper attempts to answer the question; does financial sector reforms have any impact on the soundness of banks? Consequently, it is found that financial sector reforms, introduced in late 1980s, made significant impact on the Soundness of Banks. There has been a consolidation and merger of banks, capital adequacy ratios look much stronger, asset quality has been improved stemming the flow of Non Performing Loans (NPLs), and management has been strengthened by the induction of professionals at the top and second tiers. An important achievement in the last decade has been the transformation of a largely state-owned and weak banking system into healthier, primarily privately owned system. This has been facilitated by restructuring of major banks, ongoing corporate governance, and credit culture. The analysis strongly points toward the need for continuity of banking sector reforms. Though major efforts have been undertaken by the governments to update and improve the legislative framework, there remains a need to repeal, amend and update laws.

Keywords : Reforms, Pakistan, Banks, and Soundness

LITERATURE REVIEW

There exists a vast literature on modeling and estimating the impact of financial sector reforms on financial markets.

Following the renewed interest by policy makers in bank soundness (Aditya Narain and Saibal Ghosh- 2003), ongoing international efforts towards development of minimum standards and harmonization have come into focus. After the banking crises, in several Asian economies, weaknesses in the application of prudential standards by banks and the inefficacy of the supervisory framework were cited as one of the main causes.

* The material presented by the author does not necessarily portray the viewpoint of the editors and the management of the Institute of Business & Technology (BIZTEK) or Statistics & DWH Department, State Bank of Pakistan.

* Azam Ali : azam.ali@sbp.org.pk
* Ishaque Ahmed Ansari : ishaque.ahmed@sbp.org.pk

©JMSS is published by the Institute of Business and Technology (BIZTEK).
Main Ibrahim Hydri Road, Korangi Creek, Karachi-75190, Pakistan.

Mar J. Flannery (August 1998) evaluated the growing empirical literature on private investors' abilities to assess the financial condition of banking firms. The evidence supported the proposition of corporate governance services for large traded US financial firms. It reviewed empirical evidence about market participants' liabilities to identify and control risk in banking firms.

RESEARCH METHODOLOGY

To study the impact of financial sector reforms on the soundness of banks operating in Pakistan, CAMELS framework is applied on all banks for the following periods.

I. 1982 to 1987 (pre-reform period),
II. 1988 to 1990 (reform-beginning period),
III. 1991 to 1996 (during-reform period),
IV. 1997 to 2002 (post-reform period),

CAMELS FRAME WORK

1. Capital Adequacy
2. Asset quality
3. Management soundness
4. Earnings
5. Liquidity
6. Sensitivity to market risk

STATISTICAL TESTING

The hypothesis is tested for four population means. To perform hypothesis test for four population means we established the following **null** hypothesis **Ho**.

Ho: $\mu_1 = \mu_2 = \mu_3 = \mu_4$, that is all population means are equal. **OR** Financial Sector Reforms remained ineffective on the soundness of banks operating in Pakistan during the period.

H1: Ho is not true

FINANCIAL SYSTEM IN PAKISTAN: AN OVERVIEW

The financial system in Pakistan has evolved over the years in response to growth of the economy and government plans for the development of the country. The system comprised the Central Bank (State Bank of Pakistan (SBP)), Commercial Banks and a mix of Non-Bank Financial Institutions (NBFIs) including Development Financial Institutions (DFIs), Investment banks, housing finance companies, leasing companies, modarabas and mutual funds, brokerage houses and insurance companies. Three Stock Exchanges at Karachi, Lahore and Islamabad are also a part of Financial System in Pakistan. In addition to managing the monetary policy, SBP also regulates banks and DFIs. Securities and Exchange Commission of Pakistan (SECP) supervises investment banks, leasing companies, insurance companies, modarbas and mutual funds.

FINANCIAL SECTOR REFORMS AND BANKS OPERATING IN PAKISTAN

CAPITAL ADEQUACY

Gradual decline of Capital to Liability ratio (CL-ratio) from 2.8 % in 1982 to 2.1 % in 1986 with its notable increase to 3.5 % in 1987 showed the extent to which capital and reserves of all banks operating in Pakistan were providing to liabilities from 1982-87.

Though Capital to liability (CL) ratio gradually declined from 3.6 % in 1988 to 3.0 % in 1990, it showed the maintenance of capital and reserves by banks during that period. Deteriorated CL-ratio affected capital to equity ratio by declining it from 44.7% in 1988 to 41.5 % in 1990. However, the capital to assets ratio (found between 2.9% to 3.1 %) showed improvements during the period.

