

7 STABILITY ASSESSMENT OF FINANCIAL MARKETS

Financial markets are places where financial instruments are bought and sold. They perform three primary roles in the economy: (1) offer savers and borrowers liquidity; (2) pool and communicate information; and (3) allow risk-sharing. In order to perform these functions efficiently, financial markets need to be designed in a way that keeps transaction costs – the cost of buying and selling – low.

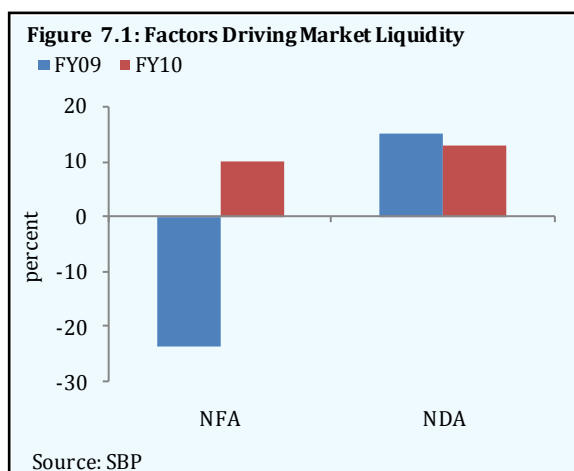
An important aspect of financial markets is their role in the conduct of monetary policy to achieve the broad objective of price stability. Monetary policy signals are transmitted instantly and influence the overall term structure of interest rates in the economy. If the transmission mechanism is impeded in any way such that market interest rates are slow to respond, the monetary policy impact can potentially be diluted with potential repercussions for financial system stability.

Financial markets in Pakistan primarily consist of money, foreign exchange and capital markets. While the money market facilitates financial institutions (both banks and non-banks) to manage their liquidity positions through lending or borrowing of short-term funds, the foreign exchange market provides an enabling environment for external trade and investment activities. The capital market on the other hand provides an avenue for raising long-term finance through equity and debt markets. In this context, financial markets are vital in ensuring the desired level of liquidity in the system, facilitating efficient price discovery and allocation of credit and diversifying risks in the economy. Notably, activities in these markets have a direct impact on various financial institutions' balance sheets by changing the value of their assets and liabilities.

In contrast to the volatility in global financial markets since the inception of the global financial crisis (GFC) in 2007, financial markets in Pakistan have strengthened in response to the ongoing reform process, and provide requisite support to the financial system in performing its function of financial intermediation.

Against this backdrop, this chapter provides an assessment of the functioning of financial markets in Pakistan in line with the stated policy stance and the associated impact on financial sector stability.

To give an overall perspective, market liquidity, which is largely influenced by movements in Net Foreign Assets (NFA) and changing credit requirements of government and non-government sectors as reflected in Net Domestic Assets (NDA), was relatively more comfortable in FY10 in comparison to FY09, thereby ensuring the smooth functioning of the domestic financial system. In FY09 a sharp contraction in NFA¹ with a significant expansion in NDA, led entirely by a sharp rise in government borrowing from the banking system, caused liquidity strains in both the money and foreign exchange markets (**Figure 7.1**). In FY10 however, while government borrowing



¹ The depletion in NFA of the banking system was entirely concentrated in SBP's NFA as scheduled banks witnessed an expansion of Rs 5.6 billion in their NFA in FY09.

continued to drive the growth in NDA (Table 7.1), it was the NFA component which showed some signs of improvement, given the surplus in the external account. More importantly, during FY10 most of the external flows comprised of official loan flows such as the IMF loan for bridge financing, logistic support funds and other official grants, with a commensurate increase in rupee liquidity in the system.

7.1 Money Market

FY10 was a challenging year for SBP's monetary management as it strived to strike the requisite balance between supporting the nascent recovery in economic growth while closely monitoring resurgent inflationary pressures in the economy (Figure 7.2). In its effort to achieve this objective, SBP retained its accommodative monetary policy stance initiated in April FY09, and reduced the policy rate by a cumulative 150 bps in H1-FY10.^{2,3}

In the subsequent months, however, resurgence in inflationary pressures, excessive fiscal slippages and lingering external sector risks in the wake of non-realization of anticipated external inflows kept the central bank from further easing of monetary policy. Accordingly, the policy rate remained unchanged in three consecutive monetary policy announcements (i.e. January, March and May FY10). As the anticipated risks started to manifest themselves more visibly in macroeconomic indicators, SBP actually reversed its monetary policy stance in FY11, raising the policy rate by 150 bps in three policy decisions in July, September and November FY11.

As always, the objective of SBP's liquidity management is to improve the transmission of the policy rate onto the market rates by neutralizing the impact of volatile flows and keeping the overnight money market rate, which is the operational target of SBP, consistent with the monetary policy stance. Further, to enhance the monetary transmission mechanism, SBP introduced a number of measures in FY10 (Box 7.1).

7.1.1 Developments in the Money Market

The money market witnessed relatively comfortable liquidity conditions during FY10 compared to FY09 when the rupee liquidity came under severe stress in the wake of rumor-induced panic withdrawals of banking system deposits, seen in Q2-FY09, and persistently heavy credit demand emanating both from the government and non-government sectors (Table 7.2).

Although the huge fiscal deficit together with the lower than targeted receipt of external finance in FY10 left no other option for the government but to continue to borrow from the

² The effective implementation of the macroeconomic stabilization program which started in November FY09, paid dividends as the demand pressures in the economy declined noticeably in subsequent months. For instance, YoY inflation dropped sharply to 17.2 percent in April FY09 from its peak of 25.3 percent in August FY08, substantial contraction in imports led to a lower current account deficit and incremental monetization of the fiscal deficit was contained. Thus, SBP found it feasible to reverse its monetary policy stance in April FY09 starting with a 100 bps cut in the discount rate.

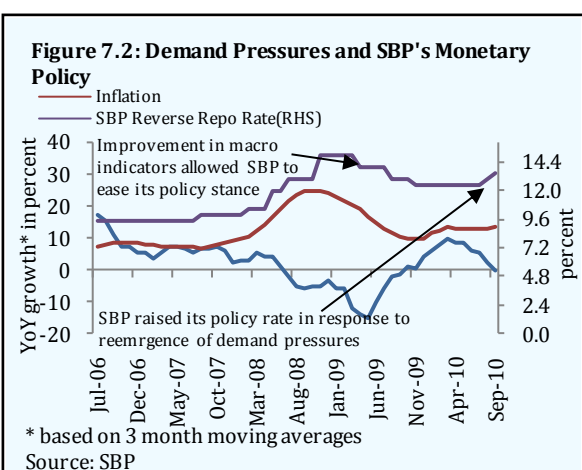
³ SBP first decreased the policy rate by 100 bps in August FY10 followed by another 50 bps in November FY10.

Table 7.1: Government Borrowing and NDA growth

Contribution in percent		
	FY09	FY10
NDA	15.4	12.7
Government	13.1	8.8
Non-gov*	4.2	4.3
OIN	-1.9	-0.3

*Includes credit to private sector and public sector enterprises

Source: SBP



Box 7.1: Key Measures introduced in the Monetary Policy framework

SBP has introduced certain changes to the monetary policy framework in the last two years with the objective of facilitating the development of financial markets in general and the money market in particular, thereby improving the monetary policy transmission mechanism. As a result, in FY10 the money market witnessed: (1) reduced interest rate volatility, (2) improvement in efficiency, and (3) better liquidity conditions.

