

2 Financial Infrastructure

2.1 Overview

Financial infrastructure is a set of institutions, which provides an enabling environment for the effective operation of financial intermediaries. In broad terms, the financial infrastructure encompasses the existing legal and regulatory framework that plays a vital role in determining the structure, growth and the health of financial sector. A safe and efficient financial infrastructure fosters financial stability and is imperative for the successful operation of modern integrated financial markets. On the other hand, a weak financial infrastructure can result in major disruptions to the smooth operation of financial markets, directly exposing market participants to greater financial risk.

The reforms in the financial sector during the 1990s were aimed at removing inherent distortions that had seeped into the financial system since the nationalization of the financial institutions in 1974; and at creating an enabling environment for the financial sector to grow and prosper. To this end, special emphasis was laid on improving the financial infrastructure. The financial reforms of the 1990s broadly covered the following areas:

- Establishing SBP's authority as the sole regulatory authority of the bank and non-bank financial institutions
- Improving the laws and judicial processes
- Increasing private sector participation through privatization of nationalized financial institutions and opening up new financial institutions in private sector
- Improvement in prudential regulations
- Promoting market integration
- Rationalization of interest rates
- Institutionalizing good governance
- Capacity building; both in the financial institutions and at SBP

During 1997, a number of fundamental structural reforms were introduced; these included establishment of SBP supremacy to regulate and supervise banks and non-bank financial institutions (NBFIs), and conduct an independent monetary policy. Banks (Nationalization) Act 1974 was also amended, dissolving the Pakistan Banking Council (PBC) and thus doing away with the dual and ambivalent control of the banking sector. On the supervision side, a system was put in place whereby performance of each bank and NBFI was evaluated under the off-site surveillance framework, which gauged the Capital adequacy, Asset quality, Earnings and Profitability, Liquidity and Sensitivity to market risk (CAELS), and the on-site inspection framework which gauged the Capital adequacy, Asset quality, Management, Earnings and Profitability, Liquidity and Sensitivity to market risk and Systems and controls (CAMELS - S). Banks were also asked to adopt International Accounting Standards (IAS) in preparation of their account for increasing transparency.¹

To regulate the corporate sector, Securities and Exchange Commission of Pakistan (SECP) was set up in pursuance of the Securities and Exchange Commission of Pakistan Act, 1997, which replaced the Corporate Law Authority (CLA). Initially, SECP was concerned only with the regulation of corporate sector and capital market. However, over time, its mandate was expanded to include supervision and regulation of insurance companies, NBFIs,² and private pensions funds, etc.

¹ For details, see Chapter 2 in the SBP publication, Pakistan: Financial Sector Assessment 1990-2000.

² Excluding Development Finance Institutions and the House Building Finance Corporation, which come under SBP regulatory framework.

By 2000, although the financial landscape of the country had improved considerably, the reform process had not only slowed but some of the gains had started to slip away due to lack of political commitment and weak macroeconomic fundamentals. Specifically, non-performing loans of financial institutions were reaching alarming proportions with continued political interference, especially in the state-owned institutions. Disclosure standards though improved; remained wanting, with financial intermediaries still able to prop up their performance through window dressing. Overstaffing and over-branching, coupled with labor union activities threatened state-owned financial institutions' viability. The presence of large number of small and financially weak institutions needed consolidation. Moreover, weaknesses also remained in the legal and supervisory infrastructure.

Aided by improved macroeconomic performance, reforms in the financial sector rejuvenated from 2000 onwards with strong political backing. While these were essentially extensions of the earlier reforms, renewed emphasis was laid on arresting the menace of non-performing loans, consolidation of the financial institutions (through restructuring, mergers, and privatization), improving legal and regulatory environment, implementing international standards of good corporate governance, and increasing efficiency and soundness of payment system. Together, these reforms were aimed at enhancing soundness, efficiency and deepening of financial sector primarily through reducing risk exposure and facilitating financial institutions to explore new markets and introduce innovative products.

This chapter highlights only the major steps taken during 2000-2005 to improve the financial infrastructure of the country.³

2.2 Resolving the NPLs Issue

To tackle the problem of non-performing loans, a multi-track strategy was adopted which included enacting of new laws, creation of institutions to pursue recovery of bad loans, and an incentive package for genuine cases (rescheduling of loans of those borrowers who were unable to pay due to economic constraints). Specifically, a new law under the title "The Financial Institutions (Recovery of Finance) Ordinance 2001" was promulgated.⁴ The new recovery law provided a mechanism for expeditious recovery of stuck up loans, e.g., the law provided a comprehensive procedure for the foreclosure and sale of mortgaged property, without the interventions of a court of law, and automatic transfer of all cases pending in any other courts to banking courts for their early resolution. Furthermore, amendments were made in the Banking Companies Ordinance (BCO) 1962 to provide legal coverage for expeditious recovery of loans.

To deal with the historical portfolio of stuck-up loans of the nationalized commercial banks and DFIs, the Corporate and Industrial Restructuring Corporation (CIRC) and Committee on Revival of Sick Industrial Units (CRSIU) were set up. While Nationalized Commercial Banks and DFIs were able to clean their balance sheets by transferring a part of their historically stuck up loans to CIRC which would then pursue their recovery independently, CRSIU was set up to valuate the possibilities of restructuring the loans of those industrial units that had become non-operational due to unsustainable debt and were otherwise viable. On the incentive side, while concessions were offered to those borrowers who were keen to regularize themselves, cases of willful defaulters, after due course of law were referred to the National Accountability Bureau (NAB).

While political resolve was necessary to tackle the issue of the NPLs, it was equally important to have a dependable infrastructure to provide accurate information on the past credit history of the borrowers.

³ It is to be noted that the review in this chapter is not exhaustive, and is largely focused in the regulatory framework of both SBP and SECP in providing an enabling environment for a safe and sound operations of financial institutions.

⁴ Vide Ordinance No. XL VI of 2001 dated 30 August 2001.

Such information generation entails substantial cost for the lenders, and at times, a lender may opt not to incur this cost, thereby exposing it self to credit risks. The need for setting up a centralized database of the borrower's credit history was realized early in the reform process and the Credit Information Bureau was set up at SBP in 1992. Over the years, the scope, coverage and efficiency of this bureau has been enhanced to meet the needs of the growing financial sector.

Credit Information Bureau

The Credit Information Bureau (CIB) is a public sector credit bureau, set up to promote financial discipline and better credit risk management by the financial institutions.⁵ Until recently, CIB contained data of borrowers of amount more than Rs 0.5 million and the information was available on request. However, keeping in pace with the advancements in the financial sector, capabilities of the CIB have also been enhanced during the last few years.

In April 2003, SBP launched eCIB, which is an online facility that allows financial institutions to upload and retrieve information online through Virtual Private Network (VPN). This has substantially reduced time required for making informed decisions. Recently, the SBP has further upgraded the CIB's technical and reporting structure. The new CIB system has been built on state of the art technology, which includes high capacity servers, security firewalls, broader bandwidth, point-to-point data encryption, and web-based data capturing software. It incorporates large number of validation rules on data capturing application to ensure integrity and accuracy of the submitted data. In the new structure, all fund and non-fund based credit facilities, irrespective of any amount outstanding, are being reported to eCIB with provisions for online amendments and updations for the financial institutions.