During-reform period, total assets of banking industry grew at a compound annual growth rate of 15.4 percent, from Rs. 499.5 billion in 1991 to Rs. 1,180.0 billion by the end of 1996. Deposits also increased from 385.9 billion in 1991 to 897.8 billion in 1996.

Despite deterioration in capital to assets ratio, overall capital adequacy during reform period improved. Although the capital to assets ratio remained below 4.0 % of benchmark, capital to liability (CL) ratio and capital to equity (CE) ratio improved slightly during the first half of 1990s.

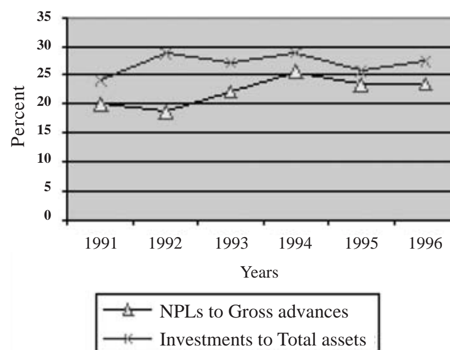
Capital to assets ratio, from 1998 to 2001, achieved its benchmark 4 %. The improved capital to liability ratio during that period showed the healthiness of banks. All four Nationalized Commercial Banks suffered losses in 1996, while huge losses by two of these banks in 1997 were responsible for the sharp decline.

ASSET QUALITY

Earning assets to total assets ratio declined from 76.3 % in 1982 to 73.7 % in 1987. Other indicators of asset quality are the ratios of credit to total assets and investment to total assets. The ratios showed the excessive utilization of assets (i.e. credit to asset ratio above 50 %) in lending than to invest (i.e. investment to total assets ratio below 30 %) in profitable securities by the banks.

Declining of earning assets to total assets, from 72.9 % in 1988 to 70.3 % in 1990, reflects deterioration of profitability of banks at the beginning of reforms. Credit to total assets remained above 52 % while investment to total assets found below 27% during 1988-90.

Fig : 1
Asset Quality of All Banks



The aggregate ratio of NPLs to total loans ranges from 0.4 percent to 35.1 percent. Asset quality of the five big banks found weak, with NPLs to total loans ratio ranging from 15 to 35 percent. Credit to total assets found below 50 % while investment to total assets remained above 24 % during the reform period.

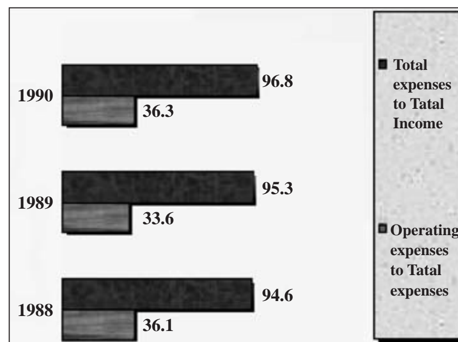
Earning assets to total assets ratio declined from the beginning of the post-reform period. Credit to total assets also increased from1997 to 2001 however declined in 2002 due to

23.9 % increase in total assets. With this increase, investment also went up by 96.7 % in 2002 over 2001. Because of this huge increase, investment to assets ratio showed a sharp increase in 2002.

MANAGEMENT SOUNDNESS

Expenditure to income ratio though was very high in 1982, deteriorated from 99.1% in 1982 to 93.0 % in 1987 and that could be retraced to higher operating expenses to total expenditure. The percentages of major indicators of management soundness depict that the banking industry during this particular period remained inefficient.

Fig : 1
Asset Quality of All Banks



Expenditure to income ratio decreased from 97.3 % in 1991 to 96.7 % in 1996 except an increase in 1994 stood up to 96.6 %. The operating expenses to total expenditure ratio also decreased from 38.4 % in 1991 to 32.4 % in 1996. Operating expenses per employee increased from Rs. 0.2 million to 0.4 million. The percentages of these indicators revealed managerial soundness of banks during 1991-1996.

Operating expenses per employee went up from Rs. 0.5 million in 1997 to Rs. 0.8 million in 2002. The notable ratio of management soundness i.e., 'expenditure to income ratio' decreased from 99.0 % both in 1997 and 1999 to 92.2 % in 2001, except in 2002 when it increased to 96.1 %. The operating expenses to total expenditure ratio also increased by 10.2 % during the period.

