5 Transformation of Financial Markets During the Reform Process

Reforms initiated in late 1980s, which continued in the 1990s, started to transform the financial markets rapidly from FY91. Structure of a well functioning money market quickly developed with the introduction of auctioning process of short and long-term government securities. Capital market activities expanded very quickly in response to opening up of equity markets to foreigners. Activities in foreign exchange market also expanded rapidly after residents were allowed to open foreign currency accounts in addition to granting licenses to money changers.

5.1 Evolution of Money Market

The debt management reforms of early 1990s, in conjunction with monetary management measures (see **Sections 2.4** and **2.5**), resulted in establishment and development of a well functioning primary and secondary market for short-term government paper. The pre-reform sale of government securities was through tap system and banks could rediscount in case of any cash requirement. The rediscounting facility precluded the possibility of any secondary market activity. Only some sporadic trading was done in the long-term market loans for which premature retirement was not possible. The abolition and replacement of tap sale of government paper with auctioning of securities, and subsequent closure of rediscounting facility resulted in establishment of a robust secondary market and a network of efficient money market brokers.

5.1.1 Pre-reform Inter-Bank Money Market

As discussed in **Chapter 1**, the pre-reform money market consisted of primary market of treasury bills on tap and government treasury deposit receipts (GTDRs), call money market for borrowing and lending overnight or very short-term, and a market for sale and purchase of unutilized portion of credit ceilings. Segmentation in the short-term government debt market was maintained by disallowing banks to purchase GTDRs. Secondary market for treasury bills and GTDRs did not exist because of presence of discount window, which allowed early discharge of these bills. The secondary market activity was only confined to rare trading in market loans. Under the system of credit ceilings banks were, however, allowed to trade in the unutilized portions of their credit ceilings. Trading in credit ceilings did not involve any collateral. The rate was linked to the overnight call money rate, determined on the basis of demand and supply.

5.1.2 Primary Market of Treasury Bills

The reforms transformed the primary market from a non-market oriented to a competitive market oriented one; the previously fixed yield on T-bills was changed to an yield determined by the competitive bids of the players, thus compelling the government to borrow at market rates.[1] Further, the SBP could send interest rate signals to the market regarding the monetary stance. First auction of six-month T-bills was held on 3rd March 1991, and during the decade 208 successful auctions were conducted. The bidding pattern of the banks demonstrated a quick adjustment to market pricing mechanism in just four auctions. The bid spreads decreased sharply from over two thousand basis points in the first auction to 273 basis points in the fourth auction.[2] Unusually high spread in first auction reflected the initial lack of competitive pricing skills required to participate in auction. The average spread of 233 basis points for the decade showed the relative competitiveness and the efficiency of the market (see **Table 5.1**). The money market brokers contributed significantly in disseminating the crucial information that makes the market more efficient.

Wide participation was allowed in auctions through a system of approved dealers who were mainly banks and non-bank financial institutions. Individuals were also allowed to participate in auctions

[1] Under the tap system, three-month T-bills carried a fixed yield of 6 percent per annum.

[2] In the first auction, the spread between highest and lowest bid was 2929 basis points, presumably due to miscalculation by a bidder.

Table 5.1: Six-month T-bill Auction Summary

	Number of auctions		Number of bids		Spread (in percent)		Yield in percent (weighted
	Held	Scrapped	Received	Accepted	Simple	as % of yield	average)
FY91	9	-	574	330	6.93	78.62	8.81
FY92	28	3	1,293	726	2.44	21.49	11.34
FY93	24	3	1,942	969	2.44	19.80	12.35
FY94	25	-	2,816	1,222	2.64	21.24	12.45
FY95	26	-	1,880	1,008	1.90	16.27	11.69
FY96	24	1	545	332	0.53	4.15	12.78
FY97	24	-	766	541	1.07	6.88	15.53
FY98	22	2	2,493	1,094	2.13	14.22	14.97
FY99	24	7	1,532	410	1.96	15.52	12.66
FY00	26	8	758	251	1.25	14.06	8.87
Total/average	**232**	**24**	**14,599**	**6,883**	**2.33**	**21.22**	**12.14**

indirectly via approved dealers. Participation in T-bill auctions was, however, dominated by banks who had an active short-term portfolio of investment. Non-bank participation was minimal due to their preference for long-term investment. After the success of six-month paper, three and twelve-month treasury bills were introduced in June 1998 (see **Table 5.2**).

Table 5.2: Three and Twelve-month T-bill Auction Summary

Instrument	Year	Amount (million Rs)		Auctions		Spread	Yield in percent (weighted
		Offered	Accepted	Held	Scrapped	(in percent)	average)
Three-month	FY99	147,735.0	45,985.0	24	12	1.79	11.60
	FY00	82,245.0	21,085.0	26	8	1.40	7.82
Twelve-month	FY99	283,038.5	78,960.0	24	6	1.51	13.52
	FY00	168,391.5	51,199.7	26	3	1.36	9.29

As the market was already adept at the auctioning process, the bidding pattern showed lower bid spreads from the beginning of their auctions. First auction of three and twelve-month T-bills was held in June 1998 together with six-month bills. Overall 50 auctions of these maturities were conducted up to December 2000, out of which 20 and 9 were scrapped for three and twelve-month instruments respectively. The average spreads during the period under study for all tenors are relatively narrow, depicting the growing competitiveness and efficiency of the market. Six-month instrument stands out as the most effective one, as both the amount and the percentage acceptance is higher compared with the other two instruments (see **Table 5.1**).

5.1.3 Government Bond Market

There was no marketable long-term government paper in the pre-reform period. Federal and provincial governments mainly relied on 'Market Loans' to raise long-term finance from the financial sector. 'Market Loans' were essentially bonds of ten-year maturity offered through subscription to banks and non-banks, only at par, with a pre-determined rate of return fixed by the government. It was not a market-based bond, and trading was confined to a few instances of exchange among banks. In order to establish a proper government bond market, a new instrument, Federal Investment Bond (FIB) was introduced with maturities of three, five and ten years. Coupon rates for these bonds were fixed at 13, 14 and 15 percent respectively.

First auction of FIBs was conducted in March 1991 and the last in June 1998. **Table 5.4** shows that auctions during the first four years proved immensely successful as the number of bids received and accepted were on higher side. The ten-year FIB showed the best overall performance on the basis of amount offered and accepted, number of bids received and accepted, and the number of auctions scrapped (see **Table 5.3** and **Table 5.4**).

Table 5.3: Federal Investment Bond Auction Summary

million Rupees

Year	Amount offered	Amount accepted				Acceptance ratio (in percent)
		3 year	5 year	10 year	Total	
FY91	39,268	13,934	6,170	14,834	34,938	88.97
FY92	56,407	10,649	3,007	31,318	44,974	79.73
FY93	77,127	12,600	5,138	35,840	53,578	69.47
FY94	63,284	10,708	4,034	11,869	26,611	42.05
FY95	42,154	8,785	2,267	18,935	29,988	71.14
FY96	18,026	3,877	4,169	7,919	15,964	88.56
FY97	4,841	1,101	105	3,510	4,716	97.42
FY98	4,882	1,331	177	2,152	3,661	74.99
Total	305,989	62,986	25,066	126,378	214,430	70.08

In the initial years of introduction of FIBs, the bond was successful in attracting both bank and non-bank investments (see **Table 5.6**). The rates offered by FIBs were higher than the rates on T-bills in the beginning. However, during FY94, the yields on six-month T-bills rose significantly and surpassed those of three and five-year FIBs. In succeeding years, unwillingness of authorities to accept bids below par, or raise the coupon rates upwards, resulted in a weakening of participation by financial institutions. Participation of financial institutions almost came to a standstill during FY98 as T-bill yields rose up to 17.4 percent surpassing even the yield of a ten-year FIB. Auctions were subsequently suspended in June 1998.[3]