All banks, DFIs, NBFCs, modarabas and microfinance banks in Pakistan are members of the CIB and reporting to the CIB is mandatory for all the members.

2.3 Privatization of State-owned Financial Institutions

As mentioned earlier, one of the main objectives of the financial sector reforms was to increase participation of the private sector. However, despite the opening of new banks in the private sector during 1990s, the banking sector continued to be dominated by the public sector by the end of 2000. The structural drawbacks in nationalized banks, especially, huge infected portfolio; overstaffing and over branching; and disproportionate tax burden were badly affecting the growth and efficiency of the overall banking sector. Similarly, the NBFIs were also largely owned by the financially weak public sector institutions. In order to minimize the organizational weaknesses of nationalized financial institutions and to improve soundness of the overall financial sector, privatization of these units has become inevitable.

Although the privatization of the nationalized banks had been on the financial sector reform agenda since early 1990s, it gained substantial momentum 2000 onwards. To make banks viable entities, steps were taken to recapitalize and clean the balance sheets of the banks of the non-performing loans. Moreover, over staffing and large-sized branch network was rationalized, tax rate was brought down, and trade union activities were curtailed. These measures ensured smooth and speedy privatization of the financial institutions (see **Box 2.1**). Consequently, by CY05 the share of state-owned financial institutions in aggregate assets of the financial sector had dropped to 38.9 percent from 66.2 percent in CY00.

⁵ Established in 1992 by the State Bank of Pakistan (SBP) under Section 25(A) of the Banking Companies Ordinance-1962.

Box 2.1: Details on Privatization of State-owned Financial Institutions

A number of financial institutions including MCB, ABL, UBL and ICP have been privatized. Status of the ongoing and completed privatization of banks and NBFIs is given below:

Muslim Commercial Bank Limited (MCB): By 1993, 75 percent of the Government's share in Muslim Commercial had already been shifted to the private sector. Another 6.4 percent of the shares were off-loaded in September 2001. The MCB was completely privatized in October 2002.

Habib Bank Limited (HBL): Bidding for divestment of 51 percent shares of HBL was held on December 29, 2003, Agha Khan Fund for Economic Development (AKFED) was declared successful bidder. The Management of HBL was transferred to AKFED on February 26, 2004.

United Bank Limited (UBL): Bidding for divestment of 51 percent shares of UBL was held on September 5, 2003, consortium of Abu Dhabi Group & Bestway Group was declared as successful bidder. Management of UBL was transferred to the successful party on October 19, 2002.

National Bank of Pakistan: Government has successfully off-loaded 23.2 percent shares of NBP through local stock exchanges. Remaining shares of NBP will be offloaded after corporatization of NBP & change in NBP Act.

Allied Bank of Pakistan: For nearly seven years, Privatization Commission (PC) had been trying to sell the remaining 49 percent stake of the Federal Government in ABL. At first, PC's attempts were blocked by the employees, who held 51 percent share in the bank. Subsequently, the three buyers who had bought nearly 40 percent of the employees' shares again stalled PC's attempts.

Eventually, PC handed over the task to the SBP. After due diligence, SBP in July 2003 invited Expressions of Interests for purchase of ABL from all the Commercial Banks, DFIs, Investment Banks, and Leasing Companies. The highest bid was received from the consortium of Ibrahim leasing and Ibrahim Group. On August 20, 2004, the management of ABL was formally handed over to the consortium.

ICP: The Privatization Commission recommended the privatization of ICP in April 2003, and in March 2004, it appointed financial and legal advisors for the ICP privatization transaction. During the same year through an open competitive bidding process, various funds managed by ICP were amalgamated and taken over by ABAMCO Asset Management and PICIC.

NITL: The privatization of NITL is under process. 19 Statement of Qualifications (SOQs) from interested parties have been received and are under scrutiny.

IDBP: The Cabinet in, 2003, approved the proposal for corporatization and restructuring of IDBP which, *inter alia*, includes that sale and reconstruction of IDBP to be managed by SBP.

2.4 Consolidation of Financial Institutions

The liberalization of the financial sector during 1980s and 1990s resulted in mushroom growth of both banks and NBFIs, and by 2000, there were too many financial institutions in different categories, threatening not only their profitability but also their very existence. Consequently, SBP and SECP embarked upon the process of consolidation of the financial sector primarily by gradually raising the minimum paid-up capital requirements for financial institutions. For instance, for banks the requirement has now been raised to Rs 6 billion, which is to be achieved progressively by December 31, 2009.⁶ Several measures have been taken to help financial institutions to achieve the increased capital requirement. As discussed in the following section, SBP has liberalized branch licensing policy for banks to achieve optimal size. Moreover, in order to facilitate and encourage voluntary mergers among financial institutions tax incentive were provided and necessary amendments were made in the legal framework. Also, SBP issued guidelines on mergers and acquisitions for banks and the other financial institutions.

⁶ Vide BSD circular number 6, dated October 28, 2005.

As a result, of concerted efforts for the consolidation of the financial sector since 2000, thirty-seven mergers have been successfully carried out, involving some 80 entities. There are still a number of other banks, which are in the process of completing the formalities prescribed in the SBP guidelines for mergers. These mergers, subject to fulfillment of all legal requirements by the concerned financial institutions, are expected to be completed soon. **Table 2.1** gives detailed list of the mergers and acquisitions since 2000.

Table 2.1 List of Mergers and Acquisitions in the Financial Sector

Effective date	Commercial banks and DFIS
3-Jul-00	Merger of Bank of America into Union Bank
19-Oct-01	Amalgamation of SBFC & RDFC into SME Bank
31-Oct-01	Merger of NDFC into NBP
3-Nov-01	Acquisition of Gulf Commercial Bank (PICIC Commercial Bank) by PICIC as subsidiary
5-Nov-01	Acquisition of Prudential Commercial Bank by Saudi Pak Commercial Bank
1-Jan-02	Merger of Faysal Investment Bank into Faysal Bank
30-Apr-02	Merger of Societe Generale into Meezan Bank
2-Sep-02	Merger of Emirates International Bank into Union Bank
17-Oct-02	Acquisition of Platinum Commercial Bank by Khadim Ali Shah Bukhari & CO.
30-Nov-02	Merger of Standard Chartered Grindlays Bank into Standard Chartered Bank
8-May-03	Merger of KASB(non-securities Section)with KASB Bank (formerly Platinum Commercial Bank)
9-Jul-03	Merger of Mashreqbank & Crescent Investment Bank into Mashreqbank Pakistan Limited
3-Oct-03	Merger of NDLC and IFIC Bank with and into NDLC-IFIC Bank
31-Dec-03	Merger of KASB Leasing with KASB Bank
25-Mar-04	Merger of Bank of Ceylon-Pakistan Operations with and into Dawood Bank Limited
19-Apr-04	Merger of Credit-Agricole Indosuez-Pakistan Operations with NDLC-IFIC Bank
5-May-04	Merger of Trust Inv. Bank Ltd, Fidelity Inv. Bank Ltd., and Doha Bank with and into Trust Com.Bank Ltd
31-May-05	Merger of Ibrahim Leasing Limited with Allied Bank Limited
	<u>Investment Banks, Leasing Companies & Modarabas</u>
2000	Ibrahim Leasing merged with First Ibrahim Modaraba
1-Mar-01	Mercantile Leasing Co. merged into Universal Leasing Corporation Ltd.
1-Jul-01	Atlas Lease Limited merged into Atlas Investment Bank
1-Jul-01	Pakistan Industrial Leasing Corporation merged into Trust Investment Bank
14-Sep-01	First Providence Modaraba merged with Guardian Leasing Modaraba
2001	Ghandara Leasing Limited merged with Al-Zamin Leasing Modaraba
2001	Industrial Capital Modaraba - Management Changed to Dawood Group
23-Jun-05	First Hajveri Modaraba - Management Changed to First Fidelity Leasing Modaraba
1-Jul-02	First professional Modaraba with Al-Zamin Leasing Modaraba
1-Jul-02	First Crescent Modaraba into First Standard Inv. Bank Ltd (Formerly Al-Towfeek Investment Bank)
26-Aug-02	Second Prudential Modaraba merged with First Prudential Modaraba
26-Aug-02	Third Prudential Modaraba merged with First Prudential Modaraba
4-Mar-02	International Multi Leasing Limited into Capital Assets Leasing Corporation Limited
29-Mar-04	Industrial Capital Modaraba and First General Leasing Modaraba merged with and into Dawood Leasing Company Ltd. (renamed as Dawood Investment Bank Limited)
28-Apr-04	Al-Mal Corporation Limited, Modaraba Company of Modaraba Al-Mali and Modaraba Al-Tijarah, acquired by M/s. Jehangir Siddique
21-May-04	General Modaraba Services (pvt) Ltd. acquired by Mr. Muhammad Amin & Associates
26-May-04	Pacific Leasing Company, Paramount Leasing Ltd., & First Leasing Corporation Ltd., merged with and into First Standard Investment Bank Ltd (renamed as Crescent Investment Bank Ltd.)
9-Jan-05	First National Modaraba merged with First Paramount Modaraba