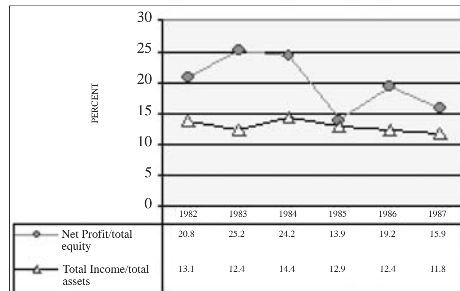
EARNINGS AND PROFITABILITY

Throughout the period, return on assets remained around 1 %, which reflected the inefficiency of the banking industry. Return on equity remained below 25 % while earning to assets ratio found below 12 % during the period. That was the upshot of falling share of earning assets in that period, which could be attributed to mounting burden of NPLs coupled with increased provisions.

The falling of earning and profitability ratios in the pre-reform period improved slightly during 1988-90. Return on equity increased from 15.7 % in 1988 to 16.6 % in 1990. Earning to assets ratio showed inclining trend with its increase from 11.9 % in 1988 to 14.5 % in 1990.

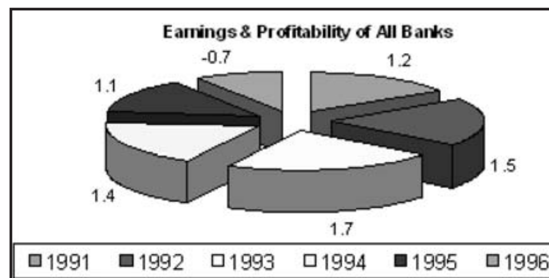
The slightly improved profit to asset and equity ratios of the pre-reform period showed downward trend during the reform period. The earning to assets ratio remained almost constant during 1991-96.

Fig : 3
Management Soundness of All Banks



Return on assets reduced from 1.2 % in 1991 to -0.7 % in 1996. Return on equity also declined from 19.0 % in 1991 to -11.7 % in 1996. Earning to assets remained almost stagnant from 13.1 % in 1991 to 13.4 % in 1996 in that period.

Fig : 3
Earnings & Profitability of All Banks



EARNINGS AND PROFITABILITY OF ALL BANKS

Percent	1997	1998	1999	2000	2001	2002
Net Profit to total assets	-0.8	0.3	0.5	0.5	-0.1	0.1
Net Profit to total equity	-25.0	8.4	-5.9	5.6	-0.8	20.3
Total Income to total assets	13.1	12.7	12.7	11.3	11.9	8.9

Except in 1999 and 2001, net profit to equity increased from -25% in 1997 to 20.3 % in 2002. Return on equity ratio was remarkably increased from -25.0 % in 1997 to 20.3 % in 2002. It was a remarkable achievement by banks to improve their return on equity. Earning to assets reduced from 13.1 % in 1997 to 8.9 % in 2000.

LIQUIDITY AND SENSITIVITY TO MARKET RISK

Liquid assets as a percent of total assets increased from 42.1 % in 1982 to 48.0 % in 1987 as the banks invested excessively in the fixed income longer tenor securities. In relation to that, liquid assets to deposits ratio soared from 54.7 % in 1982 to 67.7 % in 1987, which showed that the banks were facing problem in that period.

The increase in liquid assets and decrease in loans with respect to deposits showed banks

excess liquidity during 1988-90. The declining ratio of RSA to RSL, during the said period, indicated that banks were not risk sensitive to changes in interest rate.

During the period, liquid assets as a percent of total assets increased from 51.6 % in 1991 to 60.5 % in 1996. The liquid assets to deposits climbed from 66.8 % in 1991 to 79.5 % in 1996 along with the decline of loans to deposits ratio from 64.9 % in 1991 to 61.1 % in 1996. Gap of RSL to RSA also increased from -99 % in 1991 to -166 % in 1996.

Despite having a slight decline in 2000, liquid assets to total assets generally saw an inclining trend during the post reform period. In 1999, 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.

