

# 7

## Performance of Financial Markets

### 7.1 Overview

Efficiently working financial markets (especially money, foreign exchange and capital markets) are an integral part of a vibrant financial system. While the money market provides financial intermediaries with avenue to borrow and lend in short-term and square their respective positions, the foreign exchange market primarily provides enabling environment for international trade. Capital markets provide long-term finance (both equity and debt) for government and corporate sector. In essence, all three markets work in a coordinated way such that there are some functional complementarities and some substitutions.

These markets play an important role in transmitting monetary policy signals in an economy. In fact, monetary policy transmission initiates from financial markets (particularly money and forex markets) and then filters to other financial intermediaries (banks, non-bank financial institutions), firms and households and finally impacts inflation and economic growth.

In this background, the chapter primarily focuses on performance of money, forex and capital market in Pakistan during FY01-06. All the three markets have witnessed substantial changes during the period under view.

### 7.2 Money Market and Long-term Government Bond Market

Parallel to the phenomenal progress made by financial sector, in particular the banking sector; SBP continued its efforts to further develop the money market and improve monetary management practices during FY01-FY06. As a result, during the period the money market witnessed (a) increase in depth of both primary and secondary markets; (b) improvement in the efficiency; and (c) fall in volatility in short-term interest rates. In the long-term government bond market, however, the situation was mixed. Initially, introduction of Pakistan Investment Bonds (PIB) led to development of a relatively vibrant long-term government bond market. However, supply constraints in later years, eventually resulted in diminutive activity in both primary and secondary market of PIBs making the longer-end of yield-curve non-representative of true long-term interest rates.

#### 7.2.1 Depth and Efficiency of the Market for Government Securities

##### Treasury Bills (T-bills)

The debt management reforms and measures to improve monetary management by the SBP during 1990s, helped in creating a fairly well functioning primary and secondary market for short-term government paper by FY00.<sup>1</sup> In continuation of reform process, improvements were made in monetary management during last 5 years, which together with phenomenal growth in financial sector activities resulted in further increase in the depth and efficiency of money market.

An important step in this regard was the introduction of Primary Dealers (PDs) in July 2001.<sup>2</sup> The selection of PDs was done through rigorous process, which was primarily based on players' secondary market participation and treasury expertise. PDs were expected to improve market dynamics of government securities by increasing efficiency and depth of both primary and secondary market.<sup>3</sup> Additionally, it was hoped that size of auction would be more representative of market conditions, as PDs were supposed to advise SBP about the demand of respective government paper in the market.

<sup>1</sup> For details see SBP publication on Pakistan: Financial Sector Assessment 1990-2000.

<sup>2</sup> Initially, seven Primary Dealers (PDs) were appointed in FY01; however, this increased gradually. For FY06 14 PDs were selected.

<sup>3</sup> For details see EDMD Circular No.1, dated June 19, 2000; and EDMD Circular No. 3 dated October 13, 2000.

In retrospect, all banks were authorized to directly participate in the auctions of government securities. Since treasury expertise across institutions was unequal, this setup was causing some inefficiency in the market. This is reflected in high bid spreads in T-bill auctions during FY95-00 (see **Table 7.1**). The introduction of PDs system has helped in making the bidding process more competitive (see **Box 7.1**), which is an essential feature of an efficiently working money market. Specifically, the average bid-spread in 6-month T-bills auctions has declined substantially from 147 basis points (bps) in FY95-FY00 to only 66 bps in FY01-FY06, reflecting that the bidding process has become more competitive.<sup>4</sup> The narrower spreads are more commendable, given the continual change in trend and level of interest rates during FY01-06. The improved bidding behavior in T-bills auctions is also reflected in:

**Box 7.1: Impact of PDs on Bid-pattern in T-bills Auctions**

As mentioned in the main text, bid-spread in T-bills auctions has witnessed a substantial fall after the introduction of PDs. An attempt has been made here to study the impact of PDs on the bid-pattern in T-bills auctions. For this purpose, an equation has been estimated for bid-spread in 6 month T-bills auctions by applying the ordinary least square method. Data is taken from 173 auctions of 6-m T-bills, conducted during July 1998 to July 2006. Three explanatory variables are used in the equation; first a dummy variable with values equal to 1 for auctions conducted after the introduction of PDs and zero otherwise. The basic idea is to test the condition if the bid-spread is statistically different in pre or post introduction of PDs. The remaining two regressors are interaction dummies (interacted with dummy variable for PDs), testing conditions if the impact of PDs is different in increasing or decreasing interest rates scenario.

As summarized in **Table B. 7.1**, results suggest that introduction of PDs has played a significant role in reducing the bid-spread. In quantitative terms, following are the key findings of the regression analysis:

- In auctions where cut-offs remains unchanged from previous auction, PDs helped in reducing the bid-spreads by 51 bps.
- In declining interest scenario, the impact of PDs increased by another 28 bps making a total impact to 78 (i.e., 51+28) bps decline in the bid-spread.
- In contrast, impact of PDs did not change significantly in cases of rising cut-off rates; i.e., remained same at 51 bps decline in the bid-spread.

**Table 7.1: Treasury Bill Auctions Summary**

	Number of auctions		Number of bids		Bid spread
	Held	Scrapped*	Received	Accepted	in bps
FY95	26	1	1,880	1,008	190
FY96	24	0	545	332	53
FY97	24	0	766	541	107
FY98	22	2	2,493	1,094	213
FY99	24	2	1,532	410	196
FY00	26	2	758	251	125
<b>FY95-00</b>	<b>146</b>	<b>7</b>	<b>7974</b>	<b>3636</b>	<b>147</b>
FY01	25	0	722	334	58
FY02	26	0	1,409	547	69
FY03	26	1	2,487	754	73
FY04	26	3	1,401	479	85
FY05	26	1	1,709	750	77
FY06	26	0	1367	643	31
<b>FY01-06</b>	<b>155</b>	<b>5</b>	<b>9095</b>	<b>3507</b>	<b>66</b>

\*: Represents number of events, when entire auctions were rejected

Source: SBP

**Table B.7.1: Estimation Results**

Dependent variable: bid-spread in 6-m T-bills auctions		
	Coefficients	T-statistics
Intercept	0.73	4.62*
Dummy for primary dealer	-0.51	-2.94*
<b>Interaction dummies</b>		
Falling interest rate dummy	-0.28	-1.80**
Rising interest rate dummy	-0.13	-0.83
Adjusted R <sup>2</sup>		0.50
DW		2.01

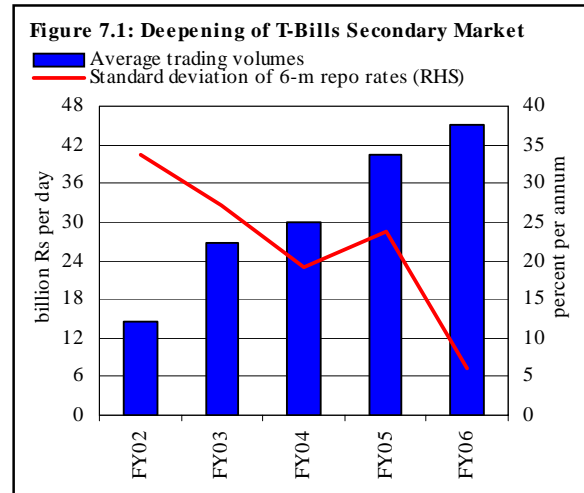
\*: 1 percent level of significance;

\*\* : 10 percent level of significance

<sup>4</sup> These figures are based on data for 6-month T-bills only, auctions for 3- and 12-month T-bills have started since July 15 1998. The bid-spreads in 3- and 12-month T-bills were also lower in FY01-FY06 compared to FY99-00.

- The reduction in number of auctions rejected by SBP from 7 (4.8 percent of total auctions held) in FY95-FY00 to 5 (3.2 percent of total auctions held) in FY00-FY06. Out of these five rejections in later period, three were in FY04 that primarily reflect SBP efforts to calm down market expectations of a sharp rise in interest rates (see **Table 7.1**).
- The rise in acceptance ratio (i.e. amount accepted as percent of total offered amount) to 55.6 percent (on average during) FY01-06 from 52.1 percent in the preceding five years.
- The average accepted amount in the auctions was very close to auction targets during the last six-years. In specific terms, on average ratio of the accepted amount to total target was 101.1 percent in FY01-FY06, which compares favorably with a substantially lower value of this ratio at 45.7 percent for FY98-00.

In essence, these developments reflect the improved efficiency and depth of the primary market of T-bills. The progress by primary market of T-bills also led to improved depth and efficiency in secondary market of T-bills. Average daily trading volume of T-bills showed rising trend during FY01-06. In specific terms, average daily trading volumes in T-bills rose from Rs14.6 billion in FY02 to Rs 45.2 billion in FY06.<sup>5</sup> More importantly, the rising trend in the trading volume was accompanied by welcome declining trend in the volatility of interest rates in the secondary market (see **Figure 7.1**). In addition, the average bid-offer spread of 6-month Repo rate also depicted a downward trend showing improved market efficiency.



### Pakistan Investment Bonds

A major highlight during the period under review was the introduction of the long-term government bond, i.e., Pakistan Investment Bonds (PIBs). Earlier in June 1998, the government has stopped issuing the then long-term government paper *Federal Investment Bonds*.<sup>6</sup> Thus, there was no long-term government bond that could meet the investment needs of banks, NBFIs, insurance companies, pension funds and corporate bodies. Nevertheless, the demand for a long-term investment instrument by corporates (excluding banks and NBFIs) continued to be met by the National Saving Schemes (NSS).