Table 5.4: FIB Auction Performance

number

Year	Bids		Auctions scrapped		
	Received	Accepted	3 year	5 year	10 year
FY91	542	430	-	-	-
FY92	893	633	3	1	-
FY93	1,321	969	-	-	-
FY94	1,287	608	1	1	1
FY95	557	374	-	3	1
FY96	257	209	1	1	-
FY97	88	84	3	8	1
FY98	60	52	1	9	1
Total	**5,005**	**3,359**	**9**	**23**	**4**

However, some banks had already piled up heavy stocks of FIBs due to much higher returns compared with those of T-bills in the initial years. This was against prudent asset-liability management and resulted in heavy losses to some of these banks when the short-term interest rates increased and even surpassed the FIB rates. In order to avoid recurrence of such pile up in future, SBP specified the limit of FIB holdings to a maximum of 15 percent of each bank's time and demand liabilities on any day or the amount of its holding of such bonds as on 22nd December 1994, whichever was higher.[4]

5.1.4 Post-reform Secondary Market

The inception of auctioning system coupled with subsequent closure of discount window paved the way for development of inter-bank money market. The banks in order to meet cash, liquidity and settlement requirements started to carry out repo and reverse repo transactions with each other. A

[3] After fresh issues of the Federal Investment Bonds (FIBs) were stopped, there were no long-term government securities that could meet the investment needs of banks, NBFIs, insurance companies, pension funds and corporate bodies. With the attractiveness of NSS rates and no bar on institutional investment, this vacuum was not even felt. However, in the interest of developing the longer end of the government debt market by creating a yield curve, and to boost the corporate debt market, the government decided to launch the Pakistan Investment Bonds (PIBs) in December 2000, sold through auctions.

[4] BSD Circular No. 19, 1994. It may be noted that the SLR was 30 percent at that time.

network of well functioning dealers also emerged to tap the opportunity thus created. Spreads in term repo market (see **Table 5.5)** were within the range of 27 to 81 basis points -- a narrow range implying a competitive market. Bid spreads ranged from 28 to 44 basis points while the offer spreads from 27 to 51 basis points. These ranges showed relative efficiency and competitiveness in the bid-offer quotation process. The bidding was relatively more efficient, as offers also included artificial quotes to lock in extra profits, if got through. The bid-offer spreads were relatively higher, ranging from 57

Table 5.5: Spreads in Term Repo Market

basis points

	Six-month repo market				Overnight repo market			
Years	**Bid**	**Offer**	**Bid-offer**	**Rate (%)**	**Bid**	**Offer**	**Bid-offer**	**Rate (%)**
FY95	38	42	68	11.63	214	234	137	9.92
FY96	41	43	59	12.55	329	333	110	10.77
FY97	44	51	81	14.69	391	409	87	12.62
FY98	37	41	67	13.84	338	343	71	12.30
FY99	42	43	80	11.5	200	218	62	7.62
FY00	28	27	57	8.35	204	195	54	8.41

Note: Spread is the difference between the highest and the lowest quote.
100 basis points = 1 percentage point

to 81 basis points, reflecting the possibility of mismatch of bids and offers, due to either artificially high offers or low bids for chance hits in a scenario of greater volatility in short-term rates.

The percentage share of FIB holdings for banks and non-banks continuously changed due to trading in the secondary market. The secondary market activity in FIBs was reflected in the difference between share of bank (non-bank) in auction sales and its actual holding (see **Table 5.6**). In the absence of data on trading volume, it can be used as an indicator of activity and development of secondary market. However, the higher yields in the earlier years prompted the players to adopt a buy-and-hold strategy. This behavior affected the development of secondary market for long-term paper adversely.

Table 5.6: Secondary Market Transactions and FIB Holdings
shares in percent

End June	**Auction sales**		**Actual holdings**	
	Bank	**Non-bank**	**Bank**	**Non-bank**
1992	77.46	22.54	75.98	24.02
1993	77.01	22.99	71.80	28.20
1994	73.92	26.08	58.49	41.51
1995	72.09	27.91	54.08	45.92
1996	67.99	32.01	44.09	55.91
1997	66.36	33.64	60.18	39.82
1998	65.87	34.13	68.68	31.32
1999	65.70	34.30	57.90	42.10
2000	66.74	33.26	70.20	29.80
Average/year	70.35	29.65	62.38	37.62

Activity in call money market, essentially a market for overnight funds, was linked to the overnight repo market. Overnight call rates usually prevailed above the overnight repo rates to cover the risk of clean lending. All scheduled banks are authorized to lend and borrow from the call market. **Figure 5.1** shows call rates prevailing during the decade under review. Money at call and short notice showed a stagnant trend till FY98; afterwards it rose sharply when SBP exempted money at call and short notice from cash and liquid assets requirement in May 1999 (see **Figure 5.2**).

5.1.5 SBP Repo Window

After the introduction of auctions for government securities, it was prudent to transform the SBP rediscounting facility. In February 1992, SBP decided to extend a 3-Day Repo Facility against T-bills to provide cash accommodation needed by the banks.[5] **Figure 5.3** shows the cash accommodation

[5] Banks were also allowed to use their FIBs, from April 1992, in case the cash requirement exceeded their T-bill holdings.

provided through this facility after discontinuation of discount window in February 1992.[6] **Figure 5.4** shows the SBP Repo Rates applicable on 3-Day Repo Facility.

Figure 5.1: Average Annual Call Rates

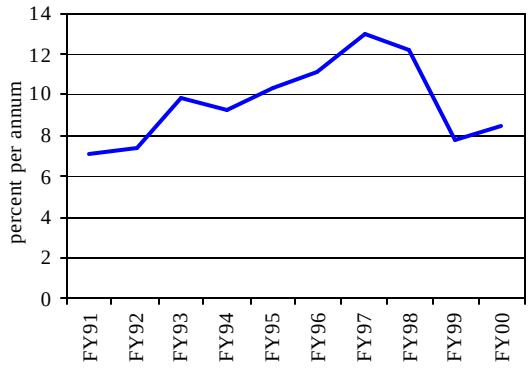
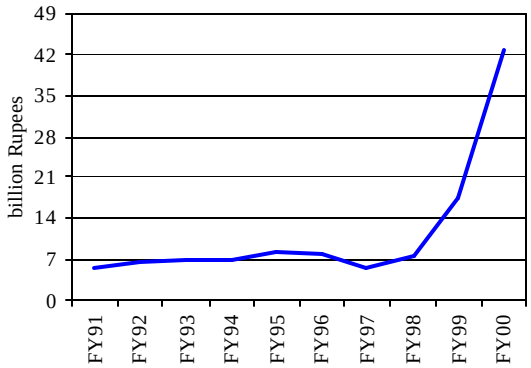


Figure 5.2: Money at Call and Short Notice



The 3-Day Repo rate is one of the main instruments of SBP; changes in it show the direction and stance of monetary policy. The rate is kept at higher levels than yields on T-bills in order to discourage banks to visit the window frequently. Further, to ensure that only the needy banks avail this facility, it is verified that the bank is not a deliberate net-lender in the overnight market. Cash accommodation is usually provided for overnight, however, transaction period can be extended to three days and exceptionally to four or five days to cover occasionally long weekends.