The rising liquid assets to deposit ratios 74.9 % in 1997 to 81.5 % in 2002 indicated a positive effect of 58.7 % increase in liquid assets in 2002. The credit to deposits ratio having a mixed trend showed increase from 61.9 % in 1997 to 62.4 % in 2002. The sharp increase in this ratio (71.9 %) was seen in 2000 only because of 21.7 % jagged fall in deposits over 1999. Analysis revealed an all round improvement during post reform period.
Results and Conclusion

The study examined the impact of financial sector reforms on the soundness of banks operating in Pakistan during the period 1982-2002. We performed Statistical test at 5% significance level, α=0.05 and df_{num}= k-1, or df_{num} = 4-1= 3 (Where k = 4). $\mathbf{F}_{(k-1,\, T-k,\, \alpha=.05)}$, where T is the total number of items in all samples or T = n1+n2+n3+n4 and k= number of samples.

$$TR_F = \sigma^{\wedge 2}_{between} / \sigma^{\wedge 2}_{within}$$

$$\sigma^{\wedge 2}_{between} = 11.95 \text{ and } \sigma^{\wedge 2}_{within} = 3.60$$

$$TR_F = 3.32$$

Result: As **TR_F (3.32)** is greater than the **table value (3.24)**, we conclude that the **Ho** is unlikely and that the alternative hypothesis **H_1** is accepted.

Consequent upon the test result, we reject our Null Hypothesis and conclude that financial sector reforms showed impact on the soundness of banks operating in Pakistan.

Major reforms in the financial sector resulted in a more resilient and efficient financial system that is better placed to absorb significant macroeconomic shocks. The reforms were implemented in conjunction with progress of a broader macroeconomic stabilization and structural agenda. The infancy of the reforms and deepening role of the financial system in the economy, however, underscore the importance of continued supervisory vigilance and efforts to further strengthen system.

An important achievement in the last decade was the transformation of a largely state-owned and weak banking system into healthier, primarily privately owned system. That was facilitated by restructuring of major banks, ongoing corporate governance, and credit culture. The reform efforts reflected an improvement in financial soundness indicators, greater resiliency to credit, market and liquidity risks, and good compliance with international supervisory standards. These reforms encompassed not only the institutional strengthening and restructuring of banks, but also those of supervisory authorities.

The financial sector has undergone considerable reforms that have resulted in a sounder and more efficient financial system. The nationalized commercial banks have been largely privatized and their financial position and resiliency to credit, market and liquidity risks have improved. The privatization and legal reforms in the financial sector and efforts to broaden sustainable and cost effective outreach of financial services to the underserved segments of the population need to be continued. Apart from increased business volume,

profitability was also helped by substantial retrenchment of personnel, closure of numerous unprofitable branches, and higher non-interest income reflecting fee-based activities and capital gains.

The analysis of soundness of banks operating in Pakistan during the period 1982 to 2002, strongly points toward the need for continuity of banking sector reforms. Though major efforts have been undertaken by the governments to update and improve the legislative framework, there remains a need to repeal, amend and update laws.

%	Period-I	Period-II	Period-III	Period-IV
C	2.6	3.3	3.1	4.8
A	70.3	71.4	72.5	73.8
M	0.3	0.5	0.9	1.9
E	1.1	1.3	1.7	2.1
L	44.4	49.6	58.2	58.7

REFERENCES

ANDRABI TAHIR & DI MEANA ANDERA RIPA, 1994, "Banking regulation and Debt Overhang", Money Credit and Banking, Vol-26 part-I, No-3.

CHAUDHRY GHAFFAR M., 1998 "Financial Deregulation and International Capital Flows: Pakistan's Experience",

FLANNERY J. MARK, "Using Market Information in Prudential Bank Supervision: A Review of the US Empirical Evidence", August 1998, Journal of Money, Credit, and Banking, Vol. 30 part-1, No. 3.

HILBERS PAUL, (2000) et al, "New tools for assessing Financial System Soundness: Journal of Finance & development Vol. 3, 2000.

HARDY C. DANIEL & PATTI DI E.B, (2001) "Bank Reform and Bank Efficiency in Pakistan", IMF Working Paper WP 01/38, September 2001.

NARAIN, ADITYA AND GHOSH, Saibal "Evolving International Supervisory Framework", February 8, 2003, Economic and Political weekly, pp. 543-549.

RAJAN RANGHURAM G. 1998, "The Past and Future of Commercial Banking viewed through an incomplete contact lens", Money Credit & Banking, Vol-I.

STATE BANK OF PAKISTAN, RESEARCH DEPARTMENT [2002], "Pakistan: Financial Sector Assessment 1990-2000", Karachi.