This situation however changed following the ban on institutional investments in NSS since March 2000 with no parallel avenue available for these corporate bodies to invest in long-term papers. Accordingly, there was an immediate need for a long-term government paper that not only could be an appropriate investment avenue for corporate sector but also help develop the longer-end of the yield curve – crucial for benchmarking of long-term corporate bonds.

<sup>5</sup> Data on trading volume prior to FY02 is not available.

<sup>6</sup> For detail see Pakistan Financial Sector Assessment 1990-2000.

In December 2000, government issued 3-, 5- and 10-year Pakistan Investment Bonds (PIBs) and effectively extended the yield curve to 10-years which was further extended to 20-years in January 2004. During the period FY01-04, PIBs witnessed vibrant activities in both primary and secondary market. In this phase, both supply and demand of PIBs seem to be picking up quite well as depicted by higher than 100 percent acceptance to target ratio especially if seen in context of a declining acceptance to offer ratio (see **Table 7.2**). Especially, 10-year bond was an immediate success as more than 50 percent activity was concentrated in this tenor. This was not at all surprising as major demand came from maturities of (10-year maturity) Defense Saving Certificates issued by NSS. In addition, banks interest in long-term government paper also witnessed a major boost due to excess liquidity and a declining interest rate trend – that ensured banks with ample opportunities to book capital gains. Subsequently, conduct of auction was also improved following the introduction of *Jumbo Issues* -- meant to increase the supply of “on the run issues”<sup>7</sup> and mitigate the problem of complicated pricing process.

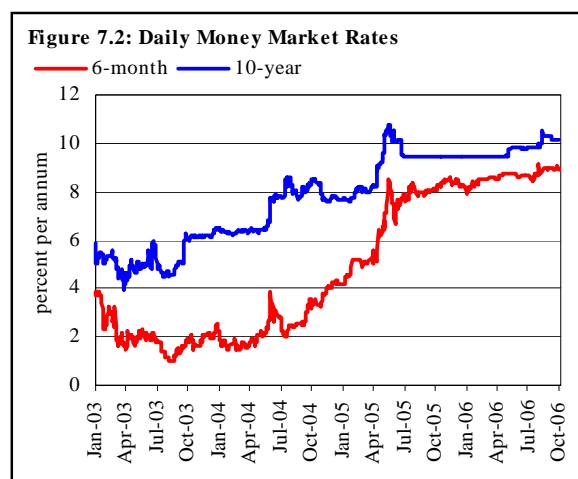
**Table 7.2 : PIB Auction Performance**

	Held	No. of Bids		Amount		Acceptance as % of	
		Offer	Accepted	Offer	Accepted	Offer	Target
FY01	6	261	182	58.8	46.1	78.4	94.1
FY02	13	1,374	486	238.4	107.7	45.2	115.8
FY03	7	1,595	323	212.0	74.8	35.3	113.4
FY04	7	1,273	626	221.3	107.7	48.6	85.4
FY05	3	126	17	8.0	0.8	9.6	8.6
FY06	1	182	133	17.1	11.2	65.8	112.4

Source: SBP

However, FY05 and onward, PIB market witnessed severe liquidity crunch (see **Table 7.2**). As short-term interest rates started moving up in Q4-FY04, PIB became unattractive for market players due to expected large revaluation losses. Banks moved to offload their PIBs holdings to lead a sharp increase in long-term interest rates in secondary market in June 2004 (see **Figure 7.2**). In turn, the corporate sector also held off their demand as buyer preferred to wait for interest rates to stabilize.<sup>8</sup> As short-term interest rates continued the uptrend throughout FY05, the demand for PIBs remained low.

This can be seen by the very low offered amounts in the auctions held during FY05. In fact, FY05 was the only year so far, when offered amount in PIBs auctions fell below the targeted amount; despite targets were set at a very low level. As the government was reluctant to increase long-term interest rates inline with market expectations, a



<sup>7</sup> Initially every PIB auction meant a new issue and an on-the-run issue (available on sale) was usually one that is most recent or/and an issue with a heavy size. Scattered issues with small size complicates pricing in secondary market which necessitates use of *jumbo issues* that have relatively greater size with multiple opening.

<sup>8</sup> For details see SBP publication on Financial Market Review for FY04.

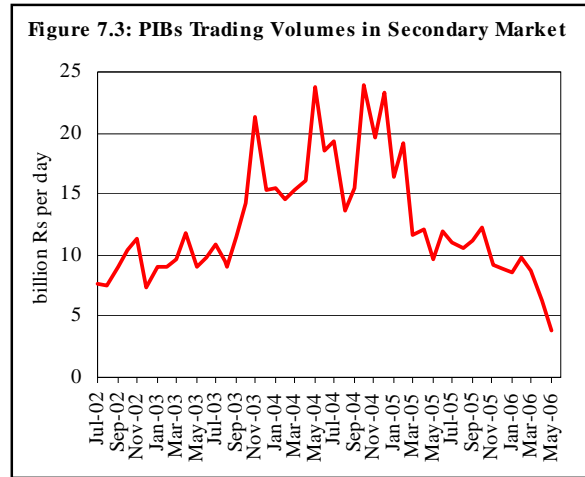
trivial amount of Rs 0.8 billion was issued in PIBs during FY05.<sup>9</sup> While the short-term interest (in T-bills auctions) stabilized and market interest in the long-term paper re-emerged in FY06, it was the government's reluctance to borrow through PIBs that explained low activity in the primary market. Only one auction with a target of Rs 10 billion was conducted during the year.

The development of secondary market for PIBs was not very different from the primary market. The introduction of PIBs resulted in a significant rise in daily trading activity. However, consequent upon interest rate trend reversal and supply constraints the PIB trading diminished sharply in later years (see **Figure 7.3**). While limited fresh supply of PIBs through auctions constrained the activities in the secondary market; another setback to secondary market of PIBs came as a substantial portion of PIBs with banks was allowed by SBP to be categorized as Held to Maturity (HTM).<sup>10</sup> This step, though, was taken primarily to immune banks from heavy revaluation losses but it effectively took away a substantial portion of PIBs out of market (see **Table 7.3**). In fact, this unfavorable development may have strong negative implications for the development of secondary market of PIBs:

- Since a major junk of 'on the run issues' was categorized as HTM, the secondary pricing mechanism remained complex.
- Long term yield quoted in the market become non indicative as trading activity in the long term paper became negligible. In fact, market once again started using short-term interest rates, especially KIBOR as benchmark for the long term lending purposes, thereby jeopardizing one of the significant objectives of the PIB floatation. As discussed later, all the floating rate Term-finance Certificate (TFCs) issued during FY05 and FY06 were benchmarked against 6-month KIBOR.

### 7.2.2 Interest Rate Volatility

Decline in volatility of short-term interest rates was another key development in the money market during FY01-FY06. As shown in **Figure 7.4**, coefficient of variation of overnight interest rates witnessed a sustained declining trend from FY02 onward, indicating that the volatility in the short-



**Table 7.3: Categorization of PIB holdings by the Banking Sector**  
billion Rupees

	Dec'05	Dec'06	Mar'06
Held-for-Trading	0.5	0.0	0.1
Available-for-Sale	71.5	57.3	56.0
Held-to-Maturity	109.2	98.3	97.6
<b>Total</b>	<b>181.2</b>	<b>155.7</b>	<b>153.7</b>

Source: SBP

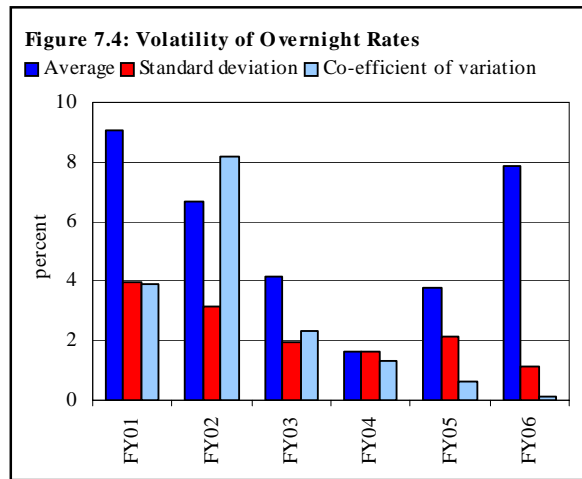
<sup>9</sup> It may be important to note that all the PIBs auctions in FY05 were scrapped and Rs 0.8 billion worth of PIBs were issued to meet short-selling requirements of primary dealers.

<sup>10</sup> In the category of HTM, institutions were allowed to hold the securities till its maturity without revaluing it with mark to market prices. In the second category of AFT, the securities placed were subject to be trade within 90 days. These securities had to be marked to market, and impairment due to revaluation had to be taken to the profit and loss account. For the third category of AFS, the securities placed had to be revalued according to the market prices but needed not to be taken to the profit and loss account. Earlier bonds in HTM were allowed to be used as collateral, however this anomaly was corrected by SBP by disallowing HTM PIBs to be used as collateral and making them illiquid for the banks.

term interest rates has reduced over time.<sup>11</sup> This was made possible primarily due to improved liquidity management by SBP. Two points are important in this regard; first, SBP has significantly increased the frequency of interventions in the market through Open Market Operations (OMOs) (see **Table 7.4**); and second, since Q4-FY05, SBP started conducting OMOs of very short maturity; even for a day.