2.5 Liberalization of Branch Licensing Policy

Liberalized Branch Licensing Policy (BLP) introduced by the SBP in 2002 has played an important role in the growth of small and medium sized banks by increasing their outreach and asset base. The BLP effectively reconciles the divergent issues of stability, efficiency, and service to the society. It is flexible and liberal enough to allow the banks to independently make their branch housing decisions within a broad parameter of conditions. Under the BLP banks are required to submit their Annual Branch Expansion Plan, 30 days before the start of year. The plan lays down proposals for number of new branches to be opened in urban and rural areas and the number of branches the bank wishes to close down. The approval of the plan is linked to the bank's financial standings, and need of the system.

Banks have also been allowed to closedown any of their existing branches at banked and un-banked places provided that the area is not left without an alternate arrangement for provision of banking services to the local community. Further banks are now free to shift or relocate their banked area branches within the same city/town/villages and on countrywide basis except shifting of branches to five metropolitan cities which requires prior State Bank approval. The policy also specifies detailed criteria for opening, shifting and closure of permanent and temporary banking booths. BLP was further liberalized in 2004 to promote banks to go beyond the major cities; enhance reach of financial services to unserved/unbanked and underserved areas; expand ATM network through installation of both on-site as well as off-site ATMs and to increase the outreach of the banking services.

The impact of the liberal branch opening policy can be assessed by aggressive countrywide expansion of branch network by banks. As is evident from the **Table 2.2**; as of 31 December 2005, there were a total of 7,313 branches, compared to 6,874 branches as of 31st December 2003. During 2004 and 2005, a total of 542 branches were opened countrywide while 102 branches were closed down. Although five large banks still hold major share in branch network, i.e. around 80 percent, the expansion in the network by small and medium sized banks during the last few years has helped in reducing the absolute dominance of the big five. Furthermore, some banks are also venturing beyond the national boundaries, and have opened branches in countries such as Afghanistan, Sri Lanka, and Bahrain.

Table 2.2: Branches of the Banking Sector

As on	Total offices*	Total booths	Total branches	Branches		Booths		Total offices	
				opened	closed	opened	closed	opened	closed
31-12-2002	7,246	318	6,928	125	157	13	18	138	175
31-12-2003	7,068	194	6,874	116	170	19	143	135	313
31-12-2004	7,196	179	7,017	227	84	8	23	235	107
31-12-2005	7,494	181	7,313	315	18	15	14	330	32

* Office include both Branches & Booths

2.6 Regulation and Supervision

Prudential Regulations (PRs) serve as the ground rules and guidelines for the financial industry, these mostly pertain to capital adequacy, quality of assets, classification and provisioning of loan losses, liquidity requirements, risk concentration and management. PRs generally aimed at achieving a balance between the objectives of maintaining efficient, dynamic and competitive financial markets; and ensuring the continuing stability and integrity of the financial system. This balancing act required, on the one hand, that the regulating authority does not guarantee the future of any particular player in the financial system; and, on the other, that the failure of one player does not threaten systemic stability. The prudential policy framework is based on the premise that ultimate responsibility for the

prudent operation of the financial entity rests with the management and board of each institution. Hence, if an institution fails the presumption has to be that the management and board of the institution have failed.

Prudential framework thus, generally seeks to reduce the likelihood of failure, while not guaranteeing the nonexistence of such instances. These basically aim at preventing a system-wide failure or systemic risk by ensuring quality assurance of control systems and risk management practices.

Up until December 2, 2002 SBP was responsible for the regulating and monitoring both, the scheduled banks and the NBFIs, though SECP's responsibilities overlapped with that of SBP in number of aspects. The SECP Act 1997 which provided legal framework for the establishment of the SECP, to replace the Corporate Law Authority (CLA), clearly allocated the responsibility of regulating the NBFIs to SECP.⁷ The resulting ambiguity and regulatory overlap were creating problems in the smooth functioning of these institutions. Hence, SBP and SECP formed a joint taskforce which recommended that there should be a clear division of responsibilities between the two regulators. Consequently, SECP, which was initially concerned with the regulation of corporate sector and capital market, also started supervising NBFIs, except DFIs and HBFC, from December 2, 2002. In addition, SECP has also been entrusted with oversight of various external service providers to the corporate and financial sectors, including chartered accountants, credit rating agencies, corporate secretaries, brokers, surveyors etc. Moreover, the two regulators, SBP and SECP hold coordination meetings on quarterly basis to address concerns that are important for the development of financial sector as a whole and also to settle issues that arise across the different sub-sectors.

Globally, Core Principles (CPs) for Effective Banking Supervision have become the most important standards for prudential regulations and a vast majority of countries has endorsed the CPs for implementation. SBP on its part has also made concerted efforts to achieve full compliance of various international codes and standards. The SBP has also conducted a self-assessment exercise to evaluate the compliance with the CPs. This exercise affirmed that the bank is in compliance with most of the CPs. The Basel Committee on Banking Supervision (BCBS) finalized a new Capital Adequacy framework in June 2004, abreast with this development, SBP on 31st March 2005, has issued a road map for Basel II implementation.

In order to further improve its supervisory capabilities and formalize the banking-desk concept, the State Bank has developed a framework for institutional risk assessment known as IRAF. The new framework envisages a collaborative and seamless supervisory focus amongst the various supervisory departments within the SBP. Besides integrating the off-site (CAELS) and on-site (CAMELS) rating systems, Institutional Risk Assessment Framework (IRAF) more objectively assesses the compliance with laws, rules, regulations, procedures, and policies also by incorporating views of external stakeholders such as external auditors, rating agencies, etc.

