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Impact of Financial Liberalisation and Deregulation on Banking Sector in Pakistan

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ABSTRACT

The study analyses market perception about the performance of Pakistani commercial banks due to financial liberalisation and deregulation measures taken by the central bank over the last two decades. For this purpose, it uses Survey approach. To augment the results of Survey Based Approach, it employs Distribution Free Approach to measure relative cost inefficiencies of commercial banks. Out of 35 commercial banks, 15 banks have been chosen for analysis purpose.

Key banking reforms remain helpful in correcting flaws in the banking sector of Pakistan. In particular, privatisation of banks, the deregulation and institutional strengthening measures and switching towards market-based monetary and credit management remain helpful in correcting the prevailing flaws. The cost inefficiency scores of banks also indicate that the efficiency of Pakistani banks have improved during 1990 to 2006.

As regards group-wise efficiency estimates, foreign banks are found to be more efficient, followed by private banks, nationalised commercial banks, and privatised banks. The relative high cost inefficiency of privatised banks is most probably due to having remained under state owned structure during most of the period of the study. The financial liberalisation and the resultant competitive environment might be the key factors behind improvements in efficacy of banks.

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1. INTRODUCTION

Banking sector plays a vital role in an economy as it facilitates in payment system, mobilises savings, and allocates funds for the most productive uses. According to Jaffe and Levonian (2001) and Wachtel (2001), the role of banks is important as they allocate funds for the highest value use, limit the risks and costs, and generate economic activities. Similarly, the study by Patrick (1967) and Porter (1967) find that an efficient financial system can intermediate savers and borrowers to mobilise high level of bidirectional causality between financial development and economic growth. In view of its significance in an economy, economic managers always endeavour to devise such policies which could help provide level-playing field for banks, thereby enabling them to operate on sound, efficient, and competitive footings.

Historically, the banking sector of Pakistan has been playing an important role in the economic development of the country. However, the financial landscape of the country changed significantly in mid 1970s with nationalisation of Pakistani commercial banks. Besides nationalisation of banks, various digressive steps were also taken, which includes commencement of subsidised credit schemes, introduction of a complex system of credit ceilings, and the imposition of controls on interest rates.[1] Government also started interfering in the business affairs of banks. In particular, the nationalised banks were issued instructions to accommodate and meet firstly the borrowing needs of government and its institutions. As regards the borrowing needs of the private sector (which is supposed to be the engine of economic growth), it was either ignored or met rarely.

As a corollary of the above policy changes, the efficiency of banks affected severely. By the end of 1980s, the banking sector in Pakistan had become hardly conducive to meet adequately the growing financial needs of the country. According to Hardy (2003), the role of state-owned banks, government sponsored schemes for specific sectors, high domestic borrowing by the government, and an administratively controlled yield structure, contributed to financial repression in Pakistan. To reduce the adverse impact of resultant financial repression, the recipe of financial sector reforms was essential to be

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[1]Haque and Kardar (1995).

implemented.[2] Therefore, to adequately respond to the factors behind poor performance of financial sector, especially the banking sector, a comprehensive reform programme was initiated in early 1990s. Especially, the measures pertaining to financial liberalisation and deregulation were particularly important for banking sector due to having far reaching implications for banks.

The first round of reforms has already been implemented while the implementation of second round of the reforms is still going on. Both, the government and the central bank, have claimed for positive outcomes of the said reform programme.[3] However, it is worthwhile to mention that despite claims of successes of banking sector reforms on different fronts, the efficacy of banks is generally criticised due to low returns on deposits, costly access to banking services, skewed distribution of credit (which is tilted more towards government and textile sectors), high magnitude of non-performing loans, poor recovery of loans, and banks' overexposure in risky and speculative transactions which make them vulnerable to shocks, thereby affecting their balance sheets from liability as well as asset sides. Such kind of criticism necessitates immediate attention of policy-makers as the poor performance of banks may have negative implications for overall economy. In particular, we need to know whether the implementation of banking sector reforms, predominantly the liberalisation and deregulation of controls on banking practices, really help improve efficiency and performance of banks.

With regard to the impact of banking sector reforms, the empirical research work provides mixed evidence on need, sequencing, and implementation of reforms. Some studies favour such reform programmes while others are totally against it. For instance, Lewis (1950) and Gerschenkron (1962) are in favour of government participation in financial markets and ownership of the banks on the back of commanding heights approach.[4] More specifically, their development theories emphasise that the government ownership can help channelise savings for long-term projects of strategic interest. Tulkens (1993), Altunbus, *et al*. (2000), and Denizer, *et al*. (2000) also find that change in ownership structure of firms has a limited impact on their efficiency level. Kumbhakar and Sarkar (2003) come across that deregulation does not yield efficiency gains in general, though private banks may increase their profitability by expanding output. Similarly, a few studies carried out for US banks suggest that liberalisation of deposit rates has little or no effect [e.g., Bauer, Berger, and Humphrey (1993); Elyasiani and Mehdian (1995)]. As against aforesaid findings, the studies by Galal, *et al*. (1994), and La Porta, *et al*. (1997) are in

[2]McKinnon (1973) and Shaw (1973) suggest that financial liberalisation results into financial deepening besides promoting economic growth.

[3]Financial Sector Assessment reports of State Bank of Pakistan.

[4]The phrase "Commanding Heights" was first used by Vladimir Lenin in 1922 which meant that the state would control the most important elements of the economy. Later on, his successor, Joseph Stalin, extended that notion to all elements, with the total eradication of all private markets.

support of privatisation, as the functioning of banks under market mechanism help improve their performance. Similarly, Demetriades and Luintel (1997), Denizer, *et al*. (1998) also favour for the removal of policies causing repression, as it may restrict market forces to play their due role in achieving economic growth at sustainable level. Despite these differences, a careful comparison of existing literature reveals that functioning of banks under a state controlled mechanism and digressive policies prove costly, as it may lead to financial repression.

Despite significance of the subject area, we hardly find a comprehensive study measuring the performance of Pakistani banks in the wake of financial liberalisation and deregulation measures taken over the last two decades. There are studies by Qayyum (2007), Ansari (2006), Iimi, (2004), Hardy (2003), Burki and Niazi (2003), Iimi (2002), Rizvi (2001), Shahid (2001), and Hardy and Patti (2001) which attempt to analyse the impact of financial sector reforms on banking industry in Pakistan. However, they employ parametric or non-parametric approaches to assess cost/profit/revenue/output efficiency of Pakistani banks. Most of them conclude that large-sized banks are relatively more efficient than small-sized banks. Arby (2003) discusses the structure and performance of commercial banks in Pakistan but his findings are based on limited data set. The model used by Rizvi (2001) is also quite simple and in many respect not fully justified. Shahid (2001) provides a subjective discussion concerning efficiency problems of banks. Nevertheless, none of them used Survey approach to capture the market perception (of the commercial bankers) about the need, impact, and strategies adopted by banks in the backdrop of financial liberalisation and deregulation measures in Pakistan. This was essential to analyse, as they comply the policies of central banks and are affected directly by good or bad policies. Such an important aspect of analysing the subject issues from stakeholder's point of view appears to have been completely overlooked by the researchers.

The main objective of the current study is to capture market perception about the performance of Pakistani commercial banks in the backdrop of financial liberalisation and deregulation measures taken by the central bank over the last two decades. For this purpose, it uses Survey approach. To augment the results of Survey based approach, it employs distribution free approach to measure relative cost inefficiencies of commercial banks. The current study is particularly important due to following reasons:

As a part of financial sector reform agenda, the privatisation of nationalised commercial was commenced in Pakistan to enhance efficiency and performance of banks. Till now, major state-owned commercial banks have been privatised with the exception of National Bank of Pakistan, Bank of Punjab, Bank of Khyber, and First Women Bank. Since the privatisation of banks has far reaching implications for Pakistan economy, it is essential to assess the impact of changes in ownership structure on banks' efficiency;

Earlier studies on financial liberalisation and deregulation of banks are largely confined to the East European, South American, African, and East Asian countries. Further, the quality of research work in the subject area is lacking for South Asian countries in general and in particular for Pakistan;

As appears from the above criticism on the efficiency of Pakistani banks, the outcomes of financial liberalisation and deregulation reforms are not upto the mark which require the need for an in-depth analysis of the subject issue;

Pakistan's banking sector provides an interesting setting for examining the impact of key banking sector reforms due to presence of varied nature of banks e.g., domestic commercial banks [which include new private banks, partially privatised banks, fully privatised banks, public sector banks)], foreign commercial banks, which are operating in almost comparable environment. However, the prudential regulations meant for Islamic, SME and Microfinance banks are a bit different from those of traditional commercial banks. Out of 35 commercial banks, 15 banks have been chosen for analysis which includes one Islamic bank. Specialised commercial banks were excluded because of their limited role;

The current study adopts two different techniques to analyse the impact of key banking sector reforms on commercial banks' performance:

Firstly, it uses the perception Survey approach mainly to capture the perception/responses of executives/senior bankers concerning the need, impact and possible reaction to key banking sector reforms. Questionnaire designed for the said purpose particularly focuses on assessing the impact of financial liberalisation and deregulation measures on banks' efficiency. Besides this, it also covers different aspect of banking sector reforms which impact on the efficiency of banks in Pakistan.

Secondly, the study employs distribution free approach to measure relative cost inefficiencies of commercial banks. The distribution free approach has also been used, among others, by earlier studies viz. Hardy and Patti (2001), Hardy (2003), and Ansari (2006). For analysis purposes, panel data has been used for the period 1990 to 2006. The sample size is large enough to provide an opportunity to employ the parametric approach to estimate the requisite parameters. Proportion of missing data is very low and where necessary moving averages have been used as an approximation. However, the study provides efficiency scores only mainly to give the reader a flavour about state of efficiency of banks across individual and their grouping besides achieving the objective of keeping the study precise.

Rest of the study is organised as follows: Section 2 is about the role of banking sector in an economy, Section 3 identifies causes of poor performance of banks, Section 4 gives a brief description of pre-reform scenario in the context of Pakistan, Section 5 provides details of key reforms and other important measures taken during the period under review, Section 6 contains the evaluation of financial liberalisation and deregulation measures based on perception Survey analysis. It also provides relative cost inefficiency scores of banks based on Distribution Free Approach. Section 7 pertains to concluding remarks. References are given at the end.

2. ROLE OF BANKING SECTOR IN AN ECONOMY

Banking sector of an economy generally performs three very primary functions which include the facilitation of payment system, mobilisation of savings, and allocation of funds to stakeholders like government, investors, consumers, and business community who can utilise them for the generation of economic activities. By virtue of its pivotal role, the banking sector can exert its positive influence on various segments of the economy. On the one side, it allocates funds for the highest value use while on the flip side, it limits the magnitude of risks and costs, thereby creating a level playing field for economic agents to flourish and generate economic activities [Jaffe and Levonian (2001); Wachtel (2001)]. This aspect of banking sector gives it a privilege over other competing sectors.

Since the banking sector plays a vital in an economy, a relevant question arises about the efficacy of its operational mechanism. More specifically, how should the banking sector operate: under a state control or a market-based mechanism. Further, how the transition towards any of the above stated mechanisms should take place? Answering to such questions invited researcher to explore various aspects of optimal functioning of banks, operating either under state control or market-based system.

Despite the significance of banking sector, the existing literature remains, to some extent, inconclusive about the most preferable mechanism of banking operations. In fact, we find strong arguments both in favour as well as against operational mechanisms of banks. According to the proponents of state controlled mechanism of firms operations, the enterprises need monopoly in markets mainly to achieve social objectives such as creation of employment opportunities. Particularly, the economies of scale strongly justify governmental monopoly in the supply of public services. Government's participation in the financial markets and state owned structure of banks is also supported by commanding height approach advocated by Lewis (1950) and Gerschenkron (1962). In particular, the development theories emphasise that government ownership of banks can help channelise savings for long-term projects of strategic interests. Similarly, the developmental theorist also support the involvement of state in banking affairs, either through direct control of ownership or imposition of operational restrictions, mainly to achieve efficiency. Further, the government involvement is supposed to ensure a better economic outcome by channelling funds to those development projects which cannot get financing under normal credit criteria or by creating a branch network in rural areas which cannot be build by profit-maximising private banks. The empirical evidence also provide support to the argument that the government involvement can ensure a better functioning of banking sector, which in turn could have a growth-enhancing effect [Gerschenkron (1962); La Porta, *et al*. (2002)]. The studies by Claessens and Djankov (1999) also find that state-owned firms perform relatively better than privatised enterprises or private firms, because they account for social objectives as well as externalities in natural monopoly markets. Moreover, the studies by Carlin, *et al*. (1997) and Frydman, *et al*. (1998) claim that the post-privatisation performance of firms remain poor. Some studies also find that changes in ownership structure of firms have limited impact on their efficiency level [Tulkens (1993); Altunbus, *et al*. (2000); and Denizer, *et al*. (2000)].

However, the proponents of market-based mechanism of banking operations provide substantial arguments in support of their viewpoint. According to them, functioning of banks under a state control or imposition of restrictions on their operations can lead to financial repression. Particularly, economic policies like transformation towards state-owned structure of banks, administratively controlled interest rates, state-sponsored directed and subsidised credit schemes, imposition of restrictions on entry and operations of banks, high statutory requirements for banks, are said to be having a negative impact on banks' operations, which in turn impair both the volume and productivity of investments. Therefore, they are in favour of removal of policies causing financial repression, thereby advocating to expanding the role of market forces to achieve desired goal of sustainable economic growth [Demetriades and Luintel (997); Denizer, Desai, and Gueorguiev (19980; King and Levine (1993)]. Claessens and Djankov (1999) claim that privatisation of state-owned firms is helpful: (a) in reducing information asymmetry between principals and agents, (b) strengthening market discipline, (c) improving corporate performances, (d) transferring control rights from governments to private investors who are supposed to be closer to market demand. Further, privatisation makes firms efficient, which as a consequence perform relatively better [Galal, *et al*. (1994); and La Porta, *et al*. (1997). Moreover, the political theorists are against the public intervention in financial markets and banks ownership. They argue that government's ownership leads to misallocation of resources and inefficiencies of public enterprises because of political motives behind such public ownership programmes.