Previously, SBP was conducting OMOs for tenors not less than a week, while the majority of the interventions were made for weekly or fortnightly maturities. The methodological change provided SBP a tool to effectively manage liquidity in interbank market, even by

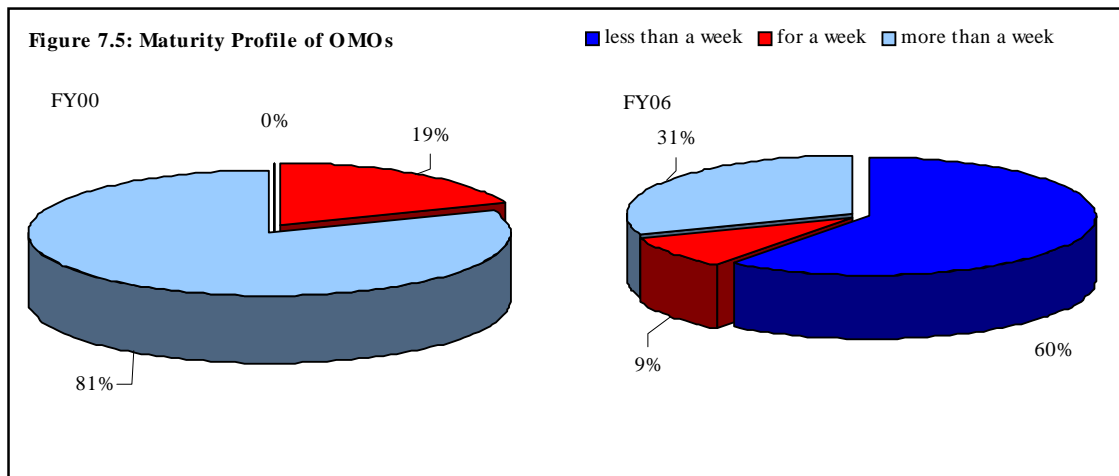
entering into the market on daily basis. This change is expected to improve the transmission mechanism of monetary policy, as high volatility in the short-term rates makes the transmission mechanism weak. For instance, to reinsure a tightening stance now SBP has the flexibility to soak excess liquidity that enters into market even for a day. As shown in **Figure 7.5**, compared to FY01, the maturity-wise composition of OMOs has changed substantially in FY06.



**Table 7.4: Open Market Operations** (billion Rupees)

	Injection	Absorption	Frequency
FY01	45	103	28
FY02	242	56	36
FY03	55	67	10
FY04	73	411	33
FY05	55	611	52
FY06	530	733	92

Source: SBP



<sup>11</sup> Although not reported here, a similar trend is observed in the coefficient of variation of other short-term interest rates.

### 7.3 Performance of Foreign Exchange Market

The foreign exchange market in Pakistan has undergone major structural changes during FY01-FY06; transforming from a volatile, segmented and thin market in FY00 to a stable, unified and relatively deep market in FY06.<sup>12</sup> At the same time, the start of foreign currency loans has increased the sensitivity of the foreign exchange flows to the changes in interest rates (both in domestic and international markets); this has improved the exchange rate channel of monetary policy transmission mechanism, as well.

While the foreign exchange market was undergoing significant changes under the Stand-by Arrangement (SBA) program of the IMF,<sup>13</sup> it was the extraordinary development following September 11, 2001 events that changed the market dynamics. In particular, the international efforts against the informal fund transfers diverted the foreign exchange flows to the formal channels that resulted in collapse of the *kerb* market and virtual unification of exchange rates. It may be pointed out that during periods prior to September 11, 2001 events, the foreign exchange market was segmented into the inter-bank and the *kerb* market, with the *kerb* market premium varying in the range of 7 to 9 percent. The collapse of the *kerb* market provided SBP an opportunity to streamline the businesses of the money changers by corporatizing them into exchange companies.<sup>14</sup> Thus, the market segmentation which was a major distortion in the foreign exchange market was eliminated.

The sharp increase in forex liquidity in the interbank market also allowed SBP to build up its foreign exchange reserves to unprecedented level.<sup>15</sup> Such high level of foreign exchange reserves has improved the economy's ability to absorb the external shocks and helped in stabilizing the exchange rate.<sup>16</sup>

The stability in the exchange rate along with improved macroeconomic environment has led to substantial improvement in external account. This is evident from a continuing rise in foreign currency flows (representing both, the trade as well as investment flows)<sup>17</sup> during the post-September 11 period (see **Table 7.5**) – reflecting the increased depth of the foreign exchange market.

The exchange rate stability for an extended

**Table 7.5: Foreign Exchange Market Size**  
billion US\$

	FY00	FY01	FY02	FY03	FY04	FY05
Trade volume	18.9	19.9	19.5	23.4	27.9	35.0
Remittances	1.0	1.1	2.4	4.2	3.9	4.2
FDI	0.5	0.3	0.5	0.8	1.0	1.5
<i>As percent of GDP</i>						
Trade volumes	25.5	28.0	27.2	28.4	28.5	31.6
Remittance	1.3	1.5	3.3	5.1	4.0	3.8
FDI	0.6	0.5	0.7	1.0	1.0	1.4

Source: SBP

<sup>12</sup> The foreign flows as depicted by the trade and current account volumes have almost doubled during the last five years.

<sup>13</sup> The major changes included: (a) free floatation of exchange rate, (b) allowing the banks/NBFIs to freely utilize Foreign Currency Deposits mobilized under FE-25 for lending/investment/ placement in Pakistan or abroad, (c) removal of the Nostro limit from the ADs and (d) advising the ADs to follow the spot value convention i.e. t+2 days from transaction date as the standard for all their Foreign Exchange and Foreign Currency money market transactions with the SBP, other banks and their clients.

<sup>14</sup> The formation of foreign exchange companies was announced on July 20, 2002 via F.E. Circular No.9 of SBP Exchange Policy Department.

<sup>15</sup> Due to uncertainty shrouding the stability of these inflows, the central bank did not allow the exchange rate to appreciate sharply; and instead decided to purchase foreign exchange that shored up its reserves.

<sup>16</sup> The exchange rate has remained broadly stable from September 2002 onward, despite the external shock in the form of record high oil prices in the international markets.

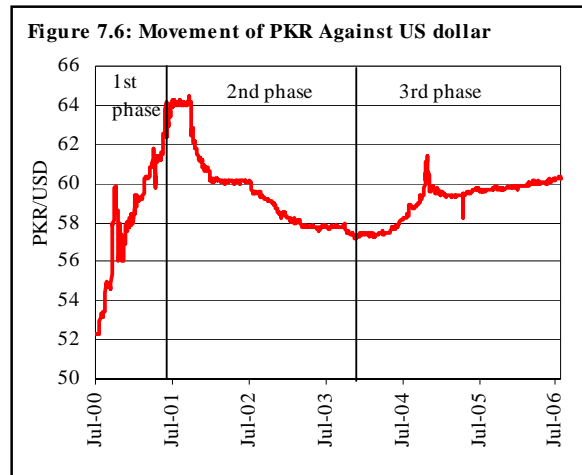
<sup>17</sup> One of the key implications of the foreign exchange inflows (with limited sterilization and stable exchange rate) was the sharp increase in money supply and severe downward pressures on interest rates. The historical low interest rates led to a surge in the domestic economic activity and, subsequently led to an increase in the volume of trade and other current account transactions. At the same time, the improved macroeconomic environment considerably enhanced the confidence level of foreign investors, thereby leading to an increase in the foreign investment.

period of time nurtured the liability dollarization (i.e., encourage foreign currency loans) in contrast to asset dollarization (i.e., foreign currency deposits) in the past. Although the exporters and importers were allowed to borrow in foreign currency from domestic banks since 2001, this facility was hardly used in the past.<sup>18</sup> One of the key reasons for the lack of demand for foreign currency loans was the continuing downward pressures on exchange rate. However, with the reversal of expectations in the foreign exchange market (following collapse of the kerb market) and relatively higher interest rate on Rupee loans, foreign currency borrowing became more attractive.

These foreign currency loans have strengthened the linkage between the foreign exchange market and the money market. Specifically, as foreign exchange loans adds to the interbank foreign currency liquidity,<sup>19</sup> the foreign exchange market has become more sensitive to changes in interest rates (both in domestic as well as international markets) and expectations regarding the exchange rate movement.<sup>20</sup> In fact, traders can substitute Rupee loans for foreign currency loans as they now have the viable choice to borrow either in foreign currency or in the local currency.

### 7.3.1 Trends in the Foreign Exchange Market

In terms of trends in exchange rate, developments in foreign exchange market during FY01-06 period can broadly be categorized into three distinct phases (see **Figure 7.6**). First phase (i.e., FY01) is characterized by a shift in exchange rate regime from managed float to free float, and severe pressures for the Rupee depreciation. The second phase (i.e., FY02 to H1-FY04) shows substantial improvement in external account – an unprecedented event in the history of Pakistan that led to continuing appreciation of local currency for an extended period. The final phase started from H2-FY04, where exchange rate again came under some depreciation pressures.