2.6.1 Prudential Regulations for Banks and DFIs

SBP introduced Prudential Regulations in 1992 which covered various aspects of commercial banking operations. In October 2002, SBP introduces PRs for Microfinance Institutions (MFIs) which were specifically designed to cover the activities of the MFIs whose nature, activities are different from those of the commercial banks.

By 2003, it was becoming increasingly difficult to cover all of the diverse activities of banks under one set of regulations. As such, SBP issued separate PRs for different set of banking operations.

⁷ For details see SECP Act 1997 Part VI (20)f .

Initially, three set of PRs were issued covering: (1) Corporate/Commercial Banking, (2) Small and Medium Enterprises Financing, and (3) Consumer Financing, for compliance by January 1, 2004.

Similarly, with the increase in the financing needs of the rapidly developing agriculture sector, it was felt necessary to issue a separate set of PRs for Agriculture Financing to provide a broader regulatory framework to the banks/DFIs, within which banks/DFIs would be able to develop their own financing schemes/products for financing the agriculture sector. To this end separate prudential regulations for agriculture sector were issued on October 22, 2005.

The formulation of the PRs by the SBP is a collaborative process, wherein views of the stakeholder is given due weight. SBP also monitors the impact of the PRs on banks activities and readily amends or modifies these regulations in accordance with the emerging developments. Some amendments are also motivated by developments in the external financial regulations. SBP also ensures timely dissemination of these regulations; all regulations and amendments are readily available on its website.

Moreover, with an objective to modernize the Pakistan's financial sector laws, the Banking Laws Review Commission (BLRC) has been constituted by the Government of Pakistan. The BLRC has recommended a new banking Act that caters the requirements of modern banking. The Commission has finalized the Draft Banking Act 2006 and has been placed on the SBP website for comments and suggestions.

Prudential Regulations for Corporate and Commercial Banking

The PRs for corporate and commercial banking govern operations of the financial institutions in respect to their dealing with corporate entities. The PRs for Corporate/Commercial Banking cover five categories viz. Risk Management (R), Corporate Governance (G), Know Your Customer (KYC) and Anti-Money Laundering (AML) and Operations (O).

The regulations on Risk Management cover per party exposure limits of the bank/DFIs for fund-based and non-fund based facilities, limits for clean advances, investment in shares/TFCs, provisioning requirements for stuck-up assets, exposure to NBFCs and margin requirements. The regulations on Corporate Governance put in place exhaustive criteria for management and the Board of Directors to ensure good governance in all respective areas. Banks and DFIs are also required to follow 'Code of Corporate Governance' issued by the SECP as long as any provision thereof does not conflict with that of the Banking Companies Ordinance, 1962, PRs and the instructions or guidelines issued by SBP.

In line with the international best practices, and also to ensure transparency/prudence in banking transactions, KYC and AML regulations have been formulated keeping in view the heightened global efforts to prevent the possible use of the banking sector for money laundering, terrorist financing, white collar crime, etc. Regulations on Operations contain instructions with regard to window dressing, use of suspense accounts, foreign currency accounts, etc.

Prudential Regulations for Consumer Financing

Although commercial banks in Pakistan were, free to undertake consumer lending (except in housing till 1998) the volume of the consumer lending was relatively small. However changing macro-economic environment post 2001 resulted in an influx of liquidity, which forced banks to look for other than traditional avenues. As banks' exposure in consumer lending increased, it was felt that the existing regulations might not serve well to ensure prudence due to the peculiarities of consumer finance.

The PRs for consumer financing were thus formulated with the aim of strengthening risk-management processes of banks/DFIs through establishing comprehensive credit risk managements systems appropriate to their type, scope, sophistication, and scale of operations. As per PRs, the board of directors of banks and DFIs are required to establish policies, procedures and practices to: (a) define risks, (b) stipulate responsibilities, (c) specify security requirements, (d) design internal controls, and e) ensure their strict compliance.

Prudential Regulations for Agriculture Finance

Realizing the importance of the Agriculture sector for the country, SBP, over the time, had been sponsoring various agriculture credit schemes; however, with the expansion in the size of the agriculture sector, the financing needs of the sector had also grown manifold. While this provided significant new opportunities for banks, it also entailed considerable risks. Therefore, in order for the banks to effectively manage these risks, SBP in collaboration with all the major stakeholders especially the banks, designed PRs for the agriculture financing which came into effect from 22nd Oct 2005. Within this framework, banks can develop comprehensive agriculture financing schemes and introduce new and innovative financial products for agriculture sector in areas such as: farm development, credit for inputs, purchase of agriculture machinery, equipment, livestock and corporate farming, etc.

The banks are also encouraged to expand their agricultural finance portfolio in terms of geographical areas, types of financing, etc. to avoid the risks of concentration of credit. Another important aspect with regard to agricultural credit is the valuation of the security and assessment of cash flows. The valuation of security in agriculture financing is a complicated and specialized area for which banks need to either engage external expertise or impart sufficient training to the concerned staff. Similarly, estimation of cash flow for different crops in different geographical areas and adjustment of these cash flows for specific borrowers require trained credit officers. In this respect, banks are encouraged to designate suitable staff for this purpose, who are well qualified in this field and properly trained. The banks are also directed to put in place an appropriate management information system to monitor the quality of agriculture finance portfolio on a continuous basis and take appropriate decisions at the right times.

SBP is continuously working to ensure that its regulatory framework for banks (a) matches the changes taking place in the market, (b) remains conducive for the development of new financial products, and (c) helps banks to optimally utilize their resources for maximizing the benefits to the banking sector and different segments of the society. Through the new regulatory framework, SBP is aiming at least 3 million farm households out of total 6 million to have access to institutional agriculture credit by 2010.

Prudential Regulations for Small and Medium Enterprise (SME) ⁸Financing

Importance of the SME sector in overall economic progress cannot be overemphasized. In Pakistan too, though its contribution to GDP is significant, it is still below potential. Many factors have been identified that constrain this sector which includes shortage of capital and skilled labor, poor management and lack of proper documentation of the business activity. However, lack of financing facilities from formal financial system has been identified as one of the leading constraints; which, in fact, is manifestation of the other constraints especially the lack of documentation.

⁸ SMED defines small enterprise as those which employ 10-35 individuals and have business assets in the range of Rs 2-20 million. Medium enterprises are those which employ 36-99 individuals and have business assets in the range of Rs 20-40 million.

To encourage banks to lend to SMEs, SBP has sought to provide an enabling environment through supportive regulatory and legal framework. One of the limitations in this regard was that the PRs governing the SME finance were the same as those for the regular corporate finance. Given the inherent weaknesses of the SMEs, this regulatory framework was not conducive for promotion of the SME finance. Therefore, in order to facilitate SME finance, SBP came up with a new set of PRs after extensive consultations with the SME associations, Small and Medium Enterprises Development Authority, Local and Provincial Governments. These regulations have come in force from January 2004. With the enforcement of the new regulations, a number of constraints in SME financing have been removed. This has allowed banks to disburse loans to SME without fear of violating the prudential norms.

The main features of PRs for the SME are:

- Shift from collateral based lending to cash flow based lending
- Maximum limit of financing against personal guarantees increased to Rs 3 million for SMEs. This is greater than that allowed for consumer as well as corporate financing.
- The requirement for banks/DFIs to obtain copy of accounts has been relaxed for exposures of up to Rs 10 million.

