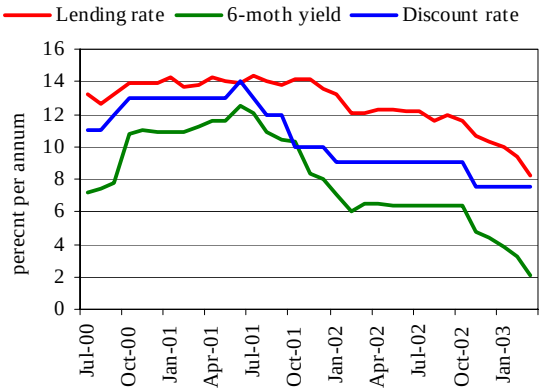
6 Performance of Financial Markets

Considerable transformation was witnessed during the last two years in money, capital and forex markets. Phenomenal increase in liquidity due to increasing foreign exchange inflows in the financial system helped ease the monetary stance, caused the share prices to surge and appreciated the rupee against US dollar. Developments related to instillation of good governance and market infrastructure also helped create an orderly environment of trading.

6.1 Performance of Money Market

The beginning of FY01 saw the free float of Rupee with significant implications for the conduct of monetary policy in Pakistan. In specific terms, the need to buildup country's forex reserves to mitigate the speculative pressure on exchange rate, and reduce governments' reliance on borrowing from the central bank in line with the IMF conditionalities, implied a tight monetary policy.

Figure 6.1: Key Interest Rates



As shown in **Figure 6.1**, after the initial period of adjustment during FY01 (tight monetary policy), the monetary policy has since been eased considerably with a series of discount rate cuts as reported in **Table 6.1**.

Table 6.1: SBP 3-day Repo Rates

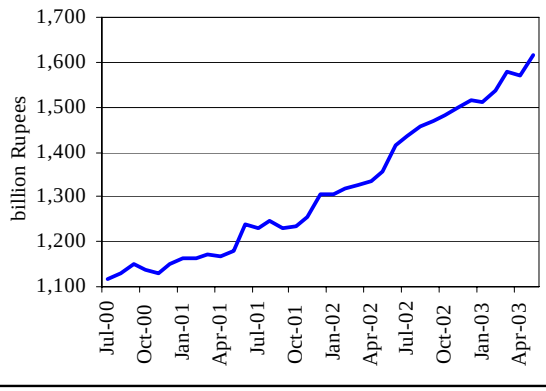
Effective	Rate (percent per annum)	Extent of reduction (basis points)
07-Jun-01	14.0	-
19-Jul-01	13.0	100.0
17-Aug-01	12.0	100.0
22-Oct-01	10.0	200.0
23-Jan-02	9.0	100.0
18-Nov-02	7.5	150.0

6.1.1 Financial System liquidity and SBP Interventions

The significant improvement in the macroeconomic environment, brought about by the preceding phase of tightening of FY01, enabled the SBP to ease its monetary stance from July 2001, while remaining comfortable within the parameters of the IMF program. Monetary ease was reinforced by the rapid accumulation of foreign exchange due to the phenomenal growth in home remittances since September 2001 and SBP's efforts to spur growth through inducing and accommodating the demand for credit by the private sector.

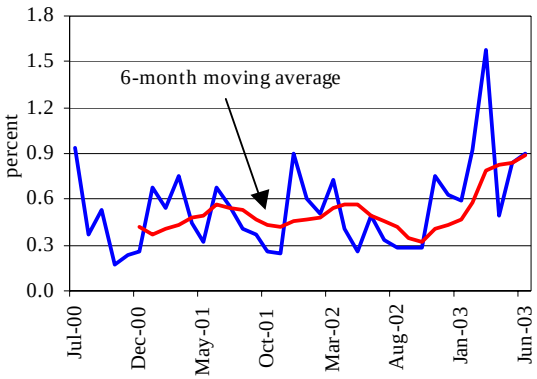
The SBP policy to purchase these foreign exchange inflows resulted in an enormous growth in the rupee liquidity of the commercial banks; the deposit growth has shown a historical pace (see **Figure 6.2**). Extent of liquidity can also be assessed from the fact that the average excess reserves maintained by the commercial banks have increased from 0.49 percent in FY01 to 0.64 percent in FY03 (see **Figure 6.3**). There is also an evident downward pressure on the interest rates during last two years especially after the November 2002 discount rate cut.

Figure 6.2: Total Deposits of Scheduled Banks



In order to sterilize the monetary impact of forex purchases, the government debt from the central bank was retired by substituting it with the borrowing from the commercial banks. Although sterilization puts an upward pressure on interest rates, the sheer size of the incoming flows fueled commercial banks' expectations of interest rate decline coupled with the SBP efforts to accommodate credit to private sector by a series of interest rate cuts resulted in historic low interest rates.

Figure 6.3: Excess Cash Reserve



It is evident from the **Table 6.2** that the liquidity shortages that were the hallmark of money market conditions prior to FY01, have come down considerably in the last two fiscal years. Similarly, the total and average discounting was also comparatively low. This reflects the commercial banks liquidity comfort that has allowed them to reduce their reliance on the SBP's lender of last resort facility.

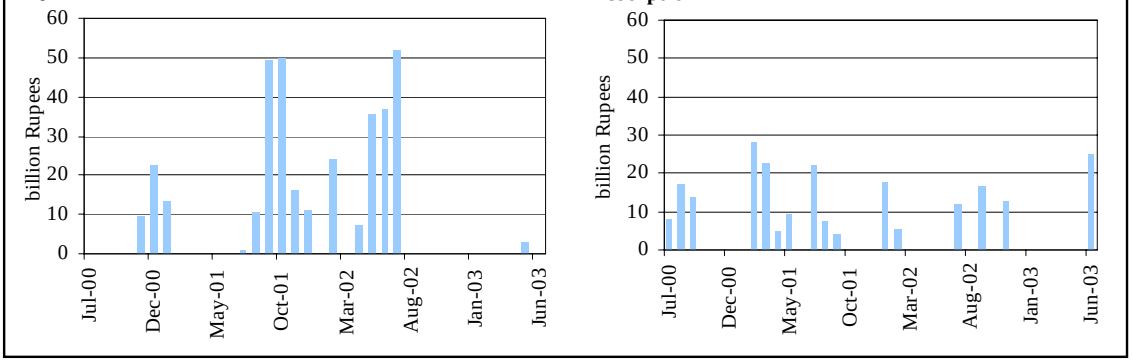
Table 6.2 Discount Window

billion Rupees

	Days of nil discounting	Days of discounting	Total discounting	Average discounting
FY00	241	125	737.6	5.9
FY01	191	174	1,556.7	4.3
FY02	233	132	828.4	2.3
FY03	305	60	618.7	1.7

As shown in **Figure 6.4**, the SBP open market operations depict a different trend during the last three years in accordance with the changing stance of monetary policy. During FY01, there was a net absorption of Rs 57.6 billion, primarily indicating the need to tighten the money market in order to support the free-floating Rupee. However, the SBP provided the market with a net injection of Rs 185.1 billion during FY02, primarily to facilitate the commercial banks to extend credit to the private sector and to intensify the monetary ease.

Figure 6.4: Open Market Operations



The conduct of OMO has also been improved since July 2001, especially through (a) reducing the tenor structure to make OMOs a more effective tool for short-term liquidity management (in addition to differentiating it with auctions), and (b) dismantling the fixed schedule of OMO in July 2001 to give the SBP more flexibility in managing market liquidity. In conjunction with the FY01 shortening of the OMO tenor structure, the move underlined the OMOs' primary role as a liquidity management tool, rather than an indicator of the SBP's monetary stance.

During FY03, the frequency of OMO has been reduced drastically (see **Figure 6.4**). The reasons behind this strategy were (a) when the market was long, SBP wanted surplus liquidity to remain with the commercial banks in order to induce them to lend to the private sector, especially for working capital financing as well as non-conventional sectors like consumer finance, and (b) when the market was short, it usually happened due to the overbidding of commercial banks in the primary auctions of T-bills/PIBs, SBP on its part discouraged overbidding by refraining to conduct an OMO to liquefy the market. However, the SBP foreign exchange intervention remained a continuous source of rupee injections.

The extent of liquidity can also be seen in an enormous surge in the amounts on offers in the primary auctions of government paper (see **Table 6.3**). In specific terms the amounts on offers in the auction by the commercial banks have increased by Rs 319.9 and 935.7 billion respectively for FY02 and FY03. In addition, there is a corresponding increase in amount accepted by the SBP, depicting also the sterilization of forex inflows during the respective years.

Table 6.3: Treasury Bill Auctions Summary

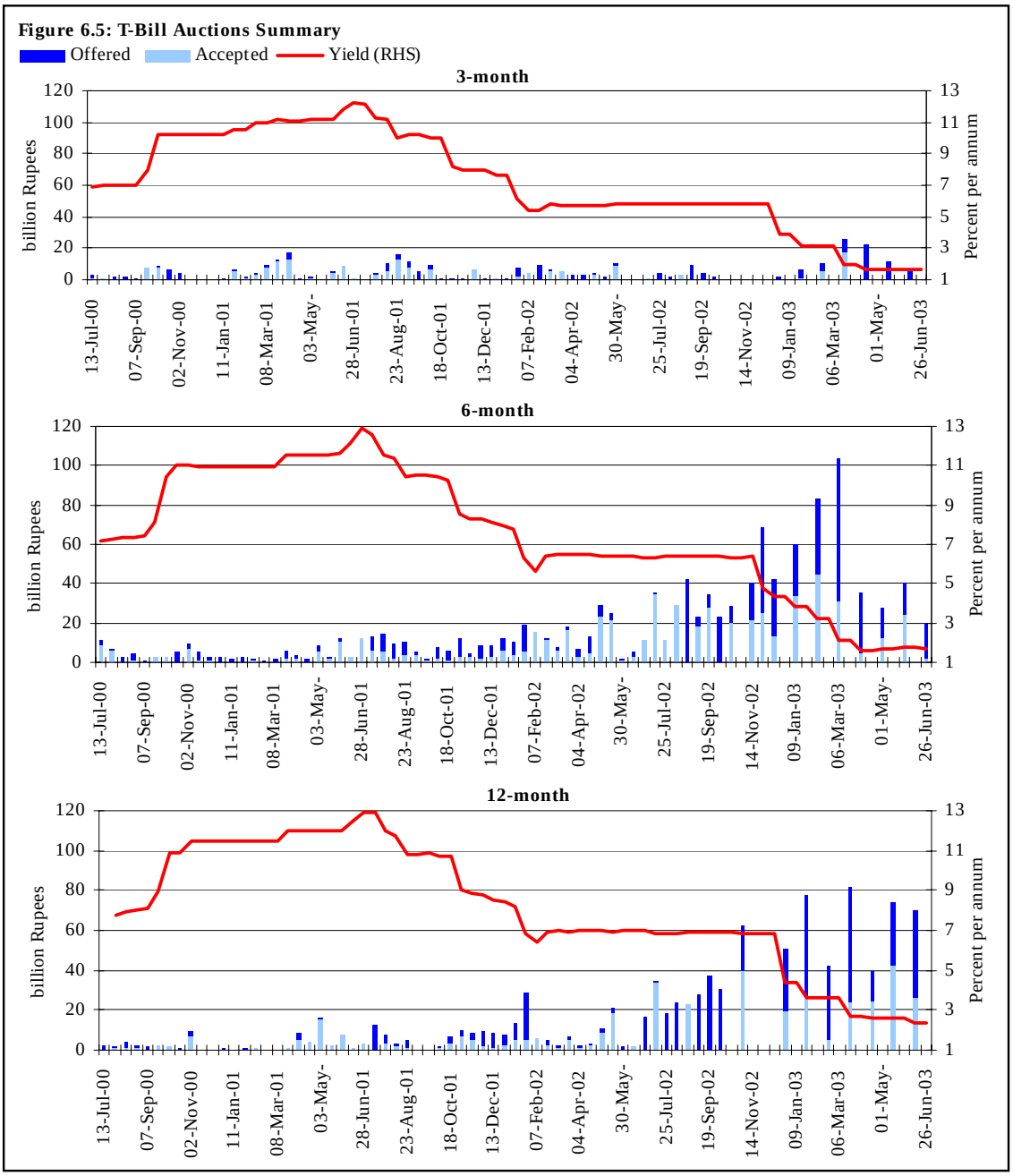
Instrument	Year	No. of Auctions		No. of Bids		Amount (billion Rupees)		Percent Accepted	Spread (percent)		W.A. Yield
		Held	Scrap.	Received	Accepted	Offered	Accepted		Simple	% of Yield	
Three-month	FY01	25	11	176	78	107.7	72.7	67.5	0.69	6.77	10.3
	FY02	26	8	177	61	128.4	72.9	56.8	0.60	7.22	8.3
	FY03	16	7	105	18	109.1	29.2	26.8	0.36	9.83	3.6
Six-month	FY01	25	0	322	147	112.6	66.4	59.0	0.92	8.94	10.3
	FY02	26	3	647	285	284.5	160.4	56.4	0.58	7.13	8.2
	FY03	18	1	1095	371	747.0	349.0	46.7	0.59	13.00	4.5
Twelve-month	FY01	25	7	224	109	75.1	54.0	71.9	0.67	6.16	10.8
	FY02	26	1	585	201	202.4	84.0	41.5	0.69	8.12	8.6
	FY03	16	5	1288	366	694.9	264.4	38.1	0.63	14.80	4.2
All Tenors	FY01	25	-	722	334	295.4	193.1	65.4	0.76	7.29	10.5
	FY02	26	-	1409	547	615.3	317.2	51.6	0.63	7.49	8.4
	FY03	26	-	2488	755	1551.0	642.6	41.4	0.52	12.54	4.1