#### **First Phase**

This period was characterized by (a) high volatility in exchange rate;<sup>21</sup> (b) wide external accounts deficits; (c) SBP's limited ability to intervene in the market due to low level of foreign exchange

<sup>18</sup> The Banks and NBFIs were allowed to use FE-25 deposits for the trade related activities via BSD Circular No.19 dated March 31, 2001.

<sup>19</sup> When a commercial bank extends forex loan to an exporter, the foreign currency is immediately sold in the market. This augments the foreign currency liquidity, which otherwise would have realized in future (i.e., when export receipts materialized). On the other hand, forex loans to importers delay the demand of Dollars till the period of maturity of loan, i.e., import payments are temporarily met from the pool of FE-25 deposits. This suggests that an increase in lending against FE-25 deposits temporarily improves the foreign exchange liquidity in the interbank market.

<sup>20</sup> It may be pointed out that the foreign currency loans are extended from the pool of FE-25 deposits available with banks. The banks' decision to extend foreign currency loans to traders will depend on the differential between the return that banks would earn on foreign placement of FE-25 deposits and the interest rate that the borrowers are ready to pay on foreign currency loans. The traders, on the other hand, will be willing to borrow in foreign currency if the cost of Rupee loans is greater than the sum of interest rate charged on the foreign currency loans and the exchange risk. Thus, foreign currency loans are sensitive to interest rates (both in domestic as well as international markets) and expectations regarding the exchange rate movement.

<sup>21</sup> Pakistan entered into free floating exchange rate regime with effect from 21st July, 2000.



reserves and IMF conditions;<sup>22</sup> and (d) high kerb market premium (see **Table 7.7**).

The management of foreign exchange market in such a situation was not an easy task.

Moreover, the weak macroeconomic fundamentals fueled the market expectations for weakening Rupee, prompting exporters to delay their proceeds. Importers on the other hand brought forward their import demand to hedge against the losses from expected depreciation of the local currency. As a result, the Rupee showed a significant weakness, depreciating by 10 percent against US dollar during July-September 2000 period.

**Table 7.7: External Sector Indicators during the First Phase**

	FY00	FY01
Trade balance (US\$ billion)	-1.4	-1.3
Foreign exchange reserves (US\$ billion)	1.0	1.7
App(+)/Dep (-) of PKR/USD	-1.1	-18.6
Kerb premium percent (end period)	5.4	4.2

Source: SBP

In such a situation, SBP had to take a number of hard measures to quell the speculative pressures and slowdown the abrupt depreciation of Pak Rupee. Since the informal market was capturing a significant amount of remittances, SBP had to purchase foreign currency from the kerb market to meet the demand-supply gap in the inter-bank market. Besides providing market support, SBP used a number of monetary policy instruments (discount rate, T-bill rates and Cash Reserves Requirement) to smooth the exchange rate fluctuations.<sup>23</sup> The monetary policy tightening squeezed the Rupee liquidity from the market which raised the cost of holding foreign currency.

The monetary tightening aimed at controlling pressures on exchange rate was indeed a less desirable option in the face of already weak domestic economic activity. Nevertheless, these monetary policy measures were successful in easing the pressure on the exchange rate. The consequent moderation in exchange rate volatility was of great importance as it reduced uncertainty in the market, quelled speculative pressure to the greater extent, reduced incentives for dollarization in the economy and helped in maintaining stable price level to protect the export competitiveness.<sup>24</sup>

### Second Phase

While the SBP's efforts to stabilize the exchange rate were already paying dividends; this process was further catalyzed by the extraordinary developments subsequent to events of the 9/11. The foreign exchange market was flushed with the liquidity following the international crackdown on the informal channels of fund transfer. However, given the uncertainty regarding the sustainability of these foreign exchange inflows and to protect the competitiveness of the country, SBP allowed the Rupee to appreciate only gradually. In this process, SBP was able to build up foreign exchange reserves through purchases from the interbank market.

In the meantime, SBP also focused on sterilizing the impact of Rupee injection in the interbank market.<sup>25</sup> This strategy was successful in moderating the real appreciation of the local currency. The moderate nominal appreciation together with benign inflation led to only a marginal fall in the competitiveness as measured by the Real Effective Exchange Rate (REER) Indices (see **Figure 7.7**).

<sup>22</sup> An agreement with IMF for SBA leading to PRGF had the condition of reserves accumulation. Under the Agreement the SBP was required to increase the official foreign exchange reserves from US\$ 0.9 billion (3.7 weeks of imports) during FY00 to US\$ 1.74 billion (7.3 weeks of imports) during FY01.

<sup>23</sup> SBP raised its discount rate to 12 percent on September 19, 2000 and further to 13 percent on October 5, 2000. The rate on twelve months T-bill was increased from 8.1 percent on September 7 to 10.9 percent on October 5, 2000. The Cash Reserve Requirement was increased from 5 percent to 7 percent on October 7, 2000.

<sup>24</sup> During the period, the export competitiveness improved as was depicted by the depreciation of Real Effective Exchange Rate (REER) on account of the stable prices and depreciation of Pak Rupee against the trading partner's currencies.

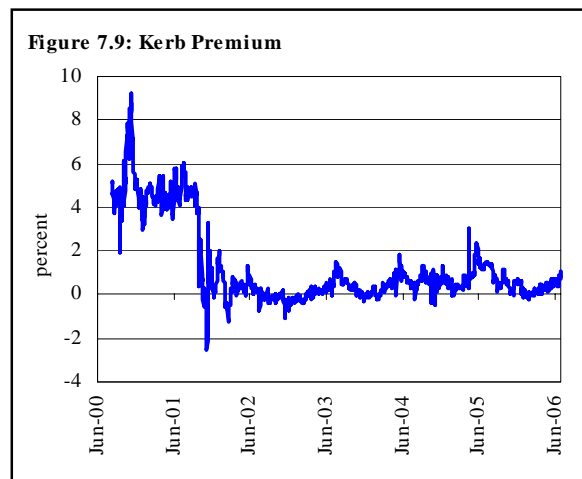
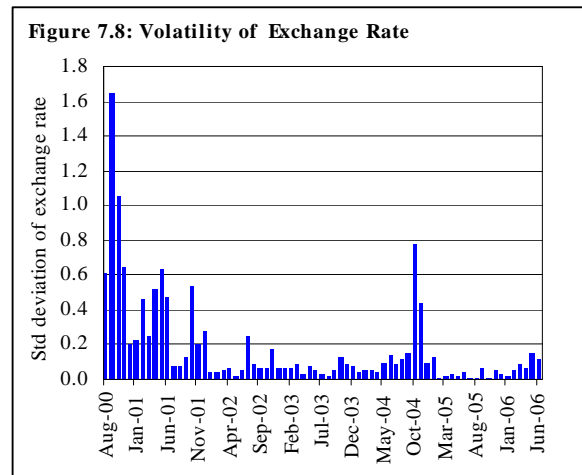
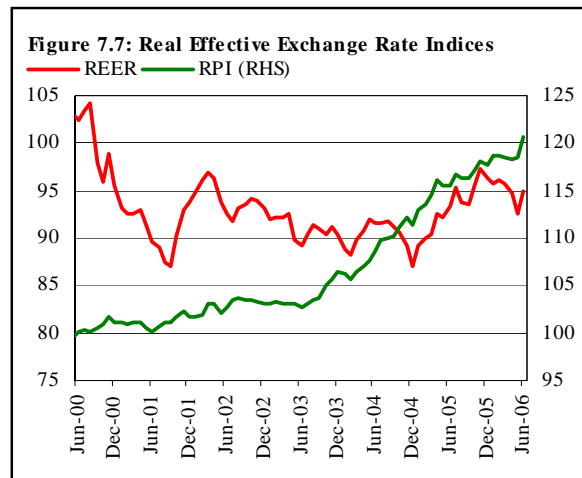
<sup>25</sup> These Rupee injections were the counterpart of SBP's foreign currency purchases from the interbank market.

In fact, the real appreciation of trading partner's currencies against the dollar was greater than the appreciation of Rupee against the US currency which had favorable impact on competitiveness of the Rupee against the basket currencies. The movement of the index was also favorable, when compared with the indices of some competitors' indices (see **Box 7.2**).

It may be pointed out that the massive foreign exchange reserves and a sharp turn around in the external accounts led to a reversal of market expectations for weakening Rupee. The strong macroeconomic fundamentals together with subdued speculations lead to the unprecedented stability in the exchange rate (see **Figure 7.8**). The large foreign exchange inflows allowed SBP to further liberalize exchange regime (see **Annexure 6**).