Over the past two decades, a large number of industrialised, developing and transition countries have undertaken extensive reforms in their banking sector [Swary and Topf (1992); Fanelli and Medhora (1998)]. Sizeable empirical evidence also substantiates the viewpoint that financial liberalisation and deregulations help improve the performance of enterprises [Fry (1997); King and Levine (1993) and Wachtel (2001)]. Like other developing countries, Pakistan has also implemented key banking sector reforms. As regards the impact of reforms and structural changes in the ownership of Pakistani banking industry, there are some studies which conclude that large-sized banks have been impacted relatively more in terms of cost efficiency than small-sized banks [Iimi (2004); Iimi (2002); Hardy and Patti (2001); Burki and Niazi (2003)].

If we have a careful comparison of both the operational and management structure of banks, we find that the state-controlled mechanism of banking operations prove costly for an economy as it may lead to financial repression. In all, the efficiency of banking sector depends, among others, also on its functional mechanism and degree of control on its operations.

3. INDICATORS OF POOR PERFORMANCE OF BANKS

Generally, banks operate under certain regulatory and supervisory framework, which help them in their smooth functioning. However, adverse changes in policies, laws, regulations and controls may inhibit proper functioning of banks and may also lead to financial repression, which in turn may impede growth of overall banking sector.

The existing literature reveals that it is the state-controlled structure of banks which remain at the root of financial problems of banks. Under this structure, the performance of banks is affected due to a variety of factors including political and bureaucratic interventions, excessive influence of trade unions in banking affairs, etc. Similarly, the imposition of restrictions on entry of private banks is considered to be the harshest type of controls on banking operations and supposed to be contributing more towards creation of an uncompetitive environment in banking industry. The empirical evidence also reveals that strict entry restrictions for new banks effectively shield the banks from competition [Deolalkar (1999); Joshi and Little (1997)].

High statutory requirements for banks, regulated interest rates, and directed credit programmes are also important restrictions/controls which can impact the efficiency of banks. For example, the imposition of high reserve and statutory requirements can affect smooth functioning of monetary policy. On the one hand, it creates under-supply of credit by taking liquidity out of the market while on the other hand it inflates artificial demand for government securities.[5] There are some other kinds of controls like setting floor on deposit rates or ceiling on lending rate, which can also affect efficiency of banking operations. The controls on lending side are especially important, as they can affect the riskiness of loan portfolio. Similarly, the floor on lending rates tend to crowd out “low-risk, low-return” projects that become unprofitable with higher interest rates [Demetriades and Luintel (1997)]. In the same way, under directed credit programme, banks

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[5]Demetriades and Luintel (1997); Denizer, *et al.* (1998).

allocate a certain portion of credit to the government priority sectors. In some cases, the lending to priority sector is combined with interest rate controls which can lead to market segmentation and constitute a barrier to financial development. Furthermore, the loans to priority sectors can have a destabilising effect on banking system, since they are often less profitable and more likely to be nonperforming [Ganesan (2003); Shirai (2002b)]. As regards high reserve and statutory requirements for banks together with regulated interest rates, these are considered the forced way to keep return on assets low.

The banks operating under the state control also endeavour to meet credit needs of the government and its organisations, which may affect adversely the overall economy. Further, the private sector, which is considered backbone of an economy, faces liquidity shortages as bulk of the credit is allocated for public sectors institutions. Less credit allocation to the most efficient segments of an economy may hamper growth and expansion of productive economic activities, which in turn may undermine the role of private investment. According to McKinnon (1991), underdevelopment of banking sector associated with financial repression may result into lowering of economic growth.

Banking sector in Pakistan also experienced difficulties due to nationalisation of Pakistani banks, initiation of government sponsored schemes, large financing of banks to government and its institutions, restrictions on entry of private banks, high statutory requirements, etc.

4. PRE-REFORM SCENARIO

Financial landscape of Pakistan altered significantly with nationalisation of domestic banks under the Banks (Nationalisation) Act 1974. With the change in ownership structure of domestic banks, political and bureaucratic interference in nationalised banks enhanced significantly. Government also took over the authority to appoint the Boards and Presidents of the banks, and was involved in managerial affairs of the banks. Strong employee unions also emerged in the nationalised banks and began to interfere in banking affairs, particularly in administrative matters and lending operations.

Besides State Bank of Pakistan (SBP), banks were also supervised by Pakistan Banking Council (PBC). The dual supervision of banks impacted on SBP's enforcement of its regulations over nationalised commercial banks (NCBs). The supervisory capabilities of SBP weakened, as it was not allowed to formulate and implement monetary policy independently. Weak supervision and poor governance of NCBs worsened their quality of banking services. Over-staffing and over branching also added to administrative cost of banks. Since data disclosure standards were weak, banks balance sheet was not conveying adequately the full picture of their financial health.

The government launched subsidised credit schemes for priority sectors through NCBs. A system of credit ceiling was introduced. Banks were given quantitative limits for credit expansion during a fiscal year.[6] Separate credit ceilings were also prescribed for the Public Sector Enterprises (PSEs) and the private sector. It remained a powerful instrument of credit management and distribution upto early 90s, when it was replaced with a system of credit-deposit ratio. Restrictions were also imposed on entry of private banks and opening of branches by foreign banks.

Besides uneven ownership of financial system towards the public sector, the presence of National Savings Schemes caused disintermediation and crowding out of private sector, which had already squeezed due to usage of direct monetary controls on the banking system. In fact, there was absolutely no role of private sector, as the participants were only watching the mobilisation of savings from households and consequent diversion to government and priority sectors. There was also absence of markets where players' interaction results in pricing and clearing.

As regards monetary management, the SBP neither had the authority nor instruments at its disposal for the formulation and implementation of an independent and market-based monetary policy. The Annual Credit Plan was the main instrument of monetary policy and quarterly credit ceilings on banks' lending were usually set by the Government, especially for the level of Governments borrowing and specialised credit schemes. In actual practice, the Government was used to borrow in excess of the prescribed limits of Credit Plan, thereby causing crowding out the private sector.

To encourage commercial banks financing in fixed investment, the SBP introduced a refinancing facility through Locally Manufactured Machinery, agro-based industries, and hotel schemes. Both directed and concessionary credit schemes were part of credit planning process. Directed credit was disbursed for mandatory and protected credit limits while subsidised/ concessionary loans were extended to various sectors under various schemes and financing facilities.

The data on key banking indicators also exhibit dominance of state-owned banks in banking sector, which is apparent from 92.2 percent share of state-owned banks in total assets while the rest belonged to foreign banks, as domestic private banks did not exist at that time. About 25 foreign banks were operating, but their market share was relatively small. Similarly high shares existed for deposits, advances and investments.

The central banks had imposed high statutory requirements for banks. They were also required to hold 30 percent of their deposits in the form of government securities and 5 percent as a cash reserve requirement at the central bank. This constraint also resulted in low returns on banks' portfolios.

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[6]Pakistan's fiscal year starts from July 1st and ends on 30th June.

The pre-dominance of public sector in Pakistan's banking sector, coupled with the instruments of direct monetary control, became responsible for financial inefficiency, crowding out of credit for the private sector, deteriorating quality of assets, and rising vulnerability of financial institutions. In short, the financial structure by the end of 1980s was hardly conducive to meet growing financial needs of Pakistan economy.

5. KEY BANKING SECTOR REFORMS

Realising the inherent weaknesses in Pakistan's financial system, a broad based programme of reforms was framed for the financial sector in early 1990s. The reform agenda included, among others, financial liberalisation and deregulation measures which are as follows: privatisation of NCBs, removal of restrictions on opening-up of private banks, phasing out of subsidised and mandatory credit schemes, removal of caps on deposit and lending rates of banks, abolishment of the system of credit ceiling, switching towards market-based approach of credit distribution, lowering of statutory requirement for banks, etc. These measures were not implemented at any specific date or point of time. Rather, it took almost two decades on their full/partial implementation, depending upon the nature of reform.

To facilitate the process of participation, Banks (Nationalisation) Act, 1974 was amended in 1990, which enabled the Government to sell all or any part of the share capital of the nationalised banks. In a subsequent amendment, the government was allowed to suspend the provisions of the Banks (Nationalisation) Act, in cases where 26 percent shares of any nationalised bank were sold to the private sector. Furthermore, a bank would fall outside the ambit of the Banks (Nationalisation) Act, 1974 when 51 percent of the share capital was taken up by the private sector.

There were five nationalised commercial banks which included National Bank of Pakistan (NBP), Muslim Commercial Bank (MCB), Allied Bank Limited (ABL), United Bank Limited (UBL), and Habib Bank Limited (HBL). Out of these banks, the shares of Muslim Commercial Bank were sold to the private sector in 1991. The shares of Allied Bank Limited were also disinvested and the management and control of the bank was handed over to the Employee Management Group. Despite the privatisation of MCB and ABL, the dominance of nationalised commercial banks (NCBs) continued by the end of 2000. The MCB was completely privatised in October 2002. The bidding for disinvestment of 51 percent share of HBL was held on 29th December 2003 and the management of the bank was transferred to Agha Khan Fund for Economic Development (AKFED) on 26th February, 2004. The bidding for disinvestment of 51 percent share of UBL was held on 5th September, 2003 and the management of the bank was transferred to consortium of Abu Dhabi Group and Bestway Group on 19th October, 2003. The National Bank of Pakistan has off-loaded 23.2 percent shares through local stock exchanges. The remaining shares of NBP would be off-loaded after changes in the NBP Act. Despite the Privatisation Commission efforts, the remaining 49 percent shares of UBL have not yet been sold.[7]

With regard to removal of restriction on opening up of banks, the Banks (Nationalisation) Act of 1974 was amended in 1991, which allowed private sector to operate banking companies. In August 1991, ten new private banks were allowed to start their operations. Out of these, two banks did not begin their business activity. Subsequently, eleven new banks were sanctioned. As regards approval of licensing of banks, the Government had de facto right to approve the licensing of banks, therefore, the Section 27 of the Banking Companies Ordinance was amended in 1997 to take the government out of the process of licensing of banks and make the Central Board of the SBP as the final decision-making authority in the matter. The Bank of Punjab and the Bank of Khyber were owned by Punjab and NWFP provinces respectively and were scheduled with the SBP in September 1994 and became subject to the regulatory framework of the SBP.

The financial liberalisation during 1990s resulted in mushroom growth of financial banks, thereby threatening not only the financial stability but also their very existence. As a consequence, the SBP initiated the process of consolidation of banks. Since 2000, the merger and acquisition of several banks have been completed while some other banks are going under the consolidation process.[8]

To give operational autonomy to the SBP, the State Bank of Pakistan Act 1956 and the Banking Companies Ordinance (BCO) were amended in 1991. Following the grant of autonomy in 1993, the SBP initiated a comprehensive plan for introduction of a market-based monetary policy. In this regard, various monetary management measures were initiated. The system of credit ceilings was abolished and replaced with credit-deposit ratio, which was also removed in 1994. The caps on banks' lending rates were eliminated to pave the way for implementation of monetary policy indirectly through signals of liquidity and short-term interest rate changes. In line with market-based policy, various steps were taken which includes reduction in Government borrowing from the banking system, elimination of subsidised credit schemes, introduction of improved technology for market intervention, and further deepening and widening of the financial market. Further amendments in the Ordinances were approved in May 1997 which also converted into permanent law.

Exchange and payments reforms were initiated in early 1990s to promote the bank intermediation, encouraging the foreign investment, facilitating the forex transactions and enhancing foreign trade. Major structural change came with the introduction of multiple exchange rate system in July 1998, which was

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[7]Banking System Review, State Bank of Pakistan (2006).
[8]Banking System Review (2006).

gradually unified and transformed to a free-floating exchange rate regime in July 2000.

Restructuring of banking system was a difficult task. A number of state-owned banks were downsized and restructured through golden handshake and branch closure programmes in later half of 1990s. To strengthen the capital base of some of the weak nationalised banks, the SBP provided equity for their respective rehabilitation plans that included reduction in workforce, rationalisation of branches, controls on expenditures, transparent lending policies, and intensification of loan recovery effort.

Banking supervision was suffering from various problems before the introduction of banking sector reforms of 1990s. The role of SBP, which had the main responsibility to supervise the banking system, was marginalised as it faced inadequacy of banking supervision capacity. With the grant of autonomy to the SBP in 1993, abolition of the PBC, and changes in the BCO, the SBP devised a strategy to consolidate banking supervisory functions. It also issued separate Prudential Regulations for commercial banks, SMEs, agriculture, microfinance, and infrastructure. Further, loan recovery process was further streamlined by issuing clear guidelines for loan classification and requiring banks to submit regular reports on recoveries.

6. IMPACT ANALYSIS OF FINANCIAL LIBERALISATION AND DEREGULATION MEASURES

Main objective of the study is to analyse the impact of financial liberalisation and deregulation measures on banking sector of Pakistan. As regards the impact of these reforms, it has been analysed on the basis of: (a) responses of key stakeholders (bankers who are involved in policy making of respective banks) obtained from Perception Survey Approach, and (b) cost inefficiency scores derived from Distribution Free approach. While the findings of Perception Survey are explained in detail in the following paragraphs/sections of the study, the cost inefficiency scores of individual banks and their groupings are also explained mainly to augment findings of the Perception Survey.[9] Besides giving readers a flavour about state of efficiency of banks across banks as well as over the time period of analysis, it would also help confine the study within desirable limits.