The SBP has effectively managed the huge inflow of foreign exchange (coming through remittances, US logistic support and supplemented by foreign debt restructuring) during the last two fiscal years, by: (a) purchasing the excess supply of Dollars to buttress exchange rate primarily to keep the Pakistani exports competitive in the international market; (b) sterilizing the rupees injections of these purchases through shifting government debt of SBP to the commercial banks; and (c) leaving ample liquidity with banks to push the domestic interest rates down (the benchmark 6-month T-bill weighted average yield has decline by more than 1000 basis points in last two years, i.e., from 12.88 percent in July 2001 to 1.66 percent in June 2003).

Table 6.3 gives a snapshot of the performance of the primary market of T-bills. During the period FY01-FY03 a total number of 77 auctions were conducted for the sale of T-bills. The overall amount offered in these auctions was Rs 2,461.7 billion, while the SBP accepted Rs 1,152.9 billion (46.8 percent of the offered amount). Although the size of the auctions have increased tremendously on the back of the rupee injections from the SBP forex purchases, the bid spread as a percent of the yield has increased from 7.3 to 12.5 percent. The widening spread was the outcome of declining interest rate environment that resulted in speculative bidding in primary auctions during the period FY02-FY03.

Looking at tenor-wise performance of T-bills (see **Table 6.3**) in terms of mobilization of funds, number of bids offered and accepted, and number of auctions scrapped; the 6-month tenor stands out as the leading paper, closely followed by the 12-month paper, whereas the 3-month paper showed a dismal performance (especially during the period FY02-FY03). The revealed pattern is plausible in a scenario of declining interest rates as the banks strove to book assets (government securities) in longer tenors in anticipation of further decline in interest rates. This naturally implied a diluted performance in the 3-month paper. Furthermore, these efforts of commercial banks to eagerly acquire government paper, resulted in speculative bidding that aggravated the downward pressure on the interest rates with the eventual decline in yields on government paper far more than the decline in the SBP discount rate since July 2001 (see **Figure 6.5**).

Figure 6.5: T-Bill Auctions Summary



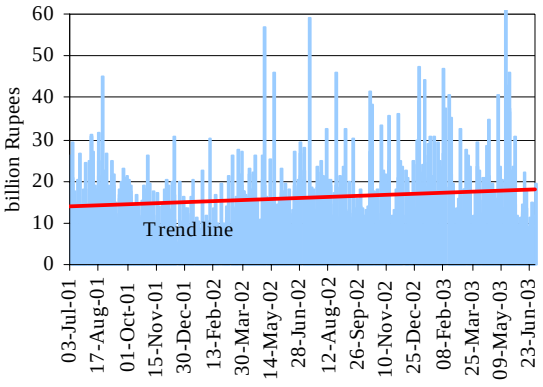
In October 2002, the SBP changed its auction practice of selling all tenors in one auction by introducing separate auctions for 6-month from 3 & 12-month T-bills. This change in practice was primarily targeted at minimizing the overbidding by the commercial banks in the primary auctions, as the banks were overbidding in all tenors due to lack of information as to which tenor will be accepted by the SBP. Although this change did not minimize the overbidding to the desirable levels, SBP was able to give supply in all tenors. In addition, the interest rate signaling also improved in the sense that prior to this mechanism, some tenors were being rejected in many auctions resulting in a truncated yield curve.

A significant development in September 2002 was the inception of a 'swap window' by SBP. An active swap window would provide SBP an additional facility to manage market liquidity in both the Rupee and forex markets. In addition, the swap window could help in sterilization of SBP forex market interventions.[1]

6.1.2 Secondary Market of Treasury Bills

As shown in **Figure 6.6** the turnover[2] effected trough SGLA in T-bills is increasing with the trend line going upward. This reflects the robustness of the secondary market for government paper and the liquidity for the market participants. The factors contributing to this increased activity are (a) a tremendous increase in the sale of T-bills especially during FY02-FY03, and (b) the declining trend in interest rate that gave the commercial banks opportunity of making capital gains.

Figure 6.6: Treasury Bills Trading



In overall terms, the total trading volume during FY02-FY03 was Rs 5,198.4 billion (see **Table 6.4**). Interestingly, the volume has shown an increase of Rs 894.3 billion during FY03 alone. Not surprisingly, tenor-wise breakup of the trading volume reveals that the secondary market activity in the 6 and 12-month paper has increased during FY03 compared with the preceding year (especially the trading in 12-month has almost doubled), while the activity in the 3-month paper is very low.

Table 6.4: Secondary Market Trading Volume

billion Rupees

	3-month	6-month	1-year	All tenors
		FY02		
Total	593.5	2,299.7	1,410.8	4,304.1
Average	2.0	7.9	4.8	14.7
Max	16.1	24.8	27.8	56.9
Min	0	0.3	0.5	3.6
		FY03		
Total	13.1	2,480.6	2,704.7	5,198.4
Average	0.0	8.4	9.1	17.6
Max	3.6	33.1	48.5	62.6
Min	-	-	-	-

The volatility in terms of standard deviation of the overnight rates has decreased during last two years, yet when seen in relation to the average level of the overnight rates, i.e., in terms of coefficient of variation, the volatility has actually increased (see **Table 6.5**). The SBP is trying to reduce this volatility by strengthening the process of liquidity estimation of the interbank money market and improving the size of intervention in open

[1]The swap window is very similar to a repo transaction undertaken in case of open market operations. In OMO government securities are used to mop up Rupee liquidity, while in the case of swaps, foreign exchange reserves could be used for liquidity management both in money and forex markets.

[2] The successful bidders in the primary auctions could get capital gains as the market prices of government paper remained higher than the auction prices during almost the entire period of FY02-FY03. In fact, this activity became one of the major source of profitability, ironically, in the wake of declining trend of interest rates.

market operations. However, during FY03, the intervention through OMOs (as discussed above) was on the lower side. Therefore, OMO could not succeed in reducing the volatility in overnight rates. A more fundamental reason for continued volatility is that the objective of OMOs and auctions is to keep quantitative components of money, especially NDA of SBP, within target. Unless a target range for overnight rates supplements this and SBP interventions are also geared toward meeting this target, reduction in volatility can hardly be achieved.

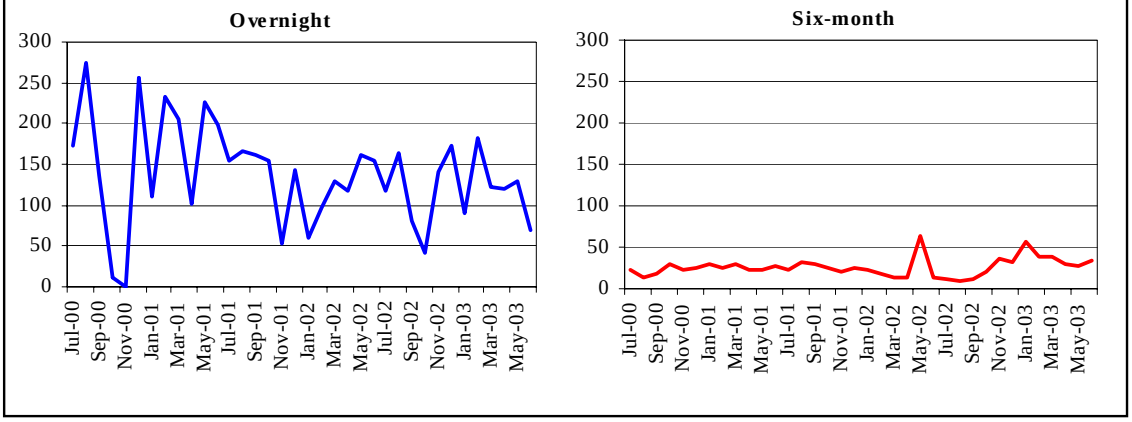
Table 6.5: Volatility in Overnight Rates

percent

	Std Dev	Average	Coefficient of Variation
FY01	4.9	9.2	0.5
FY02	3.8	6.5	0.6
FY03	3.0	4.4	0.7

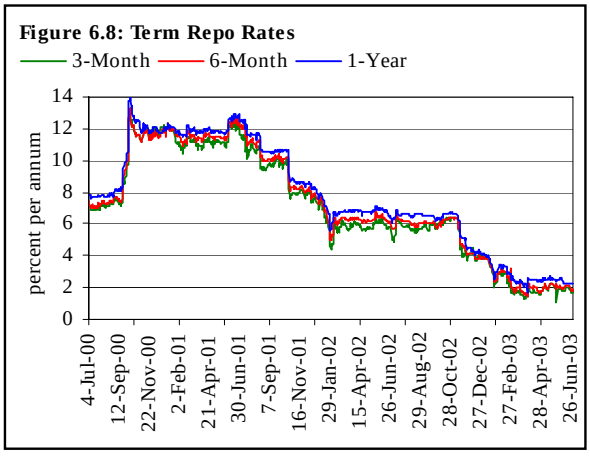
As shown in **Figure 6.7**, the overnight rates have shown a much greater degree of volatility as compared to the 6-month repo rate depicted by the high and fluctuating bid-offer spread, during the period under consideration. The volatility in overnight rates is a matter of concern both for the central bank and the other money market players, as it tends to increase the cash management cost and the risks associated with going short/long.