- (a) SBP introduced a new framework for its monetary operations in the form of an interest rate corridor in August FY10 (**Box 7.2**). Under this framework, the policy rate serves as the effective ceiling on the overnight money market repo rate, while a new overnight repo facility was introduced, the rate which effectively acts as a floor for the overnight interbank repo borrowings (currently the rate on this facility is 300 bps below the policy rate).
- (b) In order to foster transparency and credibility of the policy decision making process, the Monetary Policy Committee was re-constituted in August FY10. In addition to SBP representatives, now the committee also includes two external members.
- (c) SBP increased the frequency of issuing Monetary Policy Statement (MPS) from four to six times a year in August FY10. The two policy decisions (in January and July) are accompanied by a detailed statement and press conference, whereas the other four monetary policy decisions are announced through a brief press release.
- (d) To bring further transparency in the policy making process, SBP has increased information disclosure by making Monetary Policy Information Compendium publically available on its website since March FY09, which provides comprehensive information on the state of the economy.
- (e) In January FY10, SBP launched the electronic bond trading platform for fixed income securities, in order to improve the efficiency of secondary debt markets.
- (f) In order to make the monetary policy formulation process more transparent, and to separate monetary management from debt management, SBP has transferred the decision of setting the T-bill and PIB cut-off rates in regular auctions to the Ministry of Finance (MoF) with effect from January FY09.
- (g) Also, MoF is now responsible to pre-announce its quarterly T-bill auction targets, indicating its required volume of borrowings from the scheduled banks. This measure aims to clear the misconception that the cut-off rate in T-bill auctions signals the monetary policy stance, whereas it actually reflects supply/demand dynamics of debt management.
- (h) To improve the efficiency in the money market through better price discovery, Financial Market Association of Pakistan (FMAP) introduced the Karachi Overnight Index Average (KONIA) in April FY10. KONIA is a pure vanilla swap, in which two parties agree to an interest rate swap such that one party opts for a fixed rate and the other for a floating rate. This carries very nominal credit risk as the deal is done on the notional principal amount and only the amount of the interest rate differential is exchanged. So far, only overnight swap transactions have been executed on this basis.

Source: Monetary Policy Statements of Jan-Mar FY09 and Jul-Sep FY10.

Table 7.2: Inter-bank Market Liquidity Conditions

Flows in billion Rupees, unless stated otherwise

	FY09	FY10	FY10			
			Q1	Q2	Q3	Q4
Total deposits ¹	277.8	494.8	-70.8	265.4	-11.3	311.5
NFA of the banking system	-171.7	49.6	32.3	-30.4	-46.5	94.3
NDA of the banking system	619.7	590.4	6.3	331.5	16.5	236.1
Net budgetary borrowing from SBP	130.9	44	-84.6	22	91.7	15
Private sector credit	17.1	112.9	-74.6	199.2	22.6	-34.3
Commodity finance	210.8	77.0	-1.3	-6.7	-58.3	143.3
T-bill auctions (net acceptance)	186.4	335.6	152.4	71.9	30.7	80.6
Average outstanding OMO	-19.1	60.4	23.6	119.5	89.3	9.3
Average overnight money market repo rate (%)	11.0	11.7	12.1	12.1	11.7	11.1

¹ Excluding government deposits

Source: SBP

Box 7.2: Interest Rate Corridor

Low volatility in short-term money market interest rates is desirable for enhancing the effectiveness of monetary policy, better liquidity management and smooth functioning of financial markets. On the other hand, excessive volatility in short-term rates may create challenges for monetary management through its undesirable impact on the long-term secondary market rates. In other words, instability of short-term rates hinders the transmission of central banks' stance to financial markets and distorts the term structure of interest rates by creating a disconnect between short and long-term rates.

Given the importance of stability in short-term money market interest rates, some central banks have introduced a standing deposit facility for absorbing excess liquidity from the system. This facility is in addition to the standing (lending) facility which provides liquidity support to financial institutions as a last resort. These two standing facilities form an interest rate corridor such that the rate on the lending facility serves as a ceiling of the corridor while the rate on the deposit facility acts as a floor for the corridor.

SBP also took the initiative of introducing an interest rate corridor with effect from August 17, FY10 (Figure 7.6). This corridor operates on the basis of the SBP reverse repo rate (previously known as SBP 3-day repo rate) as its ceiling, and a floor rate - termed as SBP repo rate - which is 300 bps below the ceiling rate. The deposit facility was introduced to enable banks to deposit their excess funds with SBP and earn

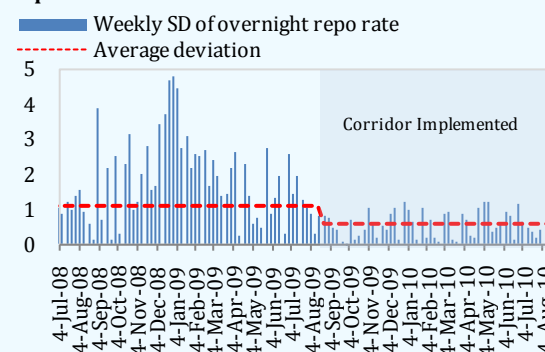
a return on their placement. Doing so reduces their incentives to lend these excess funds in the inter-bank market at rates below the floor rate, thereby causing unnecessary volatility in the overnight repo rate.

The effectiveness of the interest rate corridor is evident from the sharp reduction in the volatility in the overnight repo rate, as measured by the standard deviation, since August FY10. On average, the standard deviation in the overnight repo rate was 1.1 prior to the implementation of the corridor mechanism, which decreased considerably to 0.5 subsequently (Figure 1).

More encouragingly, reduced volatility in the overnight repo rate has also been transmitted to longer-term market interest rate. As evident from Figure 2, secondary market PKRV rates of all tenors have stabilized substantially since the implementation of the corridor compared to the pre-corridor period.

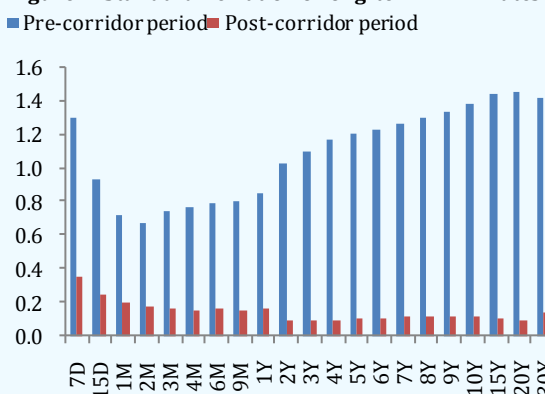
Table 1 shows banks' utilization of this new facility to manage their short-term liquidity requirements. In particular, their regular reliance on the repo facility has also reduced the need and frequency of OMO mop-ups by SBP. For instance, the total mop-ups from 17th August FY10 until end September FY11 reduced to Rs 411 billion, from Rs 700.9 billion during 1st January FY09-17th August FY10. Hence the effective implementation of the interest rate corridor has not only improved the transmission of policy rate changes to market interest rates but has also contained excess volatility in the overnight repo rate.

Figure 1: Weekly Standard Deviation of Overnight Repo Rate



Source : SBP

Figure 2: Standard Deviation of long-term PKRV Rates



Source : SBP

Table 1: SBP Standing Facilities

billion Rupees			
	visits (#)	Amount	Average per visit
Reverse Repo			
Q1	12	147.2	12.3
Q2	11	121.8	11.1
Q3	17	162.1	9.5
Q4	14	293.1	20.9
FY10	54	724.2	13.4
Repo			
Q1	8	71.6	9.0
Q2	15	107.4	7.2
Q3	11	93.3	8.5
Q4	16	329.9	20.6
FY10	50	602.1	12.0

banking sources, strong growth in deposits and expansion in NFA of the banking system partly helped in meeting the credit demand. As a result, the liquidity ratio⁴ of the banking sector remained consistently well above the previous year's level (Figure 7.3).