Figure 5.3: Cash Accommodation per Day
(on average)

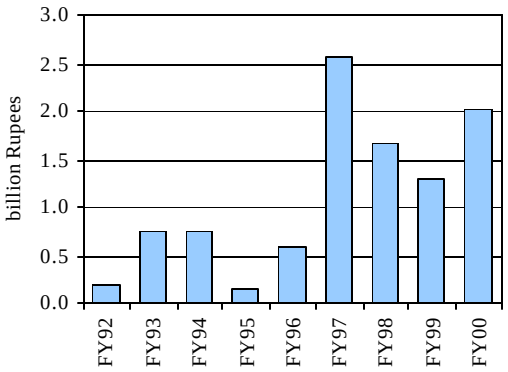
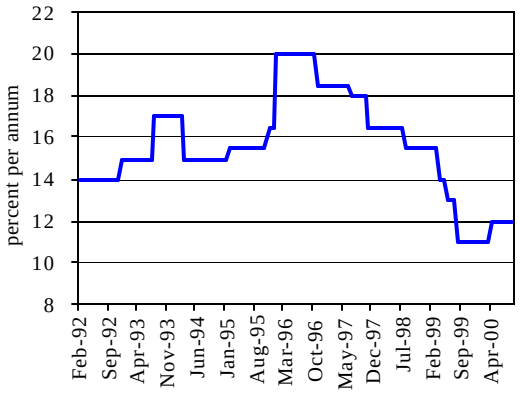


Figure 5.4: SBP 3-Day Repo Rate



5.1.6 Open Market Operations

After the abolition of credit-deposit ratio (CDR) in 1995, open market operations (OMOs) are being used as a major tool for the conduct of monetary policy. Regular OMOs are being conducted since January 1995, supplemented with special OMOs if liquidity conditions in the market require more intervention (see **Figure 5.5**). Initial few OMOs were unsuccessful as the rates quoted by the participants were not representative of the rates prevailing in the market. However, subsequent learning process enabled both SBP and the banks to adapt to the market mechanism. OMOs became the major instrument of monetary policy, after the abolition of CDR to contain the money supply within the limits set in the credit plan.

[6] The word 'discounting' is still used to indicate cash provided through SBP 3-Day Repo Window against T-bills. Likewise, 'discount rate' is also used to indicate SBP Repo Rate.

Initial OMOs were overly concerned with the objective of draining liquidity from commercial banks. This was understandable as after the abolishment of CDR, SBP lost its direct control over banks to restrain them from credit expansion. Furthermore, tight Credit Plans of FY95 and FY96, and quarterly targets under agreement with IMF, in the wake of continued excess borrowing by the government, left SBP with hardly any choice but to mop up aggressively through OMOs (see **Figure 5.5**). This focus on one-way OMOs continued till October 1997, when SBP started to inject funds for very short-term, in periods of liquidity crunch. Later years saw increasing use of OMOs by SBP for liquidity management, within the context of monetary management, relying more on short-term repos for mop-ups and even shorter-term reverse repos for injections (see **Table 5.7**). Operational objective remained the control of reserve money, rather than the overnight inter-bank rate.[7] Consequently, the issue of volatility in overnight rates has not yet been addressed.

Figure 5.5: Open Market Operations

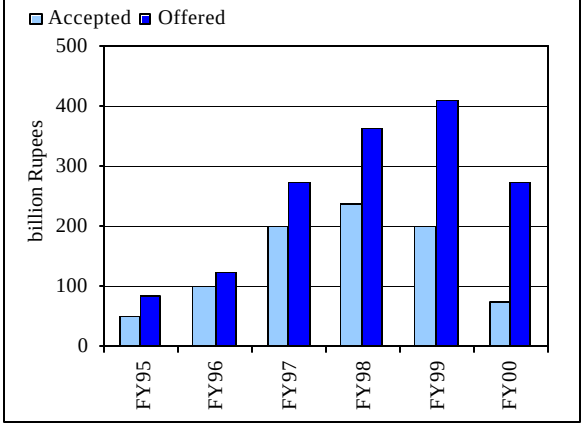


Table 5.7: OMO Injections
million Rupees

Year	Bid	Injected	% injected
FY98	16,425	4,550	27.70
FY99	32,585	10,860	33.33
FY00	282,300	137,870	48.84
Total	331,310	153,280	46.26

5.2 Development of Capital Market

One of the main objectives of the financial sector reforms was to do away with financial repression and encourage market-based allocation of financial resources. Capital market can play a crucial role in mobilizing domestic and foreign resources, and channeling them into productive medium and long-term uses.

At the beginning of 1989, the Government of Pakistan launched a broad based program of financial liberalization. These reforms had initiated a large mobilization of funds into the equity market, thus contributing to the growth of Stock Exchanges of the country. By the end of 1991, International Finance Corporation (IFC) ranked Pakistan as one of the leading emerging markets in the world. Financial reforms, specifically the permission granted to foreigners to repatriate their capital freely out of the country, resulted in a surge in capital market activity. The market capitalization increased from Rs 62 billion in 1990 to Rs 197 billion in 1992. This was due to a positive economic outlook and the increased interest in stock market as an attractive investment avenue. Increased interest of international investors also enabled Government of Pakistan to raise $150 million from Euro Dollar Market in FY95, through its first sovereign bond of 5-year maturity at 385 basis points above 5-year U.S. Treasury rate.

The boom period in Pakistan equity market meant increased returns for investors. However, market correction that followed this boom resulted in some losses to the investors. The most encouraging area, however, proved to be the development of corporate debt market. Since the launch of first Term Finance Certificate (TFC) by Packages Pakistan Limited in 1995, this market has come a long way.

[7] The volatility was a consequence of changes in amount of liquidity available in the banking system. If the market was flooded with liquidity, the overnight rates tended to be very low and vice versa. There is a need to put in place a liquidity forecasting framework to improve the effectiveness of OMOs and reduce volatility in overnight rates.

The reforms undertaken by the government at the end of the decade are expected to bear good fruits for this market.

5.2.1 Performance of Equity Market

Among the three stock exchanges, Karachi Stock Exchange (KSE) is the oldest and largest, followed by the Lahore Stock Exchange (LSE), set up in 1970, and the Islamabad Stock Exchange (ISE), which commenced its operation in 1992.

Karachi Stock Exchange

Equity market showed remarkable improvement after the introduction of exchange and payment reforms in early 1990s. These reforms allowed foreign investors and non-resident Pakistanis to trade in shares at the domestic stock exchanges and also to freely repatriate initial investments as well as profits. Furthermore, foreigners were allowed to own 100 percent equity in a venture. These steps gave much needed impetus to equity market in Pakistan. Consequently, a number of offshore funds were established in foreign countries and listed on foreign exchanges for investment either in Pakistan or in other emerging markets. For example, Citibank Hong Kong and Credit Lyonnais sponsored such funds of the size of $22 million and $35 million respectively. Similarly, the Pakistan Investment Fund (worth $60 million), listed on New York Stock Exchange was established by Asian Development Bank.

Interest of foreign brokerage houses developed very quickly. Morgan Stanley, Merrill Lynch, Bear Stearns International, Smith Barney Shearson, W.I.Carr, and Global Emerging Markets Europe entered Pakistani market and took up stakes with local partners or floated other offshore mutual funds. In addition, increased supply of securities due to the privatization of large state-owned enterprises (SOEs) such as the Pakistan Telecommunication Corporation (PTC) and the Muslim Commercial Bank (MCB) and the large issue of a power project HUBCO (Hub Power Company) had increased the depth of the market.

Notwithstanding these developments, the listed companies at KSE accounted for barely 1.8 percent of the registered companies by 2000. In terms of trading volumes, only four companies (PTCL, Hubco, PSO and ICI) accounted for 80 to 85 percent of total trading volume in KSE (during FY00). Supply of shares was limited as founding families or the government held a large segment of the listed shares at KSE. In addition, the institutional investors had the tendency of permanently holding a significant proportion of the shares of quality companies, which in turn reduced the activity in the market.