Figure 6.7: Repo Bid-Offer Spread (basis points)



As shown in **Figure 6.8,** the term structure of interest rates closely followed the monetary policy stance of the central bank during the period under study. The tight monetary policy of FY01 kept the money market rates higher with consequent stability in the exchange rate.[3] However, since July 2001 these rates have fallen in line with the easy monetary policy stance (owing to drastic rupee injections in interbank money market through SBP foreign exchange purchases).

Figure 6.8: Term Repo Rates



It is important to note that the steep fall in the interest rates after the November 18, 2002 discount rate cut[4] primarily reflected the SBP

[3] Rupee entered the free float regime in July 2000. The monetary policy was deliberately kept tight by the SBP in order to mitigate pressure on the Rupee/Dollar parity.

[4] Discount rate was cut from 9 percent to 7.5 percent effective from this date.

desire to adhere to the pre-auction targets, without accepting heavily to stabilize the rates.[5] In the meantime, the market players kept on speculating with the result that the spread between T-bill rates and the discount rate increased to historic high levels. The SBP's strategy was to discourage speculative bidding by increasing the carrying cost; eventually after March 2003 there was a visible stability in the term rates probably reflecting bottoming out of interest rates.

6.1.3 Government Bond Market

After suspension of auctions of the Federal Investment Bonds (FIBs) in June 1998, there was no long-term marketable government security that could meet the investment needs of banks, NBFIs, insurance companies, pension funds and corporate bodies. With the attractiveness of NSS rates at that time and no bar on institutional investment, this vacuum was not even felt.

However, in order to 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 Bond (PIB) in December 2000. It was hoped that there would be a sufficient demand for this instrument, given the institutional ban on investing in NSS and the fact that a new system of Primary Dealers (PDs) was established to develop a secondary market for these bonds.

As a pre-requisite for launching PIBs, primary dealers (PDs) were chosen on the basis of their treasury expertise and infrastructure, past performance as market players, and capital adequacy. These players were given the explicit responsibility of developing an active secondary market by supplying non-PDs and institutional investors with PIBs. The resulting shortlist of PDs included: (1) ABN-AMRO Bank, (2) American Express, (3) Citibank, (4) Habib Bank Limited, (5) National Bank of Pakistan, (6) Standard Chartered Grindlays, and (7) Union Bank.

Although the launch of PIBs was a success, the role of PDs in development of a robust secondary market for PIBs is still a matter of concern. The experience of PDs since inception has shown that: (a) the PDs mostly failed to judge the extent of market demand, which is reflected in over-subscription in most of the auctions held during FY01-FY03; (b) the PDs have failed to quote two way pricing that is essential for market making; and (c) PDs allegedly indulged in excessive use of pass-through bids, thus implying a reluctance to take PIBs on their books.

Another problem for the long-term market is that most institutional investors appear to lack proper professional skill and infrastructure to gauge market sentiments. This makes it difficult for institutional investors to quote appropriate prices. The PDs responsibility, here, is two-pronged, as they have to: (1) act as "market makers" and (2) help their clients make intelligent investment decisions. The SBP is therefore looking to improve the PD system to strengthen PIB primary and secondary market.[6]

In overall terms the PIBs attracted total bids amounting to Rs 508.7 billion, the SBP accepted Rs 228.6 against a target of Rs 208 billion during period Dec 00-Jun 03 (see **Table 6.6**). The demand for PIBs have increased tremendously primarily due to the maturing NSS investments and the declining interest rate scenario that prompted the commercial banks to lock assets in longer term securities.

[5] Previously, the SBP accepted funds in the T-bill auctions without honoring the pre-auction target primarily to stabilize interest rates.

[6] In fact, SBP has issued the revised PD rules on July 5, 2003. The major changes are (a) brokerage houses are also allowed to become PD, (b) retail investors are allowed to buy PIBs through non-competitive bids, and (c) pass-through bids have been disallowed by asking PDs to take PIBs on their books before any subsequent secondary market sale (**EDMD Circular No. 8, 5th July 2003**).

However, the amount mobilized during FY03 is less than FY02 due to lower government appetite for borrowing from the non-bank sector that resulted in fewer auctions with lower targets during FY03.[7]

Table 6.6: Pakistan Investment Bonds Auction Summary
billion Rupees

Instrument	Year	Combined Target	Amount offered	Amount Accepted	Percent Accepted	Average Yield (%)	Average Coupon (%)
Three-year	FY01	49.0	8.5	4.7	54.8	12.5	12.5
	FY02	93.0	46.1	24.8	53.8	9.8	10.4
	FY03	66.0	6.1	9.7	40.3	5.5	8.0
Five-year	FY01	49.0	6.7	5.3	79.7	13.0	13.0
	FY02	93.0	47.3	24.7	52.1	10.6	10.9
	FY03	66.0	45.6	14.4	34.6	6.5	9.1
Ten-year	FY01	49.0	43.6	36.1	82.9	14.0	14.0
	FY02	93.0	144.9	58.2	40.2	11.6	12.0
	FY03	66.0	139.8	50.8	72.3	6.8	10.0
All PIBs Combined	FY01	49.0	58.8	46.1	78.4	-	-
	FY02	93.0	238.4	107.7	45.2	-	-
	FY03	66.0	211.5	74.8	55.2	-	-

The tenor-wise data shows that 10-year PIB stands out as the most successful long-term government paper. The mobilization through this instrument is 148.6 percent more than the combined mobilization from the other instruments.

The performance of PIBs in terms of auctions held and scrapped, and number of bids received and accepted reflects the success and demand for these instruments (see **Table 6.7**). There is only one instance where an auction was scrapped and the reason was that a bank placed a single bid of Rs 10.8 billion against a target of Rs 10 billion at the highest price. Accepting that bid would have meant that only one bank got all the supply of that issue and SBP has also breached its pre-auction target. Although it was justified for SBP to accept more than the target amount, this course of action was needed to discourage lumpy bid patterns in future auctions. Furthermore, this incident also starkly highlighted concerns about the accuracy of "market demand" estimates provided by the PDs. All this points to the need for a closer interaction of the PDs with investors as well as SBP. Secondary market is seldom developed without active participation of the market makers.

Table 6.7: PIB Auction Performance

	No. of Auctions		No. of Bids	
	Held	Scrapped.	Received	Accepted
FY01	6	0	261	182
FY02	13	1	1,358	522
FY03	7	0	1,234	342

Table 6.8 shows the historic changes in the coupon rates for PIBs of different tenors. The decline in rates is a reflection of increasing trend of premiums at which PIBs were quoted, in the wake of easy monetary policy during last two years. Without the cuts in coupon rates, premium would have jumped to extremely high levels. The average trading activity in PIB averaged around Rs 9.6 billion during FY02-FY03. Furthermore, the secondary

Table 6.8: PIB Coupon Rates

Effective	3-year	5-year	10-year
12-Dec-00	12.5	13.0	14.0
21-Aug-01	11.8	12.2	13.0
6-Nov-01	10.5	11.0	12.0
27-Feb-02	9.0	10.0	11.0
31-Dec-02	7.0	8.0	9.0

[7] Government was getting funds from external sources, improved tax revenue and NSS instruments.

market PIB yields also declined steeply due to: (a) a series of interest rate cuts by the SBP during last two years; (b) enormous demand for PIBs coming from institutions and commercial banks; and (c) the behaviour of commercial banks to book capital gains by acquiring the bonds at cheaper rates from the primary market and subsequently selling them at an even lower rate (see **Figure 6.9**).

The secondary market activity[8] of PIBs reveals a slight increase in trading volume in periods when the interest rate decline expectations were prevalent in the market (see **Figure 6.10**).

As shown **Figure 6.11**, the banks holding of PIBs have increased from 25.8 percent of the total outstanding stock of PIBs in July 2001 to 59.0 percent in June 2003, largely due to the declining interest rates and the increased term premium. Primarily, PIB was envisaged as a long-term instrument for the non-bank institutions such as pension funds, insurance companies, etc. Keeping in mind the rationale of issuance of PIBs, the increased appetite from the banking sector is not a healthy development either from the banks' risk management perspective or from the government's limits on borrowings from the banking system.

The short-term nature of commercial banks' liabilities should ideally be matched with short-term investment portfolio. Large long-term paper holdings are a potential risk for banks in case the coupon rates in future increases and/or the term premium diminishes. The problem is compounded if the long-term holdings are funded through a potentially volatile short-term market as indicated earlier. From the government's perspective, PIB is essentially a part of non-bank borrowings. Funds generated from these would give space to government borrowing from the banking system besides acting as a major source of long term funds for development expenditures (that often have long gestations periods). Therefore, PIBs issued to non-banks should give more space to the government for borrowing short-term from the banks. Excessive bank holdings of PIB will tend to undermine the non-bank sources besides resulting in breaching the limits set for the government for borrowing from banks.

Figure 6.9: PIB Market Yields

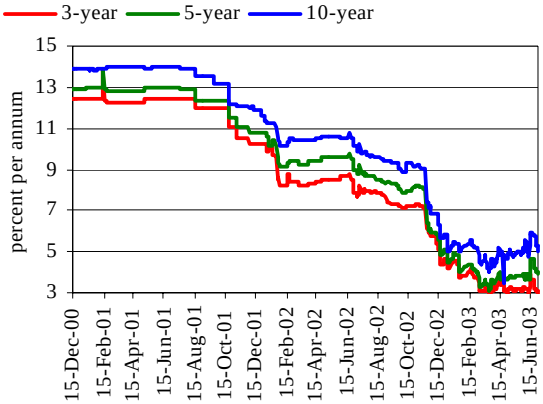


Figure 6.10: PIB Trading Volume

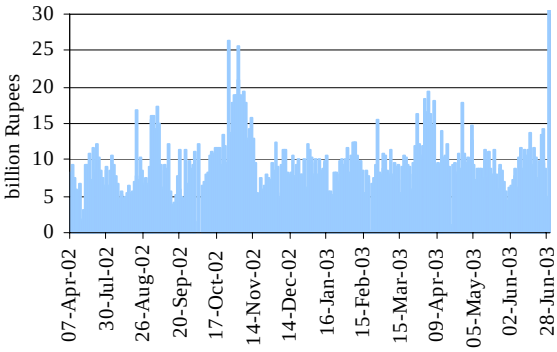
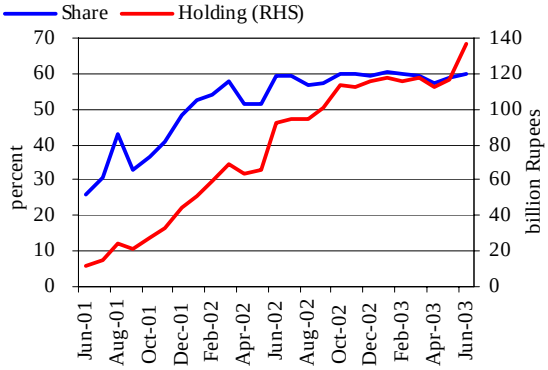


Figure 6.11: Banks' Holdings of PIBs



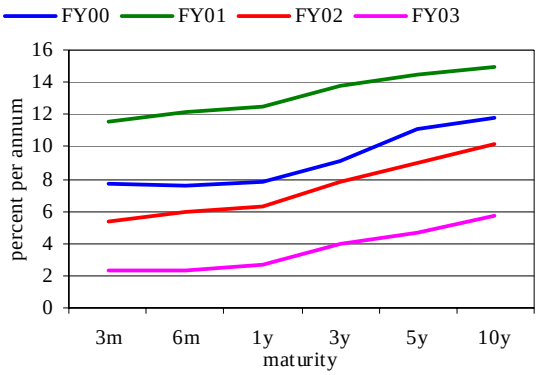
[8] Activity in terms of trading volume, which reflects the transactions effected through the general ledger account (SGLA) used for the purpose of book-based clearing of PIBs.