Within the banking system, the incremental monetization of fiscal deficit which was substantially contained after the implementation of the IMF program in November FY09, increased unabatedly from September FY10 onwards (Figure 7.4).⁵

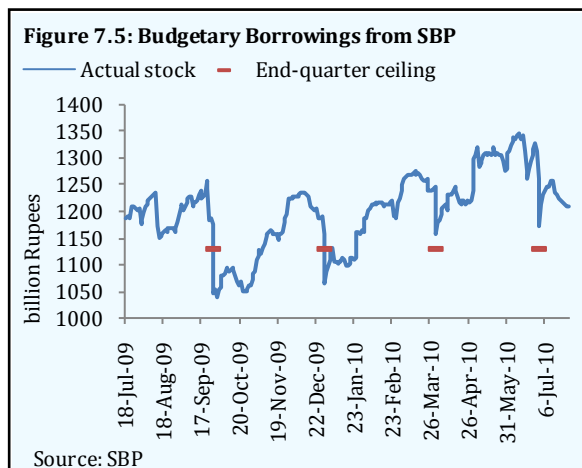
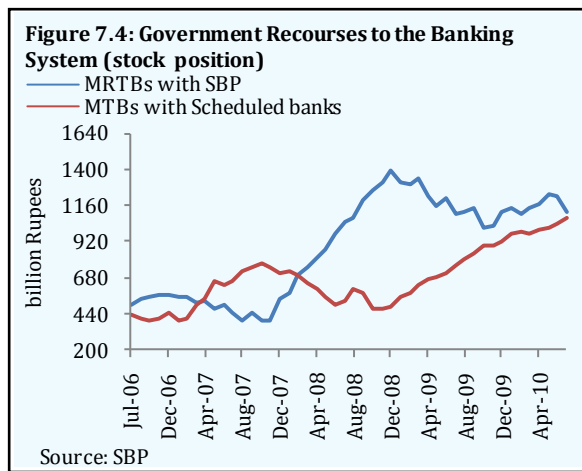
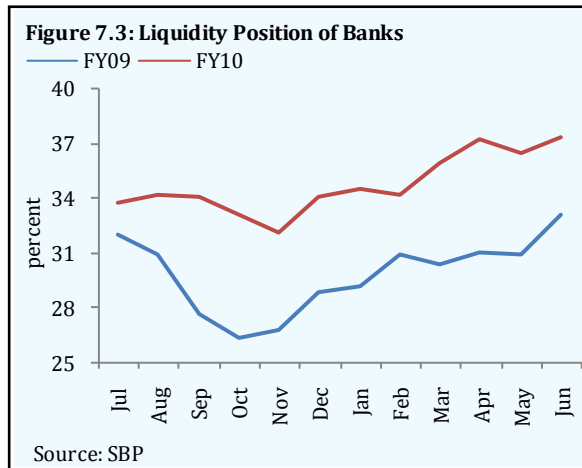
Resultantly, the Market Related Treasury Bills (MRTBs) stock increased to Rs 1,125 billion by end-FY10. In the last two quarters of FY10, the government even breached its quarterly limits of net borrowings from the central bank (Figure 7.5).

Further, given the renewed interest of scheduled banks in extending budgetary financing to the government in H2-FY09, the pace of borrowings from banks continued to increase at a rapid pace in FY10. Consequently, the stock of Treasury Bills (T-bills) with scheduled banks increased by Rs 349 billion to reach Rs 1,106 billion by end-FY10 (Figure 7.4).

A monthly analysis suggests that although overall liquidity in the inter-bank market remained comfortable during the year, there were some liquidity pressures in the second and third quarters.

More specifically, during Q2-FY10 factors such as a sharp increase in net credit off-take by the private sector, persistent borrowing by Public Sector Enterprises (PSEs), and lower than expected credit retirements by the public sector procurement agencies against commodity loans, put strains on market liquidity (Table 7.2).

In addition, weak external inflows⁶ and heavy oil import bills resulted in a contraction in the NFA of the banking sector, causing further liquidity drains from the system. This was despite government recourse to the central bank for financing the budget deficit. While such



⁴ Liquidity ratio is the ratio of total liquidity maintained (in form of reserves with SBP and NBP, cash in Pakistan and other deposits and approved securities), as percent of total time and demand liabilities. The liquidity ratio shown in the figure does not include the data on Islamic Banks.

⁵ The stock of MRTBs reduced to Rs 1,010.8 billion by end Sep FY10, from a peak of Rs 1,393.4 billion in November FY09.

⁶ During Q2-FY10, the country received budgetary support of US\$ 372 million from the IMF compared to US\$ 745 million in Q1-FY10.

borrowings led to some rupee injections in the system, its impact on market liquidity was partly neutralized by government borrowings from the scheduled banks.

On the funding side, although banking system deposits expanded substantially during Q2-FY10 compared to the contraction seen in Q1-FY10, the growth was not strong enough to ease the liquidity pressures. The liquidity stress in the inter-bank market was also evident from the overnight repo rate which stayed close to the policy rate, i.e. the ceiling of the interest rate corridor (**Figure 7.6**).

In response to these liquidity shortages, not only did banks approach SBP's discount window frequently,⁷ but SBP also responded aggressively and provided substantial liquidity through OMOs (**Table 7.3**). In more specific terms, the net OMO injections were Rs 1,596.4 billion in Q2-FY10 compared to net injections of Rs 146.4 billion in the corresponding quarter of the previous year (**Table 7.4**).⁸

Seemingly, lower net injections in Q2-FY09 appear counter-intuitive given the severe liquidity stress prevalent at that time, as mentioned earlier. This is explained by the fact that at the start of FY09, banks met their liquidity requirements by reducing their stock of government securities, as also shown previously in **Figure 7.4**.^{9,10,11} Substantial retirement of government securities held by banks limited their ability to participate in OMOs during Q2-FY09. Therefore, in October FY09 SBP reduced the cash reserves requirement (CRR) for the banking system in a phased manner by 400 bps to 5 percent of time and demand liabilities, and exempted time deposits from SLR requirement, which freed up the associated stock of government securities, enabling banks to participate in both OMOs and repo market transactions subsequently.

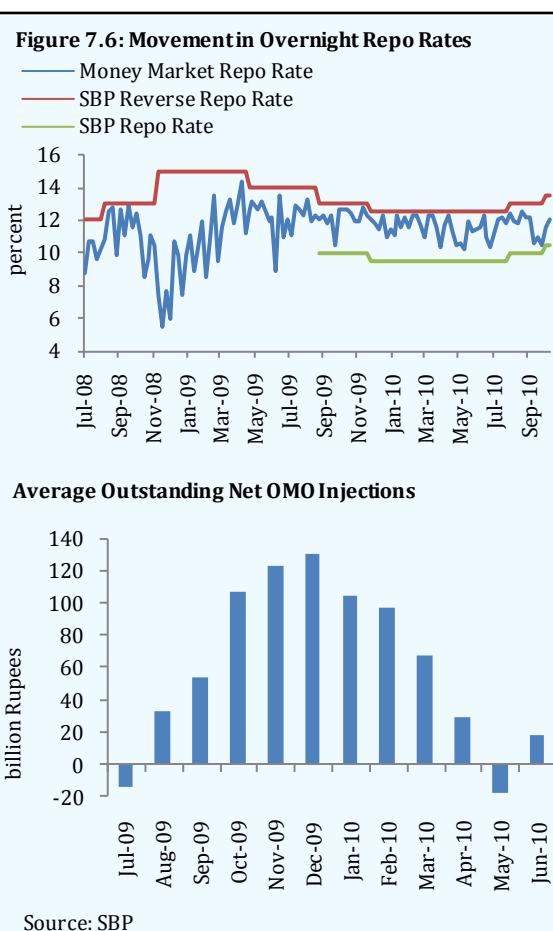


Table 7.3: SBP Standing Facility (Reverse Repo)

billion Rupees			
	# of visits	Amount	Average per visit
FY09	122	865.0	7.1
FY10	54	724.2	13.4
Q1	12	147.2	12.3
Q2	11	121.8	11.1
Q3	17	162.1	9.5
Q4	14	293.1	20.9

Source: SBP

⁷ Although the number of visits to SBP discount window in FY10 was lower than in FY09, the average amount per visit was much higher (**Table 7.3**).