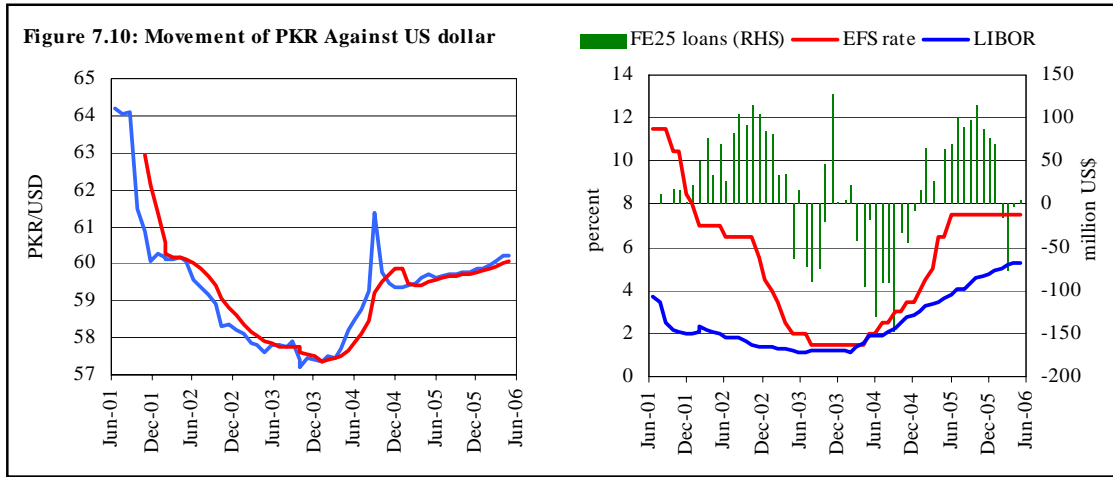
In addition, the increased forex inflows in interbank market has helped in reducing the kerb market premium (see **Figure 7.9**), which provided SBP an opportunity to streamline the money changing business and harness the corporate culture through a well documented and proper regulatory system. Thus, SBP established foreign exchange companies which also helped in addressing the long standing issue of market segmentation that had been a major hurdle in the development of the market.

Integration of the money and foreign exchange market was another important development witnessed during the period. The expectations of Rupee appreciation encouraged the foreign currency lending.<sup>26</sup> In particular, the foreign currency loans became attractive for exporters because of relatively expensive financing available under the export finance scheme (see **Figure 7.10**). As discussed earlier, these loans temporarily improved the liquidity in the foreign exchange market. Since these loans are sensitive to interest rate changes, they strengthened the linkage between the money and foreign exchange market, thereby



<sup>26</sup> The exporters' loans are adjusted from the export proceeds at the exchange rate of original financing while importers loans are adjusted by allowing the authorized dealers to purchase the foreign currency at the prevailing rate from the inter-bank market to the extent of loan.

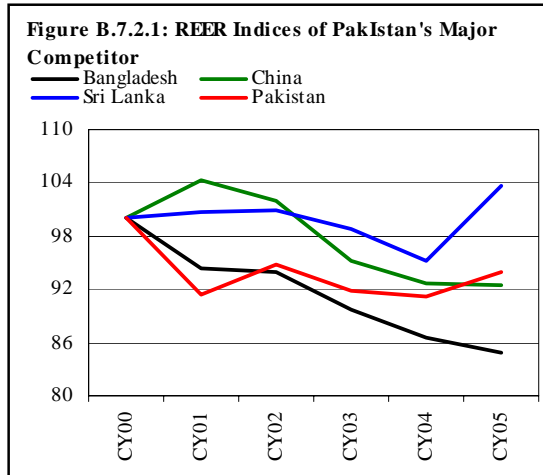
improving the monetary policy transmission mechanism (see **Box 7.3**).



**Box 7.2: A Comparative Analysis of Real Effective Exchange Rate (REER) Indices**

The Real Effective exchange rate (REER) index is an important indicator to measure international competitiveness as it incorporates not only the inflation rate difference between a country and its trading partners but also considers the movement of a country’s currency against its trading partner’s currencies. The comparison of Pakistan’s REER with the indices of the country’s major competitors provides some important insights.

During most of CY01–CY05, the movement of Pakistan’s real exchange rate was more favorable for its exports as compared to the movement of the real exchange rate of China, Bangladesh and Sri Lanka.<sup>1</sup> On account of the nominal depreciation of Pak Rupee against US dollar, the REER indices were the lowest during 2001 than those of its major competitors indicating more competitiveness for Pakistan.<sup>2</sup> Some adverse movement in the index was witnessed in the post September 11, 2001 period, however, SBP’s effective moderation in appreciation of Pak Rupee together with maintaining stable price levels protected the export competitiveness. Nonetheless, in FY05 inflationary pressures have lead to real appreciation of Pak Rupee making Pakistan relatively less competitive as compared to China and Bangladesh. Besides inflationary pressures, the strengthening of Pak Rupee against major trading partner’s currencies (except US dollar) was also exerting pressure on export competitiveness.



<sup>1</sup> The REER data of Pakistan and China is taken from International Financial Statistics while that of Sri Lanka and Bangladesh is taken from web sites of their respective Central Banks.

<sup>2</sup> The downward movement in the REER indices depicts real depreciation while the upward movement in the indices depicts real appreciation of the local currency against its trading partner’s currencies.

**Box 7.3: Foreign Exchange and Money Market Integration in Pakistan**

The foreign exchange and money market linkages have important implications for the monetary policy. In order to check the foreign exchange and money market integration, an exchange rate equation and foreign currency loans equations with the following specification are estimated.

$$\text{Exchange Rate} = f(\text{ID}, \text{COV}, \text{D1}, \text{D1} * \text{ID})$$

$$\text{Foreign Currency Loans} = f(\text{ID}, \text{ER}, \text{T}, \text{FXL}(-1), \text{D2})$$

Where ID is the interest rate differential between 6-months t-bill rate and 6-months LIBOR, COV is the foreign exchange reserves import coverage, ER is the nominal exchange rate, T is the total trade volume, FXL is the foreign currency loans, D1 is the exchange rate liberalization dummy whereas D1\*ID is the exchange rate liberalization slope dummy and D2 is the external shock of Sep 11, 2001 dummy.

The results reported in the **Table B7.2** show that increase in the interest rate differential and liberalization dummy has unexpected effect on the exchange rate. However, when the liberalization dummy interacts with the interest rate differential it has expected sign. The widening interest rate differential either due to increase in the Rupee interest rate or decrease in dollar interest rate support Pak Rupee against US dollar. This implies that changes in the money market leads to changes in the foreign exchange market showing the integration of the two markets. Moreover, the increase in foreign exchange reserves to import coverage ratio also leads to the appreciation of local currency.

The results of the second regression shows that growth in foreign exchange loans to exporters and importers is positively correlated with the interest rate differential and volume of trade. With the widening interest rate differential the traders substitute their Rupee loans with the dollar loans which in turn improve the dollar supply lending support to Rupee. Furthermore, the Rupee appreciation also encourages the foreign exchange loans by reducing their effective costs. Thus the causative factors behind the integration of the money and foreign exchange market in the Post Exchange rate liberalization period are the foreign currency lending to importers and exporters. The foreign currency loans are sensitive to the changes in the interest rate differential and exchange rate as shown in the **Table B7.2**.

**Table B7.2: Empirical Result of Exchange Rate and Foreign Currency Loans Equations**

Dependent Variable: D(ER) 1			
	Coefficient	z-Statistic	Prob.
ID	0.10	10.83	0.00
COV	-0.03	-2.62	0.01
D1	1.27	3.61	0.00
D1*ID	-0.29	-7.46	0.00
Dependent Variable: LOG(FXL)2			
	Coefficient	t-Statistic	Prob.
C	7.98	3.42	0.00
ID	0.05	2.14	0.04
ER	-0.15	-3.20	0.00
LOG(T)	0.38	2.52	0.02
LOG(FXL(-1))	0.60	10.26	0.00
D2	0.41	2.50	0.02

<sup>1</sup> The monthly data from Jul-1997 to May 2006 is used.

<sup>2</sup> The monthly data from Jul-2001 to May 2006 is used as the foreign exchange lending before this period were negligible.

**Third Phase**

The strong economic activity from FY02 onward on the one hand increased the import demand particularly for machinery and raw material, while on the other hand it increased the inflationary pressures since Q4-FY04. Moreover, the external shock in the form of record high global oil prices further accelerated the import growth along with exerting additional pressure on the domestic price level.

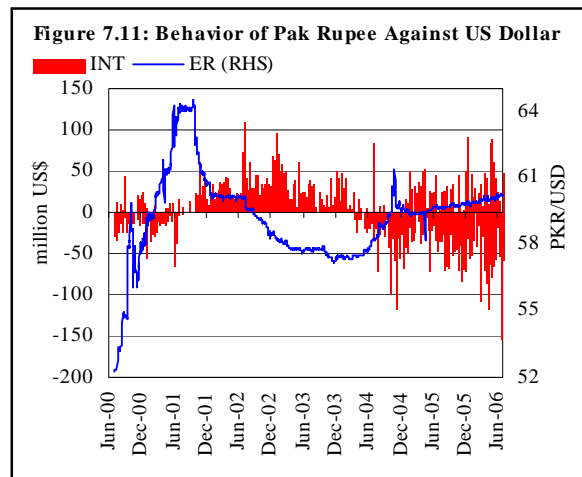
Since the beginning of FY05, the surge in import growth and resulting increase in trade deficit led to a decline in the excess liquidity in the foreign exchange market (see **Table 7.8**). At the same time, the weakening of external accounts together with increasing inflationary pressures fuelled the market expectations of Rupee depreciation. The change in market expectations led to the premature retirement of loans against FE-25 deposits, thereby draining the liquidity from the foreign exchange market. Further, this provided incentives to exporters to delay their export proceeds, whereas importers brought forward their demand for foreign currency in order to hedge against expected depreciation of the Rupee; thus resulting into additional pressure on the Rupee dollar parity.