(a) Methodology

The purpose of perception Survey based analysis is to quantify the impact of financial liberalisation and deregulation measures on banks performance using input/feedback/responses of bankers. The most representative banks were

[9]The methodology of Distribution Free Approach is not included in the study. However, it can be made available to readers on request.

selected for the requisite responses/inputs/feedback. The requisite information was collected from senior management/executives of banks. In case of historical questions, the interviewees were supported by their colleagues who had been involved in decision making process. The Survey was conducted in June 2008.[10]

As regards selection of banks, it is more tilted towards nationalised and privatised which are affected largely by the key banking reform agenda. The United Bank Limited is still partially privatised. Since the role of foreign banks is very important in terms of their competitive effect, the most representative banks are also included in the sample, particularly those foreign banks which are operating in Pakistan since long time. Rationale behind the inclusion of private sector banks is to assess their role in competitive environment. Although their asset share in total assets of commercial banks is negligible, they are considered more efficient in terms of intermediary services. AlBaraka Islamic Bank, which contains both the characteristics of a foreign as well as an Islamic bank, has been included in the sample. Bank of Punjab has been included in the sample mainly to represent provincially controlled banks. Out of 35 commercial banks, 15 banks have been chosen for analysis purpose.

Details of sample banks by type of their ownership are given as under:

(i) **Public Sector Banks:** National Bank of Pakistan, First Women Bank Limited, and Bank of Punjab.
(ii) **Privatised Banks**: Muslim Commercial Bank Limited, United Bank Limited, Allied Bank Limited, and Habib Bank Limited.
(iii) **Private Banks**: Bank Al-Falah Limited, Bank Al-Habib Limited, Metropolitan Bank Limited, and Askari Commercial Bank Limited.
(iv) **Foreign Banks**: Citi Bank, Standard Chartered, ABN Amro Bank.
(v) **Islamic Banks**: AlBaraka Islamic Bank.

Whatever has been analysed in the current study is based on the responses of the Survey prepared and conducted exclusively by authors in June 2008. To get appropriate responses of the questions embodied in the questionnaire, the capacity building sessions of interviewers were also held. After adequate training sessions, they were sent to a few banks as a test case. Based on their feedback, the necessary changes/revisions were made in the sample questionnaire. In particular, the key banking sector developments taken place after 1997 were also incorporated in the questionnaire, as they are said to have impacted banking operations significantly later on. As regards anonymity and confidentiality of the responses by bankers, an effort has been made that their views should remain anonymous and confidential.

As regards the sample banks, they have been playing a very significant role in the development of Pakistan. Their key indicators reveal that they

[10] Sample questionnaire used to capture market perception can be made available on request.

dominated in the banking sector in terms of asset holdings, deposits mobilisation, extension of advances, paid-up capital, number of employees, etc. The percentage asset share of selected banks in total of commercial banks reveals that it has reduced to 74 percent in 2006, from 93 percent in 1990 (Table 1). Similarly, their deposit share in total deposits of commercial banks has also reduced from 94 percent to 79 percent, which indicates that the role of private sector banks has increased.

Table 1

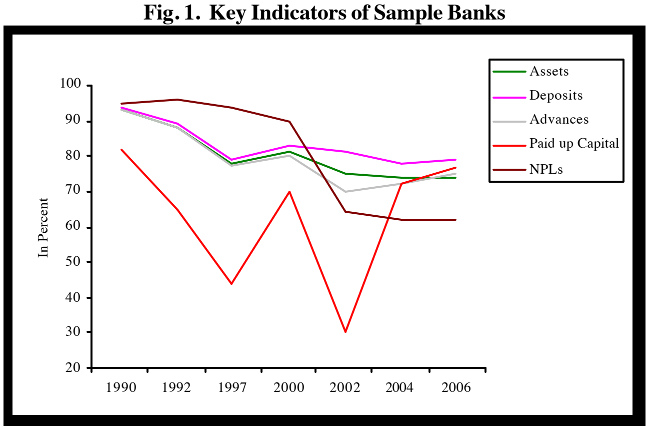
Profile of Respondent Banks

(In Percent)

	1990	1992	1997	2000	2002	2004	2006
Assets	93	88	78	81	75	74	74
Deposits	94	89	79	83	81	78	79
Advances	93	88	77	80	70	72	75
Paid-up Capital	82	65	44	70	30	72	77
Administrative Costs	95	91	89	83	72	74	71
NPLs	95	96	94	90	64	62	62
Number of Employees	98	97	92	91	73	83	82

Source: Authors' calculation using data of balance sheet of banks.

Fig. 1. Key Indicators of Sample Banks



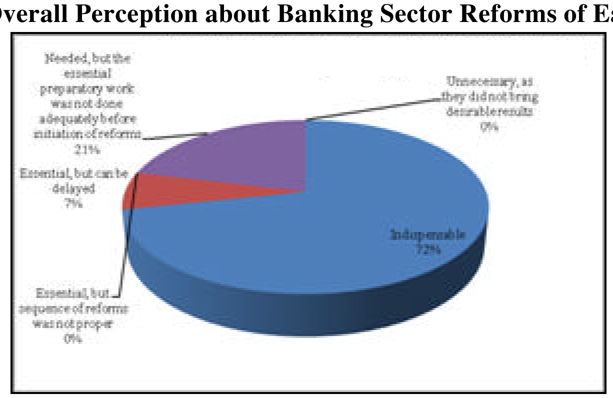
The data reveals that major improvement has been witnessed in paid-up capital to assets ratio. Initially it declined to 44 percent in 1997, from 82 percent in 1990 and then increased substantially to reach 77 percent in 2006. The SBP's measures about strengthening the soundness of banks, especially the implementation of BASEL framework, mainly led to rise in paid-up capital of sample banks. Further, the removal of restrictions for opening of private banks by the SBP caused a mushroom growth of financially weak banks, which could inflict the financial stability in case of any exogenous shock. In this backdrop, the SBP encouraged merger/acquisition of banks which in turn resulted into strengthening of paid-up capital of banks. The non-performing loans (NPLs), although still high, showed a declining trend over the period of analysis which is a very encouraging development from banks' soundness point of view. Similarly, in terms of number of employees, the share of sample banks also dominates in the commercial banking sector. Although the relative share of banks for various performance indicators has reduced marginally over the time period due to enhanced role of banks outside the sample, their role and dominance cannot be ignored in banking sector even in recent time.

(b) Impact Analysis

(1) *Overall Perception about Financial Sector Reforms of Early 1990*

With regards to overall perception concerning the need for banking reform programme with particular focus on financial liberalisation and deregulation measures, a substantial number of respondents (i.e., 71 percent) opined that the reform programme for banking sector was indispensable and should not be delayed (Figure 2). Around 21 percent of the respondents believed that the reform programme was needed but the essential preparatory work was not done adequately before the initiation of said reforms. A negligible percentage of respondents thought that the banking reform of 1990s could be delayed despite its significance. However, nobody deny the significance of the reform programme in terms of its impact. Further, the respondents appeared to be satisfied over the sequencing of the reform programme which is an unexpected response, as the sequencing and timings of financial sectors reforms, mostly sponsored by the IMF, has been criticised by numerous researchers. The study Alawode and Ikhide (1997) also indentifies that the timing, sequencing and speed of restructuring measures are very important for successful restructuring of banks.

Fig. 2. Overall Perception about Banking Sector Reforms of Early 1990

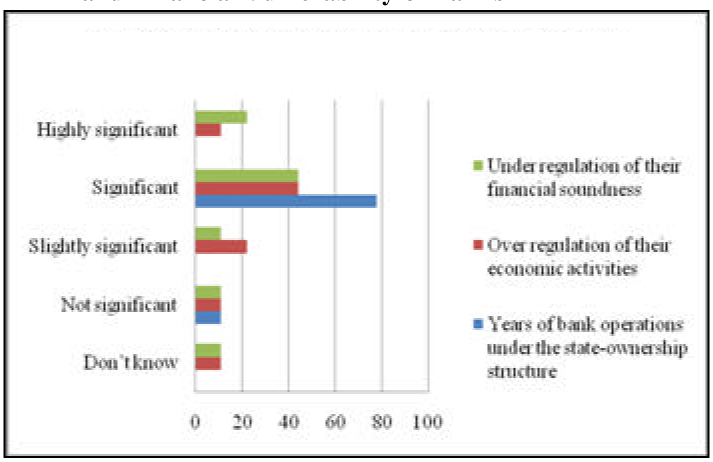


(2) *Key Factors of Uncompetitiveness, Inefficiency, and Financial Vulnerability of NCBs Prior to Reforms*

Prior to reform programme of 1990s, the nationalised commercial banks (NCBs) were considered uncompetitive, inefficient and vulnerable due to years of operations under the state-owned structure, over regulation of economic activities, and under regulation of financial soundness. To know the relative adverse impact of the above factors on banks efficiency, the current Survey attempts to capture the overall perception about the factor caused uncompetitiveness, inefficiency and vulnerability of banks.

About 78 percent of the respondents consider that years of bank operations under the state-owned structure was the prime factor behind uncompetitiveness, inefficiency, and vulnerability of nationalised commercial banks. However, 11 percent of the respondents consider role of state-owned structure as insignificant on banks performance (Figure 3). The results are also supported by Haque (1997) who finds that public sector dominancy, among others, leads to inefficiency in the Pakistani banking sector.

Fig. 3. Key Factors of Caused Uncompetitiveness, Inefficiency, and Financial Vulnerability of Banks



As regard the matter relating to under regulation of banks, around 54 percent (includes highly significant and significant) of the respondents consider under regulation as an important factor behind inefficiency and vulnerability of NCBs. The dual supervision of banks and poor regulatory controls mainly attributed to under regulation of banks which in turn impacted the financial health of banks in mid 1990s. The banking data also support the viewpoint as NPLs of NCBs increased substantially during 1990s.[11] Further, the study by

[11] Financial Sector Assessment Report, 2000.

Caprio and Klingebiel (1997) suggests that a strong regulatory and supervisory system is necessary to cope with the financial crises and promoting the efficiency in financial markets.

While 11 percent of the respondents consider the role of under regulation slightly significant, the same percentage of respondents are either not aware of its importance or consider its role as insignificant. Similarly, about 55 percent respondents are of the view that over regulation of banks also impacted significantly (includes highly significant and significant) competitiveness, efficiency and financial health of NCBs. Among other factors, the imposition of high SLR and CCR, launching of government sponsored schemes, imposition of restrictions on opening of private banks, restrictive bank branch policy, left no room for NCBs to extended credit at their own choice. However, around 22 percent respondents consider its role slightly significant. The remaining respondents are either not aware of its importance or consider its role as insignificant.

(3) *Key Reforms Planned to Rectify Flaws in Banking Sector*

Keeping in view the continued deterioration in financial health of banks and their adverse impact on Pakistan's economy, the 1990s reform programme was initiated. Among the key financial reforms, liberalisation and deregulation measures remained at the top priority, mainly to remove the flaws in the banking sector.

The current Survey attempts to capture the overall perception about key reforms of early 1990s in removing banking sector flaws (Table 2). According to 85 percent respondents, the privatisation of state-owned banks was the key liberalisation measures which corrected significantly the existing flaws in the banking sector.

Table 2

Key Reforms Planned to Correct Flaws in Banking Industry

(In Percent)

	Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1 Privatisation of state-owned banks	0	7	7	14	71
2 Entry of private banks	7	0	0	50	43
3 Adoption of new and separate prudential regulations for Commercial Banks/DFIs, SMEs, Microfinance, etc.	0	0	14	36	50
4 Switching over to indirect/market-based tools of monetary and credit management	7	0	21	50	21
5 Strengthening the supervisory role of SBP	0	7	0	50	43
6 Measures to improve financial health and soundness of banks	7	0	7	50	36

The studies by Ga lal, *et al.* (1994) and La Porta, *et al.* (1997) also argue that privatisation makes firms efficient, and consequently they perform relatively better. Similarly, Claessens and Djankov (1998) also claim that privatisation of state-owned firms is helpful in reducing information asymmetry between principals and agents, strengthening market discipline and improving corporate performances, by transferring control rights from governments to private investors who are supposed to be closer to market demand. Fry (1997), King and Levine (1993) and Wachtel (2001) supports the viewpoint of financial liberalisation and deregulations. Although, the process of privatisation started in early 1990s, it is still continued as some commercial banks are still operating under state control (e.g., NBP, First Women Bank Limited). However, a negligible percentage of respondents do not consider the privatisation of state-owned banks as an important measure for correcting the prevailing flaws of banking sector in early 1990s. The viewpoint is supported by the studies of Carlin, *et al.* (1997) and Frydman, *et al.* (1998) who claims that the post-privatisation performance of firms remains poor.

As regard the removal of restrictions on opening of banks by the private sector, about 93 percent of the respondents consider the measure a revolutionary step which played a significant role in the rectification of prevailing flaws from the banking sector. Demetriades and Luintel (1997), Denizer, and Desai and Gueorguiev (1998) also favour the removal of policies causing repression, which restrict the role of market forces in achieving the ultimate goal of sustainable economic growth. Nevertheless, about 7 of the respondents are not aware of the significance of this liberalisation measure.

Similarly, the measures pertaining to institutional strengthening are also considered important steps by around 90 percents of the respondents. The strengthening the supervisory role of SBP and implementation of CAMELS framework were among the key measures enforced in 1997 onward, largely to improve efficiency and soundness of the banks. However, a negligible number of respondents consider the measure as slightly significant in reducing the said flaws. About the monetary policy measures, around 70 percent of the respondents believe that the implementation of market-based monetary and credit management programme was among the key policy measures which helped reducing flaws in the banking sector. Nevertheless, about 7 percent of the respondents are not aware of the significance of market-based monetary policy in terms of its impact in correcting the banking sector flaws.

4. *Improvements in Key Indicators of Banks after Major Reforms*

The Survey results indicate that most of the indicators of bank performance have showed significant improvements due to enhanced competition, mainly influenced by liberalisation, deregulation, and institutional strengthening measures (Table 3). Especially, the deregulation of controls on banking operations instilled competition in the banking sector.