⁸ Average outstanding amount of net OMO injections reached Rs 119.6 billion in Q2-FY10, from Rs 23.6 billion in Q1-FY10 (**Figure 7.6**).

⁹ Another reason for this conduct of banks was the expectation of a further increase in interest rates in H1-FY09. This not only resulted in lower participations by banks in T-bill auctions, but also concentrated their interest in 3-month T-bills.

¹⁰ The stock of Treasury Bills (T-bills) with scheduled banks decreased from Rs 597.8 billion by end July FY09 to Rs 472.5 billion by end Oct FY09. As a result, the excess liquid assets with banks declined from 5.5 percent of the TDL at end July FY09 to 1.8 percent of the TDL by mid October FY09.

¹¹ The decline in banks' liquidity reserves and lower T-bill holdings both led to a sharp jump in call rates in the inter-bank market in Q2-FY09.

The challenges for liquidity management continued in Q3-FY10 due to net contraction in the NFA of the banking system and a decline in banks' deposits. This was in stark contrast to Q3-FY09 when the inter-bank market was excessively liquid on account of the supportive measures taken by SBP in October FY09.

The liquidity pressures, however, subsided towards the end of FY10. Aided by a robust flow in remittances, deposits of the banking system expanded substantially in Q4-FY10. Moreover, partial realization of external official loans, coupled with a reduction in the external current account deficit, resulted in an expansion in the NFA of the banking system. Consequently, rupee liquidity in the inter-bank market increased significantly, and helped in easing the liquidity demand emanating mainly from the government for fiscal and quasi-fiscal activities.

The comfortable liquidity position therefore allowed SBP to gradually reduce its heavy liquidity injections into the market. Some mop-ups were even conducted in May and June FY10. Specifically, the average outstanding amount of net OMO injections was limited to Rs 9.3 billion in Q4-FY10 compared to Rs 89.3 billion in Q3-FY10.

Interest Rate Dynamics

Adjustments in the policy rate influence short-term money market interest rates, leading to changes in banks' lending and deposit rates and prices of other financial assets. However, movement in market interest rates may not always be concurrent with the direction of the policy rate change, given that market rates are also influenced by a range of other factors such as market perceptions of the future path of inflation, liquidity and credit risk etc. These factors may cause excess volatility in short-term rates thereby creating complications for monetary policy implementation.

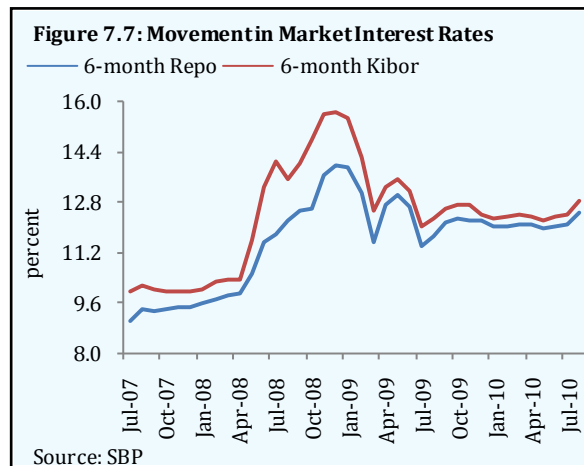
In this context, this section discusses interest rate dynamics during FY10. Money market interest rates moved broadly in line with the policy stance during the year, compared to a sharp variation seen in FY09 (**Figure 7.7**).

Monthly analysis reveals that FY10 started with some upward pressure on market interest rates. Interestingly, this uptick in rates occurred despite the availability of ample liquidity in the system (on account of increase in foreign exchange inflows¹² and seasonal retirement of private sector credit) and the then accommodative monetary policy stance pursued by SBP. This apparent anomaly is explained by uncertainties in the market due to: (1) delayed announcement of the monetary policy statement in August FY10, which was initially scheduled for end-July FY10, and (2) less than expected reduction in the policy rate (i.e. 100

Table 7.4: Open Market Operations

	billion Rupees			Net O/N Repo Rate	
	Injection	Mop-up	Injection	Average	CoV*
FY09	1,234.1	1,367.7	-133.6	11.0	19.0
FY10	3,621.0	489.7	3,131.3	11.7	6.0
Q1	506.9	153.6	353.4	12.1	5.0
Q2	1,610.7	14.3	1,596.4	12.1	5.0
Q3	1,234.9	93.8	1,141.1	11.7	5.0
Q4	268.5	228.0	40.5	11.1	6.0

*Coefficient of variation
Source: SBP



¹² In August FY10, the country received the first tranche of the short-term bridge finance of US\$ 745 million from the IMF.

bps).¹³ In the subsequent months, however, the interest rates declined, following a 50 bps reduction in the policy rate in November FY10. For instance, the 6-month KIBOR decreased by 41 bps by end-January FY10 from the November 24, FY10 level, whereas the decline in the 6-month repo rate was limited to 25 bps only (**Figure 7.7**). The relatively lower reduction in the repo rate reflects bank's efforts to meet their liquidity needs in the inter-bank. Consistent with status quo in the policy rate in the latter half of FY10, the money market interest rates moved in a narrow range; broadly reflecting the changing liquidity conditions.

Consequently, the spread between 6-month KIBOR and 6-month repo rate, which is typically viewed as a crude proxy of the spread between the risk-based and the risk-free return, came down to 0.31 percentage points by end-FY10, from a peak of 1.03 percentage points in March FY09 (**Figure 7.8**).

Interest Rate Volatility

Encouragingly, interest rate volatility as measured by the coefficient of variation showed a sharp decline in FY10 compared to FY09 (**Table 7.5**). This was despite the unpredictable nature of government borrowings from SBP and the uncertainty in the realization of foreign inflows. The reduction in interest rate volatility in turn implies the successful implementation of the interest rate corridor.

7.1.2 Depth and Efficiency in the Market for Government Securities

From a financial stability perspective, a vibrant government securities market is important as it provides the benchmark rates for long-term corporate bonds. This section discusses the major developments in the primary and secondary markets of government securities in Pakistan. The government meets its funding requirements by issuing two main instruments i.e. Market Treasury Bills (MTBs) and Pakistan Investment Bonds (PIBs).