**Table 7.8: Major Market Flows**

million US dollar							
	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Current account balance	-212	192	2723	4070	1812	-1534	-4999
Trade balance	-1412	-1228	-261	-359	-1279	-4514	-8442
Remittances	983	1087	2390	4237	3871	4168	4600
FDI	472	323	485	798	951	1525	3521
Kerb purchases	1633.4	2157.3	1376	429.3	0	0	0
Inter-bank net purchases	-797	-1126	2483	4546	897	-2049	-2760
App(+)/Dep (-) of PKR/USD	-1.08	-18.63	6.77	3.89	-0.64	-2.55	-0.87

Source: SBP

Responding to the situation, the SBP adjusted its exchange rate policy and supported the Rupee through its net sales of the foreign currency. Despite the sizable intervention in the market, the Rupee dollar parity continued to face significant pressures in the inter-bank market. These pressures were more pronounced during the months of September and October of 2005, forcing SBP to make a public commitment to provide foreign exchange to meet all oil payments. The SBP commitment to make such lumpy payments along with other measures was successful in quelling the speculative pressure on the local currency as was evident by the subsequent recovery of Rupee against the US dollar. Since then the exchange rate has remained fairly stable; despite widening trade and current account deficit. This was made possible due to improved financial flows in the country and SBP market support to reduce excessive volatility in exchange rate (see **Figure 7.11**)



## 7.4 Capital Market

### 7.4.1 Performance

Low interest rate environment and investor friendly policies of the Government coupled with positive geopolitical developments, that led to the turn around in the macroeconomic conditions also had a positive impact on the equity markets of the country. The increased investor's confidence together with strong improvements in the corporate earnings is reflected in the remarkable performance of the equity markets, especially since 2003. Although the market encountered some major corrections, it remained among one of the best performing markets in the world.

In terms of the size of the market, and growth of indices, all the three stock exchanges of Pakistan showed phenomenal growth. The Karachi Stock Exchange (KSE) registered more than 700 percent increase in market capitalization and over 600 percent increase in the index over the period of last five years (see **Table 7.9**).<sup>27</sup> The same trend is also visible in the Lahore Stock Exchange (LSE) and Islamabad Stock Exchange (ISE).<sup>28</sup>

**Table 7.9: Profile of Karachi Stock Exchange**

	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Total number of listed companies	762	759	725	705	666	659	658
Total listed capital (Rs billion)	229.0	239.9	260.6	300.9	377	439	496
KSE-100 index	1,520.7	1,366.4	1,770.1	3,402.5	5,279.2	7,450.1	9,989.4
KSE all share index	942.7	870.4	1,118.8	2,168.5	3,480.2	4,876.9	6,708.4
SBP General Index of Prices	128.8	118.7	106.7	204.9	323.3	362.8	427.0
Initial public offering (IPO) (in numbers)	3	4	4	3	10	6	11
New debt instrument listed (in numbers)	3	2	10	15	6	12	7
Amount (billion Rs)	0.8	5.4	10.1	10.7	3.3	15.6	7.0
Trade volume (million shares)	48,097	28,859	29,005	52,720	96,297	87,972	78,633
Market capitalization (billion Rs.)	394	342	412	756	1,422	2,068	2,801
Market capitalization as percent of GDP	10.3	8.2	9.4	15.7	25.2	31.4	36.3
Value of shares traded (billion Rs.)	1,877.8	1,073.0	804.4	2,270.6	4,862.0	7,167.6	8,707.5
Average daily turnover (million shares)	193.2	118.3	120.4	214.3	386.7	351.9	319.6
Trading days	249	244	241	246	249	250	246
Turnover ratio	4.8	2.9	2.2	4.1	3.4	3.5	3.1
Portfolio investment (US\$ million)	73.5	-140.4	-10.1	22.1	-27.7	152.6	351.5

Source: Karachi Stock Exchange & Statistics Department, SBP

Market capitalization of KSE as a percent of GDP, which stood at 36.3 percent at the end of FY06 shows continuous improvement during the last five years. The rising market capitalization indicates that in terms of the size, the market has been improving faster than the economic growth (see **Table 7.9**).

Another indicator, which reflects the market activity, is the trading volume that registered a phenomenal surge during the period. In both FY03 and FY04 the trading volume increased by more

<sup>27</sup> The performance of the capital market can be judged by looking at the major indicators and developments taking place at Karachi Stock Exchange (KSE) since it is the biggest equity market among the three stock exchanges and the trends are generally followed by the other exchanges of the country.

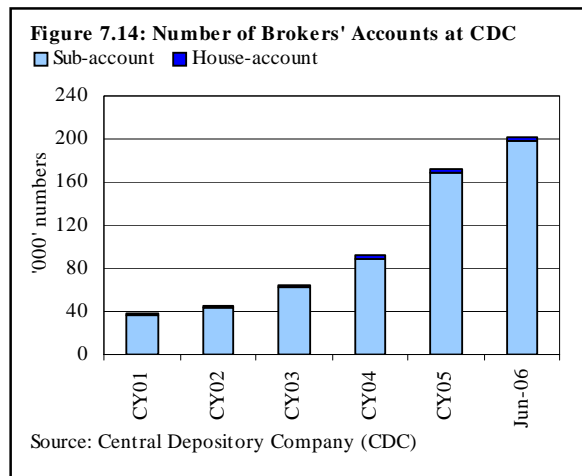
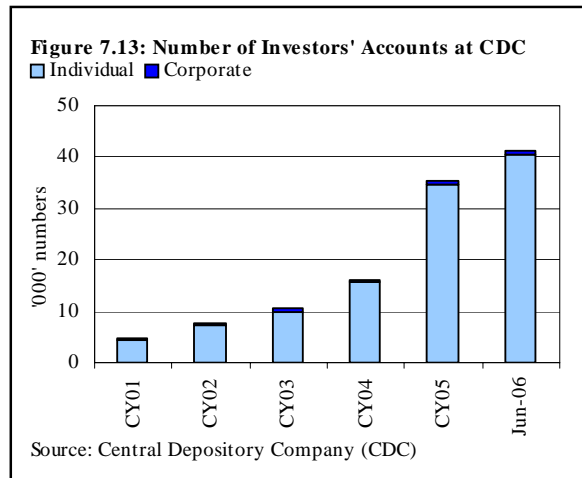
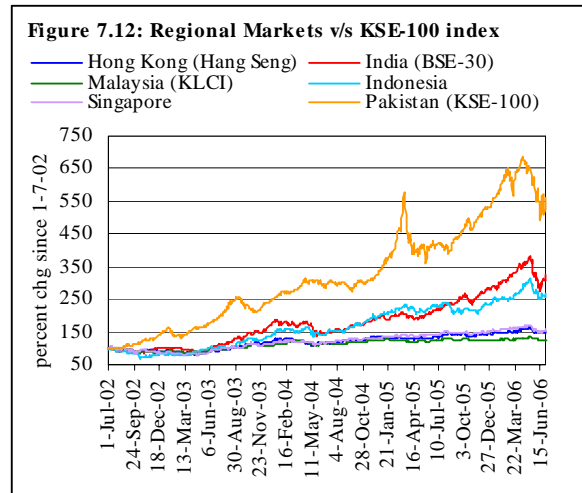
<sup>28</sup> The Market capitalization of LSE and ISE has increased by 259 percent and 288 percent respectively over the last three years. In terms of indices the growth has been 115 percent and 40 percent respectively, however, it may be noted that indices at end of FY06 may not reflect the true market performance due to crises in all stock exchanges during June 2006 and resulting fall in indices.

than 80 percent. Although the volume growth has been negative during FY05 and FY06 but comparing the absolute volume traded during FY06 with FY99 the increase is still many folds.

Almost the same reflection is evident from average per day turnover of shares and turnover ratio<sup>29</sup> during the recent years compared with FY00 or earlier. In terms of numbers of new initial public offerings (IPOs) too, there was significant improvement, with number of IPOs rising from just 14 during FY00-FY03 to 27 during FY04-FY06. The number of listed companies at KSE although showed some decline but the constant increase in total listed capital indicates that, healthier companies in terms of market capitalization and other selection criterion, have replaced the weaker ones.

The performance of KSE-100 was outstanding even if compared with some of the established and emerging markets of the region. As can be seen from the **Figure 7.12**, the growth in KSE-100 index outperformed all the major markets of the region. This made Pakistan's equity market not only attractive for the domestic investors, but also for the foreign fund managers.