Moreover, on May 23, 2006, the Ministry of Industries, Production & Special Initiatives, Government of Pakistan announced the Pakistan's first SME Policy.⁹ The policy was formulated through a participatory process by involving representatives from private sector bodies, chambers of commerce and industries, trade associations, public sector organizations, and more than 1000 SMEs operating across the country. The objective of SME Policy was to provide a short and a medium to long-term policy framework with an implementation mechanism for achieving higher economic growth based on SME led private sector development. The policy suggested concurrent and specific measures in all possible areas of SME development including business environment, human resource development, access to finance and support for technological up-gradation and marketing, etc. Of these, SME lack of access to bank finance has been identified as a key factor in impeding the SME growth in Pakistan. To address this, the policy has made a few recommendations that deal mostly with the increased role of SBP, banking ombudsman and the regulatory procedures in the financial sector (see **Box 2.2**).

Box 2.2: SME Policy – Recommendations Regarding Access to Bank Finance in SME Policy 2006

In order to improve SME access of bank finance, following recommendations have been made in the SME Policy 2006:

1. Incorporating the SME financing in the Annual Credit Plan of the SBP.
2. In line with the SME credit demand and supply data, the Prudential Regulations for SME finance should be reviewed periodically.
3. Establishment of Credit Guarantee and Credit Insurance agencies, operating in line with sound international practices, to provide incentives and risk cover for banks in financing SMEs.
4. Support to financial institutions in designing and launching industry-based programs or lending schemes.
5. Capacity building of the Credit Information Bureau to report positive and negative data and sharing of SME financing data by the SBP.
6. Improvement in the regulatory procedures and fiscal incentives for Venture Capital Companies.
7. Introduction of Bankruptcy Laws with dedicated and effective judicial process.
8. Expansion in the role of Banking Ombudsman to include redressal process for SME complaints.
9. Awareness and promotion of options for formal financing and good accounting practices amongst SMEs.
10. Promotion of Islamic mode of financing for SMEs.

⁹ SME Policy 2006, 'SME Led Economic Growth – Creating Jobs and Reducing Poverty', Ministry of Industries, Production & Special Initiatives, Government of Pakistan.

2.6.2 Prudential Regulations for Non-Bank Finance Companies

Prior to 2002, the Non-bank financial institutions (NBFIs) were comprised of a variety of specialized institutions undertaking various types of businesses including leasing, investment banking, housing finance, etc. However, this structure had resulted in excessive fragmentation of the financial sector. In order to remove this fragmentation and also to improve the soundness of institutions, the concept of universal Non-bank Finance Company-NBFC was introduced. The prime objective of the NBFC regime was not only to consolidate the NBFIs sector by allowing multiple business activities to the institutions; but also to provide customers a wide variety of financial products through one-window operation.

Soon after taking up the responsibility of regulating NBFCs, the SECP during April 2003, issued the detailed rules for the establishment and regulation of NBFCs in the country. These rules clearly identified the functions of each of the various types of NBFCs including, leasing, investment banks, housing finance companies, venture capital companies and discount houses. Regarding the establishment, the rules set eligibility conditions especially pertaining to the sponsors, directors, chief executive and chairman of the board of directors of NBFCs. In addition, the mechanism of obtaining the permission to form NBFC and the conditions for the grant of license was also guided in the rules. As far as the operational rules were concerned, the NBFCs were required to maintain proper books of account and other such records, and also to ensure that the accounts are prepared in line with the International Accounting Standards-IAS. Moreover, issues like opening of branches, insurance coverage, prevention, and protection from exchange rate fluctuation risk, mechanism and conditions for issuance of certificate of investment or certificates of deposits were also addressed.

With regard to the PRs even after transfer of the responsibility of regulating the NBFCs from the SBP to SECP, the PRs issued by the SBP for NBFIs continued to serve the purpose of providing operational guidelines. However, during 2004, SECP issued PRs for NBFC¹⁰ and revised the existing PRs for Modarabas.¹¹

The basic objective behind the issuance of PRs for NBFCs was to introduce a uniform set of regulations for the all NBFCs in order to improve their effective risk management capabilities and to promote corporate governance in the non-bank financial sector. These Regulations were divided in three main parts. Part II of the Regulations pertained to the corporate and individual borrowers. The regulations have clearly set a limit on NBFCs on a single borrower with respect to the equity of these institutions by placing an upper limit on both total (funded) and non-funded exposure. Further, the regulations have also set a minimum eligibility criterion for the borrowers in terms of borrowers' own equity and other financial indicators including debt to equity and the current ratio. Moreover, the minimum margin requirements against different kinds of facilities and associated securities have been laid out in detail. The regulations also specified the kinds of exposure which the NBFCs have been prohibited from, such as investment in listed TFCs or shares and financing facilities for speculative purposes.

Part III of the regulations has set limits on the liabilities and contingent liabilities of the NBFCs. In addition, the upper limit was set on the building up of reserves fund to be maintained by these companies. Further, the issues like return on deposits and deposit insurance were also covered in this part. An important feature of the regulations has been the classification and provisioning of the non-performing loans for short term as well as for medium and long term financing facilities. For the

¹⁰ SECP Circular No. 02: Prudential regulations for Non-Bank Finance Companies dated January 21, 2004.

¹¹ SECP Circular No. 04: Prudential regulations for Modarabas dated January 28, 2004

classification and provisioning purposes, a time-based criterion has been laid out in the regulations. Further a uniform criteria was set to determine the realizable value of mortgaged assets. Finally in the Part IV of the regulations, guidelines for conducting internal audits, submission of statistical returns, abiding by a code of conduct, ensuring the prevention of money laundering activities were laid down.

In the PRs for modarabas, a special emphasis was given to ensuring the transparency in the operations and performance of the sector. Guidelines included matters like appointment of special auditors, appointment of chief executive, distribution of profits and holding of the Annual Review Meeting. SECP is also modifying these regulations in accordance with new developments.

2.6.3 Prudential Regulations for Microfinance Banks

Microfinance refers to the activity of provision of financial services to clients who are excluded from the traditional financial system on account of their lower economic status. Microfinance targets this group and provides improved facilities for savings and investment. During 1980s and 1990s, micro credit programs throughout the world showed that these can be an important tool for poverty alleviation.

Realizing the growing importance of microfinance, in Pakistan, a microfinance policy has been designed in June 2000. The policy emphasizes sustainable microfinance and encourages private sector entry into microfinance to ensure innovations and flexibility. Ministry of Finance, SBP and the Asian Development Bank (ADB) expeditiously gave effect to the policy with an innovative Microfinance Sector Development Program that combines the development initiative of a range of institutions both public and private.

In order to facilitate transformation of the microfinance institutions in the non-government sector to proper micro finance banks and to ensure orderly development of the microfinance sector, supervisory and regulatory arrangements were instituted.¹² Licensing procedures, supervisory regulations, and disclosure standards were simplified. SBP established a Microfinance Support Division to provide supervisory oversight and development support.