To increase the efficiency and depth of both the primary and secondary markets of government securities, SBP has taken a number of measures in the recent past. An important measure in this regard is the introduction of an electronic platform for the trading of government securities, which was launched in January FY10 (**Box 7.3**). Prior to the launch of this system, government securities were traded in the wholesale market mostly through telephones and individual terminals. This system of trading was not only cumbersome and required considerable time and effort to settle a deal, but also limited scheduled banks' ability to gauge the real-time demand and supply of securities in the market. This rendered the pricing mechanism of securities in the secondary market sub-optimal; risking a dead-

Figure 7.8: Spread Between 6 -month KIBOR and 6-month Repo

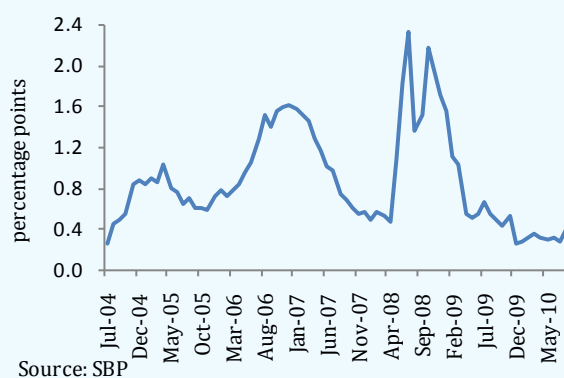


Table 7.5: Volatility in Market Interest Rates

	percent			
	Average		Coefficient of variation	
	FY09	FY10	FY09	FY10
	Repo			
3-month	12.6	11.9	5.3	2.1
6-month	12.8	12.0	6.2	2.1
	KIBOR			
3-month	13.9	12.3	7.0	2.0
6-month	14.1	12.4	7.1	1.7
	PIB			
10-month	14.1	12.5	10.0	2.6
30-month	15.3	13.3	7.5	1.1

Source: SBP

¹³ Market participants expected a more substantial reduction in the policy rate in August FY10, given their perceptions regarding the decrease in inflation, which strengthened further following the release of CPI inflation numbers for the month of May and June FY09; YoY CPI inflation dropped from 17.2 percent in April FY09 to 14.4 percent in May FY09 and to 13.1 percent in June FY09.

Box 7.3: Electronic Bond Trading Platform

SBP launched the electronic bond trading platform for fixed-income securities on January 11, 2010. Previously, all securities were traded in the inter-bank market either through individual dealing terminals or through telephones, with no real-time source of information. This used to result in delayed deal execution, inefficient pricing mechanism, enhanced credit/liquidity risk, and unproductive utilization of liquidity available in the market.

The availability of real-time information about yields and turnover will help the issuer in determining demand for its paper and make better funding decisions. It will also attract more investors to the market as the price discovery process becomes much easier resulting in liquidity enhancement and reduced liquidity premium. This will also result in the development of liquid yield curves for various market segments. Since Bloomberg subscribers pay no additional cost for this platform, they will save on broker commissions by using it more frequently which should result in narrower spreads, *ceteris paribus*.

With a widened investor base, banks will be able to shift government debt from their books freeing up funds for private sector credit. Overtime, it will also facilitate the development of ABS market in Pakistan as investors become more comfortable with fixed income instruments resulting in increased lending capacity for banks.

The fact that Bloomberg is offering its services in all the major financial markets in the world is another advantage of the system as it will provide international investors with an additional window on Pakistan's economy.

Source: FSCD, SBP.

weight loss.¹⁴ Moreover, in the absence of a centralized system, participants in the money market spent considerable time in finding a profitable deal.

Available data shows that the cumulative trading of government securities through this platform reached 66 percent of the total trading volume by end-FY10, compared to a level of 58.0 percent in January FY10.

Primary market for Government Securities

A detailed analysis of the primary auctions of government securities reveals that banks' participation in T-bills started to rise significantly from FY09 onwards as the government decided to announce T-bill auction targets in a more predictable manner. Moreover, given banks' risk averseness due to the rise in non-performing loans (NPLs) since FY09, it has been their preference to place the loanable pool of funds in risk-free government securities at relatively higher interest rates. Hence, not only did banks participate aggressively in T-bill auctions in FY10, as evidenced by the offer ratio (i.e. ratio of offered amount to target amount) which increased by almost 40 percent over the previous year, but the acceptance ratio (i.e. ratio of accepted amount to target amount) also increased (**Table 7.6**).

Table 7.6: T-bill Auction Summary

billion Rupees

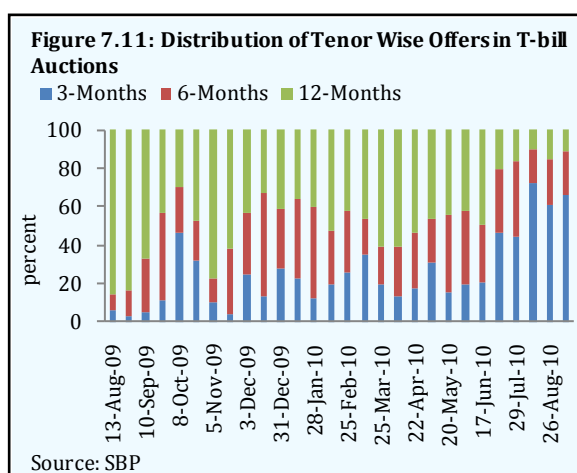
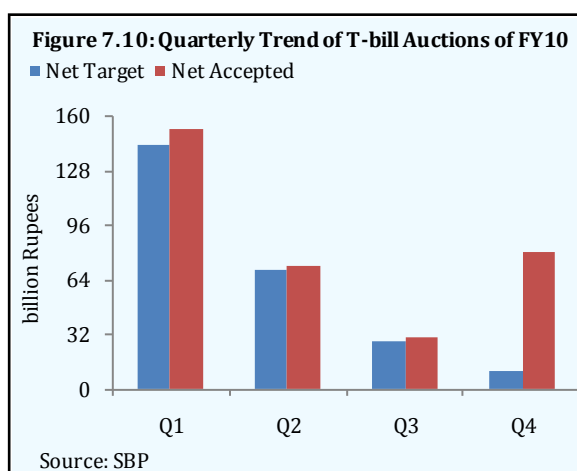
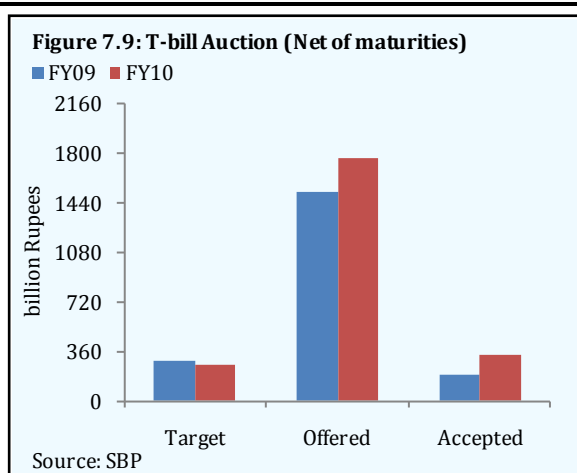
	Target	Offer	Acceptance	Accept/Target	Offer/Target
FY08	939.0	833.6	607.8	0.6	0.9
FY09	1845.0	3086.3	1747.0	0.9	1.7
FY10	1360.0	2875.1	1441.9	1.1	2.1

Source: SBP

¹⁴ Dead-weight loss is a cost incurred by some traders when markets are inefficient. For instance, due to asymmetric information prior to the launch of the e-bond platform, some traders routinely did not get the optimal price when selling or buying securities. However, since the introduction of the e-bond system, all participants have access to available information which has led to an improvement in the price discovery mechanism.

The overall net target (i.e. adjusted for maturities) set for T-bill auctions by the government was Rs 253.7 billion in FY10 which was Rs 30.6 billion lower than the previous year (Figure 7.9). Though the government largely adhered to its pre-auction targets until March FY10,¹⁵ it clearly transgressed the last two auction targets (Figure 7.10). As against the pre-announced T-bill auction target of Rs 460 billion, the government realized Rs 529 billion, including maturities of Rs 449 billion in Q4-FY10.¹⁶ Delayed and lower than anticipated realization of external inflows, and rising fiscal spending along with low tax receipts, were the various factors which prompted the government to borrow well above the target in the last few auctions of the year.