Table 3

Impact of Liberalisation, Deregulation, and Institutional Strengthening Measures on Banks Performance

		Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1	Lowered administrative expenses	7.7	15.4	46.2	38.5	0.0
2	Reduced banking spread	7.7	30.8	30.8	30.8	7.7
3	Improved bad debt portfolio	0.0	7.7	15.4	53.8	30.8
4	Increased profitability	7.7	0.0	0.0	46.2	53.8
5	Improved intermediation inefficiencies	0.0	7.7	7.7	69.2	23.1
6	Increased recovery of loans	0.0	7.7	15.4	69.2	15.4
7	Adopted international practices	7.7	0.0	7.7	76.9	15.4
8	Improved credit discipline	7.7	0.0	7.7	76.9	15.4
9	Became more regulation compliant	15.4	0.0	7.7	76.9	7.7
10	Adopted sound banking practices	15.4	0.0	7.7	53.8	30.8
11	Became more accountable and transparent	7.7	0.0	15.4	69.2	15.4
12	Updated technology in banking operations	7.7	0.0	7.7	69.2	23.1
13	Improved professional skills	0.0	7.7	15.4	61.5	23.1
14	Adopted good governance practices	15.4	0.0	15.4	46.2	30.8
15	No political influence	23.1	0.0	30.8	46.2	7.7
16	No denial of access to bank credit	15.4	0.0	30.8	53.8	7.7
17	Credit decisions based on market conditions	15.4	0.0	7.7	76.9	7.7
18	Operate under competitive environment	7.7	0.0	7.7	53.8	38.5

A significant percentage of respondents think that banks adopted best practices, became more disciplined in credit disbursements, implemented SBP's prudential regulations, and faced less political interference in lending decisions. Similarly, the bankers believe that a significant improvement has also been taken place in key areas of banking operations which included recovery of loans, accountability and transparency in policies, up-gradation of IT system, and reduction in intermediation inefficiencies of banks. Especially, the measures taken in 1997 and onward have impacted significantly the soundness and health of banks. The liberty to banks about the HR policies also helped in strengthening the staff skills through hiring of professionals and capacity building of officials at the induction level.

According to a large number of respondents, the banks are now operating under a relatively more competitive environment as a consequence of financial liberalisation, removal of quantitative controls/restrictions on banks operations besides other complementary steps. If compared with pre-reform period, the denial of access to bank credit has also reduced significantly. However, this does not cover the aspect relating to distribution of bank credit which is still more skewed towards manufacturing sectors, despite its 16 percent share in real GDP.

With regards to reduction in bad portfolios of banks, about 84 percent of the respondents think that the quality of portfolios of banks has improved significantly, particularly after implementation of BASEL framework in 1997 and other relevant measures. The corporate governance of banks has also improved significantly, most probably after the issuance of code of conduct for good governance for banks and other guidelines issued over the time period. About 92 percent respondents are of the opinion that the profitability of NCBs has improved significantly due to privatisation which promoted competitive environment in the banking sector. The privatisation of banks also resulted into less political interference which induced them to perform better in competitive environment. This aspect is important as too much intervention by the government, prior to the implementation of reforms, caused deterioration in the efficiency of nationalised banks. Since the partially privatised banks and remaining nationalised banks are part of the current Survey, about 31 percent of the respondents are of the opinion that government interference in banking affairs has reduced slightly despite the implementation of banking sector reforms. However, in case of foreign and private banks, the interference of government is non-observable, as 23 percent of the respondents are not aware of any political or bureaucratic interference in the banking affairs.

Reduction in administrative cost and banking spread are the two areas where banking sector reforms have not impacted significantly. About 39 percent respondents think that the key banking reforms have helped in reducing administrative cost of banks while remaining respondents consider the impact of reforms either slightly significant or not aware of any impact. However, the cost efficiency scores computed for banks indicate that they differ across the banks.[12]

In the same way, about 40 percent respondents are of the view that the said reform Agenda has not impacted the banking spread significantly. Despite concerted efforts, it appears that banks have not succeeded in bringing down high administrative cost which is an important factor behind large banking spread. Nevertheless, a negligible number of respondents are of the view that the liberalisation, deregulation and institutional strengthening measures, among others, have almost no role in squeezing the banking spread.

5. *Impact of Privatisation on the Performance of State-owned Banks*

The banking sector reforms were expected to hit some very important areas of banking operations, which were shading a negative impact on banks

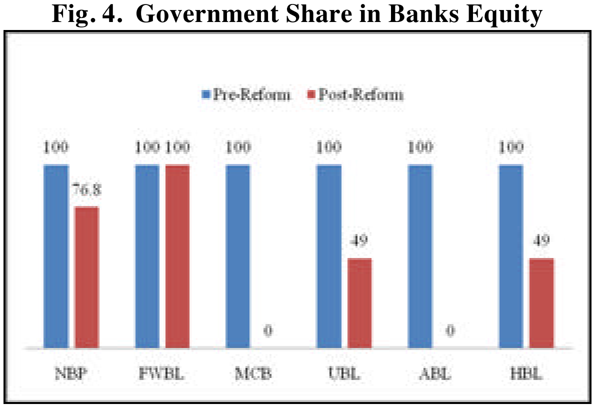
[12]For more details, please see on Page No.47 of the current study.

performance. The current Survey captures the overall perception about impact of changes in ownership structure, role of government interference in banking affairs, role of strong bank union, etc. on NCBs efficiency, details of which is given as under.

(a) Changes in Ownership Structure of NCBs

The ownership structure of state-owned banks has changed significantly with amendments in the Banks (Nationalisation) Act, 1974 in 1991. Before privatisation, the government held 100 percent asset shares of NCBs (Figure 4). As a corollary to this factor, the government was used to interfere in their banking affairs in the pre-reform period. According to respondents, most of the financial problems of NCBs were owing to the state controlled structure of banks. The study by Haque (1997) also authenticate the viewpoint that public sector dominancy, among others, lead to inefficiency in the banking sector in Pakistan. Further, there was almost no competition amongst the public sector banks due to absence of private sector banks. Although there were 27 foreign banks operating in the country but their combined share was around 5 percent in total assets of the banking sector. Further, their banking activities were also restricted to foreign sector. This indicates the role, significance, and dominance of NCBs in Pakistan's economy.

Fig. 4. Government Share in Banks Equity



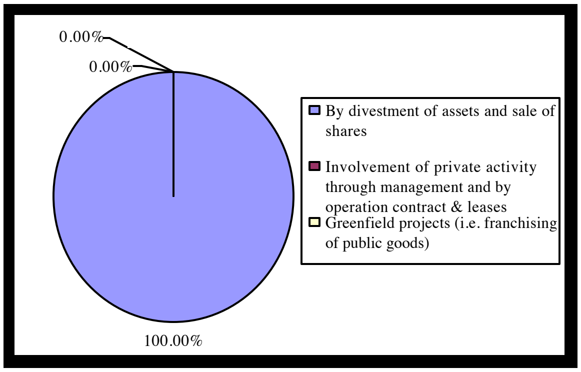
With the implementation of decision regarding the dilution of government equity in NCBs, the asset share of government in nationalised banks have reduced from 100 percent in 1990 to less than 50 percent in 2006.[13] Changes in ownership structure of privatised banks impacted positively on their role and area of business significantly which in turn put a positive impact on their overall performance. Besides privatisation measure, financial liberalisation, institutional strengthening, and other complementary measures also played a significant role in improving overall efficacy.

[13] Financial Sector Review, 2006.

(b) The Process of Transferring of Banks Ownership to Private Sector

The efficiency of privatisation firms is sometimes influenced, among other factors, by the mode of transferring of ownership of firms. In case of Pakistan, the Survey results reveal that the ownership of NCBs has been transferred largely by the disinvestment of government's assets and sale of shares, except for selling of share of ABL to bank employees under the Employee Stock Ownership Plan (Figure 5). The disinvestment of shares through stock exchanges show, among others, strengthening of market capitalisation of local stock exchanges.

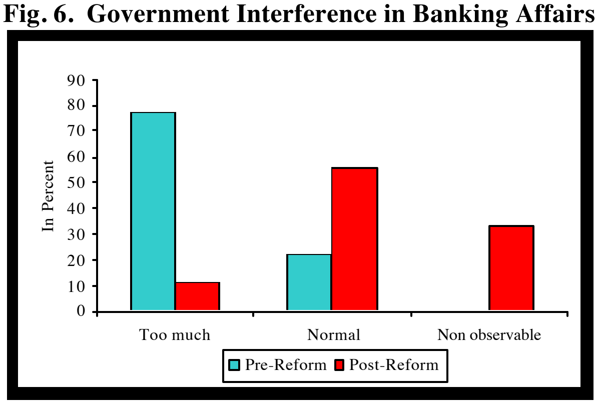
Fig. 5. Mode of Transferring of Ownership of NCBs



(c) Degree of Government Interference in Operational Affairs of Banks

Too much political and bureaucratic intervention in banking affairs is considered, among the key factors, a major cause of poor performance of banks. Results of the perception Survey provide a comparison of the degree of government interference in operational matter of the banks during pre and post reform period (Figure 6).

Fig. 6. Government Interference in Banking Affairs

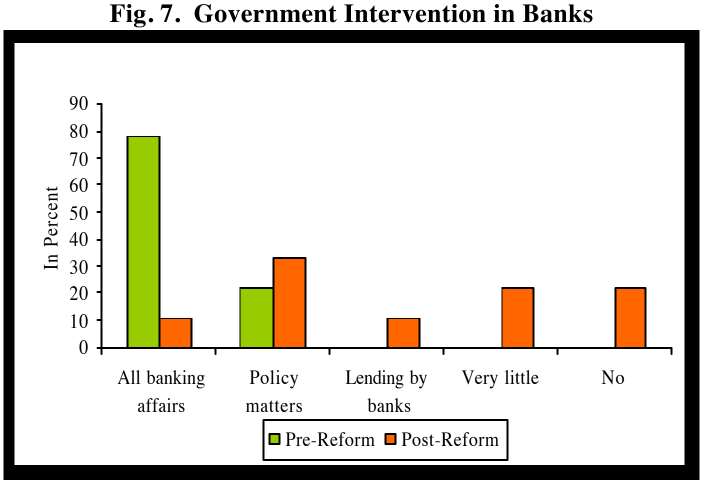


A significant percentage of respondents (78 percent) reveal that there was too much governmental interference in the operational affairs of nationalised banks in the pre-reform period. The purpose of such intervention was to divert financial resources of nationalised banks towards the achievement of government's economic targets. In fact, the government and its institutions always got priority in banks lending while the private sector, which is supposed to be central point of all sort of economic activities in a market-based system, faced liquidity shortages. Since the most efficient economic agents were denied of bank loans while the public sector, which is supposed to be relatively less efficient, got bulk of the credit. This trend caused misallocation of resources which ultimately impacted adversely the productivity and economic growth of the country.

However, the results of perception Survey reveal that the degree of governmental interference has reduced significantly in the post reform period. Abolishing of PBC, privatisation of MCB and ABL, and partial privatisation of HBL and UBL, grant of operational autonomy to SBP, are said to be the major causes of low governmental intervention in banking affairs.

Further, as per 78 percent of the respondents, the government was used to intervene in almost all areas of banking operations in the pre reform period. However, the feedback of 33 percent of the respondents shows that the governmental interference was restricted to policy matters of banks only. After the introduction of financial liberalisation, deregulation, and institutional strengthening reforms, the degree of government interference has reduced significantly in all banking affairs (Figure 7). Regarding interference in lending decisions, a negligible percentage of respondents (i.e., 11 percent) shared that the government has started interfering in lending decisions of banks recently. However, about 22 percent of the respondents opined that a very low level of

Fig. 7. Government Intervention in Banks

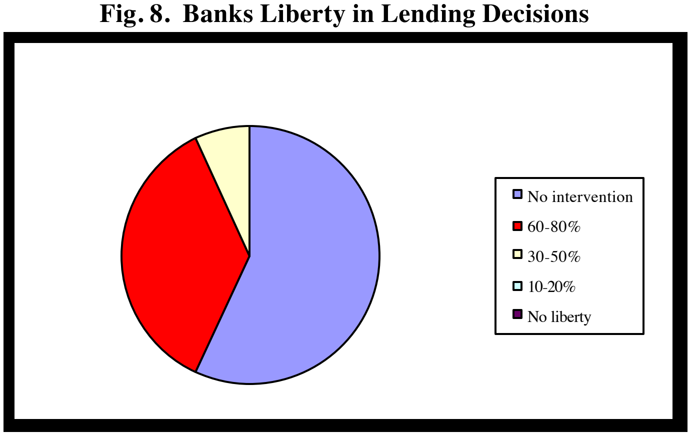


government intervention still exists in banking affairs. This affirmative response appears to be inclusion of nationalised and partially privatised banks in the sample where government intervention is possible due to having more than 51 percent equity holdings. The degree of government intervention is likely to reduce in banking affairs after the privatisation of remaining NCBs.

(d) Bank's Liberty in the Credit Decisions

According to perception Survey, about 57 percent respondents are of the opinion that the bankers are free in their lending decisions and do not face any bureaucratic or political interference in recent time (Figure 8). Prior to 1990s reforms, the nationalised banks have little choice in their lending decisions, as they were required to finance fiscal deficit together with providing finance to plethora of government sponsored schemes. High SLR and CRR, bank-to-bank credit ceilings, also left little room for banks to extend credit at their own will. With the change in mechanism of monetary and credit management, the privatisation of NCBs, the abolishment of Pakistan Banking Council, grant of autonomy to the SBP in its operational decisions, and the implementation of BASEL framework, the liberty in lending decisions of banks has enhanced substantially. However, 36 percent of the respondents think that banks face rear bureaucratic or political interference in their credit decisions. Similarly, a very negligible percentage of respondents have observed some bureaucratic or political interference in the lending decisions.