SBP has issued PRs for Microfinance Banks (MFBs) and Microfinance Institutions (MFIs), which are licensed by it. These regulations provided guidelines regarding paid-up capital, cash reserve requirements, and maximum exposure limit, etc. Following are the salient features of PRs for Microfinance:

- MFB or MFI shall maintain equity equivalent to at least 15 percent of its risk-weighted assets.
- MFB or MFI shall maintain a cash reserve equivalent to not less than 5 percent of its time and demand liabilities in a current account opened with the SBP or its agent. In addition to cash reserve, it shall also maintain liquidity equivalent to at least 10 percent of its time and demand liabilities in the form of liquid assets, such as cash, gold and unencumbered approved securities.
- MFB or MFI shall not extend loans exceeding Rs 100, 000 to a single borrower.
- The outstanding principal of loans and advances, payments against which are overdue for 30 days or more, shall be classified as NPLs.

Moreover, to further expand the activities of microfinance banks, few amendments have been made in Microfinance ordinance through Finance Bill of July 2006. The major changes include (1) change in the definition of poor; (2) increase in powers of SBP to remove directors or other managerial persons

¹² The MFIs Ordinance 2001 was promulgated by the Government of Pakistan to support the development of the microfinance sector by introducing the concept of microfinance banks.

from offices, supersede Board of Directors, and prosecution of directors, chief executive officers or other officers; (3) granting permission for establishing regional microfinance bank;¹³ and (4) allowing MFBs to invest surplus funds in marketable securities etc.

2.6.4 Regulations for Insurance Sector

At the time of independence, Pakistan's insurance sector was regulated under the Insurance Act of 1938. The government in 1948 established the Department of Insurance within the domain of Ministry of Commerce (MOC) to supervise the affairs of insurance industry and to safeguard the interests of the insured. The Act was amended in 1958 for the first time keeping in view the requirements of domestic market and to have effective control over the insurance premium rates. Since then, various amendments have been made in the Act. The Department of Insurance further created the Controller of Insurance for the same purpose that was abolished in 2000 after the conversion of Corporate Law Authority (CLA) in to SECP, wherein a new division was formed in SECP to look after the affairs of the insurance industry.

With the establishment of SECP and the promulgation of insurance ordinance 2000,¹⁴ the much-awaited insurance reforms were introduced. The main thrust of insurance reforms was to improve the financial standards and efficiency of the insurance companies, which in turn enables the insurance industry to mobilize long-term resources. Moreover, development of life insurance sector was to improve the individual welfare by extending social security coverage, while general insurance was to help minimize the business risks. In 2002, insurance rules and regulation were separately issued first by ministry of commerce and then by SECP. These comprehensive rules were aimed at complementing insurance ordinance 2000 and building extensive regulatory framework of insurance industry, which had previously no policy direction. A comprehensive guideline for market conduct was also developed. In order to provide a level playing field, a market code of conduct was also established.

The new ordinance and regulations sets higher capitalization and solvency standards, introduces sound and prudent management, lays down market conduct rules for safeguarding the interests of policy holders, and provides comprehensive adjudicatory system. Specifically, the salient features of the Ordinance include phased increase in the paid up capital of life insurance to Rs 100 million and Rs 80 million for non-life insurance companies by December 31, 2004. The solvency margin was also increased from Rs. 500,000 in the Insurance Act 1938 to a minimum of Rs. 5 million over liabilities or assets of an individual non-life company. In addition, every life insurance company was to keep at least Rs. 10 million as statutory deposit with the SBP compared to Rs.3.5 million previously. A number of venues were made available to the policyholders to redress their complaints through the establishment of a tribunal, creation of a commission, office of Insurance Ombudsman and small disputes resolution committee. The requirement for registration of insurance companies, insurance broker, and grant of license to surveyor and loss adjustor were also laid down. Similarly, accounting and reporting standards were also provided to the insurance companies.

The two major government-owned insurance companies – Pakistan Insurance Corporation (now Pakistan Reinsurance Company) and National Insurance Corporation (now National Insurance Company) – have been corporatized as an essential step towards their future privatization. The rule of compulsory reinsurance from Pakistan Reinsurance Company has been abolished. Furthermore, in order to broaden the scope of insurance sector to Islamic mode, Ministry of Commerce issued comprehensive rules and regulation for establishment of Takaful Insurance in 2005.

¹³ Regional MF bank means that one MF bank can be established by joining three to four adjacent districts and the capital requirement for the bank is Rs 150 million.

¹⁴ The ordinance replaced the Insurance Act of 1938.

While the comprehensive insurance regulatory framework has been established in the last five years, however, the oversight arrangement over the insurance industry remains unclear. SECP and MOC have issued their own rules while SECP neither have significant enforcement powers nor have the power to revoke licenses without consultation with MOC.

2.7 Developments in Islamic Banking

As a part of the Islamization process, banks in Pakistan had been offering interest free instruments since 1984 under the prevalent legal and regulatory framework. However, the procedure adopted by the banks to implement a banking system based on 'mark-up' was declared un-Islamic by the Federal Shariat Court (FSC) in November 1991. On December 23, 1999, the Supreme Court of Pakistan endorsed this verdict, also ordered entire existing financial system to be made *Shariah* compliant. It is in this backdrop that the Commission for Transformation of Financial System (CTFS) was set up as a division in SBP for the development of financial instruments, and standardized documents to prepare model arrangements and financial instruments for Islamic banking system. The division established in 2001 was transformed into full-fledged department in 2003.¹⁵ This department is presently overseeing licensing, monitoring, accounting and *Shariah* Standards for Islamic banking.

While SBP had already issued detailed criteria in 2001 for setting up of Scheduled Islamic Commercial banks in the private sector based on Sharia principles, in 2003 it further laid down regulations for setting up subsidiaries of commercial banks for Islamic banking and stand-alone branches for Islamic banking.¹⁶

To ensure level playing field, uniform *Shariah* regulatory standards were necessary. For this purpose, the SBP has provided minimum *Shariah* Regulatory Standards¹⁷ and new "Fit and Proper" criterion¹⁸ for selection of the *Shariah* Advisor. The *Shariah* Advisor of the commercial banks has to be approved by the Central *Shariah* Board at SBP. The Central *Shariah* Board is also providing advisory services to resolve *fiqh* issues. The process is consultative as all commercial banks are participants of this advisory service and hold regular meetings with *Shariah* boards of Islamic banks.

Pakistan's *Shariah* Board has also reviewed and approved the essentials of Islamic modes of financing; (*Murabaha, Musawamah, Ijarah, Salam, Musharaka, Modaraba* and *Istisna*) and recommended that the same may be circulated to the banks conducting Islamic banking business in Pakistan as guidelines that would form the basis for PRs on Islamic banking in due course. This however does not preclude the possibility of developing new modes or instruments of financing, modifications or variants of the modes, provided they are *Shariah* compliant.

As with rest of the banking industry, the SBP is monitoring the Islamic Banking Industry closely to ensure their sustainability. In this regard, the SBP has prepared special *Shariah* Compliance Inspection Manual in coordination with Ford Rhodes Sidat Hyder to facilitate *Shariah* compliance Inspection to be conducted by Banking Inspection Department (BID). For accounting standards, the State Bank has provided full support and assistance to Institute of Chartered Accountant's committee responsible for the development of accounting standards for Islamic mode of finance consistent with international best practices.

Realizing that lack of awareness and education about the concepts of Islamic finance is one of the major hindrances in moving to Islamic banking operations, SBP has campaigned for raising

¹⁵ IBD Circular No.1, dated April 23, 2004 provides all the contact details of Islamic Banking Department.