Moreover, following banks' inclination to invest in longer-tenor T-bills seen in H2-FY09,¹⁷ the participation in 12-month T-bills continued to increase in H1-FY10. However, banks' offer pattern shifted from longer-tenor to shorter-tenor instruments as the year progressed due to the change in the policy stance: from accommodative in H1-FY10 to a more cautious one in the second half (Figure 7.11). Until around end Q3-FY10, banks continued to invest in 12-month T-bills. From Q4-FY10 onwards, there was a shift in the participation trend more towards shorter-term securities and a consequent rise in cut-off rates set by MoF in view of changing inflation expectations and pressure on interest rates. In the last few auctions in FY10, the cumulative share of the amount offered by banks in 3 and 6 month tenors reached approximately 60 percent of the total amount offered, compared to 40 percent in April FY10.



In terms of the financing cost for the government, the cut-off rates in T-bills auctions for most of FY10 moved in line with the prevalent liquidity position and the easing policy stance (Figure 7.12). A gradual increase in the cut-off rate from May FY10 onwards was evident in almost all tenors following the changing market expectations regarding inflation. It may be

¹⁵ During Jul-Mar FY10, the pre-announced T-bill auction target was Rs 900 billion whereas the government realized Rs 912.4 billion including maturities of Rs 657.3 billion.

¹⁶ Out of total net accepted amount (i.e. Rs 81 billion) of Q4-FY10, government accepted almost half in the last two auctions conducted in the quarter. Altogether, there were six auctions held in Q4-FY10.

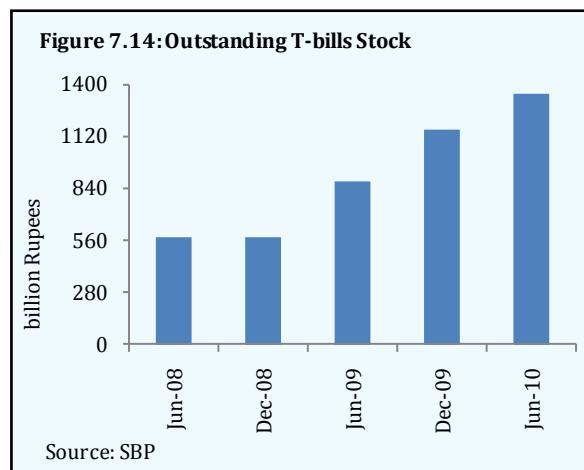
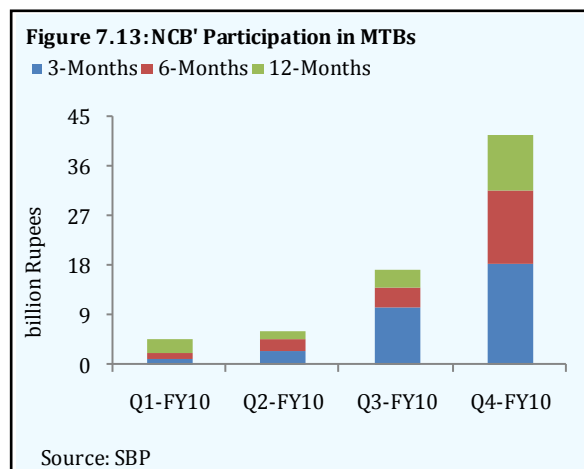
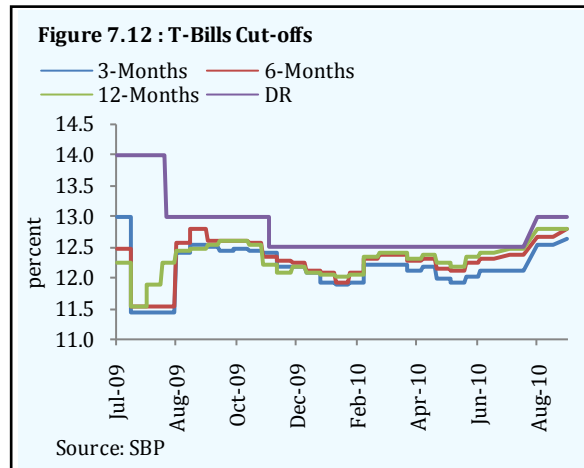
¹⁷ In H1-FY09, most of the banks' offers were in 3-month T-bills due to expectations of a further rise in policy rate at that time, however, as the interest rate outlook changed from January FY09 onwards (i.e. Interest rate peaked out) banks increased their participation in longer-tenor instruments.

pertinent to mention here that lingering quasi-fiscal activities such as continued borrowings of the energy sector due to circular debt and lower than expected retirement by procurement agencies and food departments for commodity operations exerted further upward pressure on the government's cost of borrowing. This reflects that banks are pricing in the cost of rollover, instead of repayment, in commodity debt chains.¹⁸

Besides banks, participation by small institutional investors and individuals in T-bills also increased substantially in FY10 compared to FY09. In this vein, SBP's decision to increase the ratio of Non-Competitive Bids (NCB) from 10 percent in Jul FY03¹⁹ to 15 percent from July FY10²⁰ encouraged small investors to invest in government securities. This measure was aimed at diversifying the participants' base in auctions of government securities, along with instilling competition in the bidding process. Resultantly, the participation of non-bank financial institutions and individuals in T-bills auctions increased as the year progressed: total NCB participation increased to Rs 56 billion in H2-FY10 from Rs 9.8 billion in H1-FY10 (**Figure 7.13**).

It is pertinent to note here that following the quarterly limits imposed by the IMF on deficit monetization since November FY09, government met its additional borrowing requirements from the scheduled banks. Given that commercial banks have been investing heavily in government securities since then, governments' requirement to just rollover these maturities is increasing substantially each year. In fact, the maturing amount of T-bills has been growing by 50 percent per year since FY08 (**Figure 7.14**).

In FY08 around Rs 576 billion was required just to roll over T-bills issued in FY07. This amount increased more than twofold in FY10, reaching Rs 1348 billion. The sharp rise in the amount to be rolled over has implications not just for the fiscal account, but also for the private sector. More specifically, T-bills rolled over by scheduled banks serve to squeeze the available liquidity for the private sector.



¹⁸ As a case in point, government Term Finance Certificates (TFC) issued in September 2009 was priced at KIBOR plus 200 bps, while the March 2009 government TFC was issued at KIBOR plus 175 bps. Similarly, the rates for financing commodity operations were increased to 3 month KIBOR plus 275 bps in FY10 compared to 3 month KIBOR plus 150 bps in FY09.

¹⁹ EDMD Circular No. 08 dated Jul 05, 2003.

²⁰ FSCD Circular No. 07 dated June 06, 2009.

Unlike T-bill auctions, government remained aligned with the PIB auction target set forth for FY10, even though banks' offered amount remained persistently high in PIBs as well (**Table 7.7**).

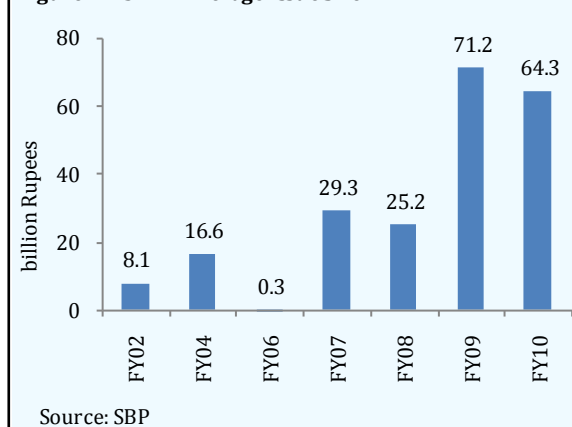
A detailed analysis of PIB auctions reflects that the gross target set for the five PIB auctions held during FY10 was Rs 60 billion; almost 25 percent lower than the targeted amount for FY09. However, the net target (i.e. adjusted for maturities) was actually much higher than in FY09.²¹ Similar to previous years, in most of the auctions previous issues were re-opened with only one new issue. SBP started reopening²² of PIBs from FY07 onwards with an objective to increase the supply of 'on-the-run' issues.²³ Resultantly, the average issue size of PIBs²⁴ has increased substantially in the last two years, which has helped in better determination and improved representation of long-term interest rates and yield curve (**Figure 7.15**).