Political and economic instability of 1990s and institutional constraints of the equity market brought volatility in the KSE Index, which fell from a peak level of around 2661 in March 1994 to 1507.6 by the end December 2000. After the nuclear detonation of May 1998, market rode through the bumpiest path in its history, dropping to 765.7 on 14th July 1998. Nevertheless, market recovered and went through a boom during 2nd and 3rd quarter of FY00, reaching a peak on March 22, 2000 at 2054.4. However, these bullish sentiments proved to be short lived. Factors like Hubco-WAPDA dispute and slow privatization of SOEs proved to be an impediment in improvement of equity market during final quarter of the decade.

Table 5.8: Performance of Karachi Stock Exchange
amounts in billion Rupees

end period	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00
Number of listed companies	497	596	652	683	746	783	782	779	769	762
Listed capital	31.1	50.6	63.5	76.1	118.8	145.0	206.7	211.2	215.0	229.0
Market capitalization	90.0	218.4	214.4	404.6	293.3	365.2	496.1	259.4	289.2	391.9
KSE-100 index	1855	1545	1264	2333	1612	1703	1566	880	1055	1521
SBP general index	114.9	188.5	161.7	290.2	186.8	170.2	143.0	98.8	106.4	128.8
Trading volume (million)	361	725	894	1,831	2,293	5,232	8,023	15,004	25,533	48,109

As shown in **Table 5.8**, the number of listed companies grew from 497 in FY91 to 762 in FY00 showing an increase of 53 percent; in the latter half of the decade, the number of listed companies declined by about 3 percent. Listed capital showed a growth of 636 percent, from Rs 31.1 billion in FY91 to Rs 229.0 billion by FY00. Trade volumes also showed great improvement during 1990s mainly due to automation of the stock exchanges and establishment of Central Depository Company of Pakistan Ltd (CDC).

Lahore Stock Exchange

Companies listed at Lahore Stock Exchange (LSE) almost doubled from 332 in FY89 to 616 in FY00, as shown in **Table 5.9**. However, much of this progress occurred by FY95, when 617 companies got enlisted. Remaining half decade showed little progress on this front. In fact, few companies got themselves de-listed since FY97. Nevertheless, paid up capital rose consistently during the period under consideration. There was more than ten-fold rise in paid up capital (see **Table 5.9**).

Table 5.9: Performance of LSE and ISE
billion Rupees, shares in million

	LSE			ISE*		
	Listed companies	Turnover	Paid up capital	Listed companies	Turnover	Paid up capital
FY89	332	16.5	18.8	-	-	-
FY90	377	22.4	23.4	-	-	-
FY91	417	41.4	30.0	-	-	-
FY92	505	48.1	49.9	-	-	-
FY93	552	85.2	59.7	158	9.5	26.3
FY94	570	369.6	77.2	201	37.4	36.4
FY95	617	959.2	99.8	244	82.0	65.1
FY96	640	2564.8	119.4	272	154.0	84.1
FY97	645	2775.6	184.7	283	115.0	92.4
FY98	631	5848.2	186.9	285	478.0	149.4
FY99	621	9798.7	186.9	284	1,802.9	150.7
FY00	616	16356.9	207.7	283	3,139.8	162.2

* ISE commenced its operation in Aug-92

Islamabad Stock Exchange

Islamabad Stock Exchange (ISE) commenced its operation in August 1992. This exchange was established for catering investors' needs in northern region of the country. ISE, in comparison with the rest of the exchanges, is quite small and, in fact, follows the other exchanges. By FY00, 283 companies with a paid up capital of Rs 162.2 billion, were listed on this exchange (see **Table 5.9**).

5.2.2 Performance of Term Loan Market

DFIs and NBFIs continued to be marginalized during 1990s. This was mainly due to their inability to mobilize required funds, discontinuation of foreign credit lines, and fundamental structural weakness in most of these institutions, manifested in heavily infected portfolios and high level of NPLs. Sharp increase in NPLs forced DFIs to restrict their lending operations.

The performance of some selected DFIs during 1990s is shown in **Table 5.10**. It is evident that both the amount sanctioned and disbursed declined over the decade, former by almost 90 percent and latter by 78 percent. The diminishing role of DFIs and NBFIs highlights the need to broaden the term financing sources within financial system, rather than relying on specialized institutions that have proven to be inefficient and inherently unsustainable.

Table 5.10: Sanctions and Disbursements by Selected DFIs and Specialized Banks

million Rupees

	FY90			FY95			FY00		
	Deposit	Sanctions	Disbursed	Deposit	Sanctions	Disbursed	Deposit	Sanctions	Disbursed
NDFC	12,422	5,123	2,272	19,297	8,007	2,435	28,338	127	225
RDFC	128	459	239	1,042	440	486	601	-	-
BEL	1,771	4,152	1,462	5,146	1,212	1,024	3,895	-	15
PICIC	1,191	8,591	1,239	5,303	394	747	3,263	988	193

5.2.3 Corporate Debt Market

A market for corporate paper began to develop after FY95 when private companies were allowed to issue Term Finance Certificates (TFCs) to raise resources. Establishment of the Pakistan Credit Rating Agency (PACRA),[8] also provided a supporting infrastructure in terms of rating process. Progress was slow in the beginning due to presence of bonds, with very high coupon rates, issued by some public sector enterprises carrying the guarantee of federal government.[9] Although the Federal Investment Bonds had an active market at that time, the presence of government guaranteed bonds with rates much steeper than those of FIBs made the pricing of new issues of TFCs very difficult. Discontinuation of further issues of these bonds proved conducive for the TFC issues.

Only five TFCs were issued upto 1998; however, after the decline in short-term interest rates, and consequently in long-term yields, market for TFCs picked up with four new issues in 1999 alone. Two important policy changes relating to National Savings Schemes (NSS) would go a long way in promoting TFC market. Firstly, NSS rates were reduced in mid-1999 and again in mid-2000. Secondly, institutional access to NSS was discontinued in April 2000. Since the institutional funds constitute a large part of long-term savings in Pakistan, these are likely to find TFCs a profitable avenue for investment. Five new issues of TFCs came to market in 2000 (see **Table 5.11**), and with the launching of Pakistan Investment Bonds (PIBs) in December 2000, it is expected that TFC market will flourish further as pricing becomes easier with PIB benchmarks.

Despite the issuance of several TFCs, their trading in secondary market is very thin as most investors still prefer to "buy and hold". Intermediaries also face difficulties in market participation, due to lack of short selling. Market makers are, therefore, unable to provide two-way quotes to develop a strong and deep secondary market. Furthermore, the volume of outstanding issues is also very small compared with those of long-term marketable government paper. Secondary market trading can only develop if investors get out of "buy and hold" mentality and sufficient volumes exist for meaningful trades.

Future outlook for TFC market looks bullish both from investor and issuer point of view. Companies that previously relied heavily on

Table 5.11: Corporate Debt

million Rupees

TFC	Issue Date	Maturity	Issue size	Coupon rate
Packages	Feb-95	Feb-00	232	18.5
Nishat tek	Jan-96	Jan-99	250	18.0
ICI	30-Sep-96	Sep-01	1,000	18.7
GATRON	17-Jun-98	Jun-03	274	18.0
Inter-Bank	1-Dec-98	Dec-03	300	17.5
SPLC	28-Jan-99	Jan-03	250	18.3
DSFL	24-May-99	May-04	863	19.0
NDLC	1-Dec-99	Dec-04	550	17.0
PILCORP	21-Dec-99	Jan-05	288	18.0
Sigma Lease	18-Jan-00	Jan-03	100	17.0
Paramount Lease	2-Aug-00	Aug-04	250	16.3
Atlas Lease	22-Sep-00	Sep-05	200	15.0
Network Lease	4-Oct-00	Oct-05	100	16.3
Al-Noor Sugar	31-Oct-00	Oct-05	204	DR+25 bps (16.5-18.5)

*: DR: SBP Discount Rate

[8] PACRA was established as a joint venture between International Finance Corporation (IFC), IBCA Limited of England and the Lahore Stock Exchange.