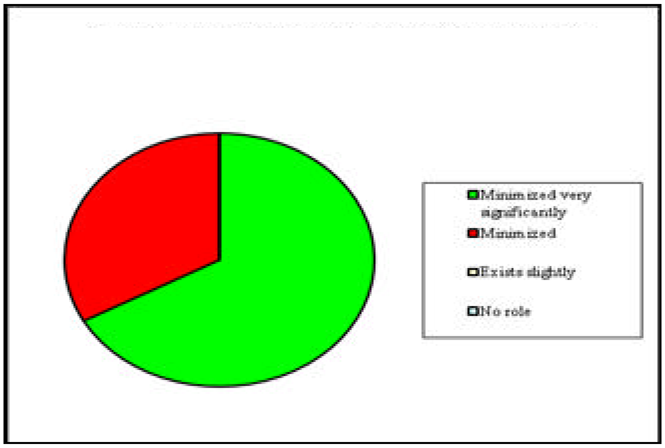
Fig. 8. Banks Liberty in Lending Decisions



(e) Role of Employees Union after Privatisation and Restructuring of Banks

Prior to implementation of key banking sector reforms, the role of staff unions had become very strong in banking affairs. Especially, they were used to interfere in the management decisions pertaining to recruitment, promotion, transfers and postings of staff, which caused a negative impact on the efficiency of state-owned banks. The role of staff union was particularly dominant in day-to-day affairs of nationalised commercial banks. With the privatisation and restructuring of banks, the role of staff union was expected to reduce significantly. According to the Survey results, about 67 percent of the respondents believe that the role of employees union has minimised very significantly due to privatisation and restructuring of banks (Figure 9).

Fig. 9. Role of Employees Union after Privatisation and Restructuring of Banks



About 33 percent of respondents also opined that the role of staff union has minimised. Furthermore, nobody indicated any role of staff union in banking affairs in recent time.

6. *Market-based Monetary Policy*

The current Survey also captures the impact response of market-based monetary policy on different aspects of banking operations. According to the perception Survey, clarity in communication strategy of SBP enhanced substantially due to market-based monetary policy. This aspect of monetary policy, among others, is extremely important as the dissemination of adequate signals to market agents could help them in their future economic decisions. About 21 percent of the respondents opined that recent monetary policy stance of SBP is relatively more transparent. A significant percentage of respondents also believe that the market-based policy is more supportive to prevailing exchange rate regime.

As regard the supervisory role of SBP, about 72 percent of the respondents believe that its supervisory role has improved significantly over to the time period (Table 4). As per 71 percent of the respondents, the indirect tools

Table 4

Switching towards Market-based Monetary Policy

(In Percent)

		Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1	Helped improving signals of liquidity and short-run interest rate changes	0	14	21	50	14
2	Helped improving business conditions	7	7	43	43	0
3	More credit availability to private sector	0	21	21	50	7
4	More access of credit to previously neglected borrowers	7	14	43	29	7
5	More Transparent and accountable monetary policy strategy	7	21	14	50	7
6	Improved supervisory role SBP	0	21	7	57	14
7	Better off-site and on-site monitoring	0	7	43	43	7
8	Clarity in communication strategy	7	7	21	43	21
9	Supportive to continued financial innovations	0	0	43	50	7
10	Consistent with market-based exchange rate system	0	7	29	64	0
11	Supportive to broad-based distribution of credit to private sector	0	14	29	57	0
12	Helpful in the creation of competitive environment for banks	7	7	21	50	14
13	Less credit off-take by government sector	14	14	21	36	14
14	More flexible to absorbing external shocks	0	14	29	50	7
15	Smaller time lags in its transmission mechanism	14	7	14	50	14

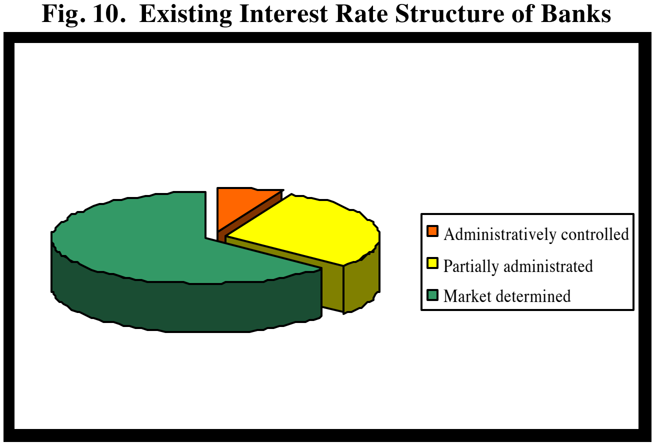
of monetary policy also helped in creating competitive environment for banking sector. Furthermore, the time lag of monetary policy has also reduced which shows that the central bank can achieve its targets in a comparatively smaller time span. About 57 percent of the respondents think that the market-based policy is relatively more flexible in absorbing the impact of external shocks. Keeping in view theoretical features, the policy seems to be more open to financial innovations. Similarly, the market-based monetary policy has removed restrictions on private sector borrowers who have relatively more opportunities to avail bank credit than the pre reform period. The issuance of separate prudential regulations for different types of banks also helped in enhancing access of bank credit to borrowers, including the SMEs and microfinance. The clarity in SBP communication strategy, among others, made monetary policy relatively more accountable and transparent over the time period.

As regard the perception about magnitude of governmental borrowings, about 50 percent of the respondents opined that it has reduced substantially over the time period which paved the way for more credit off-take by the private sector. It might be added here that the government institutions are treated for bank credit at par with private sector since 1995. A similar percentage of respondents opined that the market-based monetary policy also supported the move for strengthening of SBP's supervision, especially off-site and on-site monitoring mechanism. Nevertheless, despite various successful stories, the monetary policy remains least helpful in reducing banking spread, which is expected to shade a negative impact on its creditability besides affecting the goal of financial stability in the country. This indicates that the story of successes of financial liberalisation measures in Pakistan is not as reliable as it is believed by the policy makers.

7. *Liberalisation of Interest Rates*

Administratively controlled interest rate structure is said to be one of the major reason behind financial repression in the country. As a part of financial sector reform, the interest rates were gradually liberalised by removing caps and ceilings on deposits and lending rates. The central bank of the country claims that the current interest structure of banks is market determined and it has removed all kinds of interest rate controls. The perception Survey also support the central banks viewpoint as 64 percent of the respondents believe that the existing interest rate structure is being determined by market forces (Figure 10). However, 29 percent of the respondents opined that the existing interest rate structure is being administered partially while 7 percent respondents consider it an administratively controlled interest structure. This is an area of concern for SBP as the market-based interest rate structure ensures the availability of bank credit to borrowers without any exploitation.

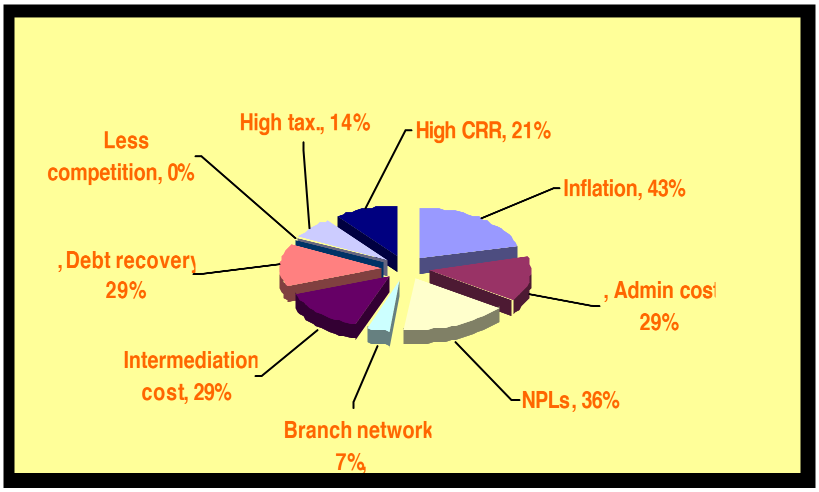
Fig. 10. Existing Interest Rate Structure of Banks



8. ***Banking Spread***

Since the large banking spread have significant implications for an economy, central banks of a country always try to reduce its gap (i.e. the differential between the lending and deposit rates). The Survey results exhibit that high domestic inflation and NPLs of banks are the two major reasons for large banking spread in Pakistan (Figure 11). About 29 percent of the respondents opined that high administrative expenses, larger intermediation costs, and poor debt recovery are also important factors behind the increase in banking spread.

Fig. 11. Causes of Large Banking Spread

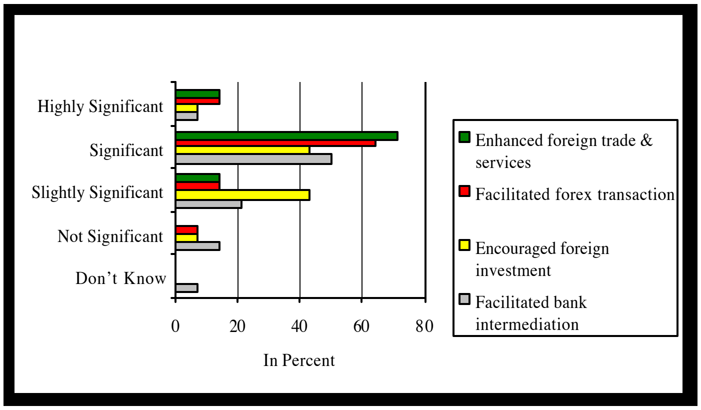


The imposition of high CRR by SBP and high tax on profit of banks are also considered important factors of widening of banking spread. Unlike the past, the adverse impact of large branch net work of banks relative to assets size and high return on government National Saving Schemes (NSS) on banking spread has either reduced or the respondents are not aware of any significance of such factors on banking spread.

9. ***Exchange and Payment Reforms***

Exchange and payment system reforms were introduced in early 1990s, which also continued in later years, were expected to have a positive impact on economy in general and the banking operations in particular. About 85 percent of the respondents (including both the highly significant and significant ranking) believe that reforms introduced in forex market and exchange rate regime caused expansion in Pakistan's foreign trade and services (Figure 12). A nominal percentage of respondents, however, considered its role as slightly significant. However, a 14 percent responded that these reforms have no

Fig. 12. Impact of Exchange and Payment Reforms



significant impact on foreign trade and services while 7 percent are not aware of the significance of these reforms. Similarly, about 78 percent (including both the highly significant and significant ranking) of the respondents opined that the forex regime facilitated forex transactions significantly besides encouraging foreign investment.

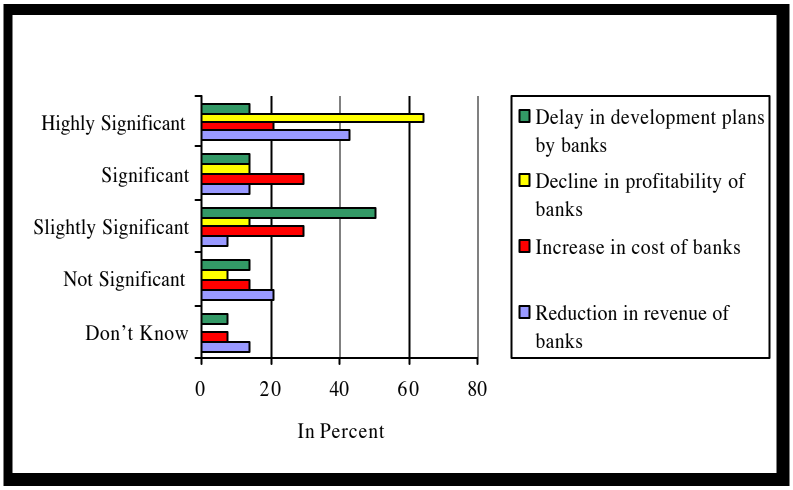
Regarding the significance of reforms introduced for strengthening of payment system, about 57 percent (includes both the ranking of highly significant and significant) of the respondents are of the view that it helped improved interbank transactions besides strengthening intermediary services. About 21 percent respondents are either not aware of its significance or do not consider its significant role in Pakistan's economy.

10. *High Non-performing Loans*

Too much political and bureaucratic interference in lending decisions may lead to an increase the magnitude of bad portfolios of banks due to non-compliance of prudential regulations and by overlooking of usual credit discipline procedure. With the implementation of new prudential regulations and BASEL norms, the introduction of reclassification and disclosure requirements, framing of rules for provisioning of loans, it was perceived that the NPLs of banks would reduce significantly. Further, the reduction in the magnitude of NPLs is also essential due to having negative impact on banks' performance.

According to the perception Survey, about 88 percent (includes both the ranking of highly significant and significant) of the respondents believe that an increase in the magnitude of NPLs leads to a decline in the profitability of banks (Figure 13). However, only 7 percent respondents consider that it play an insignificant role in the determination of profitability of banks. Regarding the impact of NPLs on revenue of banks, about 57 percent (including both the highly significant and significant ranking) of the respondents opined that NPLs have a significant adverse impact on the revenue of banks.

Fig. 13. Impact of High NPLs on Banks Efficiency



However, around 35 percent respondents consider either its role insignificant or not aware about its significance in terms of reduction in the revenue of banks. With regard to the impact on costs of banks, about 35 percent (including both the highly significant and significant) of the respondents opined that an increase in NPLs have enhanced significantly the costs of banks while 29 percent considered its adverse impact as slightly significant. Around 21 percent respondents either consider its role insignificant or are not aware of its any importance. As against expectations, only 28 percent (including both the highly significant and significant) of the respondents believe that an increase in NPLs leads to delay in the development projects of banks. In fact, an increase in NPLs and the consequent provisioning against the outstanding amount of bad debts leave little room for spending to be made on development projects. While 55 percent (including both the highly significant and significant) respondents consider the role of NPLs in delaying of development projects of banks as slightly significant, however, about 21 percent respondents are either not aware of its impact or consider its role as insignificant. This indicates the commitment of banks for development plans, particularly the IT plans, which are being implemented despite shortage of funds in the wake of provisioning against bad debts .

11. *Technological Up-gradation*

The role of information technology (IT) has dominated in almost every sphere of modern banking. Banks upgraded their IT systems mainly to facilitate customers, provide secured modes of payments, reduce their intermediation costs, thereby impacting positively on their overall efficiency.

The perception Survey results reveal that about 64 percent of the respondents ranked the usage of ATM machines as very significant in terms of its impact on banks efficiency. About 21 percent respondents also opined that the IT technology has impacted significantly the banks' efficiency. As regards the e-banking, about 86 percent respondents believe that it has shaded positive significant impact on banks' performance mainly due to introduction of an on-line transactions and provision of utility services to customer. Around 65 percent respondents think that the M-net facility has played a significant role in enhancing the bank's efficiency (Table 5).