So far, State Bank has used moral suasion to minimize bank holdings without a visible success. More stringent measure may be required to minimize the increasing risk on banks' bond holdings. Here, the commercial bankers have to take more responsibility to ensure the continuity of market-based mechanisms.

6.1.4 Developments in Yield Curve

As shown in **Figure 6.12,** the monetary policy changes during FY01-FY03 are well reflected in the yield curve. The yield curve shifted upward during FY01 reflecting (a) the tight monetary stance triggered by the need to support the fast depreciating rupee after the free-float in July 2000 and (b) stiff IMF performance criteria for FY01 that required extra-ordinary steps like increase in CRR, etc, during the first half of the FY01.

Figure 6.12 : Yield Curves (end-June)

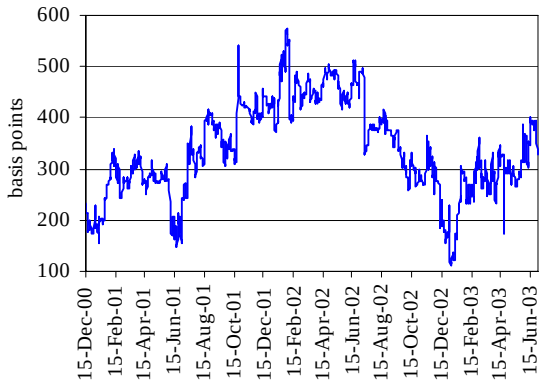


However, during second half of FY01, the macroeconomic fundamentals improved coupled with relatively comfortable IMF performance criteria. This situation allowed the SBP to ease monetary policy since July 2001 by a series of discount rate cuts that brought it down from 14 percent in July 2001 to 7.5 percent in November 2002. The easy monetary policy gave impetus to the credit to private sector that started to show solid signs of recovery during FY03 after a slack during FY02.

The analysis of term premium[9] is very useful in revealing the market expectations regarding the future changes in the interest rates –a rising term premium implies the market expectation of an increase in future interest rates and vise-versa.

As shown in **Figure 6.13**, the slope of the yield curve has fluctuated a lot since the inception of PIBs. Still, there was a period of stability especially when the SBP tried to align the market expectations (Feb-Jul 2002). However, there was a steep decline after the November 2002 discount rate cut primarily showing the scarcity of PIB supply besides indicating declining expectations about interest rates.

Figure 6.13: Term Premium



The recent trend (since end-Dec 2002) showed a change in the term premium as it started to rise again, possibly reflecting a bottoming out of the interest rates. However, the accelerated rise during later half of June 2003 is the result of the PIB auction in which the government gave a surprise heavy target just to avoid a bigger cut in NSS rates. This rise is not an indication of an expectation of increase in interest rates and the early July 2003 data confirms the bottoming out.[10]

[9] Term premium (also the slope of the yield curve) is the difference between the market yields of 10-year bond and the 3-month T-bill.

6.2 Capital Market

Capital market plays a significant role in direct mobilization of surplus funds in the economy and diverting these to productive investment without the help of banks. Equity and corporate debt markets are the main constituents of capital market. Realizing the vast potential of expansion in direct deployment of funds in stocks and corporate bonds, a capital market reform program was initiated in early 1990's and gathered momentum after 1999 with the establishment of Securities and Exchange Commission of Pakistan (SECP)[11].

For effective supervision and growth of capital market, SECP enacted various laws, rules, and guidelines to improve the regulatory framework of the markets in general and of the stock exchanges in particular. Several improvements were made in trading and settlement system of the stock exchanges and Central Depository Company (CDC). In addition, federal government took several steps to reduce policy and regulatory constraints faced by market participants.

The government also rationalized tax anomalies for the equity markets. After extending exemption on capital gains on listed securities until 2001, in 1997, the Government has announced further extension in exemption till 2004. Also, tax on bonus shares and turnover tax on shares was abolished through the Finance Act, 1997. In addition, all provincial governments were advised by the federal government to reduce the stamp duty on the transfer of securities for the CDC transactions from 1.5 to 0.1 percent. As regards rationalization of tax rates on asset-backed securities, significant tax concessions have been announced through the Finance Ordinance, 2001, which includes allowing payment to special-purpose vehicles on behalf of the originator to be tax deductible. Payment on account of securitization of receivables by special-purpose vehicle has also been exempted from withholding tax.

As an important step, the government progressively liberalized the investment restriction on institutional investors. According to the new Insurance Ordinance promulgated on August 19, 2000, the minimum requirement of investment of investible funds of life insurance companies in government securities is 40 percent. Immediately prior to the promulgation of the Ordinance, the minimum requirement was 50 percent while in 1997 the requirement was 60 percent. Also the investment cap was raised for provident funds to invest in stocks and listed corporate fixed income securities from 10 to 30 percent.

6.2.1 Supervisory Role of Securities and Exchange Commission of Pakistan (SECP)

The SECP has been empowered to administer the Securities and Exchange Ordinance, 1969, Modaraba Companies (Floatation and Control) Ordinance, 1980 and Companies Ordinance, 1984. In August 1999, regulation of the insurance sector was also transferred to the SECP and the SEC Act was amended on October 11, 2000 in this regard.

In order to improve the regulatory framework of capital market, SECP enacted various laws and guidelines with a view to consolidate enforcement and monitoring, rationalize trading practices, improve risk management, and enhance corporate governance.

Consolidation of Enforcement and Monitoring

Securities and Exchange Ordinance, 1969 has been amended on September 8, 2000, to strengthen SECP enforcement and monitoring of the stock exchanges and brokerage houses. In order to strengthen the regulatory framework of the stock market and to facilitate the implementation of the

[10] Nonetheless, this partly hurt the SBP efforts to stabilize interest rates. Much worse, the market players would expect the recurrence of this (market distortion) behaviour of the government near six-monthly dates of changing the NSS rates. If that happens, it may further hurt the term structure of interest rates in future.

[11] For details, see **Pakistan: Financial Sector Assessment 1990-2000**, SBP, 2002, pp 86-90.

SECP reform agenda, a number of rules and regulations were issued to prescribe minimum standard of market intermediaries[12]; enhance monitoring of brokers and agents[13]; motivate and facilitate employees in acquiring a greater share in their companies share capital[14]; specify and streamline the eligibility criteria for share transfer agents, underwriters, balloters and consultants to issue[15]; and establish a direct regulatory nexus with brokers and agents to ensure investors protection[16].

Rationalization of Trading Practices

In order to protect small investors against excessive price volatility due to the use of privileged information, the SEC implemented the "Listed Companies (Prohibition of Insiders Trading) Guidelines" on March 27, 2001. These guidelines increased the degree of transparency in the market and gave protection to small investors from possible losses. In order to implement these new rules, SECP has been authorized to investigate and inspect the accounts and records of individuals deemed to be insiders and associated members of the stock exchanges.

In addition to this, internationally accepted T+3 settlement system has been introduced and successfully implemented at the three stock exchanges during FY02. This system was implemented gradually to address various objections from the traders.

The SEC also introduced the undisclosed market trading system in line with the international practice. This step is expected to check manipulation and front running to a certain extent. On October 7, 2002, KSE launched this trading system where the identity of the buyer and seller is not disclosed. This is aimed at discouraging a "herd" culture where small investors try to mirror the activities of larger players in hopes of speculative gains rather than investing on the basis of stock fundamentals.

Improvement in Risk management

In order to improve the risk management and governance at stock exchanges, procedures were introduced in the Securities and Exchange Rules, 1971 to redefine net-capital of the stock exchanges in line with internationally accepted best practice. In addition, the requirement for net-capital balance has been enhanced by 10 times to Rs 2.5 million for the KSE, Rs 1.5 million for LSE and Rs 0.75 million for the ISE.

Also, a measure of capital adequacy for stockbrokers has been stipulated. The exposure of a broker must not exceed 25 times the net capital employed. This would reduce the magnitude of excessive speculative activity. Moreover, the margin requirements have been strengthened; notably the brokers' ability to trade up to Rs 50 million without margin was abolished and all exposure of brokers is now subject to margin.

In order to reduce the systemic risk[17] at the stock exchanges, circuit breakers were introduced to reduce excessive volatility in the prices of scrips. They protect clearing-house from large defaults caused by extreme market movements. In addition, these protect brokers and investors from defaults

[12] *Members, Agents and Traders (Eligibility Standards) Rules, 2001* were issued on May 10, 2000.
[13] *Stock Exchange Members (Inspection of Books and Records) Rules, 2001* were enforced on April 26, 2001. According to these, SECP can order the inspection of books and record of any member of the stock exchanges. These inspections can be conducted any time and for any purpose, giving SECP discretionary powers.
[14] *Public Companies (Employees Stock Option Scheme) Rules 2001* have been issued on May 11, 2001
[15] *Share Transfer Agents, Underwriters, Balloters and Consultants to the Issue Rules, 2001*
[16] *Brokers' Agents Registration Rules* rules were notified on May 10, 2001
[17] Systemic risk refers to the likelihood that the failure of one participant to meet its settlement obligations will cause other participants to be unable to meet their's. This risk is present in the system because of the time lag between transaction and settlement, which is three days in a T+3 settlement cycle.

due to price fluctuations, even when these individual defaults do not endanger the clearing-house. Currently, the following design is being used in all three local exchanges:

- For downward circuit breakers, during a day, price of scrip cannot fall below 5% or Rs 1, whichever is higher, from the closing price of the previous day.
- For upward circuit breakers, during a day, price of a scrip cannot rise more than 7.5% or Rs 1.5, whichever is higher, from the closing price of the previous day.

In addition, stock exchanges have established investor protection funds and the clearinghouse protection funds under the instruction of the SECP.

Enhancing Corporate Governance

For the purpose of establishing a framework of good corporate governance whereby a listed company is managed in compliance with best practices, SECP issued the "*Code of Corporate Governance*" on March 28, 2002. Accordingly, all stock exchanges included the code of conduct in their respective listing requirements. This comprehensive law aims at enhancing investor confidence by increasing transparency in the business practices of listed companies. It envelopes diverse areas of corporate governance including guidelines on the constitution of the Board of Directors of the company; a framework of internal control; rule on financial and accounting responsibilities of directors; directors' report; disclosure regarding pattern of shareholding; and scope of internal audit, etc.

Another important step was to improve the corporate governance of the stock exchanges and reorganize them to improve their management and operational efficiency. This process was initiated by SECP in end-December 2000 and completed in September 2002. To attain this objective, the following reforms have been implemented with a view to improvements in governance:

- 40 per cent independent directors are to be nominated by the SECP on the Board of each stock exchange after due consultation. In 2001, seven non-broker directors were nominated on the Boards of the KSE and the LSE and five directors on the Board of the ISE.
- Independent professional management has been ensured in the exchanges by requiring the Managing Director/CEO of each stock exchange to be appointed and removed with the approval of the SECP. Independent CEOs have already been appointed at the KSE and the LSE, with the prior approval of SECP.
- The directors of each exchange have been directed not to delegate their operational powers to any person other than the Managing Director.
- The number of broker-directors in the CDC has been reduced from five to three (out of a total of nine).
- The Chairman of the CDC is to be a non-broker.
- The Board of Directors of the CDC is required not to delegate their operational authority to anyone except the CEO.
- The SECP has nominated a director on the Board of the CDC.