Further, the share of the banking sector in outstanding PIB holdings declined in FY10, while the share of the non-bank sector increased gradually (**Figure 7.16**).²⁵ In specific terms, the share of the banking sector declined to 39.8 percent by end-June FY10 in contrast to the previous year when the share witnessed a slight rise. On the other hand, within the non-banking sector, all other sectors, except insurance companies, continued to increase their share.

Table 7.7: PIBs Auction Summary

billion Rupees				
	Years	Combined Target	Amount offered	Amount accepted
3-Years	FY09	80.0	21.1	8.3
	FY10	60.0	19.1	9.7
5-Years	FY09	80.0	21.5	7.7
	FY10	60.0	12.6	6.4
7-Years	FY09	80.0	12.2	6.7
	FY10	60.0	5.6	2.0
10-Years	FY09	80.0	83.9	32.5
	FY10	60.0	67.3	38.2
15-Years	FY09	80.0	5.8	1.3
	FY10	60.0	3.3	0.8
20-Years	FY09	80.0	5.0	1.9
	FY10	60.0	12.0	1.5
30-Years	FY09	80.0	10.5	6.6
	FY10	60.0	14.5	1.8
All	FY09	80.0	160.0	65.1
	FY10	60.0	134.4	60.3

Source: SBP

Figure 7.15: PIB Average Issue Size

Source: SBP

It may be pertinent to mention here that in the first two PIB auctions conducted in FY11, banks not only offered an amount lower than the target, but the bid rates also increased substantially. More specifically, banks offered a total of Rs 35.5 billion against a combined target of Rs 45.0 billion and the bid rates increased on average by 96.5 bps.²⁶ However, the Ministry of Finance rejected all bids in both auctions. This conduct of banks was a reflection of changed expectations regarding interest rate outlook since July FY11; banks were anticipating further increases in the policy rate given the rising inflation trends. In the October FY11 PIB auction, government accepted Rs. 6.4 billion against a target of Rs. 20

²¹ PIB auction maturity in FY10 was only Rs 0.43 billion compared with Rs 42 billion in FY09.

²² Issue lots with the same issue and maturity date, offered on different occasions: the first opening with full maturity while in each subsequent opening the remaining term to maturity declines. This strategy effectively increases liquidity in the bond market by resolving pricing problems related to small and scattered issues.

²³ These are bond issues of a relatively bigger size.

²⁴ PIB average issuance size is the total outstanding PIBs divided by the number of PIB issues.

²⁵ Though the share of banks in PIBs holdings is declining, in absolute terms it has actually increased in FY10.

²⁶ It may be noted here that the increase in bid rates also includes the impact of the hike in the policy rate w.e.f. August FY11.

billion. It may be noted here that banks' offer remained low (at Rs. 17.1 billion) in this auction as well.

Besides PIBs, government also raised long-term funds through Ijara Sukuk. In the fourth GoP Ijara Sukuk auction held in FY10, government raised Rs 14.4 billion against a target of Rs 10 billion (**Table 7.8**).

Secondary Market of Government Securities

Secondary market transaction²⁷ facilitate market participant such as banks, DFIs, non-bank finance companies in managing their ongoing liquidity requirements. Within secondary market trading, the repo market, which is a securitized transaction, represents a substantial portion of daily transaction volume. On the other hand, uncollateralized funds are transacted on overnight basis in the call money market.

Table 7.8: Auction Profile of GoP Ijara Sukuk

billion Rupees

	Date of Issue	Date of Maturity	Target Amount	Offered Amount	Accepted Amount
GoP Ijara Sukuk-I	26-Sep-08	26-Sep-11	10	9.5	6.5
GoP Ijara Sukuk-II	29-Dec-08	29-Sep-11	10	7.4	6
GoP Ijara Sukuk-III	11-Mar-09	11-Mar-12	10	21.4	15.3
GoP Ijara Sukuk-IV	17-Sep-09	17-Sep-12	10	30.4	14.4

Source: SBP

In Pakistan the trading volume in the secondary market is highly skewed towards repo transactions (**Table 7.9**) such that around 80 percent transactions are repo based. This is commensurate with bank's large holdings of government securities over and above SLR requirements, which is an inefficient utilization of banks' funding base. This also indicates the need for developing the call market where lending decisions are based on the assessment of credit worthiness of the borrower rather than reliance on collateral.

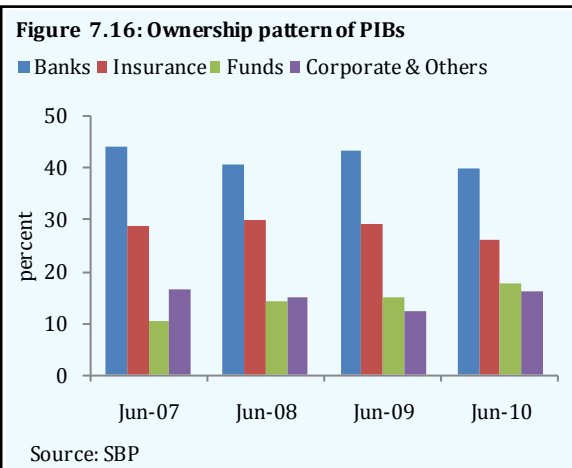


Table 7.9: Secondary Market Trading

billion Rupees

Type	Volume			% of total		
	FY08	FY09	FY10	FY08	FY09	FY10
Outright	704	1,532.1	2,018	4.3	8.6	9.9
Call	2,545	1,802	1,615	15.5	10.1	7.9
Repo	12,153	13,752.9	16,639	73.9	77.0	81.5
Clean	1,051.5	781.8	153	6.4	4.4	0.7
Total	16,453.5	17,868.8	20,425			

Source: SBP

The volume of call transactions remained insignificant in the overall secondary market trading (i.e. approximately 10 percent) and is persistently declining. FY09 was an exceptional year when the limited availability of securities to fulfil the overnight liquidity requirement led to increase in volumes of call transactions in Q2-FY09 and consequent widening of the spread between call and repo rates (**Figure 7.17**).

Developments in Yield curve

The yield curve is a graphical representation of the term structure of interest rates. Given that financial instruments of different maturities are not perfect substitutes, the supply and demand dynamics in the market for these instruments are distinct. Notably, the term

²⁷ Secondary market mainly comprises of repo, call, outright and clean transactions.

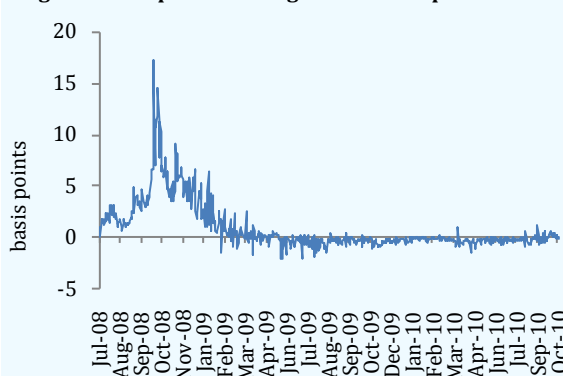
premium on long term interest rates is driven primarily by inflation expectations in the economy. The yield curve in Pakistan has undergone significant changes in the last few years which are discussed in this section.