Table 5

Impact of Latest IT Technology on Bank's Efficiency

(In Percent)

		Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1	E-banking	14	0	0	50	36
2	Automated Teller Machines (ATMs)	7	0	7	21	64
3	Credit Cards	7	0	29	36	29
4	M-net	14	0	21	36	29
5	Society for Worldwide International Facilitation Transfers (SWIFT)	0	0	21	29	50
6	National Institutional Facilitation Technologies (NIFT)	0	0	21	29	50
7	Real Time Gross Settlement (RTGS) System	0	0	36	21	43
8	GLOBUS network system	21	7	36	14	21

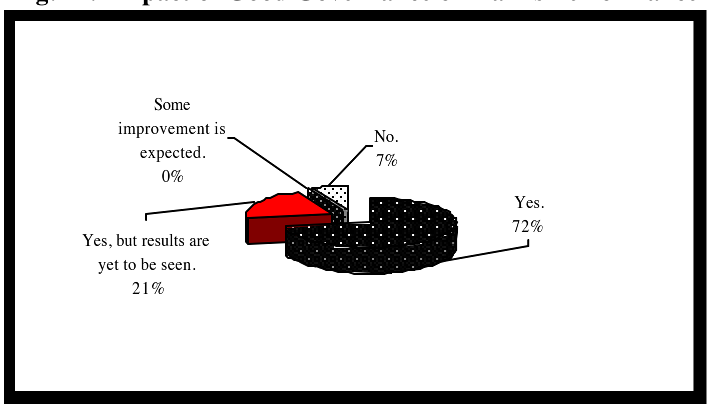
The central bank also provided some IT based systems mainly to facilitate banks in their interbank transactions, transactions with SBP, and supported them to expand transactions in foreign sector. Seventy-nine percent (includes both the highly significant and significant) of the respondents are of the view that the adoption of NIFT has shaded a positive significant impact on the performance of banks. The SWIFT also helped improve the scope of foreign trade transactions through secured, efficient, cost effective and speedy mode of payment.

Similarly, about 32 percent of the respondents shared that the GLOBUS system has shaded significant impact on bank's efficiency. The real time grass system (RTGS), which is likely to start in near future, is expected to have a significant impact on bank's performance mainly due to savings of time and HR involved in the banking transactions.

12. *Good Corporate Governance*

After 1997, the State Bank of Pakistan paid significant attention towards improving the governance of banks and issued guidelines for the board of director of banks, etc. The measures taken by SBP are expected to have a significant positive impact on banks' performance. According to the current perception Survey, a significant percentage of respondents (i.e., 71 percent) opined that good corporate governance caused an improvement in the quality of management of banks which in turn shaded a positive impact on their performance (Figure 14). While 21 percent of the respondents shared that the impact of good governance has not yet appear, about 7 percent respondents are not aware of any impact of good governance measures on banks efficiency.

Fig. 14. Impact of Good Governance on Banks Performance



13. *Merger/Acquisition of Banks*

Although the financial liberalisation of early 1990s opened up the way for entry of private banks, it led to a mushroom growth of banks, particularly the financially weak banks, which may cause financial instability. In this backdrop, the State Bank of Pakistan instructed banks to improve their financial health by meeting high paid-up capital requirements. However, the weak banks, which were unable to meet high capital requirements, were given options of merger and acquisition.

According to 64 percent of the respondents, the policy of merger and accusation helped in achieving the desired goals of financial soundness of banks by reducing the number of financially weak banks (Table 6). A low percentage of respondents (i.e., 14 percent) think that although the policy of merger/ acquisition is favourable for banks, the smaller banks should be given adequate time to improve their liquidity position mainly to meet BASEL requirements. A similar percentage of respondents also consider the policy of merger/acquisition a discouraging move by the SBP for new entry of banks in the private sector.

Table 6

Perception about Policy of Merger/Acquisition of Banks

(In Percent)

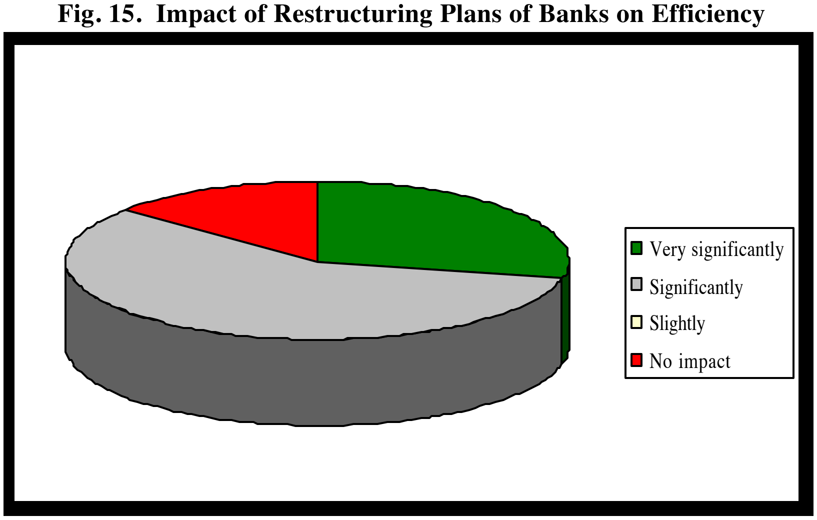
1	Put favourable impact on soundness of banks, as it reduces the number of weak banks and improves the quality of banking services.	64
2	Put favourable impact on soundness of banks, but smaller banks should be given adequate time to improve their liquidity position mainly to meet BASEL-I and II requirements.	14
3	Do not put favourable impact on soundness of banks, rather it discourages entry of new banks	14

14. *Restructuring of Banks*

After privatisation, the banks made plans for their restructuring mainly to improve their overall performance. As a part of their restructuring plans, they introduced various voluntarily retirement schemes for their employees besides re-engineering of their banking businesses. These steps were expected to have impacted positively their overall efficiency.

As per Survey results, 29 percent of the respondents opined that the restructuring plans of banks helped improve their performance very significantly (Figure 15). A significant percentage of the respondents (i.e., 57 percent) support the idea of significant impact of restructuring of privatised banks on their efficiency. However, around 14 percent of the respondents are not satisfied with the impact of restructuring plans, most probably due to policy loopholes, implementation lags and continued government intervention in the backdrop of partial privatisation of some of the NCBs .

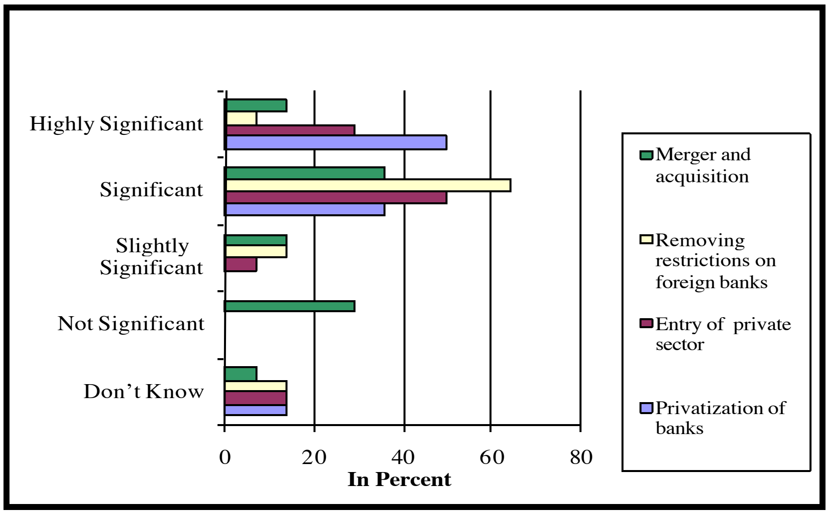
Fig. 15. Impact of Restructuring Plans of Banks on Efficiency



15. ***Quality of Banking Services***

One of the key objectives of banking sector reforms was to improve the quality of services being offered by the banks. According to the Survey results, about 86 percent (including both the highly significant and significant) respondents opined that the privatisation of NCBs put a significant impact on the quality of banking services (Figure 16). However, 14 percent of the respondents are not aware of its impact of key banking reforms on quality of banking services. The entry of private banks also significantly contributed to the quality of banking services. There is a general perception that the entry of banks led to an increase in competitive environment which in turn resulted into diversification as well as improvements in quality of banking services.

Fig. 16. Impact of Reforms on Quality of Banking Services

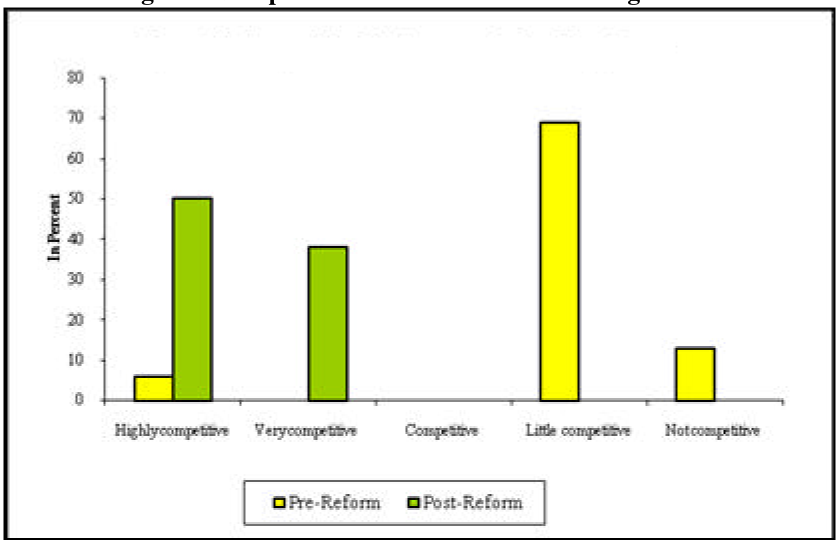


Similarly, about 71 percent (including both the significant and very significant) of the respondents are of the view that the removal of operational restrictions on foreign banks contributed to competitive environment which induced local banks to bring the quality of services at par with those of foreign banks.

16. ***Competitive Environment in Banking Sector***

Since the administratively controlled banking sector was lacking the elements of competitiveness and efficiency, the drastic reforms were planned to transform the system into a competitive and efficient one. The perception Survey attempts to capture the impact of key reforms on different aspects of competitiveness of banking sector, as competitive environment is supposed to meet the financing needs of the most efficient economic agents, enabling them to play their due role in Pakistan's economy. As per the Survey results, the need for banking sectors reforms was felt as banking sector had little competition during the pre reform period. This is supported by a significant percentage of respondents (i.e., 82 percent) that the banking sector had little competitive environment in the pre reform era (Figure 17). Further, about 13 percent respondents also supported the viewpoint of least competition amongst the banks operating in Pakistan. However, about 6 percent of the respondents consider the pre reform period a competitive one. This viewpoint is completely against the existing market perception and empirical evidence regarding the banks operating in Pakistan during pre reform period.

Fig. 17. Competitive Environment in Banking Sector



As per expectations, almost 100 percent of the respondents believe that the range of competition in banking sector varies between "highly" and "very competitive" banking environments in recent time.

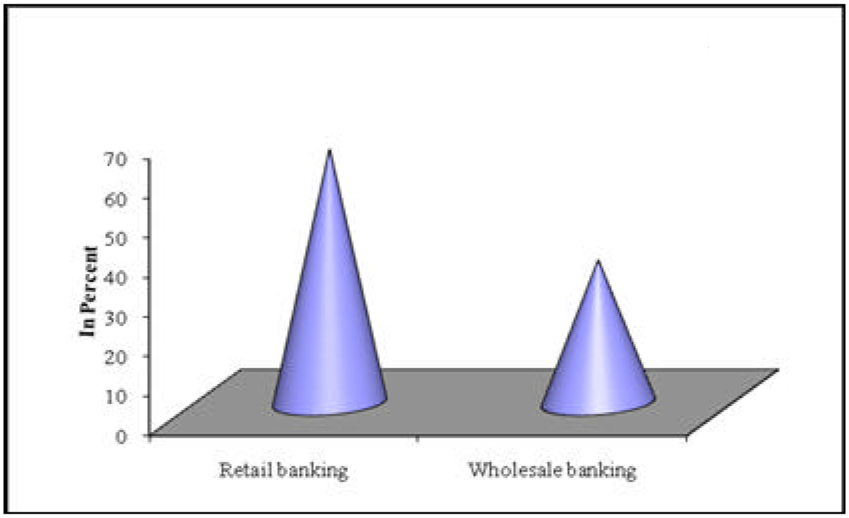
17. ***Competitive Effect on Banking Products***

The competitive environment which emerged due to implementation of a variety of banking sector reforms impacted various segments of banking operations. A brief description of competitive effect is given below:

(a) General Classification of Banking Products

The impact of all key banking sector reforms was expected to reflect initially in the major category of banking products. According to the perception Survey, between the two general classifications of banking products, about 64 percent of the respondents think that the competitive environment affected significantly the retail banking (Figure 18). In fact, the banks introduced a variety of innovative products in retail banking mainly to attract customers and enhance their earnings through low cost of funds generation.

Fig. 18. Competitive Effect on General Banking Products



Like the retail banking, the whole sale banking products were also influenced due to enhanced competition in the Pakistani banking sector. Under competitive effect, banks launched various whole sale banking products. According to the Survey results, about 36 percent respondents opined that the competitive environment affected the wholesale banking. This is an important development as most of the local banks are involved in retail banking in Pakistan while foreign and major commercial banks always prefer whole sale banking. However, Citi bank has commenced various schemes for retail customers in recent time. This change in the marketing strategy of foreign banks appears to be the major factor behind increased competition in retail banking.

(b) Specific Category of Banking Product

As explained above, the competitive environment also affected specific category of banking products.