Also to encourage corporatization of members of the stock exchanges, exemption has twice been granted to sole proprietorship and partnership members of stock exchanges from capital gains arising out of the conversion.

6.2.2 Improvements and Modernization of Securities Market Infrastructure

An important component of the reforms was to improve the infrastructure at the stock exchanges. This envisaged elimination of open outcry system at the stock exchanges and adoption of harmonized automated trading system by all the stock exchanges; development of a Central Depository and

development of a National Clearing and Settlement System. Accordingly, all three stock exchanges are fully automated now and old open outcry system has been abolished.

For introducing an efficient delivery, settlement and transfer of securities through a computerized book entry system, a Central Depository Company of Pakistan Limited (CDC) was established. The Central Depository Act, 1997 was promulgated on June 7, 1997 and regulations under the Act were issued on June 25, 1997. The CDC became operational on September 03, 1997 starting with only one scrip. However, all listed securities were declared to be eligible securities for induction into CDC by June 23, 1998. By end-December 2002, out of 819 declared eligible securities 406 were active at CDC. Also CDC was managing 7244 individual and 293 corporate accounts. CDC also started operations with custody services. It is now offering Delivery vs. Payment services, which are covered by the CDC Act and Rules. The CDC has been appointed as custodian for ICP's 13 mutual funds and also provides trustee services to three private sector open-end mutual fund.

Another important objective of the reform process was to modernize and centralize the clearing and settlement system. A national clearance and settlement system was established and operationalized on December 24, 2001 by the National Clearing Company of Pakistan Limited (NCCPL). NCCPL has been incorporated (July 2001) with paid-up capital of Rs 35 million, contributed by the three stock exchanges. The NCCPL has its own Board of Directors and Chief Executive. In order to monitor system performance and to give enough time to the clients to get used to the system, it was decided by the management to start with two relatively less active scrips. However, by December 31, 2002 there are 308 securities being cleared and settled through this system. Establishment of NCSS is considered as a big leap forward to reducing the risk factor. NCSS operates on a T+3 system on a daily rolling settlement.

6.2.3 Performance of the Stock Exchanges

The Karachi Stock Exchange maintained its standings as the premier market in the country. The KSE-100 index recorded a growth of 16.4 percent from FY00 to FY02 (see **Table 6.9** for data on KSE). During the period, various factors influenced the KSE-100 index. These include changing regulatory environment due to implementation of reform process by the SEC, the problems with the carry over trade, the September 11, 2001 attacks on the world trade center in New York and geo-political situation in the region (see **Figure 6.14**). During this period, SECP implemented various

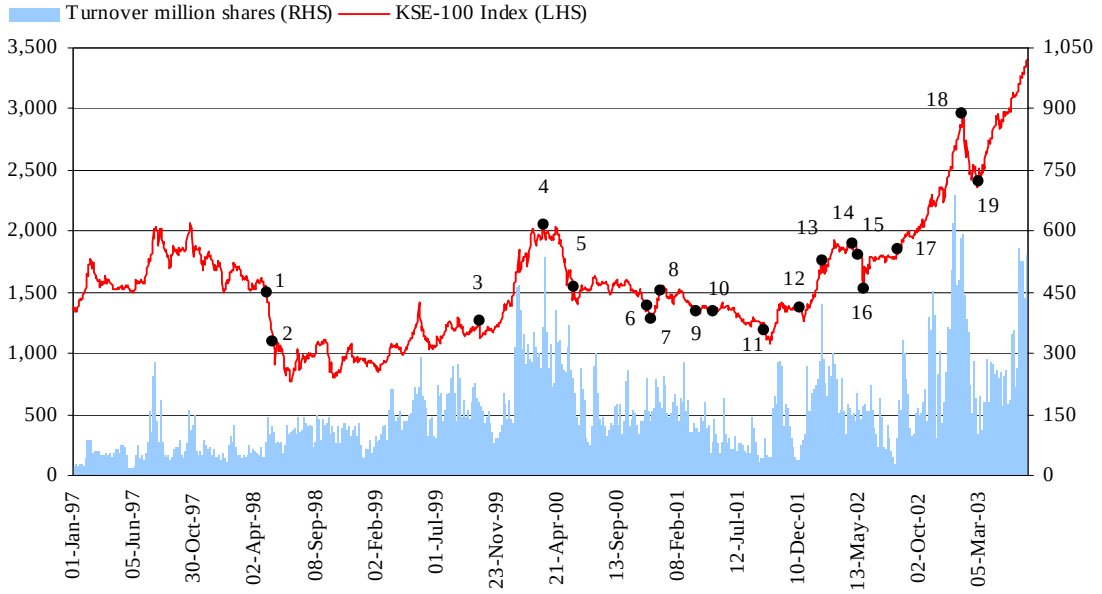
Table 6.9: Profile of Karachi Stock Exchange

	FY98	FY99	FY00	FY01	FY02	FY03
Total number of listed companies	779	769	762	759	725	705
Total listed capital (Rs billion)	211.3	215.0	229.0	239.9	260.6	300.9
KSE-100 index	879.6	1,054.7	1,520.7	1,366.4	1,770.1	3,402.5
KSE all share index	586.8	675.4	942.7	870.4	1,118.8	2,168.5
SBP General Index of Prices	98.8	106.4	128.8	89.7	106.7	204.9
Initial public offering (IPO) during the year	2	0	3	4	4	2
New debt instrument listed during the year	3	2	3	2	10	14
Trade volume during the year (million shares)	14,994.4	25,524.8	48,097.0	28,858.9	28,852.4	52,740.6
Market capitalization (Rs billion)	262.4	287.9	394.4	341.8	411.6	755.8
Value of shares traded (Rs billion)	509.6	605.3	1,877.8	1,073.0	804.4	2,270.6
Average daily turnover (million shares)	63.8	103.4	193.2	119.5	120.9	214.3
Trading days	235	247	249	244	241	246
Turnover ratio	1.0	2.1	4.8	2.9	2.2	4.1
Foreign investment (US$ million))	221.3	27.3	73.5	-140.4	-10.1	24.0

Source: Karachi Stock Exchange & Statistics Department, SBP.

laws and directives to improve the performance of the stock exchanges and to bring their operations in line with the best international practices. These include the changes in the Article of Association of the stock exchanges to improve their corporate governance, implementation of internationally acceptable T+3 settlement system and enforcement of risk management measures at the bourses. Although market participants initially showed some reservations on the pace of implementation of these changes but afterwards accepted these.

Figure 6.14: KSE-100 Index and Turnover



1. India detonated nuclear device, May 11, 1998
2. Pakistan went nuclear, May 28, 1998
3. Change of Government, October 12, 1999
4. KSE-100 Index at 29-month high of 2054.43
5. Trading remained suspended because of settlement problems by some of KSE members on May 30, 2000
6. SECP prohibited blank selling, November 2000
7. Pakistan managed to secure SBA with IMF, end-November 2000
8. SECP ordered change in Article of Association of KSE on December 31, 2000. This was to improve the corporate governance of the stock exchanges and reorganize them to improve their management and operational efficiency.
9. T+3 settlement system was initially introduced in two scrips (Telecard and Ibrahim Fibre) on April 2, 2001
10. Decision to defer the implementation of T+3 settlement system for couple of months in mid-May 2001
11. Terrorist attacks in New York created jitters in the market, September 11, 2001
12. Terrorist attack on Indian Parliament. Market sustained the shock initially but fell afterwards due to extreme measures taken by Indian government
13. KSE-100 Index fell due to enforcement of minimum capital adequacy requirement for brokers
14. Presidential referendum, April 30, 2002
15. Terrorist attack in Karachi, May 8, 2002
16. The KSE-100 shed 8.28 percent in last 15 days of May 2002 due to escalation in tension with India
17. Start of rally driven by good corporate performance and unprecedented liquidity in the market.
18. The uptrend, driven by excessive liquidity, was broken due to hike in badla financing rates (as brokers faced capital adequacy limits) forcing weak holders to sell.
19. However, market fundamentals (good corporate results, attractive market valuations) and liquidity forced start another rally.

As can be seen from **Table 6.10** that primary market activities in equity remained low as only 8 new companies got listed at KSE during FY01 and FY02. However this trend has been there since FY97. Before that financial sector liberalization of early 1990s coupled with the regulation that all new financial sector companies (like Modaraba, Leasing, Investment banks, Commercial banks, etc.) had to list themselves, provided boost to new listings. KSE witnessed new listings of 303 firms during FY91 to FY95 period with highest of 99 in FY92. Another driver in this regard was the high cost of raising funds from the banking system as average discount rate from 1991-95 was 15 percent. Unfortunately latter, this trend of listing slowed down. The reason for the slow down in the listing activity after FY96 could be attributed to the general slow down of the economic activities in the economy and uncertainty on domestic and international political front. Also, improved disclosure requirements by SECP to protect shareholders may have contributed to the reluctance of the promoters to list their companies at the bourses. Contrary to slow listing activities in the market, de-listing is on the rise as 06 and 40 companies were de-listed during FY01 and FY02 respectively. However, 16 of these companies were de-listed due their merger with other firms. In addition, market concentration was very high at KSE, as top 25 companies (turnover wise) cover approximately 51 percent of market capitalization at the end-June 2002.

Table 6.10: New Floatation at KSE
million Rupees

Company	Date of Listing	Total Paid up capital	Amount		Subscribed by underwriter
			Offered	Subscribed	
FY01					
1 Dewan Farooq Motors	31-Jul-00	734.0	185.0	226.0	-
2 Al-Meezan Inv. Bank Ltd	4-Aug-00	901.0	148.0	35.8	171.2
3 Bestway cement	9-Apr-01	1,934.7	200.0	205.0	-
4 Arif Habib Securities	25-Jun-01	50.0	99.0	434.6	-
FY02					
1 Fayzan Manufacturing Modarba	20-Dec-01	900.0	540.0	6.1	533.9
2 WorldCall Multimedia	4-Jan-02	530.0	132.0	21.4	110.6
3 National Bank	18-Feb-02	3,730.4	373.0	1,033.2	-
4 Attock cement	28-Jun-02	680.3	100.0	31.1	68.9
FY03					
1 Bosicor Pakistan Limited	15-Jul-03	1,377.6	272.0	42.2	230.3
2 Ittehad Chemical Limited	14-Apr-03	250.0	62.5	39.9	-

Being the smaller stock exchanges, Lahore Stock Exchange and Islamabad Stock Exchange closely follow the Karachi Stock Exchange. The reason for this is the fact that the companies listed at these stock exchanges are a subset of companies listed at Karachi with few exceptions. As in the KSE, listed companies at LSE and ISE too declined (see **Table 6.11**).