The investor base witnessed continuous rise during the last five years and especially so, during 2005 (see **Figure 7.13**) reflecting increased investor confidence. Investors' accounts maintained with the Central Depository Company recorded an exceptional growth of over 117 percent during FY05. While both individual and corporate accounts increased, the major growth was witnessed in the individual accounts. As compared to 28.0 percent growth in the corporate account individual investor account recorded an increase of 120.8 percent. The number of investors' accounts maintained with brokerage houses also increased substantially recording a



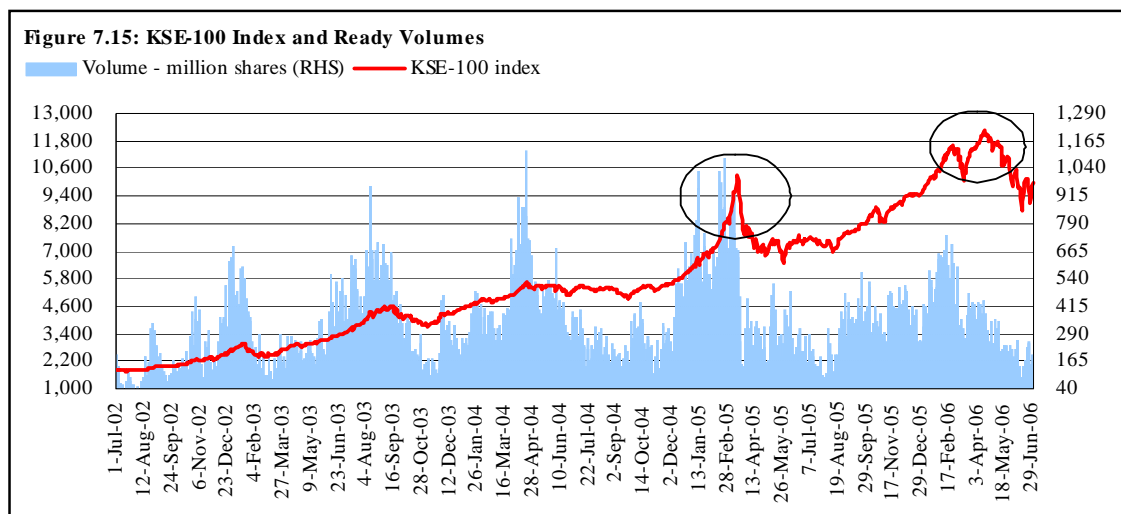
<sup>29</sup> Turnover ratio is defined as the Value Traded for the year divided by the Market Capitalization for the same year.

growth of 88 percent in FY05 (see **Figure 7.14**).<sup>30</sup>

The extraordinary performance of the equity market of Pakistan owes to a confluence of positive developments spread over the years. These include among others; expectations of a significant increase in corporate profitability, burgeoning market liquidity & concomitant decline in interest rates, hopes for the early privatization of large profitable public sector companies (e.g. PSO, OGDC, etc.), reforms in the equity market, improved regulations<sup>31</sup> and the general increase in optimism based on hopes of a broader recovery in the economy. Of these, the first three arguably had the dominant influence.

### 7.4.2 Major Concerns

The performance of the equity markets while outstanding was not without major hiccups. Specifically, the market encountered crash like situation, twice; once in 2005 and second in 2006 (see **Figure 7.15**).



In 2005 after reaching a peak of 1033 points on March 15 the KSE-100 index slipped down almost with the same pace it had moved up earlier and lost 2706 points in just 12 trading days. Daily trading volumes also dropped very significantly, with the average daily volumes falling to 289 million shares during these 12 days compared to the 712 million shares during previous 12 days.

Basically a correction was expected after the high speculation but the decline was unexpected and further high leveraged positions of the investors intensified the fall of index since investors were unable to exit their speculative positions particularly from futures contracts. As these contracts did not allow for settlement by payment of prices differentials many speculators did not have the necessary funds to take delivery of their future positions, this raised the risk of a major default.

In order to avoid the systemic risk both the SBP and SECP acted jointly. SECP took measures to adjust the *COT* rates that allowed more funds in the market and further easing the phasing out deadline of the *COT* and extending it to August FY06 for the remaining seven scrips. Where as SBP

<sup>30</sup> Individual investors can open their account directly with CDC and can also open their sub account with brokers simultaneously.

<sup>31</sup> For detail on reforms and regulatory measures introduced by SECP and Management of Stock Exchanges during the period under review, see **Annexure 7**.



removed the ceiling on bank's financing in the stock exchanges which was earlier set at 20 percent aimed at providing financing to leveraged investors that were facing difficulties in arranging for the funds. The intervention by the regulators was eventually successful in alleviating the expected default risk of the *futures* market.

**Box 7.4: Main Findings of SECP Task Force on March 2005 Crises**

Following are the main findings of the task force set up by SECP to investigate factors responsible for high volatility in stock prices during March 2005:

- There was an unusual build-up about the prospects of a rise in the KSE index in the media and by the brokers and others aided by favorable statements by the government and privatization officials that created unwarranted confidence in the capital markets and of the prices of listed stock;
- Withdrawal of badla funds by the badla providers at some stage created liquidity shortage. It was a manipulation of the liquidity in the ready market to push prices down, thus adding financier's gains from their earlier decision to sell at higher prices;
- Excessive buy positions by several brokers in future market and their inability to exit due to continuous decline in the market;
- Sellers in March futures contracts carried hedged position from ready market and decided not to square up their positions in the March future contract;
- The circuit breakers were a flaw in the system for major actively traded shares. While they may have played a role in preventing manipulation of prices in illiquid shares the downward breakers prevented the exit from the market at the time of excess volatility;
- The Taskforce noted that apart from wearing several hats simultaneously -- of broker, of Badla/COT provider, of mutual fund and investment bank -- brokers and their staff frequently conduct trades between their own accounts and that of their clients, thereby creating opportunities for market abuse.
- There were no limits on the level of day trading by a broker, due mainly to the lack of pre-trade verification systems and other capital adequacy measures. This weakness, coupled with an almost out of control use of wash trades either directly by a broker's client or through the use of two or more brokerages in violation of the rules, facilitated market manipulation;
- The software installed by the KSE contributed to systemic risk by permitting the netting of buy positions of one client of a broker with the sell position of another client of the same broker resulting in inadequate risk margins being collected by the clearing house. The leverage available as a result of the offset of these positions was a major contributor to excess speculation compared with other markets that require client margining at a gross level, along with a value at risk system of adequate standard to estimate broker margins;
- The evidence before the Taskforce suggested that the KSE Board was unwilling to concede the division of responsibility between that of a Board and the independence required for management to perform its proper role. Further, complaints were made about the lack of technical competence of KSE management and its ability to keep pace with developments in the market;
- The Task Force believed that SECP should have acted more forcibly, via directives to exchange to ensure that the recommendations of the previous enquiries into market crises were implemented in a more timely fashion. Further, SECP should have been more prescriptive, via directives, to eliminate impediments to the proper functioning and surveillance of the markets and its players. More importantly, the SECP broker inspection, surveillance and monitoring systems established by SECP failed to function effectively either prior to the market crisis, or after the crisis;
- The Taskforce believed that the lack of knowledge of the overall position of the market and lack of transparency of the market activity by arbitrageurs did not allow the market to restrain from taking additional risks in an already highly leveraged market.

Further to avoid the systemic risk in future and to investigate the developments in Stock Market during the first quarter of 2005, SECP set up a task force on April 12, 2005. The main findings of the report are summarized in **Box 7.4**.

The other jolt that the market received was in June 2006. Beginning May 2006 rumors about the increase in withholding and value-added tax in the new budget gripped the leading players and small investors who liquidated their positions in the fear of further fall in prices. Prices of market leaders and most of the blue chips fell sharply but there was no matching buying even from the financial institutions, which were supposed to act in abnormal market conditions to protect the interest of small and genuine investors. By the last week of May, stocks fell across the board including leading scripts as panic selling from the forward counter spilled over to the ready. Some leading investors were trapped in the clearing business during the rollover week. The market leaders, including the oil, bank and cement shares were the forefront losers. During May 25 to June 14, 2006, the KSE index fell by 2350 points and the average trading volumes shrank to 165 million shares.

KSE management with the support from the SECP took number of measures to check the market's freefall. The measures included: (1) holding lower circuit breaker at 5 percent; (2) putting temporary ban on short-selling in futures contracts; (3) increase in the number of CFS-financed scrips from 14 to 30, and (4) allowing 100 percent exposure (in approved securities) in futures contracts. In addition, in order to address the concerns of foul play, SECP launched an investigation of June 2006 stock market manipulation.

### 7.4.3 Conclusion

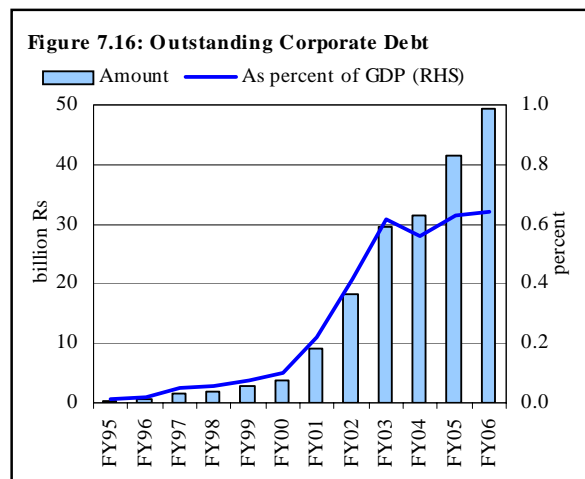
The outstanding performance of the equity market during 2001-2005 has brought Pakistan's capital market to attention of the global fund managers. International investment firms such as Morgan Stanley, Merrill Lynch, Goldman Sachs, etc. have entered the markets in association with the local fund managers. With market capitalization reaching 2.8 billion, or equivalent to 36 percent of GDP as of end June 2006, the significance of the equities market has increased for Pakistan as well. Two major crises however indicate that there is plenty of room for improvement. These events not only provide an opportunity for self-assessment but also highlight the need to strengthen the governance of the exchanges. To restore investor confidence, the SECP is systematically pursuing the strengthening of the governance of stock exchanges by restructuring of Boards and appointment of independent management. At the same time, strengthening risk management systems and demutualization of exchanges is also being encouraged.

Continuation of investor friendly policies, outlook of improved corporate earnings and persistence with privatization, and improvement of regulatory framework is likely to keep Pakistan's equities markets attractive for both local and foreign investors. The future outlook of the Pakistani bourses is indeed bright.