As per the Survey results, the "Commercial Banking" is ranked 1st in terms of competitive effect followed by "Corporate Banking". While the "Investment Banking" is ranked 3rd, the "Islamic Banking" which is one of the most growing area of global banking, is ranked 4h in terms of competitive effect. Cash Management and Asset Management are ranked 5th and 6th respectively by the respondents (Table 7).

Table 7

Completive Effect on Specific Banking Products

		Ranked in Terms of Significant Effect					
		1	2	3	4	5	6
1	Corporate Banking	4	3	1	1	0	0
2	Commercial Banking	5	4	1	0	1	0
3	Investment Banking	1	1	4	1	1	1
4	Islamic Banking	0	0	0	4	3	2
5	Cash Management	0	1	1	1	4	1
6	Asset Management	1	0	2	1	0	4

(c) Intermediary Services

The ultimate impact of banking sector reforms and other strengthening measures was supposed to transmit on various intermediary services of banks. The current Survey provides some details of effectiveness of intermediary services due to competitive environment (Table 8).

Table 8

Impact on Intermediary Services due to Competitive Environment

(In Percent)

		Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1	Advances	17	42	42	0	0
2	Deposits	33	8	50	8	0
3	Foreign exchange	0	42	25	25	8
4	Trust services	0	8	17	33	42
5	Investment	0	25	42	33	0
6	Money market placements	0	50	25	25	0
7	Investment in fixed Assets	0	25	25	25	25
8	Project financing	8	17	25	42	8
9	Export finance	8	33	25	33	0
10	Infrastructure finance	0	8	42	25	25
11	SME finance	8	50	33	8	0
12	Auto finance	17	33	17	25	8
13	E-banking	25	33	8	17	17
14	Utility services	0	33	17	33	17
15	Personal loans	8	33	33	25	0
16	Housing financing	17	42	17	25	0
17	Others (please specify)	8	33	17	25	17

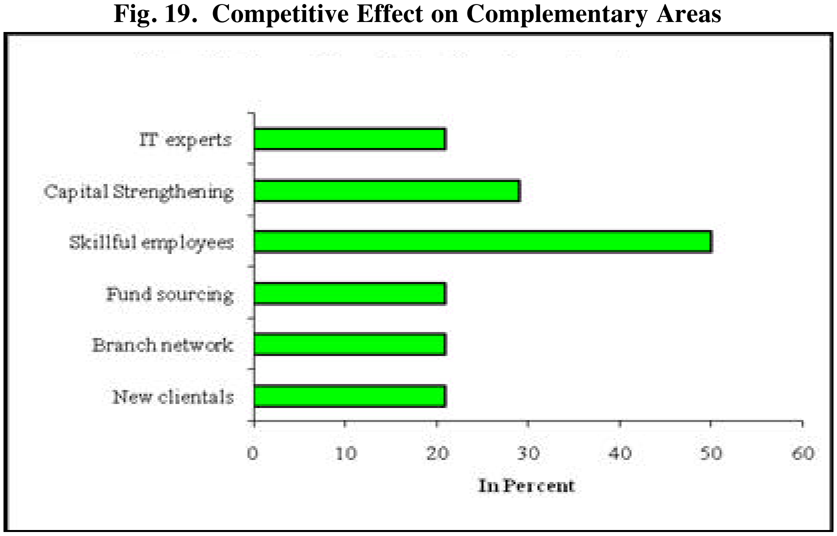
According to the Survey results, the "Trust Services" are affected significantly due to competitive environment, followed by "Utility Services", "Project Financing", Investment in Fixed Assets", and "Infrastructure Finance". About 33 percent of the respondents opined that "Export Finance" and "Investment" are affected by the competitive environment, most probably due to relatively more awareness about prevailing business conditions by customers. Similarly, around 25 percent respondents are of the opinion that consumer financing, in particular "Auto Finance", "Personal Loans", "Housing Finance" are affected significantly by the competitive environment. In the same way, "E-banking", "Deposit" and "SMEs Finance" are identified as the least affected areas of competitive effect.

Since the sample includes nationalised and privatised banks, their deposit base remains in tact despite competitive environment due to banking with a significant number of PSEs as main clients. Regarding the e-banking, it is important to find that banks face minimum loss of business on this account as majority of them offer almost similar on-line banking services.

(d) Competitive Effect on Complementary Areas of Banking

The banks faced stiff competition in some of the complementary areas of banking. As per the Survey results, substantial competition was witnessed in recruitment of skilful employees/professional bankers (Figure 19). The banks also faced competition while raising "Capital" to meet BASEL requirements. Some competition was also reported by the respondents in other segments like seeking of "New Cliental", "Funds sourcing", "IT experts" to upgrade the systems, and expansion in "Branch Network".

Fig. 19. Competitive Effect on Complementary Areas



(e) Strategies Adopted to Meet Stiff Market Competition

Banks took various measures to meet the challenges of enhanced competition in the banking industry in the wake of key reforms in the banking sector. Some of their moves were imminent to meet stiff competition, while a few could be delayed. Similarly, they kept some important steps as a part of their future plans. As regards the action already taken by banks, about 79 percent of the respondents opined that banks invested in new technology, as the modern banking required too much reliance on IT technology, mainly to facilitate customers in a variety of on-line based products (Table 9). Similarly, around 70 percent respondents think that banks introduced new products largely to meet customers demand and keep the customer-bank relations intact. They also changed their mission and vision statement to make their businesses compatible with future needs.

Table 9

Action Plans of Banks to Meet Challenges of High Competition

(In Percent)

		Action Already Taken	Imme-diate Action	Part of Future Strategy	No Action Required
1	Move to other markets	57	0	29	14
2	Chang the mission/vision	69	8	8	15
3	Invested in new technology	79	14	7	0
4	Review pricing to match competition	57	43	0	0
5	Introduce new products	71	29	0	0
6	"Pirated" from other banks	18	0	9	73
7	Hire consultants	62	8	0	31
8	Increase bank network	50	14	36	0
9	Re-engineer all or some processes	62	23	15	0
10	Review manpower policies	64	21	14	0
11	Form strategic alliances				
	(a) With local banks	27	9	18	45
	(b) With foreign banks	27	0	45	27
12	Increase advertising and promotion activities	57	21	14	7
13	Capital infusion (relevant for NCBs/ Partially PBs)				
	(a) From present shareholders	55	9	9	27
	(b) From outsiders	38	0	25	38
	(c) Combination of both	44	0	22	33
14	Merge/Acquire				
	(a) Local banks	25	0	13	63
	(b) Foreign banks	14	0	0	86

A significant percentage of respondents (around 60 percent) believe that banks revamped their business processes, reviewed manpower policies and hired consultants so that they could meet challenges of banking industry in the wake of enhanced competitive environment. This was essential for domestic banks as the foreign banks with sufficient resources, professional skills, and product diversification have an edge over their competitors particularly the local banks. Therefore, the competitors also planned to introduce similar innovative products.

Around 55 percent of the respondent opined that banks reviewed their pricing policy to match competition, focused more on other businesses, and started paying attention towards advertisement and promotion of businesses. Some banks also off-loaded their shares to raise funds through stock exchanges mainly to strengthen their capital in the wake of BASEL norms. Furthermore, the banks also generated funds through issuance of GDRs. About 25 percent of the respondents think that merger/acquisition of banks should be formed with local banks while 14 percent consider these arrangements with foreign banks. About 18 percent of the respondents shared that banks "pirated" some policies from others to meet the customers demand.

As regard the immediate actions, about 43 percent of the respondents opined that banks need to review their pricing policy to match competition while 28 percent respondents consider the need of immediate introduction of innovative financial products. Around 20 percent of the respondents support the need of businesses re-engineering and promotion of business through aggressive advertisement. About 14 percent respondents are of the opinion that banks should invest more on IT projects and expand their banking network. Some respondents think that banks should generate funds through issuance of GDRs for strengthening of equity.

With regard to future strategy of banks, about 45 percent of the respondents opined that banks would form more strategic alliance with foreign banks while 18 percent think that such alliance would be formed with local banks. Similarly, the expansion of business through branch network is also likely to be an important part of future strategy of banks. They would also try to explore new areas of businesses where they would have some advantage over others.

18. *Exogenous Factors*

Among others, the exogenous factors also play a very important role concerning the performance of banks. In some cases, the overwhelming impact of extraneous factors could have neutralised the positive impact of reform measures. For example, the freezing of foreign currency accounts in the background of May 1998 events had very significant negative impact on Pakistan economy. Similarly, the political unrest, poor law and order situation, etc. also eroded the positives of policy measures.

According to the results of perception Survey, about 50 percent (including both the highly significant and significant) of the respondents are of the opinion that corruption, injustice, increased terrorism, and lack of infrastructure facilities have shaded a negative impact on the efficiency of banks operating in Pakistan (Table 10). Especially, the acts of terrorism have caused significant financial loss to banks in recent time. In some cases, the bank branches were also burnt by the protesting mob as consequence of act of terror.

Table 10

Impact of Exogenous Factors on Banks' Efficiency

(In Percent)

		Do not Know	Not Significant	Slightly Significant	Significant	Highly Significant
1	Corruption	7	29	21	36	7
2	Injustice	14	21	21	36	7
3	Bribery	14	29	21	29	7
4	Terrorism	14	29	14	29	14
5	Lack of infrastructure facilities	14	21	21	29	14
6	Market imperfections	7	21	43	14	14

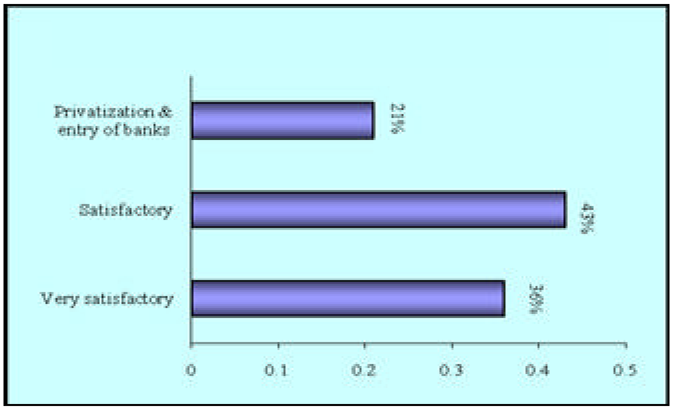
Similarly, the growing corruption in the country has also damaged the creditability of major institutions, including banks. However, the role of market imperfections on banks' efficiency has reduced recently, most probably due to increased competition in the banking sector.

19. *Privatisation and Financial Liberalisation—Future Strategy*

Although, the process of privatisation of banks, initiated in early 1990s, is incomplete till date, as there are nationalised commercial banks which are still operating under the state control. Further, the process of full privatisation of some of the banks continued even for 10-12 years. This lengthy process of privatisation of banks might have impaired the benefits and efficiency of privatised banks due to functioning under some of the political and bureaucratic influence.

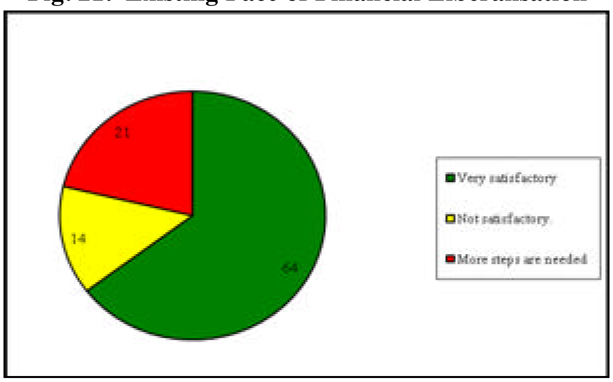
As per the current Survey results, about 36 percent of the respondents revealed their full satisfaction over privatisation process of banks in Pakistan (Figure 20). About 43 percent of the respondents showed their mere satisfaction over the privatisation process while 21 percent suggested for the need of privatisation of remaining state-owned banks.

Fig. 20. Existing Pace of Privatisation of Banks



Similarly, with regard to the satisfaction level of financial liberalisation programme, about 64 percent respondents showed their full satisfaction over the liberalisation process, around 14 percent stressed to enhance the pace of financial liberalisation, but with cautious approach (Figure 21). Similarly, 21 percent respondents suggested for more financial liberalisation measures.

Fig. 21. Existing Pace of Financial Liberalisation



Cost Inefficiency Scores

Various methods are used to derive estimates of a firm's inefficiency in the financial services industry [Berger and Humphrey (1997)].[14] The

[14]The methods for evaluating frontier efficiency basically break into parametric and nonparametric methods. The former category is represented by the Data envelopment analysis and the Free disposable hull. The latter comprises the Stochastic frontier approach (SFA) in cross-section or panel data framework, cross-section or panel data Thick Frontier Approach, and panel data techniques of the Random effects model (REM) and the Distribution free approach (DFA). For a comprehensive survey and detail description of these methods, see Berger and Humphrey (1997).

current study employ Distribution Free approach to measure the relative cost inefficiencies of banks operating in Pakistan, using panel data from 1990 to 2006.[15] In the said approach, estimated inefficiencies are supposed to remain stable over the sample period while random errors are most likely to be averaged out. While estimating cost inefficiencies, researchers are generally confronted with problem of isolating inefficiency term from its random errors in the model. To overcome this issue, the current study employs fixed effect model which enables us to capture inefficiency element associated with a specific bank. The study uses unbalanced micro panel data of banks which include state owned, privatised, private and foreign banks (including one foreign Islamic bank.

The translog cost function, although incorporates fixed effect model, is assumed to follow all fundamental assumptions of "Distribution Free" approach. As regard variables, the study uses both the input and output variables keeping in view the intermediation approach. The ratio of total expenses of a bank to total assets of commercial banks is used as dependent variable. The independent variables include: percentage of advances to assets, percentage of investment to assets, annual administrative expenses per employee (for labour price), and interest expenses per million of borrowed funds (price of financial capital). Moreover, the model incorporates percentage of non-performing loans (NPLs) to total asset ratio. Time dummy variable is also used as an independent variable, as it quantifies the impact of technological progress upon cost.