[9] For example, Wapda Bonds carried government guarantee besides offering coupon rates as high as 19 percent per annum.

Development Finance Institutions (DFIs) will have to utilize TFC funding in future. In the past, DFIs provided significant portions of term funding for leading Pakistani companies. These institutions, in turn, received considerable funding assistance from the multilateral development agencies. Lately, however, multilateral agencies have stopped funding the NBFIs, particularly to DFIs and leasing companies. These institutions have not been able to develop alternate sources of funding. This has adversely affected their lending and investment capabilities. Consequently, some major companies, particularly leasing companies, are forced to rely on TFCs for additional term debt funds.

On the investment side, commercial and investment banks are main investors in private sector TFCs. In 1997, listed TFCs became "approved securities" for the purpose of meeting statutory liquidity requirement (SLR) for non-bank financial institutions (NBFIs). Furthermore, in order to promote corporate debt, government has reduced stamp duties and taxation, including withholding tax on profits.[10] Nevertheless, retail investors lack confidence in the market, as they do not fully understand debt securities. Many are also concerned whether corporate borrowers will repay loans according to agreed terms. However, these sentiments are changing as more and more companies are relying on TFCs for their financing requirements. Although supply conditions are improving since FY00, institutional investors would welcome additional investment opportunities in TFC issues, subject to acceptable market profit rate.

5.2.4 Securities and Exchange Commission of Pakistan

Securities and Exchange Commission of Pakistan (SECP), having autonomous status, was established under the Securities and Exchange Commission of Pakistan Act, which was passed by the Parliament and promulgated in 1997. The main difference between the erstwhile Corporate Law Authority (CLA) and SECP is that while the former was an attached department of the Ministry of Finance, the latter is an autonomous body, within the framework of SECP Act, 1997. The Act clearly defines functions, powers and responsibilities of SECP that became operational from 1st January 1999. The erstwhile CLA stood dissolved simultaneously and all of its functions had been transferred to the SECP.

SECP has five to seven Commissioners including the Chairman who are appointed by the government. In order to increase the expertise within SECP, majority of the Commissioners are taken from the private sector. The tenure of the Chairman is three years and that of the Commissioners, two to three years. It has been vested with adequate operational, administrative and financial autonomy. Its functions include regulation of all aspects of capital market. The main functions can be divided into following three categories:

- Regulation of the securities market and related institutions like mutual funds, Central Depository Company and credit rating institutions.
- Administration of the Company Law.
- Regulation of some non-bank financial institutions like leasing and modaraba companies.

Since it became operational, SECP has implemented many laws for the betterment of capital market. Although stock exchanges in Pakistan are mostly self-regulating authorities, SECP is actively monitoring their activities and making amendments in regulations to create a level playing field for all investors. For this purpose SECP ordered some amendments in the Article of Association of the stock exchanges. This will amplify the transparency in stock exchanges' operations and in turn increase investors' confidence.

[10] Withholding tax on TFC profit was removed in 1995 but reinstated in March 1998. However, federal budget for 1999 again exempted payment of withholding tax to all persons, including companies.

5.3 Performance of Foreign Exchange Market

The process of liberalization in the external sector, initiated in 1991, was mainly concentrated in areas other than exchange rate regime (see **Section 2.7**). However, reforms specific to forex market were initiated in February 1998, when authorized dealers (ADs) were allowed to fix their buying and selling rates for currencies other than US dollar. Subsequently, fixation of exchange rate was further liberalized in March 1998, when SBP widened its buying/selling spread for US dollar from 0.5 percent to 1.0 percent of buying rate. At the same time, ADs were allowed to fix their own buying/selling rates for US dollar transactions with their customers within this band. Although the overall reform program went off-track following nuclear detonation, changes in exchange rate regime were expedited to address the external pressures. Major structural change came with the introduction of multiple exchange rate system in July 1998, which was gradually unified and transformed to one where the market forces determined the value of the Rupee.

This was a major achievement given the concerns over the viability of floating exchange rate regime due to thin foreign exchange and under-developed financial markets that increase the potential volatility of market determined rates and the cost of hedging against it.[11] Furthermore, floating the currency with serious balance of payments difficulties could lead to a steep fall in its value, which in turn adversely affects price stability and output in the short run and, therefore, undermines country's capacity to operate market-determined exchange rate.

A comparison of Pakistan's experience regarding floating rate system with other developing countries suggests a few common elements. First, most of these countries were facing severe balance of payments difficulties, reflected in sizeable external payments arrears. Second, in most of these countries, new mechanism was adopted in the context of Fund-supported programs. Third, the transition process involved a move from multiple exchange rate regime to unified and floating rate system. What is more interesting is the fact that Pakistan unified its exchange rate more swiftly. Generally, countries find it increasingly difficult to exit from multiple rate regime.

With this background, discussion on the performance of foreign exchange market has been divided into two periods -- setting 21st July 1998 as divider when multiple exchange rates regime was introduced.

5.3.1 Foreign Exchange Market Prior to 21st July 1998

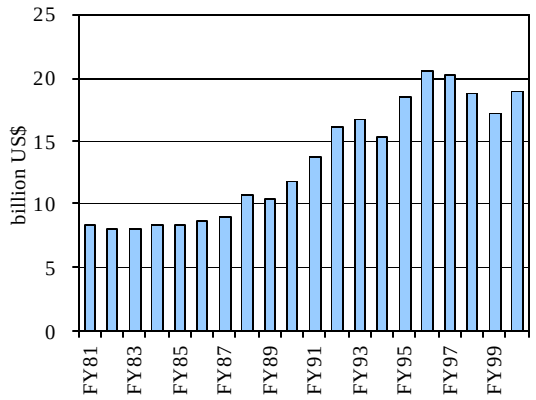
In terms of foreign exchange regime, overall structure of the forex market was not significantly different from what has already been described in **Section 1.3.3**. However, there are some specific issues regarding interbank forex market that need to be highlighted.

Inter-bank market had very limited role*:* Narrow spread, between buying and selling prices provided limited scope for the development of an active interbank market as participants were restricted in terms of their ability to take positions. Low margin of 0.1 percent, set by SBP for banks for selling US dollar to their customers, was also limiting spot foreign exchange trading operations. Foreign exchange flows were also restricted due to imposition of requirement on exporters to surrender their proceeds to ADs, who in turn were required to sell that foreign exchange to SBP on a daily basis after clearing their payment obligations. In effect, ADs' role was limited only to an intermediary between public and SBP. In overall terms, this resulted into a very shallow inter-bank forex market.

[11] Pakistan did not go for large devaluation supported by extensive exchange controls.

The market depth was also affected due to falling forex flows, which largely comprised of export proceeds, worker remittances and import payments. It is evident from **Figure 5.6** that the volume of merchandise trade, which expanded sharply following initiation of exchange and payment reforms in 1991, has started falling back after reaching peak in FY96 at US$20.5 billion. On the other hand, worker remittances, another major source of foreign exchange in the inter-bank market, also showed a generally declining trend (see **Figure 5.7**). This is mainly due to widening differential between official and kerb market rate, supported by efficient transfer channels of the hundi system.