Table 6.11: Performance of LSE and ISE
billion Rupees, shares in million

	L S E			I S E		
	Listed companies	Turn over	Paid up capital	Listed companies	Turn over	Paid up capital
FY96	640	2564.8	119.4	272	154	84.1
FY97	645	2775.6	184.7	283	115	92.4
FY98	631	5848.2	186.9	285	478	149.4
FY99	621	9798.7	186.9	284	180	150.7
FY00	616	16356.9	207.7	283	2012	162.2
FY01	614	7848.3	226.2	281	747	183.3
FY02	581	18281.2	246.3	279	1658	180.6
FY03	561	28191.6	280.09	261	1606	232.7

6.2.4 Corporate Debt Market

The country has already achieved a moderate level of capital mobilization through the bond and equity markets at 25 and 11 percent of gross domestic product (GDP) respectively, at the end of FY02. However, the figures are deceptive as government issues dominate the

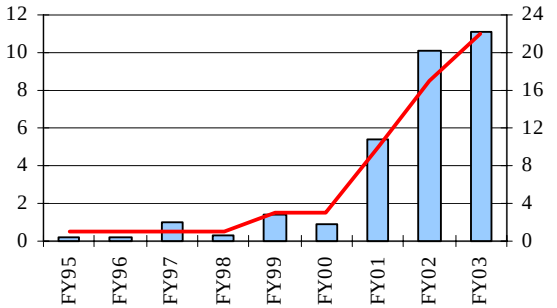
bond market--with corporate bond market accounting only 0.6 percent of GDP.

As early as 1985, privately placed TFCs issued by development finance institutions (DFIs) had been in existence. A Five-year bond issued in 1988 by the Water and Power Development Authority (WAPDA), a statutory corporation, was Pakistan's first corporate debt[18]. However, it was not until February 1995 that the first public TFCs issued by Packages Ltd. was listed on the stock exchange. The listing signaled the birth of a corporate debt market and was swiftly followed by three others, with yields between 17.8 and 19 percent, bringing the stock of listed TFCs to a little more than Rs 2 billion. While listed TFCs are not approved securities for commercial banks' SLR, non-bank financial institutions (NBFIs) were allowed to invest in TFCs for SLR from June 1997 onward.[19]

In September 1997, additional incentives in the form of tax exemption (on the 10 percent withholding tax) were granted to TFC holders, including corporate entities such as banks, giving a boost to the investor base of TFCs. However, six months later, the withdrawal of part of the tax exemption, leaving only individuals tax exemption, dealt a heavy blow to the fixed income market.[20]

While it was expected that long-term securities would be priced relative to government bonds, in reality TFCs' pricing (coupon and price) was based on the National Saving Schemes (NSS). The reason is twofold: first, secondary market for long term government papers was not in a stage where their yields were long-term benchmark rates; and second, NSS constitutes more than a quarter of all domestic government debt and is aimed mostly at the public, which the TFCs, through listing at the stock exchanges, were also targeting. This put the TFC issuers at a disadvantage in raising finance through this instrument.

Figure 6.15: Growth in TFC Market



In order to remove these anomalies in interest rate structure, major policy changes have been introduced in the NSS.[21] Rationalization of the rates of the NSS has greatly contributed to developing the corporate debt market. In addition to this, the Government also barred institutional investors from investment in the NSS in March 2000, which has substantially benefited the corporate debt market.

As a result of these measures, 27 new issues were launched during FY01 and FY02, whereas previously only 13 issues were launched from the FY95 to FY00 (see **Figure 6.15**).[22] The detail of these issues is presented in **Table 6.12**. A very interesting development is the gradual evolution in the pricing structure of the TFCs.

Table 6.12: Overall Composition of Listed TFCs

	Since FY95	FY01	FY02	FY03
Total issued	62	10	17	22
Fixed	23	7	4	0
Floating	39	4	13	22
Anchored to discount rate	25	3	8	14
Anchored to PIBs	14	1	5	8

[18] For details, see Pakistan; Financial Sector Assessment 1990-2000, SBP, 2002, PP 89-90.
[19] State Bank of Pakistan's (SBP) Rules of Business for NBFIs allowed in June 1997, listed corporate fixed income securities to be treated as eligible investment for the purpose of meeting statutory liquidity requirement (SLR) for non-bank financial institutions (NBFIs).
[20] The rational was to prevent banks from profiting from converting their taxable loan portfolio to tax exempt TFCs.
[21] See **Chapter 5**.
[22] During the first 10 months of FY03, 20 new issues were floated in the market.

Starting from the plain vanilla[23] structure with fixed coupon rates, market has witnessed an increasing number of bonds with floating structures.[24] This is not surprising, given the continuing decline in interest rates. Also noteworthy is the issuers' apparent reluctance to use PIBs as the benchmark issue as majority of the floating rate instruments are anchored with the discount rate (see **Table 6.13**).

Table 6.13: Corporate Debt Market

million Rupees

Security (TFCs)	Issue Date	Maturity	Size	Coupon Rate
Packages Ltd.	7-Feb-95	Feb-00	232	18.50%
SSGC 1	17-Oct-95	Oct-00	500	18.25%
Nishat Tek	15-Jan-96	Jan-99	250	18.00%
ICI 1	30-Sep-96	Sep-01	1,000	18.70%
Banker's Equity	31-Dec-97	Dec-02	700	18.00%
GATRON	17-Jun-98	Jun-03	274	18.00%
FIB (Interbank) 1	1-Dec-98	Dec-03	326	17.50%
Saudi Pak Leasing 1	28-Jan-99	Jan-03	250	18.25%
Dewan Salman 1	24-May-99	May-04	864	19.00%
NDLC	1-Dec-99	Dec-04	500	17.00%
PILCORP 1	21-Dec-99	Dec-04	287	18.00%
Sigma Lease	18-Jan-00	Jan-03	110	17.00%
Paramount Lease	28-Jun-00	Jun-04	250	16.25%
Atlas Leasing 1st Tranch	27-Sep-00	Sep-05	200	15.00%
Network Lease	4-Oct-00	Oct-05	100	16.25%
Al-Noor Sugar Mills	31-Oct-00	Oct-05	200	DR+2.5%, floor 16.5%, cap 18.5%
Nishat Mills	19-Dec-00	Sep-01	343	12% - 14%
PILCORP (2nd issue)	2-Mar-01	Mar-04	334	15.60%
Orix Leasing	22-Mar-01	Mar-05	742	14.00%
Shakarganj Mills 1	10-Apr-01	Apr-05	250	DR+2% (15.5-18.75)
SSGC	31-May-01	May-06	1,000	Yr 1-2: Fixed at 14.15%, Yr 3-5: floating @ DR + 1.1%; floor 13%, cap 18%
Engro Asahi	15-Jun-01	Jun-06	500	W.A. last 3 cut off 5 Yrs PIB + 150 bps; floor 13%, cap 17%
Dewan Salman 2	22-Jun-01	Jun-05	1,816	16.00%
ICI 2 (PTA)	2-Aug-01	Aug-06	1,600	Last cut off 5 Yrs PIB + 300 bps
Atlas Lease 2nd tranch	16-Aug-01	Aug-06	100	15.00%
Packages 2	29-Aug-01	Jan-05	850	DR + 1.25%, floor 13.5%, cap 17%
Gulistan Textile Mills Ltd	4-Sep-01	Sep-06	321	DR + 2%, floor 14%, ceiling 17.5%
Dawood Leasing 2	12-Sep-01	Sep-06	250	DR + 1.75%, floor 13.5%, cap 17.5%; Perpetual with put and call option
FIB (Interbank) 2	15-Sep-01	Sep-06	193	3yrs =13.75% pa, 3 yrs 6 months =16% pa
Nishat Mills	18-Sep-01	Sep-05	600	1st year 14.5% , 2-4 year DR + 1.5%; floor 13% ceiling 17%
Engro Chemical	26-Nov-01	Nov-06	500	W.A. last 3 cut off 5 yrs PIB + 1.15% , floor 13%, ceiling 17%
PARCO	12-Dec-01	Dec-04	2,500	Last cut off 3 Yrs PIB + 1.45%, floor 13%, ceiling 15%
Crescent Lease	26-Dec-01	Dec-06	250	Base rate +2% , floor 14.5%, ceiling 18%
Security Leasing	28-Dec-01	Dec-05	200	DR + 2.25%; 1st 2 yrs floor 14.75%, last 2 yrs floor 14%, ceiling 17.50%
Reliance Weaving	6-Feb-02	Feb-07	150	DR + 2.5%, floor 15.25%, cap 17.50%
Union Leasing	9-Apr-02	Apr-05	357	DR + 2.25%, floor 14.5%, cap 16.75%
Shahmurad Sugar Mills	21-May-02	May-06	200	15.5 - 17.5% pa

[23] Simplest kind of bond without any options.

[24] In floater TFC, coupon rate is variable which changes with market conditions by being anchored to a benchmark rate (usually with SBP Discount Rate). This pegging protects the investors from any upward fluctuation in interest rate that would cause a fall in yield.

Table 6.13 (Cont'd): Corporate Debt Market

million Rupees

Security (TFCs)	Issue Date	Maturity	Size	Coupon Rate
Saudi Pak Leasing 2	31-May-02	May-07	430	W.A. last 3 cut off 5yrs PIB+1.75%, floor 12%, cap 16%
SSGC Tranch 2 (2)	3-Jun-02	Jun-07	1,250	DR + 1.1%, floor 11.5%, cap16%
Sitara Chemical	19-Jun-02	Jun-07	360	First 100mn 12%, increased 2% with each 100mn
Engro Chemical Pak. Ltd. 2	4-Jul-02	Jul-07	1,000	W.A. last 3 cut off 5yrs PIB+1.15%, floor 11%, cap 15%
Maple Leaf Cement	18-Jul-02	Jul-06	250	5 Years PIB Rate + 2.50%, floor 15.25%, cap 17.75%
DAWOOD LEASING 2	25-Jul-02	Jul-07	250	DR + 1.75%, floor 12.25%, ceiling 16.25%
Orix Leasing 2	29-Jul-02	Jul-06	747	DR + 2%, floor 10%, cap 13%
Muslim Commercial Bank Ltd.	8-Aug-02	Feb-08	1,600	5 year PIB cut off yield + 1.50%, floor 11.75%, cap 15.75%
Shakarganj Mills 2	2-Sep-02	Sep-06	200	DR + 200 bps, floor 12.25%, cap 15.75%
Crescent Leasing Corp.2	4-Sep-02	Sep-07	250	Cut-off on last successful auction of 5 yrs PIB+2%, floor 12.25%, cap 15.75%
Shakarganj Mills 2	26-Sep-02	Sep-06	200	DR + 200 bps, floor 12.25%, cap 15.75%
World Call	30-Sep-02	Sep-07	350	DR + 1.75%, floor 12.25%, cap 16.25%
Quetta Textile Mills Ltd.	24-Oct-02	Oct-07	750	DR + 2.50%, floor 13.0%, cap 18.0%
Union Bank	19-Dec-02	Jun-08	750	Cut-off yield of 5 yrs PIB + 2.25%, floor 11.0% , cap 15.5%
Bank Al-Falah	19-Dec-02	Dec-08	650	Cut-off yield of 5 yrs PIB + 1.35%, floor 11.0% , cap 15.0%
Security Leasing 2	9-Jan-03	Jan-06	299	DR + 2.25%; 1st yr floor 11.5%, for remaining 2-4 yrs floor 11%, cap 15.5%
KASB Leasing (Pak Apex)	14-Jan-03	Jan-08	200	W.A. last 3 cut-off 5 yrs PIB + 2.25%, floor 11.50%, cap 14.50%
Gulistan Textile Mills Ltd	29-Jan-03	Jan-08	400	DR + 2.25%, floor 11%, cap 17%
Gulshan Spinning Mills	29-Jan-03	Jan-08	400	DR + 2.25%, floor 11%, cap 17%
Paramount Spinning Mills	29-Jan-03	Jan-08	200	DR + 2%, floor 10.9%, cap 17%
Paramount Leasing Ltd.2	7-Feb-03	Feb-07	325	DR + 2.5%, floor 11.5%, cap 14.5%
Paktel	27-Mar-03	Mar-06	840	DR + 2%; 1st yr floor 12%, for 2-3 yrs floor 11.5%, cap 16%
JS & Co.	18-Apr-03	Apr-08	900	Cut-off 5 yrs PIB + 1.5%, floor 7.5%, cap 13%
Trust Leasing	03-Jun-03	Jun-08	250	DR + 2%; floor 9%, cap 14%
Ittehad Chemicals	27-Jun-03	Jun-08	250	DR + 2.5%; floor 7%, cap 12%
Total			**32,200**	

6.3 Foreign Exchange Market

Abolishing the multiple exchange rate system, adopted after May 1998 nuclear detonation, culminated into a market based unified exchange rate on July 21, 2000.[25] The development process of the market, however, remained slow due to the weak macroeconomic fundamentals and the expectations of market players. The process, nevertheless, took momentum after the post-September 11 extraordinary developments, which flushed the market with forex liquidity and altered the self-fulfilling expectations of a uni-directional movement of the exchange rate. The market, which witnessed extended episodes of volatile exchange rate and a sharp depreciation of the Rupee before September 11, turned into a vibrant stable market after September 11. The market segmentation into the kerb and the inter-bank market, which had been a great hurdle in its development, came to an end after the international drive against *Hundi* network. The massive inflows in the inter-bank market, which were earlier coming through the kerb market, resulted in a sharp appreciation of Rupee and helped accumulation of foreign exchange reserves with the SBP. The reserve buildup of SBP also helped change in market expectations and allowed further liberalization of the market.