¹⁶ BPD Circular No.1, dated January 1, 2003.

¹⁷ IBD Circular No.3, dated April 29, 2004.

¹⁸ IBD Circular No.4, dated October 26, 2004.

awareness among the stakeholders and for the capacity building in this sector. The most significant of these programs was a series of lectures, organized through Video Conference in collaboration with Islamic Development Bank for SBP staff, Islamic Scholars, Islamic bankers and students etc. Moreover presentations on Islamic banking concept have been made to all Departments of SBP and SBP(BSC) offices, prospective banks, Chambers of Commerce, Business Houses, etc. to increase the awareness of key stakeholders in finance and business sector.

2.8 Corporate Governance

Corporate governance is a set of rules that ensures balance between the rights and interests of multiple stakeholders (i.e., management, the corporation, shareholders, creditors, employees and other stakeholders). Sir Adrian Cadbury published a code of practice (the "Cadbury Code") in December 1992 which defined the responsibilities of Chief Executives and Board Members of listed companies to demonstrate to their shareholders effective, efficient and honest business practices, safeguarding shareholders investments and company assets.¹⁹ In 1999, the Internal Control Working Party of the Institute of Chartered Accountants, England, and Wales (Turnbull Committee) issued the Guidance for Directors on the Combined Code.

East Asian financial crisis brought corporate governance to the center of the international development agenda. In addition, the rapid changes arising from privatization, deregulation and technological advances further contributed to increased scrutiny of corporate behavior, management, and policies due to enhanced risks associated with financial liberalization. Governance of the banking sector received particular attention due to the sector's enormous influence on the economy and its potential to trigger systemic crisis. The recent high-profile corporate failures (Enron, Worldcom etc) reaffirm that the underlying principles of fairness, transparency, accountability, and responsibility reflect minimum standards necessary to provide legitimacy to the corporate sector, reduce financial crisis vulnerability, and broaden and deepen access to capital.

Given the importance of the corporate governance both the SBP and SECP have made sincere efforts to strengthen the framework of good corporate governance in their respective areas. In this regard, SECP in 2002 issued the Code of Corporate Governance for Corporates (for listed companies) which were also applicable on the Non-Bank Finance Companies (NBFCs). SBP on its part also issued a 'Handbook of Corporate Governance' in 2003, containing instructions and guidelines to the banks for implementation of the corporate governance standards. These guidelines are mostly drawn from the recommendations made by the Basel Committee on corporate governance and cover four important areas; namely, Board of Directors, Management, Financial Disclosure, and Auditors.

The guidelines with regard to the Board of Directors (BOD) and Management set criteria for nominations/appointment of an individual as a member of the board, chief executive officer or senior executive. The potential nominee/appointee for the BOD must have not less than 20 per cent shares and should be working in a management capacity for the bank. Anyone holding at least 10 per cent shares can also become Director subject to SBP's approval. Prior SBP clearance is required in either case.

Furthermore, the potential candidate for BOD, Chief Executive Officer (CEO), and senior executives of the bank has to qualify Fit & Proper Test (FPT). FPT for the directors and the CEO evaluates the individual on five criteria namely (i) Integrity, Honesty & Reputation; (ii) Experience & Management; (iii) Track Record; (iv) Solvency & Financial integrity; and (v) Conflict of interest.

¹⁹ The Cadbury Report, titled *Financial Aspects of Corporate Governance*, is a report by Adrian Cadbury that sets out recommendations on the arrangement of company boards and accounting systems to mitigate corporate governance risks and failures.

The FPT for key executives is applicable on the functional heads of Accounts, Finance, Internal Audit, Credit, Treasury, Risk Management, Human Resource, Operations, and Compliance. The Criteria in this regard is on similar lines as that of Director/CEO with appropriate variations, however SBP's approval is not required in case of the appointment of the management. The guidelines pertaining to BOD further clearly lays down the responsibilities of the BOD and sets limit to their powers.

Under financial disclosure, financial entities are directed to furnish an audited balance sheet and profit and loss accounts to the SBP at the end of the calendar year. Guidelines require report on the company's state of the affairs, dividend distribution, and details of any reserve accounts. These further require disclosure of any material changes and commitments affecting the financial position of the company and of any adverse remarks made in the auditor's report, etc.

Efficient audit plays key role in identifying the problem areas to avoid a major collapse. Realizing the importance of audit the handbook of corporate governance lays down detailed guidelines in this regard as well. The auditors have to be appointed at the annual general meeting for a period of one year. All banking companies are required to appoint auditors from the panel of auditors maintained by the SBP. This panel consists of auditors who satisfy certain minimum criteria based on their qualification and experience. The statements of the account; balance sheet and profit and loss account prepared by the company have to be audited by the banking company's auditor. Furthermore, the auditor is required to furnish an audit report stating the authenticity of the information and extent of cooperation provided by the banking company while conducting the company audit. These include verification of the sources of funds generated and investments made by the banking company during the audit period.

Money laundering gained increasing importance following the events of 9/11, since it was realized that this was the key method employed by terrorist to finance their activities. More generally, money laundering refers to any activity through which the origin of illicit funds is disguised. As part of the global drive and to ensure more transparency in the financial market, SECP set up an Anti-Money Laundering (AML) unit in January, 2003 in collaboration with the World Bank for reviewing existing laws and formulating new ones. SBP, as the regulatory and supervisory authority of banks and DFIs also initiated measures to prevent the use of banking channels for money laundering purposes. These measures include issuance of PRs, initiating promulgation of AML law and participation in regional efforts against Money Laundering. In this regard, SBP revised its guidelines regarding customer information referred to as "Know Your Customer (KYC)" in March 2003.

In order to keep the activities of banks in compliance with the relevant laws and regulations, especially with regard to KYC, and other AML rules and regulations, SBP through BPD Circular No. 16 of 2003 directed banks and DFIs to appoint or designate a suitably qualified and experienced person as compliance officer (CO) on a countrywide basis, who in turn will appoint COs down the line. The COs will primarily be responsible for ensuring his institution's effective compliance relating to (a) guidelines for KYC; (b) AML laws and regulations; (c) timely submission of accurate data, and returns to regulator and other agencies; and (d) monitor and report suspicious transactions to president or CEO of the institution and other related agencies.

2.9 Payment System

Payment system covers the instruments facilitating exchange of assets and services between economic units, the institutional and organizational structure, the operational procedures, and the communication network. A robust payment and settlement system is the backbone of a stable financial infrastructure and plays a vital role in containing systemic risk.

Following the financial sector reforms that had targeted reducing financial risks and increasing reliability and speed, it was important to upgrade the payment system to keep pace with the increase in both the volume and the value of transactions.

For this purpose, Electronic Clearing House (ECH) taskforce was set up in 2001 for implementing electronic clearing and e-banking in Pakistan. The ECH taskforce decided that all banks should join an ATM network and the two networks should be interlinked to provide inter-bank ATM transactions to the customers. However the electronic banking and electronic clearing were not considered feasible, due to the absence of the main requisites for such transactions, i.e. the use of digital signatures with attributes of authentication and non-repudiation and the absence of the legal framework to support digital transactions. To overcome these constraints, the Electronic Transaction Ordinance was passed in late 2002 and soon after National Institutional Facilitation Technologies (NIFT) private Ltd. took the initiative to establish the Certificate Authority in Pakistan.²⁰

SBP is now in the process of introducing a Real-Time Gross Settlement (RTGS) system for large value payments in the inter-bank market whereby banks holding accounts at SBP would be able to operate their accounts in real time from their own premises, via computer network between SBP and the participating banks. In this respect, a complete on-line, real time banking solution Globus is under implementation which will provide a strong back end system for SBP's banking operations.