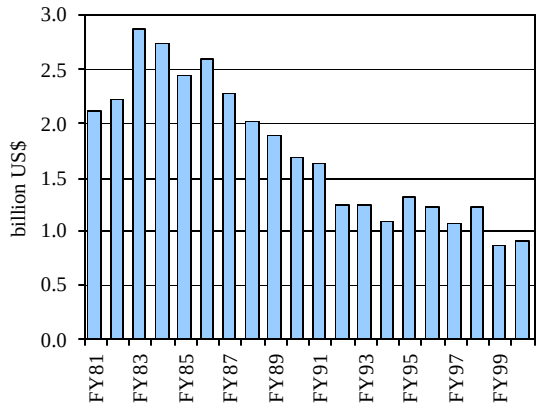
Figure 5.6: Merchandise Trade



Merchandise trade is sum of exports and imports based on FBS data

It is clear that despite Pakistan's comparative advantage in the export of semi-skilled labor, remittances are still far short of their desired level. In fact, throughout the 1990s, the authorities had not paid sufficient attention to the declining or stagnant flow of remittances. Instead, money changers, central player in hundi system, were granted licenses to operate. As a result, the hundi system was able to become established and is now clearly out-performing the banking system.

Figure 5.7: Home Remittances



Inter-bank activity was also restricted, as banks had set low trading limits for some of the ADs perceived to be weak. In addition, large banks, especially foreign banks, had a preference for direct dealings and while there are a few foreign exchange brokers, their role was limited. This had also resulted in a lack of depth in the market.

Forward market could not develop:

The forward cover facility was initially provided by the SBP to scheduled banks against forward cover provided by them to their customers in respect of imports, exports and repatriable loans. However, this facility was withdrawn on 30th June 1994 and banks were allowed, at their discretion, to continue providing such cover, provided their open positions permit them to do so. With a view to encouraging the banks to offer this facility without any major interruption, their combined Nostro limit was gradually raised from $50 million in June 1994 to $300 million in August 1994.

There were still some impediments to development of the forward market. For example, SBP required that all forward transactions be trade-related and that no forward coverage be extended by ADs for a period exceeding six months. In addition, ADs were restricted in terms of their ability to take on open position in excess of their nostro limits. This, viewed against large imbalances between exports and imports, meant higher premium paid by customers. Furthermore, paucity of forex flows did not always allow banks to square their position on a daily basis -- an essential condition for the development of a good forward market. In view of these limitations, the forward market was thin but

since SBP does not regulate the premium charged in that market, it seemed that banks compete aggressively in that segment.

Growing dependence on foreign currency accounts:
The introduction of foreign currency accounts, a driving force behind dollarization, had significant policy implications. The scheme, introduced in 1973, received a major boost in 1985 when banks were allowed to accept FCAs of a minimum amount of $10 million from overseas branches for a minimum maturity of one year.[12] This scheme was further broadened in 1991 when residents were also permitted to hold FCAs and again in 1992 when non-bank financial institutions were allowed to raise foreign currency funds from abroad.

In seven years since the liberalization in 1991, foreign currency deposits rose at a rate of 23 percent per annum to $10.9 billion in May 1998 -- when these were frozen. Growth in resident accounts accounted for more than two thirds of this increase, while non-bank financial institutions, which were allowed to accept such deposits in 1992, accounted for 20 percent. The amounts held by non-residents, outside of those held with the non-bank financial institutions, declined marginally over this period. The unusual growth in FCAs was the result of policy measures that included tax exemption and immunities and subsidized forward cover by SBP.[13] This was supported by persistently high rate of inflation in Pakistan and steady depreciation of the rupee. The growing gap between the official and the free market rate also added to the process of dollarization where the foreign currency was considered much more secure than the Rupee as a store of value.

The use of FCAs in the face of meager forex reserves and declining net medium and long-term concessionary capital inflows was considered a much easier source for financing large current account deficits. Consequently, the large and growing volume of short-term liability and the increased dependence of external sector on these deposits, was not only threatening to the economic stability but also posed severe difficulties for the conduct of macroeconomic policies.

More specifically, FCAs had implications for the monetary, fiscal and exchange rate policies. Resident FCAs permit greater substitutability between domestic and foreign assets and cause changes in the transmission of monetary policy. Overtime, volume of outstanding FCAs rose to a level where its reversal on account of any policy action was deemed as the most unwanted outcome. This binding was more evident in terms of monetary policy where T-bill rates could not be lowered, as this could have resulted into large-scale outflows of these deposits. The fiscal policy is affected due to erosion of the tax base and losses from the forward cover operations. The large build-up of these deposits was also creating self-fulfilling expectations for devaluation through false foreign exchange demand, thereby impeding the exchange rate management. Summing up, use of FCAs to finance external payments and consequent build-up of short-term liability, conflicted with the objective of sound economic management.

5.3.2 Foreign Exchange Market After 21st July 1998

In response to heightened uncertainty, particularly in terms of balance of payments viability, following nuclear detonation, SBP introduced a multiple exchange rate system in July 1998, comprising an official and a floating interbank rate (FIBR). Under this system, the official rate was fixed at Rs 46 per US Dollar whereas market forces determined FIBR, which was comparatively more devalued. The pre-specified ratio (originally being 50:50) of these two rates was known as composite rate. Subsequently, role of the market participants in determining the exchange rate was gradually

[12] In 1992, the minimum amount was reduced to US$ 5 million to encourage more inflows. In 1993, the minimum maturity was shortened to 6 month duration.

[13] Initially, SBP was providing the entire exchange rate risk on FCAs free of any charge. In 1992, in order to partly cover the mounting losses, SBP introduced a forward cover fee on FCAs: different fee rates were applicable on deposits denominated in various currencies to discourage currency substitution

enhanced by changing this ratio in favor of FIBR, first to 20:80 in December 1998, and then to 5:95 in March 1999.

Although the multiple exchange rate system was introduced under severe balance of payment pressures, it was very deftly converted into a market-based regime. On 19th May 1999, exchange rates were unified with FIBR covering all transactions; ADs were allowed to fix their own buying and selling rates. However, this attempt to liberalize the exchange rate was aborted after a few days and an unofficial band was imposed on banks. The band remained unchanged for almost a year, and after revising twice in June 2000, it was altogether abandoned on 20th July 2000 as a part of an IMF program. All through this period, the exchange rate system was tightly managed by SBP with the help of a number of restrictions placed on market participants. In particular, ADs were not allowed to provide cover to their clients for imports of less than one month. Furthermore, forex transactions in the interbank market by ADs were limited to sales and purchases backed by permissible (essentially trade) transactions.

These steps, which in effect curbed the ability of ADs to open speculative positions, were reflecting the notion that forex market was primarily based on trade and related transactions and, in the absence of genuine demand, no exchange could take place.[14] Although SBP continued to target exchange rate, the primary objective was to maintain an orderly condition in the forex market and to check destabilizing and self-fulfilling speculative activities.

Besides pure speculative forces, there were also mismatches in import demand and export proceeds, which could have a significant effect on exchange rate in the short run. Thus, while the relative absence of pure currency speculation in forex market due to SBP measures was helpful, it did not eliminate short-term pressures in the market by exporters/importers in anticipation of future value of the currency.[15]

Recognizing these "leads and lags" in foreign exchange transactions, SBP managed the foreign exchange flows by facilitating demand/supply matching in the interbank market. SBP also provided market support by directly meeting partially or fully the foreign exchange requirements for import of POL and debt payments, when considered necessary. This had the effect of reducing lumpy and panicky market demand for foreign exchange.