### 7.5 Corporate Debt Market

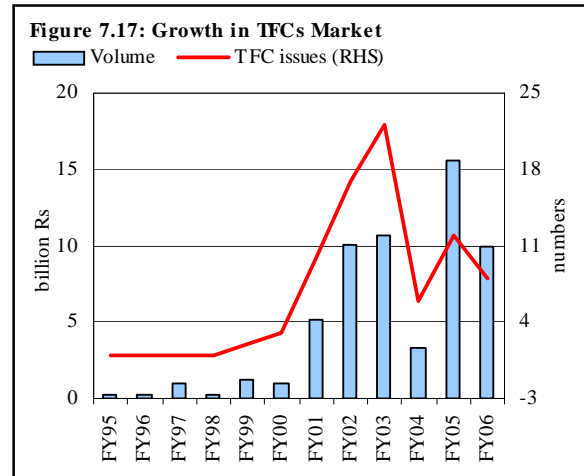
Private companies in Pakistan were allowed to issue TFCs in FY95 and the first publicly placed TFC (listed at stock exchange) was issued by Packages Limited in the same year. Although the corporate debt market in Pakistan has remained insignificant in size so far, the market has made some progress during FY01-FY06, especially during FY01-FY03. By the end-June 2006 outstanding issues totaled Rs 49.3 billion, which was only 0.64 percent of GDP (see **Figure 7.16**).

Progress was very slow initially, with only four



TFCs worth a total of Rs 1.8 billion issued by end-FY98 (see **Figure 7.17**). This was despite the presence of various ostensibly positive factors in the form of: (a) the existence of a recognized domestic rating agency - the Pakistan Credit Rating Agency (PACRA), (b) NBFIs were allowed to invest in listed TFCs for the purpose of meeting statutory liquidity requirement (SLR) in 1997; and (c) reduced availability of funding from DFIs. This had been a major source of term financing for leading Pakistani companies in the past, and these could have been substituted by bond issuances.

The key obstacle to the development of the corporate debt market was the competition for long term funds from the government's National Savings Scheme (NSS) instruments, which offered zero risk yields that were much higher than corporate borrowing rates.<sup>32</sup> Indeed, the yields on these instruments were higher even than the market-based yields on the government's treasury bonds, and therefore the primary investors in the government treasury bonds remained banks (which were not allowed to invest in NSS instruments). TFC issuance was further discouraged by the relatively high issuance and taxation costs.



Not surprisingly therefore, the interest in the corporate debt market revived only in the wake of reforms aimed at removing these anomalies. Specifically, the yields on NSS instruments were first reduced<sup>33</sup>, and then pegged (loosely) to the yields on the government's market-based long term bonds. Moreover, from March 2000, institutional investors were barred from incremental investment in NSS.<sup>34</sup> Similarly, the TFC issuance and listing costs were reduced through efforts of SECP and KSE, as well as a reduction in withholding tax rates and stamp duties on these instruments. These developments provided the enabling environment for the accelerated growth of the domestic debt market in subsequent years.

It was the continuing fall in interest rates and ample availability of liquidity with banks that led to the subsequent reversal in the fortunes of the corporate debt market, boosting both demand and issuance of TFCs. The easy monetary policy being followed by the SBP amidst a sharp rise in external account inflows post September 11 led to exceptionally strong deposit growth for banks and a sharp decline in domestic interest rates. This in turn sparked a sharp rise in demand for long bonds by both individual and institutional investors. Corporates (and in particular banks) took advantage of the lower interest rates to lock-in funds, and/or enjoy capital gains on their holdings. This phenomenon is clearly evident in the growth of the corporate debt market FY01 onwards and especially during FY01-FY03 (see **Figure 7.17**), when 57 new issues were launched in the market. As a result, the outstanding listed TFCs reached to Rs 29.6 billion by the end of FY03, up from only Rs 3.8 billion in FY00.

<sup>32</sup> In addition, some unlisted public sector enterprises' bonds (carrying the guarantee of federal government) were also offering very high returns. For example, Wapda Bonds (carried government guarantee) was offering coupon rates as high as 19 percent per annum.

<sup>33</sup> These were reduced with effect from May 14, 1999, and was followed by two more cuts in NSS rates effective from January 1, 2000 and July 1, 2000 that brought down the average rate on 10-year DSC from 15 percent to 14 percent during this period.

<sup>34</sup> 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.

Ironically, it was the excessive liquidity and low interest rates that eventually led to the subsequent reversal in the fortunes of the corporate bond market in FY04, when only 6 TFCs of total worth Rs 3.3 billion were issued compared to 22 (of worth Rs 10.7 billion) issued in FY03. This is because banks sharply increased long term lending to offset the impact of record low interest rates and continued strong deposit growth.<sup>35</sup> Thus the availability of easier and cheaper finance from the commercial banks increased the opportunity cost of fund raising through corporate debt securities. While the corporate debt market saw a small revival in FY05, this was principally caused by the SBP's regulation that enables commercial banks to enhance their paid-up capital by issuing TFCs as well as rising expectation of a monetary tightening.<sup>36</sup> Indeed, of the twelve new listings in FY05, seven were launched by commercial banks. During FY06, while 8 new issuances were made, commercial banks issued another three TFCs (see **Annexure 8**).

The prospects for the growth of the debt market are improving due to number of recent developments. On the supply side, rising interest rates have lead corporate to lock-in funding costs, even as the demand profile is improving due to two main reasons: first, the increasing number of mutual funds; and second, the increasing role of professional fund managers in pension & provident funds, trusts, etc. However, the recent decision by the government to re-allow institutional investors in NSS may reduce the demand of TFCs. Thus, it is essential to keep NSS rates in line with overall interest rate structure in the economy.

While the primary market of TFCs has made some progress, the secondary market for TFCs is quite illiquid. This is due to number of factors including small issue volumes, a buy-and-hold mindset (probably reflecting lack of expertise in trading debt instruments – this is particularly true in many pension and provident funds – and lack of competition<sup>37</sup>), as well as an absence of market makers.

Another interesting development in the corporate debt market has been the increasing incidence of floating rate instruments. The initial popularity of floaters stemmed from corporates desire to protect against interest rate volatility, and this is particularly evident in FY03 and FY04, when all issues were at floating rates. However, given the expectation of continuing volatility in rates many issues also

**Table 7.10: Overall Composition of Listed TFCs**

in numbers	FY01	FY02	FY03	FY04	FY05	FY06
Total issued	11	17	21	6	10	8
Fixed	7	4	0	0	3	0
Floating	4	13	21	6	7	8
Anchored to discount rate	3	8	13	3	0	0
Anchored to PIBs	1	5	8	2	0	0
Anchored to profits	0	0	0	1	0	0
Anchored to KIBOR	0	0	0	0	7	8

Source: Invest Capital & Securities (Pvt.) Ltd.

<sup>35</sup> To put in historical perspective, commercial banks generally gave loans for working capital (i.e., short-term), the excessive liquidity available to them, in the aftermath of the 9/11, forced to look for new avenues including financing of long-term projects.

<sup>36</sup> BSD Circular No 12 dated August 25, 2004 not only asked banks and DFIs to hold capital against market risk, but also raised the minimum paid-up capital requirement from Rs 1.0 billion to Rs 2.0 billion. In order to meet this capital requirement, banks are allowed to issue Term Finance Certificates (TFCs), which become part of the subordinated debt under tier 2 supplementary capital if the certificate has a maturity of more than 5 years. TFCs of a tenors of less than 5 years are included in the Tier 3 supplementary capital.

<sup>37</sup> Fund managers were not pressed to maximize profitability of investments by taking advantage of trading opportunities, leveraging, etc.

incorporated embedded options to protect both issuers and investors (see **Table 7.10**).

Even as the popularity of floating rate instruments increased, the use of ostensible long term benchmark (PIBs) for TFCs has actually declined; as seen in **Table 7.10** none of the floating rate issues in FY05 and FY06 used the PIB rate as a benchmark, pegging instead to short-term KIBOR rates. This is probably a direct result of the increasingly non-representative nature of the PIB yields, given the illiquid market and lack of fresh issues.

### **7.6 Conclusion**

Financial markets witnessed a surge in volumes while improving further in terms of efficiency during FY01-06. Despite commendable improvements, there are areas which need further reforms in order to enhance the role of financial markets in Pakistan.

The long-term government bond (PIB) market is still underdeveloped largely due to supply constraints and lack of market making by the PDs. The supply-side issues would only resolve if government sells adequate amount of PIBs on a regular basis. PDs should play a role in educating their corporate clients to make better pricing decisions and change a *buy-and-hold* strategy. The failure in development of long-term government bond market also adversely affected the corporate bond market. The size of both bond markets is well below compared to both the emerging market economies and developed countries.

Increased size and role of financial markets is a welcome sign, however it is associated with greater risks. Integration of financial markets also asks for proper risk mitigating strategies to prudently manage risk, for instance through derivative products. Though market has already started to use simple derivative products, there is a need to further develop derivative market to provide market with better risk management tools.

In equity markets, the March 2005 crisis hints towards market manipulation. Though number of investors has grown tremendously over the years, few big brokers can still maneuver the market. Another factor instilling instability in equity markets is the presence of badla/CFS financing that supports speculative activities without proper exposures. Going forward, there is a need to further strengthen market ethics, diversify investors' base and remove badla financing together with better risk management tools.