[25] For details, see **Pakistan: Financial Sector Assessment 1990-2000**, State Bank of Pakistan, Section 5.3.2, pp 93-96.

The September 11 incident crafted a clear distinction between the pre-September 11and post-September 11 developments. The analysis of the forex market developments has therefore been divided into these two distinct phases.

6.3.1 Pre-September 11 Developments

High volatility amplifying uncertainty

Soon after the free float, the market witnessed turbulent changes in the exchange rate, as the market had the expectations of a weakening Rupee due to the prevailing weak macroeconomic conditions. The market experienced the most volatile movements in exchange rate during the first half of FY01, especially during the months of September and October 2000, when the Rupee had several episodes of sharp depreciation and appreciation (see **Figure 6.16 & 6.17**). During September 2000, the Rupee depreciated sharply by 4.8 percent in a single day. These sharp changes in exchange rate were largely caused by the panic buying of importers who had stayed away from the market due to the relative stability of the Rupee earlier. The volatility in the Rupee Dollar parity increased uncertainties strengthening the expectations of further depreciation and a unidirectional movement of the Rupee. Another factor, instrumental in strengthening the expectations was the belief that the SBP may not be successful in stabilizing the exchange rate in the face of meager reserves it had. The market also had the information that the SBP's ability to intervene in the market would further be curtailed due to the IMF conditionality of reserves accumulation as Pakistan had entered into an agreement with IMF for SBA leading to PRGF. However, the SBP was successful in stabilizing the exchange rate through its measures (mainly discount rate cuts) during July 2001 to September 2001.

Figure 6.16: Exchange Rate Since July 2000

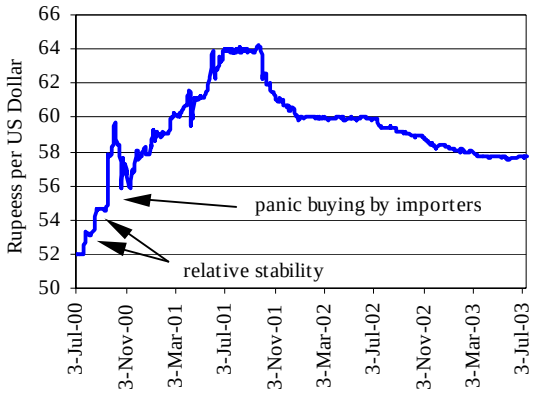
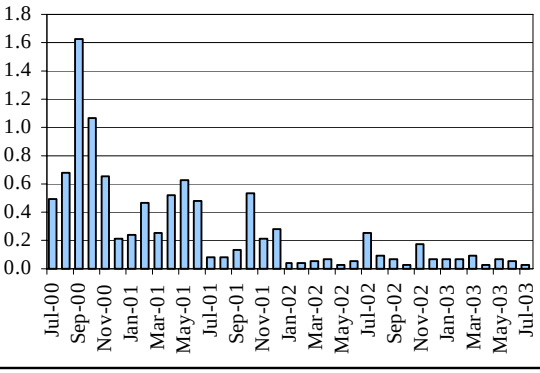


Figure 6.17: Volatility in the Exchange Rate (Standard Deviation of ER during a month)



The volatility in the exchange rate has its own repercussions on the economy in terms of: (i) affecting trade by creating uncertainties; (ii) increasing the incentives for dollarization; and (iii) fueling speculative activities. A volatile exchange rate forces the risk averse traders in reducing their exposure to exchange rate. They also try to minimize the costs by hedging their positions in the forward market, which lead to an increase in the forward premium. Economic literature is full of evidences that the volatility in the exchange rate has a negative relationship with international trade.[26] They also show that the volatility in exchange rate can ultimately lead to a change in the composition of output.[27]

[26] For example see 'Measuring and Analyzing the effects of short term volatility in real exchange rate' by Peter B. Kenen and Dani Rodrik, The Review of Economics and Statistics, Volume 68, Issue 2 (May 1986).
[27] See 'Does Exchange Rate Volatility Depress Trade Flows? Evidence from Error-Correction Models', by Abdur R, Chowdhury, The Review of Economics and Statistics, Volume 75, Issue 4 (November 1993).

Meager inflows in the market

The various volatile episodes till September 2001 are a combination of both *fundamental factors* and *speculative runs*, which are hard to disintegrate but the latter usually follows the former. The weak *fundamentals*, during the said period, resulted in meager market flows and posted great challenges to the SBP in stabilizing the exchange rate. As can be seen in **Table 6.14**, the market flows during FY01 were almost the same as they were in FY00 but the market was exposed to altogether different situation in FY01 as compared to FY00. The meager inflows created the dilemma that smaller inflows pushed the Rupee Dollar parity downwards and a falling parity gave an incentive to exporters to keep their funds away from the market. This situation necessitated support from the SBP as is evident from its net inter-bank sales. These market injections by the SBP were largely covered with the help of purchases from the kerb market. The large trade deficit due to lower export receipts are in the forefront for squeezing liquidity in the market. The high kerb market premium raised the incentive for workers' remittance to flow through informal channels. As a result, despite the efforts to speed up remittance delivery by banks, workers remittances remained at very low levels. Similarly, despite the incentives, the foreign direct investment could not be attracted much. Foreign currency accounts had already lost their attraction after the *freeze* and were a small source of foreign exchange for banks. The SBP also took the steps to channelise funds from the kerb to the inter-bank market by restricting moneychangers in transporting, currencies other than the US Dollar, outside the country. Instead they were directed to surrender such currencies to the National Bank of Pakistan.

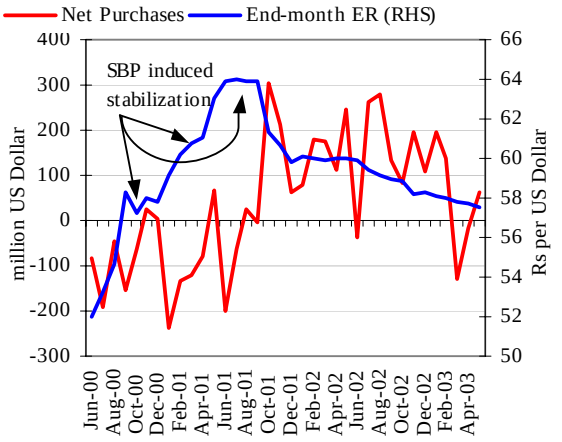
Table 6.14: Major Market Flows

million US Dollar

	FY00	FY01	FY02	FY03
Trade balance (exchange record)	-1412	-1,269	-360	-610
Remittances	984	1,087	2,389	4,200
FDI	472	323	486	744
FCA (FE-25)	360	566	556	198
Interbank purchases (net)	-797	-1,126	2,483	4,546
Kerb purchases	1,633	2,157	1,376	0
Reserves (stocks)	991	1,677	4,333	9,525

Note: Trade balance for FY03 is uptill Mar-03.

Figure 6.18: SBP intervention and ER



SBP actions and stabilization

The management of the exchange rate market after the free flotation of the Rupee was indeed not an easy task; especially the scanty foreign exchange inflows were a great obstacle. In the absence of enough foreign exchange reserves to support the market, the SBP had to use a host of instruments stabilizing the exchange rate. The foremost tool, used for this purpose, was the foreign exchange injections in the market either to *support* the market for heavy debt or oil payments or to quell the speculative panic. Even though these injections did not seem sufficient in stabilizing the Rupee, it was easier to notice several episodes of stabilization (see **Figure 6.18**). The *market support* by SBP for heavy oil payments, however, ended by the end of FY01 (see **Table 6.15**) as the improvement in market liquidity reduced

Table 6.15: Market Intervention /Support by SBP

million US Dollar

	Intervention			Support		
	Purchases	Sales	Net Purch.	Oil	Debt	Others
FY01	547	103	444	1,538	101	3
FY02	1,749	454	1,295	0	0	0
FY03	1,605	289	1,316	0	0	0
Jul-00 to Sep-01	708	305	403	1,538	101	3
Oct-01 to May-03	3,194	542	2,653	0	0	0

Source: EDMD

the need for such support; also, the increasing need to build foreign exchange reserves forced the SBP to shift such payments to the market. On the other hand, the SBP also *intervened* in the market at several occasions to support the Rupee from speculative runs. Overall, the SBP remained a *net purchaser* of the foreign exchange from the inter-bank market during all the fiscal years. The volume of net purchases during Jul-00 to Sep-01, is however, sharply lower than the rest of the period.

In efforts to stabilize the exchange rate through market interventions, the major market players, which contributed significantly with the SBP, were mainly the public sector commercial banks and the foreign banks (see **Table 6.16**). During Jul-00 till Sep-01, when the market had been facing large imbalances between the supply and demand for foreign exchange, the SBP made most of its purchases from the public sector banks to meet the market requirements, while the foreign banks remained the major recipients of foreign exchange from the SBP. The situation, however, changed after September 2001 and the foreign banks emerged as the largest seller of foreign exchange to the SBP following massive inflows.

Table 6.16: SBP Spot Transactions with Banks

million US Dollar

	Foreign Banks	Public sector commercial banks	Domestic private bank	Total
Jul-00 till Sep-01				
Purchases	151	470	86	708
Sales/Support	741	726	480	1,947
Net Purchases	-590	-256	-394	-1,240
Oct-01 till May-03				
Purchases	2,059	436	721	3,215
Sales/Support	306	101	297	704
Net Purchases	1,753	335	424	2,512

The SBP also used other monetary policy instruments for the stabilization of exchange rate **(see Box 6.1)**. However, the extensive use of such instruments was made during the months of Sep-00 and Oct-00, to support the Rupee Dollar parity. During this period the discount rate was increased twice; from 11 to 12 and then to 13 percent. Also the CRR was raised from 5 to 7 percent. As a result of this tightening of the monetary policy, the Rupee Dollar retreated to its previous trend.