The turnaround in the exchange rate policy witnessed on 21st July 2000, when the Rupee was put to float with a view to achieve market-oriented and more flexible exchange rate policy, required a new mindset. Accordingly, the SBP role under the new paradigm became very different. Although measures aimed at discouraging pure speculative demand for foreign exchange were still effective, SBP's exchange rate management by facilitating demand/supply matching in the interbank market was completely abandoned and its market support was gradually reduced.

The forex market, still in the process of development, has certain features that need to be highlighted. First, the market has three distinct sets of participating banks: state-owned banks with a large merchant base; foreign banks mainly catering to multinational companies; and private banks having

[14] The need to impose requirement of commercial-based transactions also arise due to lack of liquid risk management tools. The risk management in an international forex market includes deep and diversified derivative market facilitating risk transfer, accounting and disclosure standards and a strong regulatory framework to develop an orderly market not driven by panic. Even then, strong speculative forces are often successful in changing the market sentiments. Lack of risk management tools necessitates commercial-based transactions.

[15] During periods of uncertainty, while importers tend to bunch their current and future requirements of foreign exchange, exporters may hold back export receipts in anticipation of further depreciation.

limited participation. Former two sets of banks play a significant role in influencing the market rate through active inter-bank participation. Second, the forex market is thin in terms of turnover. In view of curbs on speculative positions of ADs, the Rupee rate comes under pressure due to excess demand for the hard currency (a reflection of large trade gap), thereby leading to unidirectional expectations. However, a recent trend is witnessed of two-way movement. Third, the depth and liquidity that provides stability in times of volatility, are lacking in the forex market. Consequently, market exhibits tendencies of sharp overshooting and unidirectional trends and the SBP intervention becomes inevitable to stabilize the market.

5.3.3 The Kerb Market

The kerb market consists of authorized money changers (AMCs) who were granted formal license by SBP in 1991. Pakistani nationals or resident firms could obtain a license to work as AMCs after depositing the required capital according to regulations. Since then their number has increased to 427 as on June 2000. Although this seems large, there are only 4 or 5 money changers that are really important, with about 80 percent of turnover. Apart from AMCs, there are unlicensed money changers, who are much smaller and make up the black market.

Traditionally, authorities have used different instruments to channel foreign currency flows from the kerb market to the banking system. In particular, FCA scheme for resident Pakistanis, introduced in 1991, was effectively providing a conduit to attract remittances flowing through the hundi into the banking system. Although the fall in domestic dollarization following freeze of FCAs in May 1998, had reduced the physical inflows of foreign exchange into the country, such hard currency balances have been building up abroad. Outright purchases by SBP, which simply tap into these balances at the existing kerb rate, have now become one of the major sources for financing the trade deficit. However, against general perception, these purchases as such do not have any significant relationship with kerb premium. In fact, kerb market maintains an almost fixed wedge over inter-bank rate irrespective of volumes purchased.

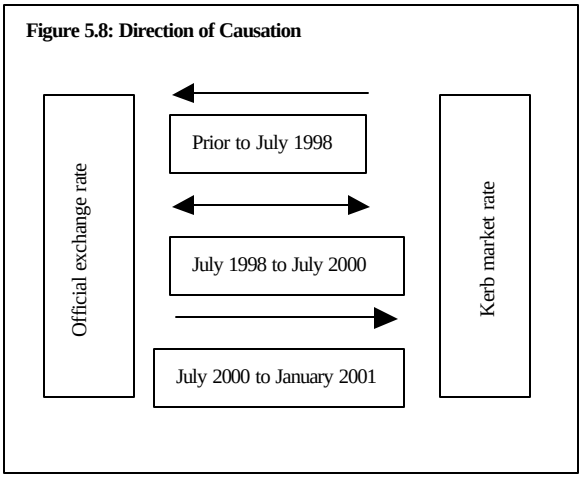
Deviations between the kerb and official rate are often used as proxy for the degree of misalignment of the official exchange rate. More specifically, the premium in the kerb market is taken as a reflection of the excess demand for foreign exchange resulting from certain restrictions that entail capital account controls. However, changes in the exchange rate regime following detonation have not only impacted the underlying relationship between the two rates, but also have implications for the validity of the kerb premium as an indicator of overvaluation. Prior to July 1998, the kerb rate was adjusting to market conditions whereas the official rate was announced on a daily basis by SBP. The overvaluation of the *pegged* exchange rate was directly on account of restrictions limiting only certain 'approved' transactions that could be executed at the official exchange rate. However, when the dual exchange rate mechanism was adopted, the official rate has been adjusting to market conditions.

According to a SBP study that attempts to determine the direction of causation between kerb and official rate, prior to July 1998, the official rate (as determined by SBP) followed the kerb rate. [16] This implied that a sustained upward movement in the kerb rate would preempt or lead to a devaluation of the exchange rate. This also meant that kerb market was able to correctly predict changes in the official rate, and the resulting activity in the open market would increase the kerb premium just before an official devaluation. During July 1998 to July 2000, on the other hand, when the Rupee was in a transitional stage towards free float, causation ran in both directions. To put simply, it was hard to determine one-sided causality. However, after the Rupee was fully floated, a stronger causation runs from the official to the kerb rate. This means that changes in the official rate now determine almost equivalent changes in the kerb rate. The main findings of the study are summarized in **Figure 5.8**. A

[16] See **Second Quarterly Report 2000-2001**

closer look at the two rates suggests that kerb market responds swiftly to changes in official rate when the latter depreciates, whereas it reacts with certain lags when the official rate appreciates. In other words, we can say that the kerb market rate is relatively rigid in downward direction.[17]

Figure 5.8: Direction of Causation



5.3.4 Crisis Management

Developments following the nuclear tests exposed Pakistan's external vulnerability and brought about a balance of payments crisis. Despite its intensity, Pakistan's economy survived the external shock fairly well, for several reasons: (1) economic linkages with international financial markets were not too strong-- i.e. its external exposure was mainly in foreign currency accounts (FCAs), which were frozen without any delay; (2) proper crisis management, including a variety of actions to prevent overshooting of the exchange rate; (3) a relatively good food supply situation; (4) availability of Saudi Oil facility; and (5) presence of a large and robust informal sector which is not captured in the economic statistics.

In the face of immediate risk of massive withdrawals from FCAs against a very low level of foreign exchange reserves, the government suspended withdrawals in foreign exchange from FCAs and imposed certain restrictions on other foreign payments. This, together with the fact that Pakistan was building up substantial arrears on debt servicing and other forex obligations, adversely affected the confidence of investors. Downward revision by major credit rating agencies and imposition of economic sanctions led to a sharp fall in capital flows. Worker remittances also declined considerably due to widening differential between kerb and official market, thereby further aggravating external imbalances.

The government also imposed restrictions on certain hard currency payments in addition to debt servicing with a view to conserve foreign exchange reserves. It established a temporary dual exchange rate system to offset the loss of export competitiveness while easing the pressure on the official exchange rate. Furthermore, a 30 percent advance cash margin requirement was imposed to discourage imports. Cash reserve and statutory liquidity requirements were reduced to ease the anticipated squeeze on banks' liquidity resulting from withdrawals from FCAs. In order to accelerate the conversion of FCAs, Special US Dollar Bonds were introduced. These bonds were issued for a period of three, five and seven years. Since its inception, a total of US$ 1.95 billion bonds have been issued up to 30th June 2001. Of that, US$ 465 million have been converted into Rupees, thereby leaving US$ 1.5 billion outstanding liability in hard currency.