As per the model, a bank may be considered more efficient if it performs its usual banking functions at a relatively lower cost. The cost of their doing business may be affected by a variety of factors including cost effective practices, choice in asset portfolios, risk management, professional skills, wastage of resources, the share of infected loans, loan recovery efforts, degree of government intervention, over staffing, and various other factors. The key banking reforms in Pakistan were intended to remove prevailing flaws in their banking operations, thereby improving their efficiency level.

The results of the model indicate that banks have different efficiency levels. Ranking of banks in terms of cost efficiency depicts that relative efficiencies of other banks fall within the range of 97.3 percent (foreign bank) to 55.4 percent (a privatised bank) (Table 11).

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[15]The sample size is large enough to provide an opportunity to employ the parametric approach to estimate the requisite parameters. Proportion of missing data is very low and where necessary moving averages have been used as an approximation.

Table 11

Efficiency Across the Banks

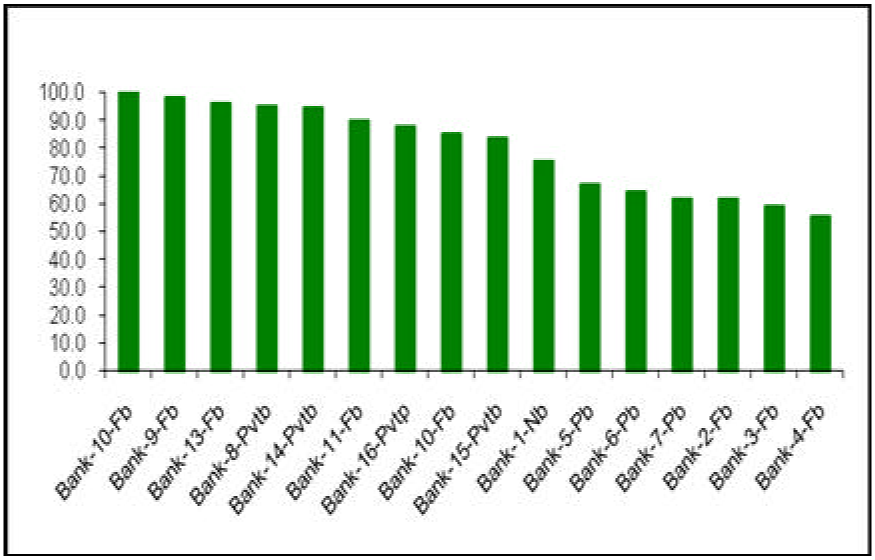
(In Percent)

Bank	Coefficients	Std. Err.	T -stat	P>|t|	[95% Conf.	Interval]	Efficiency
Bank-10-Fb*	1.09	0.29	3.78	0.00	0.52	1.66	100.00
Bank-9-Fb	1.09	0.28	3.85	0.00	0.53	1.65	99.73
Bank-13-Fb	1.12	0.29	3.91	0.00	0.55	1.68	97.22
Bank-8-Pvtb**	1.16	0.29	3.95	0.00	0.58	1.74	93.01
Bank-14-Pvtb	1.16	0.29	4.00	0.00	0.59	1.74	92.88
Bank-11-Fb	1.19	0.29	4.09	0.00	0.62	1.77	90.09
Bank-16-Pvtp	1.22	0.29	4.23	0.00	0.65	1.79	87.35
Bank-10-Fb	1.24	0.29	4.27	0.00	0.67	1.81	86.08
Bank-15-Pvtb	1.29	0.29	4.43	0.00	0.72	1.86	81.80
Bank-1-Nb***	1.37	0.29	4.66	0.00	0.79	1.95	75.25
Bank-5-Pb***	1.49	0.30	4.98	0.00	0.90	2.08	66.93
Bank-6-Pb	1.53	0.30	5.20	0.00	0.95	2.12	64.02
Bank-7-Pb	1.55	0.31	5.03	0.00	0.94	2.15	63.37
Bank-2-Nb	1.57	0.30	5.30	0.00	0.99	2.16	61.65
Bank-3-Nb	1.61	0.31	5.14	0.00	0.99	2.23	59.30
Bank-4Pb	1.68	0.30	5.66	0.00	1.10	2.26	55.40

Note: * Denotes Foreign Bank operating in Pakistan.
** Denotes Private Domestic Bank operating in Pakistan.
*** Denotes Nationalised Commercial Bank operating in Pakistan.
**** Denotes Privatised Bank operating in Pakistan.

The 55.4 percent relative efficiency of privatised bank means that this bank could have saved 44.6 percent costs in producing the current level of earning assets by eliminating the element of cost inefficiency (see Figure 22). Ansari (2006) finds that all banks significantly differ in relative cost efficiency ranging from 87 percent to 49 percent. Similarly, according to Limi (2002), the differential in technical efficiencies of Pakistani banks ranges from 51.9 percent to 79.5 percent and seems to be decreasing over time, implying that there appear to be striking differences between banks which undergo internal restructuring and banks which are failing to do so. However, the results different from the study by Rizvi (2001), which find that inefficiency in overall banking system of Pakistan is more or less stagnant, while the efficiency composition within the industry has changed, local banks, especially nationalised banks, except one, have improved their performance. The results of the current study are consistent with efficiency estimates of the study conducted by Ansari (2006) for Pakistani banks. Similarly, Berger, *et al.* (1993) finds that the X-inefficiency for the U.S. depository institutions is around 20 percent of costs while Allen and Rai (1996) reports that the average cost inefficiency for the European countries is around 15 percent of cost.

Fig. 22. Ranking of Efficient Banks



The average relative efficiency of top 5 best practice banks is 96.6 percent corresponding to 60.5 percent for 5 least efficient banks. The overall average efficiency level of commercial banks is found to be 80 percent which depicts that there is enough room in commercial banking sector to minimise the cost by reducing the impact of factors causing inefficiencies in commercial banks' operations.

Group-wise efficiency of banks is also consistent with the overall efficiency estimates, as foreign banks are found more efficient, followed by private banks, nationalised commercial banks and privatised banks. As a group, the efficiency of foreign banks is 100 percent, followed by 90.5 percent for private domestic banks, 70.5 percent for nationalised commercial banks, and 62.8 percent for privatised banks. The relative high cost inefficiency of privatised banks is most probably due to having remained under state owned structure during most of the period of the study (Table 12). Apparently, the partial privatisation of banks is the key reason behind high cost inefficiency of privatised banks amongst 4 major groups of banks. Ansari (2006) also find that most of the public sector banks exist in the least efficient group while the majority of foreign banks and some private commercial banks in the best efficient group.

The above results primarily augment the findings of the sample perception Survey which indicate that banks differ in terms of their efficiency level. However, the overall efficiency of banks has improved over the time period of analysis.

Table 12

Efficiency Across the Banks

Groups	Coefficients	Std. Err.	t	P>|t|	[95% Conf.	Interval]	Efficiency
FBs	0.76	0.31	2.44	0.02	0.15	1.38	100.00
PVTBs	0.86	0.32	2.72	0.01	0.24	1.49	90.53
NCBs	1.11	0.33	3.41	0.00	0.47	1.75	70.60
PBs	1.23	0.32	3.82	0.00	0.59	1.86	62.86

Note: FBs denotes Foreign Bank operating in Pakistan.
PVTBs denotes Private Banks operating in Pakistan.
NCBs Nationalised Commercial Banks operating in Pakistan.
PBs denotes Privatised Bank operating in Pakistan.

7. CONCLUDING REMARKS

The study was primarily aimed at analysing the impact of financial liberalisation and deregulation reforms together with variety of complementary measures on commercial banks performance. For analysis purposes, the current study employ perception Survey approach to capture responses of banks about the need, impact and possible reactions of banks to key banking sector reforms. Out of 39 banks commercial, 15 banks were chosen for analysis purposes which include one Islamic bank, 3 state-owned banks, 4 privatised banks, 4 private banks, and 3 foreign banks. Specialised commercial banks were excluded because of their limited role.

The sample of banks adequately represent the whole commercial banking sector as their key financial indicators reveal that they dominate in the commercial banking sector in terms of their asset holdings, deposits mobilisation, extension of advances, paid up capital, number of employees, etc. For instance, the asset share of sample banks in total assets of commercial banks stood 74 percent in 2006, declining from 93 percent in 1990.

Just to augment the findings of perception Survey approach, the study also employed distribution free approach to measure relative cost inefficiencies of commercial banks which are included in sample perception Survey. One more foreign bank namely AGN Zurich Bank was also included in the analysis, however, its data is available up to 2005. The AGN Zurich Bank was merged with Metropolitan Bank Limited in 2007. The current study uses panel data for the period 1990 to 2006.

The study mainly finds that:

(1) Key banking reforms remain helpful in correcting flaws in the banking sector of Pakistan. In particular, privatisation of banks, the deregulation and institutional strengthening measures and switching towards market-based monetary and credit management remain helpful in correcting the prevailing flaws.

(2) Years of bank operations under the state-owned structure and under regulation of banks are identified as the key factors behind uncompetitiveness, inefficiency, and vulnerability of banks.

(3) Dual supervision of banks and poor regulatory controls are indicated as the major factor behind weak financial health of banks. Over regulation of banks also impacts competitiveness, efficiency and financial health of banks.

(4) The factors like imposition of high SLR and CCR, launching of government sponsored schemes, imposition of restrictions on opening of private banks, restrictive bank branch policy, left no room for banks to extended credit at their own choice.

(5) Most of the indicators of banks performance improve due to enhanced competition in the wake of financial liberalisation, deregulation, and institutional strengthening measures. As a consequence, banks adopt best practices, become more disciplined in credit disbursements, implement prudential regulations, and face less political interference in lending decisions. Improvements may also occur in the areas like recovery of loans, accountability and transparency in policies, up-gradation of IT system, reduction in intermediation inefficiencies of banks, more access of bank credit to private sector, corporate governance, and better portfolios of banks.

(6) Privatisation of banks also results into lesser political interference. In case of Pakistan, too much intervention by the government, prior to the implementation of reforms, cause deterioration in the efficiency of nationalised commercial banks. The abolishment of Pakistan Banking Council (PBC), full privatisation of MCB and ABL, and partial privatisation of HBL and UBL, grant of operational autonomy to SBP, the legislation about fiscal transparency and accountability, are said to be the major cause of low government intervention. The degree of government intervention is also likely to reduce in banking affairs after the privatisation of remaining NCBs. Further, the privatisation and restructuring of banks has minimised the role of staff union very significantly. Prior to banking reforms, the staff unions had became very strong and used to interfere in the management decisions pertaining to recruitment, promotion, transfer and postings of staff, which caused negative impact on the overall efficiency of state-owned banks.

(7) Switching towards a market-based system of monetary management positively impact on banking operations due to clarity and consistency of the system.

(8) High domestic inflation and non-performing loans (NPLs) of banks are identified as the two major reasons behind large banking spread.

Further, high administrative expenses, larger intermediation costs, and poor debt recovery are also said to be the important factors of widening banking spread. In case of Pakistan, the imposition of high CRR by SBP and high tax on profit of banks are also regarded important factors behind large banking spread. As regard the negative impact of NPLs of banks, the respondents opined that an increase in the NPLs causes a decline in their profitability besides contributing to an increase in the costs of banks. As against expectations, an increase in NPLs does not cause delay in the development plans of banks. This indicates that banks continued their development plans, particularly the IT up-gradation, despite shortage of funds in the wake of provisioning against NPLs.

(9) The restructuring plans help improve banks performance. However, a few respondents are not satisfied with the impact of restructuring plans, most probably due to policy loopholes, implementation lags and continued government intervention due to the partial privatisation of some of the NCBs. Similarly, the policy of merger and acquisition also helped in achieving the desired goals of financial soundness of banks by reducing the number of financially weak banks. Nevertheless, some of the respondents think that although the policy of merger/acquisition is favourable for banks, the smaller banks should be given adequate time to improve their liquidity position mainly to meet BASEL requirements. However, a few respondents consider the policy of merger/acquisition a discouraging move for new entry of banks in the private sector.

(10) The financial liberalisation and deregulation measures impact positively on the quality of banking services. The impact of privatisation of NCBs is reported to be significant on the quality of banking services. The entry of private banks also significantly contributes to the quality of banking services. Similarly, the removal of operational restrictions on foreign banks adds to competitive environment which induce local banks to bring the quality of services at par with those of foreign banks.

(11) The competitive environment, which emerged due to implementation of a variety of banking sector reforms, impacts various segments of banking operations.

(12) The cost inefficiency scores of banks also indicate that the efficiency of Pakistani banks have improved over during 1990 to 2006. However, the cost inefficiency varies across the banks. The ranking of banks in terms of cost efficiency indicates that a foreign private bank is found to be the best practice bank and estimated as a cost frontier. The relative efficiencies of other banks fall within the range of 97.3 percent (foreign bank) to 55.4 percent (a privatised bank).

(13) The average relative efficiency of top 5 best practice banks is 96.6 percent corresponding to 60.5 percent for 5 least efficient banks. The overall average efficiency level of commercial banks is found to be 80 percent which depicts that there is enough room to minimise the cost by reducing role of factors causing inefficiencies in banking' operations. The results of the current study are also consistent with efficiency estimates of the study conducted by Ansari (2005) for Pakistani banks.

(14) As regards group-wise efficiency estimates foreign banks are found to be more efficient, followed by privatised banks, nationalised commercial banks, and private banks. As a group, the efficiency of foreign banks is 100 percent, followed by 90.5 percent for private domestic banks, 70.5 percent for nationalised commercial banks, and 62.8 percent for privatised banks.

(15) The relative high cost inefficiency of privatised banks is most probably due to having remained under state owned structure during most of the period of the study. The financial liberalisation and the resultant competitive environment might be the key factors behind improvements in efficacy of banks. Further technological up gradation and financial innovative in banking sector also improved cost efficiency of banks. Further, there exists enough scope for banks to improve cost efficiency which can be acquired by corrective measures to improve HR management, best choice for asset portfolio, technological up-gradation progress and reduction in NPLs.

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