6.3.2 Post-September 11 Developments

The post September 11 developments brought major changes in the foreign exchange market. The market went through *structural* changes and experienced a reversal in expectations. The developments also enabled the SBP in switching to more proactive policies. The market witnessed unprecedented stability in the exchange rate brought about by an equally unmatched inflow of foreign exchange. The international drive against the informal channels diverted the foreign exchange flows to the formal channels not only filling the market demand-supply gap but also enabling the SBP in shoring up its reserves to unprecedented levels. The diversion of flows from the informal to the formal market virtually eliminated the *kerb market* and paved the way for a secure creation of foreign exchange companies. It also helped the SBP in resuming the foreign exchange market liberalization process.

Unprecedented stability

The concerted efforts by the various governments (USA, UAE etc.) after the September 11 incident lead to massive inflows of foreign exchange in the inter-bank market, being diverted from the kerb market, which had a strong network in USA and UAE. The immediate impact of these dollar inflows can be seen in the sharp appreciation of Rupee and a decline in kerb market premium (see **Figure 6.16**). The exchange rate, however, stabilized later on and saw marginal adjustments.

Two stark differences can be observed in the pre and the post September 2001 exchange rate movements:

- First, the rate of change of the Rupee Dollar parity was much stronger in the post September period; and

- Second, though the appreciation of Rupee was much stronger than the depreciation of Rupee, it caused less panic in the market than the one witnessed during Sep-00 to Oct-00 period (with the sharpest episodes of depreciation). This is evident form the fact that the volatility in exchange rate is much lower in the second period than the first (see **Figure 6.17**).

Box 6.1: A chronology of monetary measures by SBP/Banks

Pre-September 11	
9-Sep-00	Discount rate increased to 12 percent from 11 percent
21-Sep-00	Weighted average 6-month T-bill rate increased from 7.4 percent to 8.1 percent
5-Oct-00	Discount rate further increased to 13 percent
6-Oct-00	Weighted average 6-month T-bill rate further increased to 10.5 percent
7-Oct-00	CRR increased to 7 percent from 5 percent
5-Oct-00	Imposition of 30 percent cash margin on all import letters of credit by commercial banks
24-Oct-00	Banks reduced the margin to 25 percent, due to strengthening of the Rupee Dollar parity
6-Nov-00	Margin requirements further reduced to 15 Percent
14-Nov-00	Margin requirement is removed all together
7-Jun-01	Discount rate changed to 14 percent
9-Jul-01	Discount rate reduced from 14 to 13 percent
16-Aug-01	Discount rate reduced further to 12 percent
Post September 11	
20-Oct-01	Discount rate is further reduced by 2 percent points to 10 percent per annum
1-Jan-02	Discount rate reduced to 9 percent per annum
18-Nov-02	Discount rate reduced by 150 basis points to 7.5 percent per annum

What explains this difference is also instructive. During the period when Rupee depreciated sharply, several developments coupled with the monetary/administrative steps (see **Box 6.1** and **Section 6.3.1)** by the SBP to quell the panic caused erratic movements in the exchange rate. Such developments/measures either lead to a *delay* or *quick* inflow/outflow of foreign exchange in the market. For example, when the deadline for overdue exports proceeds was extended in February 2001, it effectively encouraged the exporters to hold back their proceeds leading to a sharp depreciation of Rupee. The situation, however, turned around when this deadline expired in April 2001 causing massive inflows in the market.

In contrast, the foreign exchange flows during post September 2001 period were almost uni-directional. The inflows were much stronger than the outflows brushing aside any worry about the outflows in the market. As a result, the exchange rate only appreciated without much volatility. The exporters, once sniffed such an appreciation of Rupee, began throwing in their export proceeds causing large inflows in the market. The speculators, following the suit, started squaring their positions intensifying the flows in the inter-bank further. Such *bandwagon* effect increased foreign exchange liquidity in the market manifolds eliminating any excess demand through *fundamental* or *speculative* factors.

Reversal of expectations

The foreign exchange market dynamics remained dominated by the expectations of market players. The market witnessed a sharp reversal from the expectations of a uni-directional depreciating Rupee to a stable exchange rate. These expectations were mainly driven by the likely sustainability of massive foreign exchange inflows and the SBPs foreign exchange reserves position and an apparent concern for exports. The workers' remittances, which formed the basis for massive inflows in the country, were deemed likely to continue as the US government had initiated a hunt for illegal channels of funds mobility while the UAE central bank had introduced the requirement of documenting every transaction above AED 5000. Both the countries are the major sources of workers' remittances accounting for almost half of the overall remittances. Also the US government's drive to deport illegal residents and find illegal money in the country forced many of the Pakistanis to shift their assets back to their homeland and caused a reversal of capital flight.

The emerging macroeconomic stability, especially during FY03, as indicated by the increasing exports and robust foreign exchange reserves with the SBP, also strengthened the market expectations of a stable Rupee Dollar parity. The negligible exchange rate volatility is yet evidence to such stabilized expectations.

Elimination of segmentation

A major hindrance in the development of the foreign exchange market was eradicated when the market segmentation (into the inter-bank and the kerb market) ended as the kerb market became almost non functional due to the diversion of workers' remittances to the inter-bank market. This also paved the way for introducing foreign exchange companies in July 2002. The creation of the exchange companies was aimed to restructure and document the foreign exchange business, carried out earlier by the moneychangers, on corporate lines. Exchange companies can undertake many of the activities, which were earlier not allowed to the moneychangers (see **Box 6.2**).

SBP's proactive policies

The unprecedented foreign exchange inflows had a tremendous influence on SBP's policies on exchange rate and monetary management. While the *raison d'etre* for policy changes remained the exchange rate during Jul-00 to Sep-00; the policy direction, altogether changed - from exchange rate to the interest rates instead of vice versa, during Oct-00 to Jun-00. Before September 2001, SBP had been supporting the exchange rate through increases in the interest rates; the policy, however, took a u-turn, after September 2001, and the foreign exchange inflows enabled the SBP in instigating a reduction in the market interest rates. The exchange rate management carried out through market purchases resulted in heavy Rupee liquidity in the market forcing the interest rates downwards. The massive foreign exchange inflows also eliminated the need of *market support* from the SBP; it rather allowed the SBP in shifting heavy oil and debt payments to the inter-bank market (see **Table 6.14**). In contrast with the exchange rate volatility before September 2001, despite extensive market support, the post September 2001 stability was entirely due to the market purchases by the SBP as it can be observed that no other *instrument* was used during this period (see **Figure 6.18**).

As a matter of fact, the heavy SBP purchases from the inter-bank market served two purposes: one, it stabilized the exchange rate and second, it built up the SBP foreign exchange reserves. The increasingly accumulating reserves also had a strong psychological impact of raising expectations of a stable exchange rate, as SBP's ability to safeguard the Rupee was perceived to have improved. A negative perception about the same, in the past had its negative consequences too.

Further liberalization of the forex market

The post-September 11 developments provided an opportunity to the SBP to resume the foreign exchange market liberalization process. A number of steps were taken by the SBP in this regard such as:[28]

- Abolishing (i) the nostro limits for banks, (ii) restrictions on authorized dealers for transaction in the inter-bank to be backed by permissible customer transactions, and (iii) surrender requirement for ADs on incremental deposits (FE-31);
- Reducing the Special Cash Reserve requirement from 20 percent to 15 percent of total FE-25 deposits;
- Banks were given powers to (i) extend realization period for export proceeds, (ii) make remittances against import documents, (iii) sanction foreign currency loan for working capital of foreign controlled companies, (iv) open Special Foreign Currency Accounts in

[28] For details see Exchange and Payment Reforms in Annexure 2.1.

Pakistan for businesses related to shipping and (iv) decide freely, the rate of return on foreign currency deposits mobilized under FE-25;

- The pre-payment of Foreign Private Loans (other than the Government guaranteed loans), was allowed;
- Importers were allowed to take cover for their third currency exposures. Exporters had already been enjoying the facility; and
- To develop the forward market, ADs were permitted to extend forward contracts on rollover basis even for less than one month and provide forward cover to investment banks, modarabas and leasing companies holding restricted AD license.

Box 6.2: Foreign Exchange Companies

One of the major features of the financial sector reforms was the creation of *moneychangers* institution in 1991. Over the years, these *moneychangers* acquired substantial control over the inflows/outflows of foreign exchange in the country mainly due to the weak infrastructure of official channels abroad and incentives in the form of kerb premium. Since these institutions had no formal link with the official foreign exchange market (i.e. inter-bank market) such inflows could not be exploited directly for official transactions. The market segmentation also resulted in two different exchange rates for the Rupee and the wedge between the two rates grew significantly over time – especially after the freeze of foreign currency accounts. The rising *kerb premium* further weakened the flow of foreign exchange to the inter-bank market, increasing incentives to channelise funds through the kerb market.

Given the increasing market segmentation and kerb premium, it was strongly felt to rationalize the structure of foreign exchange market. The post September 11 developments, which on the one hand raised concerns for the documentation of *moneychangers'* activities, provided an opportunity to corporatize the money changing business. On July 20, 2002, an ordinance was promulgated amending the Foreign Exchange Act 1947 leading to the creation of foreign exchange companies (FECs). After this ordinance the SBP issued a circular delineating the rules and regulations governing these companies.[1] The following are the salient rules and regulations governing FECs.

Equity, business and management

- The minimum paid up capital required is Rs 100 million, which will subsequently be raised to Rs. 200 million in 3 years;
- FECs can have foreign participation up to a maximum of 50 percent of equity;
- The license shall be issued for a period of three years, renewable thereafter for the same period and will not be transferable;
- FECs are allowed to have:
    - a branch network offering complete range of services in each branch;
    - franchise arrangement with other entities;
    - currency exchange booths at public places with limited operations;
- Conduct the business only from such premises as approved by the SBP;
- Companies are authorized to deal in the following businesses:
    - Exchange of foreign currency notes/coins postal notes, money orders, bank drafts, traveler's cheques and transfers;
    - Buy/sell foreign exchange from/to
        - individuals in 'ready' value only;
        - incorporated companies for remittance on account of royalty, franchise, technical fee, repair and maintenance etc after obtaining NOC from SBP
        - exchange companies in 'ready', 'tom' and 'spot' values;
- Sell foreign exchange from/to banks in 'ready', 'tom' and 'spot' values;
- FECs are prohibited to engage in any other activity, directly or indirectly, such as deposit taking, lending etc.
- Directors of the FECs are required to possess appropriate knowledge of the exchange business and are not allowed to hold the same position in any other FEC.

Prudential Regulations

- FE companies are required to maintain 25 percent of capital as SLR with the SBP;
- The FECs shall limit their exposure at the close of business each day at a level not higher than 50 percent their capital base;

Documentation requirement

- All dealings with customers are required to be supported with official receipts;
- Every receipt is required to be sequentially numbered and give particulars of FEC and the transaction;
- For every transaction exceeding US$ 10,000 (or equivalent in other currencies) name, address and ID/passport number of the customer are required to be verified and mentioned on the receipt;
- For transactions involving transfer/remittances, the particulars of both remitter and beneficiary are required to be mentioned on the receipt regardless of the amount;

Audit / Reporting requirements

- FECs are required to have annual statutory audit from the SBP approved auditing firms and submit a copy of the audited accounts to the SBP within three months after the close of the financial year. The financial year of the FECs is from July1 to June 30th;
- The SBP reserves the right to inspect the FECs at any time it deems fit.