At the same time, government revived its 1997 reform program with strong up-front actions. Based on this reform program, the government also sought rescheduling from the Paris/London Club creditors. Subsequently, with the assistance from the World Bank, and refund of payments for F-16 planes by the USA, foreign exchange reserves increased from $ 415 million on November 12, 1998 (lowest level reached during the crisis) to $ 1,733 million on February 11, 1999. Reserves further increased to $ 1,838 million on March 31, 1999 after disbursement of $ 200 million by the Asian Development Bank (ADB) under the newly approved Trade, Export Promotion and Industry Loan. As the external financing position became relatively more comfortable, Pakistan removed most

[17] This behaviour changed completely in the aftermath of events of September 11, 2001. See **Second and Third Quarterly Reports 2001-2002** for details.

restrictions on current account transactions ahead of the schedule agreed upon under the ESAF/EFF program.

5.4 Credit Allocation System

Credit planning had a powerful role in the allocation of credit by the banking system till the initiation of financial sector reforms. After the abolition of credit controls, in the form of credit ceilings or mandatory credit, this role has been minimized to a tentative credit expansion plan during a fiscal year. It, however, still plays an important role in the integration of monetary expansion with the real sector growth targets set under the annual plan. Credit planning is done through a systematic and broad-based procedure, under the National Credit Consultative Council (NCCC), in which the views and suggestions of all stakeholders are duly considered and incorporated through consensus.

Under the NCCC, every year a credit plan is prepared to achieve a more focused and equitable distribution of credit, after a thorough regional and sectoral review of credit expansion during the past year, within safe limits defined after fixing of growth and inflation targets in the annual plan. Total domestic credit expansion is determined on the basis of foreign exchange inflows or outflows. In a situation of foreign inflows, the domestic credit is expanded by the overall monetary expansion less the foreign exchange inflows and vice versa. Within the domestic credit expansion limits, credit allocation to the government and non-government sectors are determined on the basis of government budgets, annual plan and capital requirements worked out on the basis of certain percentages of value added by different sectors. After a few dormant years, NCCC has once again been revitalized in FY00, to assess the credit requirements of the real sector and determination of safe limits of monetary expansion.

The credit allocation mechanism prevalent in FY00 was almost market-based except for the few subsidized credit schemes, like export finance and LMM schemes. Now that credit ceilings and mandatory credit do not bind the banks, they have also been freed from ceilings and floors on mark-up rates. Since July 1997, minimum and maximum bounds on mark-up rates on trade and investment related modes of financing have been abolished. Before the abolition of credit control regime, banks were penalized for not having achieved targets fixed for credit expansion to various sectors, after setting up of the overall monetary expansion targets. Now the credit plan is not followed by any kind of targets for banks. They are free to extend credit at their own choice of customer and mark-up rate. Since banks can avail the refinance facility for export finance and LMM schemes, it can be said that the lending by banks from their own resources is completely market based.

Although the government is enjoying bulk of the banking system resources, these are borrowed at market-based interest rates, mainly through auction of treasury bills. Only a small fraction of government borrowings is subsidized and that is for commodity operations. The credit to the private sector, however, has a significant part, in the form of export finance and LMM schemes, which is provided at subsidized rates.[18]

5.5 Transformation of Payment and Settlement System

The payment system comprises all those entities, which enable financial institutions, enterprises and individuals to transfer funds from one to another. An efficient and reliable payment system is of utmost importance for all users and participants. The types of payment instruments, clearing mechanism and final settlements represent key infrastructure for the financial sector and for the wider economy. In order to ensure efficiency and reliability in the growing cross-border payments and settlements during the last decade or so, a number of initiatives have been taken at international level to improve the payment systems. A considerable progress has been made also in Pakistan towards speedy clearance of checks and corporate securities during 1990s, especially in the later half.

[18] On average, 12.5 percent of the credit to the private sector is extended under export finance scheme.

At the beginning of 1990s, major components of the payment system in Pakistan were check clearing and settlement system, government securities settlement system and corporate securities settlement system. Before 1997, a clearinghouse at SBP was performing the function of check clearing through manual process. The clearinghouse used to prepare the net clearing position of each member bank and send it to Deposit Account Department (DAD) of Karachi Office of SBP for settlement. The DAD then, debited or credited, as the case may be, to the respective accounts of banks. However, since March 1997, the settlement remained structurally the same as before, but an automated system of clearing checks replaced the manual process of clearing through a private sector initiative.

National Institutional Facilitation Technology (NIFT) was launched in March 1997.[19] Since then, NIFT has entered in agreement with SBP to provide automated clearing services. Presently, all commercial banks have become participating members by signing a standard service agreement. So far, this modern imaging facility has been established at Karachi, Lahore and Islamabad and the process of conversion is on the move at Rawalpindi, Peshawar and other major cities.

In early 1990s, volumes of turnover were very small, given the predominance of currency-based transactions reflected in high currency to deposit ratio. On average, only 4 checks were used for every checkable deposit in 1992. Check clearing indicators are shown in **Table 5.12**. Turnover of checks relative to GDP remained stagnant around 1.27 times of GDP up to 1994. During the next four years, it fluctuated between 1.01 and 1.33 times of GDP. Only in the last two years, it has gone over 1.5 times of GDP.

Settlement of government securities was also performed at SBP. Before 1991, physical movement of the securities was routine of the day. In order to avoid unnecessary physical movement of the securities, the facility of Subsidiary General Ledger Account (SGLA) was extended to banks and NBFIs on March 7, 1991. Since then, transactions had been recorded through debits and credits in SGLA of banks and NBFIs. In this regard, two accounts were maintained, one for each institution as approved dealer for their own position, while the other was maintained at SBP to show the client's position. However, in case of client's request, physical movement still took place and remained a part of the system.[20]

Table 5.12: Indicators of Turnover in Clearing House

Year (Jan-Dec)	No of cheques cleared (millions nos)	Turnover in payment system (billion Rupees)	No of checkable deposits (millions nos)	Total no of deposits (millions nos)	Cheques to checkable deposits	Currency in Circulation to total deposits ratio(%)	Ratio of turnover to GDP
1990	13.2	1,083.3	3.6	26.8	3.7	51.4	1.3
1991	14.4	1,277.9	4.2	31.0	3.4	52.6	1.3
1992	16.0	1,544.3	4.0	27.1	4.0	43.3	1.3
1993	18.3	1,754.6	4.3	28.0	4.2	39.4	1.3
1994	16.9	1,978.8	4.7	29.5	3.6	36.0	1.3
1995	16.4	1,905.3	5.1	31.1	3.2	35.7	1.0
1996	22.2	2,824.7	5.2	31.7	4.3	33.6	1.3
1997	22.9	2,832.6	5.7	32.3	4.0	30.4	1.2
1998	24.7	3,508.8	5.6	29.8	4.4	29.4	1.3
1999	29.1	4,467.8	5.2	29.7	5.6	29.2	1.5
2000	29.6	5,357.6	4.8	28.8	6.2	34.3	1.7

Note: Total deposits include RFCD

[19] The private banks that participated in the establishment of NIFT included MCB, NBP, HBL, UBL, ABL and First Woman Bank Limited.

[20] The only exception is Pakistan Investment Bond, which is issued in book entry form without any scrip.

Corporate equities settlement system during 1990s, like check clearing system, had also experienced radical changes regarding efficiency and security of the settlement process. Since establishment of the Central Depository Company (CDC) in September 1997, electronic settlement process has replaced the physical transfer of shares from one party to other. Till March 2000, CDC had been settling about 97 percent of the securities traded at the stock exchanges. The CDC had also included Term Finance Certificates (TFCs) in its settlement process. Since its inception, CDC had also launched two major services that resulted in higher participation of investors in electronic settlement system. First, Investor Account Services (IAS) was started from August 16, 1999 that allowed investors to directly open and maintain accounts in CDC for electronic settlement system. Second, Delivery versus Payment (DvP) Service started on November 8, 2000, which allowed simultaneous transfer of cash and securities from one account to another in the CDC.