Under the new arrangements, banks would be able to settle their transactions affecting their accounts at SBP (e.g. inter-bank lending/borrowing) immediately after the terms of the transaction have been agreed and executed between the banks. In contrast existing system is based on manual book keeping procedures, which is not only time consuming and inefficient but also prone to various types of risk affecting the overall efficacy of the banking system. Going forward net balances from the NIFT would also be directly settled in the RTGS.

To expedite international transactions, SBP became a member of Society of Worldwide Inter-bank Financial Telecommunications (SWIFT) in June 2000, while all other banks were required to become members of SWIFT by the end of FY01. Adoption of electronic clearing SWIFT and RTGS will enhance the efficiency and reduce settlement risks considerably. For the details on development in the Payment Systems see **Box 2.3**.

2.10 Conclusion

Pakistan's financial sector in pre-reform period was marred with both physical and institutional weaknesses. Efforts were therefore required not only to remove these weaknesses but also to adopt a forward-looking strategy so that challenges arising from ever evolving financial innovations could be confronted efficiently.

In this regard, efforts were made to provide an enabling environment to the financial sector. This included improving the legal infrastructure, regulatory and supervisory framework, and increasing institutional capacity. To reduce the risks inherent in the financial sector, measures were taken to mitigate them by adopting international best practices; strengthening capital base, institutionalizing corporate governance and enhancing the capabilities of the Credit Information Bureau. To increase the speed and reliability of the financial sector, payment system is also being upgraded.

²⁰ NIFT was incorporated in September 1995 as joint venture between a consortium of six banks and entrepreneurs from the private sector. All commercial banks head offices and all of branches in major cities avail NIFT's services. As of June 2005, 43 commercial banks and their 3000 branches in 9 major cities utilize NIFT's services.

While the financial environment has now become much more reliable and conducive for business, as financial system grows and becomes more sophisticated the need to keep up the pace of improvements in financial infrastructure cannot be overstated.

Box 2.3: Developments in the Payment Systems

As a part of the financial sector reforms, the SBP in collaboration with the private sector has taken various steps towards the improvement of payment and settlement system in the country. Consequently, the past few years have seen a tremendous development in the payment system profile in terms of the quantum of electronic based transactions through plastic money and online banking.

In specific terms, during 2001-05, 2943 more branches have been linked to the online network (see **Table B.2.2.1**). As a result, the total number of online branches increased to 3265 comprising almost half the entire bank branch network in the country (see **Figure B.2.2.1**). It is therefore expected, that in coming years the volume of electronic transactions would increase significantly which at present constitute only 18 percent of the total banking sector transactions.

Customer Transactions

Within the e-banking transactions, 57 percent of the transactions are conducted through ATMs. This was mainly an outcome of the increase in number of ATMs, ATM card holders, and the inter connectivity of the two ATM switch providers, i.e., 1 Link and M-Net. Specifically, in the preceding five years, banks installed 1011 new ATMs across the country, increasing the total to 1217 machines as of at end CY05. Another important development with reference to ATM is the added facility of utility bill payments and fund transfers that now can also be accomplished through the ATMs.

In addition to ATM cards, the number of credit cards has also increased tremendously in preceding five years (see **Figure B.2.2.2**). From just 217 thousand credit cards during 2000, the number of credit cards has increased to almost 1.5 million at end March 2006 constituting 32 percent of the total plastic money in the system. Moreover, the interchangeability of different cards, i.e. ATM, debit and credit cards, was also introduced during 2001-2005. In particular, a number of ATM cards can be used as debit cards; and credit cards can also be used as ATM cards. Further one bank has also issued chip-based credit card which is globally known to be the most secure way of conducting the credit card transaction.

Automation of Clearing and Settlement System

In 1997, the National Institutional Facilitation Technology (NIFT) Pvt. Ltd. was established with an objective to automate the cheque clearing system. As of June 2005, 43 commercial banks and their 3000 branches in 9 major cities utilize NIFT's services for supporting cash collection, payments by cheque, and payments through internet. To facilitate the accounts' settlement, NIFT provides the net balance of the banks' inter bank transactions by the end of the day; which is later settled in respective banks' account maintained with the SBP. Further, NIFT also provides services to the utility companies and has already automated three of the largest utility companies in Pakistan. The services it provides include: (1) processing data for updating consumers' record; and (2) facilitating the processing of cash payments made at bank branches and post offices.

Table B.2.3.1: Statistics on Automation

Numbers; ATM cards in 000

	CY00	CY01	CY02	CY03	CY04	CY05	Mar 06
Online branches	322	450	777	1,581	2,475	3,265	3,424
ATMs	206	259	399	552	786	1,217	1,363
ATM cards	-	-	-	1,161	1,875	2,693	3,000

Figure B.2.3.1: Online Bank Branches

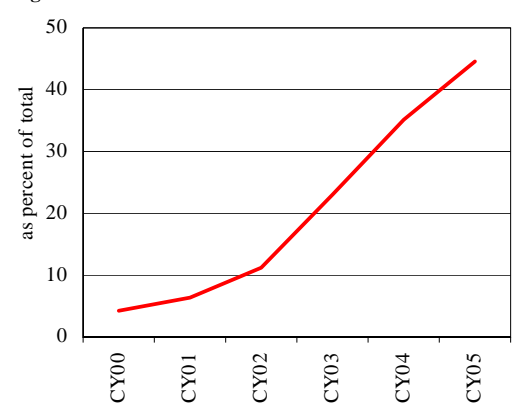
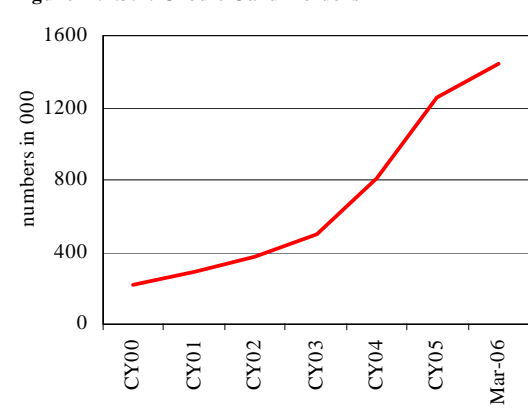


Figure B.2.3.2: Credit Card Holders



Moreover, to prevent the settlement failures in the wholesale inter bank transactions, the SBP will soon be implementing the Real Time Gross Settlement-RTGS system. In RTGS, the payment information and settlement take place simultaneously on gross basis thereby overcoming the liquidity and settlement risks associated with inter bank transactions.

Further to ensure a smooth and risk free settlement and transfer of stocks, a computerized book entry system, the Central Depository Company (CDC) was incorporated in 1993 to operate and manage the Central Depository System (CDS). Later, during 2001, a National Clearing and Settlement System (NCSS) has become operational through which investors can automatically settle their position in CDS. In fact, the NCSS transmits the net position of different account holders to CDC where the final settlement of the equity transfers is done.