With the advent of monetary tightening in April FY05, the slope of the yield curve in Pakistan (based on trading of government securities in the secondary market) was broadly stable throughout the course of FY05-06, after witnessing a sharp decline during FY04 (**Figure 7.18**). With short-term interest rates gradually rising as a consequence of monetary tightening, there was relatively less activity in the longer-end of the yield curve. The main reason behind the relatively inactive longer-tenor rates was the inadequate supply of long-term government bonds in the primary market, and an associated decline in the bonds available for trading in the secondary market. This situation started to change when PIB auctions started to be held regularly from May-FY06 onwards, and PIBs with longer-tenors, i.e. 15 and 20 years were introduced in January FY04 and the 30 year bond was issued for the first time in December FY07. This effectively served to increase the supply of long-term bonds, led to more active trading of these bonds in the secondary market, and extended the term structure of interest rates to 30 years.

As a result, a certain degree of steepening of the yield curve was seen in FY07 (**Figure 7.19**). As trading volumes in the secondary market started to gain depth, the yield curve became more representative of market conditions.

With the continuation of monetary tightening in FY08, the increase in the policy rate was transmitted to the secondary market yield of government securities. As the yields for all tenors of government securities increased, steepening of the yield curve suggests that the term premium also increased significantly during the year.²⁸

Figure 7.17: Spread Overnight Call and Repo



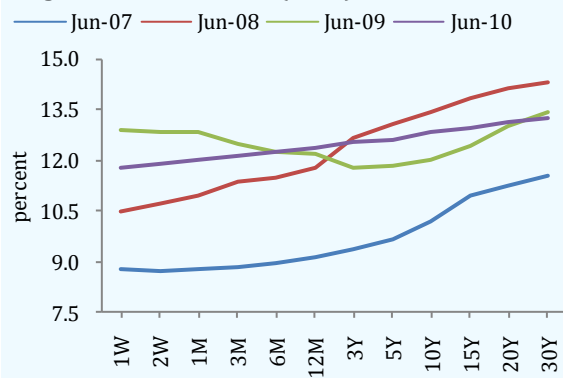
Source: SBP

Figure 7.18: Slope of the Yield Curve (10-Year Minus 6-Month PKRV)



Source: Reuters

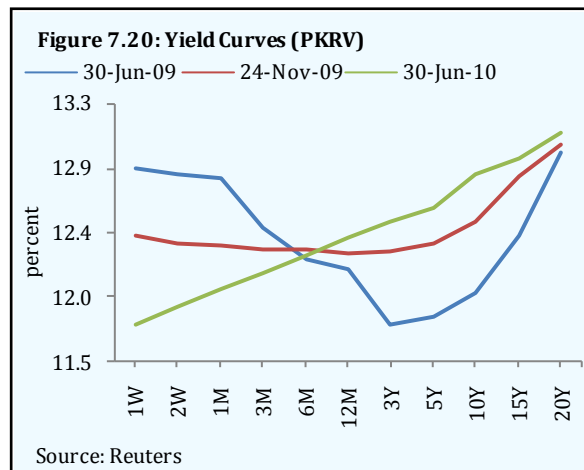
Figure 7.19: Yield Curves (PKRV)



Source: Reuters

²⁸ The secondary market yield spread between 10-year and 6-months surged to 2.4 percentage points by end-CY08, compared to 1.3 percentage points in H2-CY07.

By end-FY09, the yield curve had acquired a 'U shape' depicting an upward movement in short-term yields (**Figure 7.20**). While this was a reflection of some short-term uncertainties prevalent in the market at that time,²⁹ the movement in long-term rates was largely consistent with the monetary policy stance. Low inflation sentiments and consequent fall in interest rates encouraged investors to invest in medium-term bonds rather than buying short-term bonds. This in turn pushed up the price of medium-term bonds and thus decreased the yield on these bonds. The issuance of the 7-year bonds in August FY08 also played a major role in the active trading of medium-term bonds in the secondary market at that time.



The movement in short and medium tenor yields resulted in a narrowing of the yield spread. By the end of Q4-FY09, the spread between the 10 year bonds over 6-month T-bills even became negative for the first time ever (**Figure 7.18**). The negative slope of the yield curve, however, lasted for a short period and the yield spread started to increase gradually by the end of Q1-FY10. It was only after November FY10 that the slope of the yield curve increased more sharply.

At end-FY10, while the decline in short-term rates reflects ample liquidity in the market despite the cautious monetary policy stance, the longer end of the yield curve remained largely stable possibly due to less trading activities. It may, however, be noted here that the longer-end yield of instruments with maturity below 10 years, witnessed a more pronounced increase since November FY10 when the last policy rate cut was made. As a result, the difference between the secondary market rates for 10-year and 3-month tenors increased to 71 bps by June FY10 compared to 19 bps in November FY10. This can be seen in steepening of the yield curve and a widening of the yield spread, suggesting that the market perceives higher future inflation and a further tightening of the monetary policy.

7.1.3 Conclusion

In sum, the functioning of the money market in FY10 gained strength from the ongoing policy measures, and supported SBP monetary policy stance and financial sector stability. Although persistent increase in government borrowing from the banking system resulted in intermittent pressures on market liquidity during the year, robust deposit growth and net expansion in NFA of the banking system partly offset these pressures. Moreover, SBP also provided liquidity support to the market through OMOs and discounting when needed. As a consequence, the overnight money market repo rate moved in tandem with the policy stance through most of FY10.

7.2 Foreign Exchange Market

In tandem with the money market, the foreign exchange market³⁰ plays an important role in the economy by facilitating foreign currency transactions and hedging foreign currency risk, with the primary purpose of assisting international trade and investment.

²⁹ For details please see section on interest rate dynamics in this chapter.

³⁰ The foreign exchange market is generally defined as the over-the-counter market for trading of currencies. It usually comprises of ready, forward and swaps transactions through which it determines the relative value of different currencies.

In a floating exchange rate regime, banks can often be exposed to foreign exchange risk due to movements in the exchange rate. Banks' direct exposure to currency risk is through the Net Open Positions (NOP)³¹ held by them, whereas indirect risks emanate from banks' exposure to foreign currency denominated loans. Specifically, this arises from the inability of the borrower, particularly importers,³² to retire foreign currency denominated loans.

Encouragingly, both these risks are well contained in the domestic banking system: banks' NOP largely fluctuated within the acceptable range of \pm US\$ 100 million in FY10. Similarly, the quantum of foreign currency loans availed by domestic borrowers is only 3.0 percent of the gross loans of the banking system at end-FY10, compared to 3.2 percent at end-FY09, and a relatively higher proportion of 7.3 percent in June FY08.

The foreign exchange market in Pakistan during the recent past has benefited from the strong growth in worker remittances, foreign investments and rising trade activities. Daily average turnover in the inter-bank market (ready, forward and swaps) increased from around US\$ 850 million in FY07 to more than US\$ 1 billion in FY10. Resultantly, the volume of foreign exchange transactions increased steadily from US\$ 260 billion in FY07 to US\$ 360 billion in FY10 (**Figure 7.21**).

Notably, transactions in the foreign exchange market are driven by the external current account (surplus or deficit), and the foreign exchange flows which finance a deficit balance. Hence it was the surplus balance in the capital and financial account in FY10 which more than offset the external current account deficit (CAD), and led to a substantial improvement in the country's balance of payments position during the year. This was unlike the preceding two years, when the widening CAD led to an erosion of the surplus in the financial account. Contraction in import payments together with a rise in current transfers³³ contributed to the improvement in the external CAD, as a result of which it narrowed to US\$ 3.5 billion in FY10: the lowest in the last four years (**Figure 7.22**).

The developments on the financing side, however, continue to be a source of concern. First, the surplus in the capital and financial accounts decelerated for yet another year. Second, the composition of the financial account surplus in FY10 was skewed more towards debt-creating flows instead of investment flows. In specific terms, a significant portion of the external flows comprised of non-recurring SDR flows, IMF loan for bridge financing and only partial realization of anticipated external official loans. Had the expected external official

Figure 7.21: Foreign Exchange Market Volume

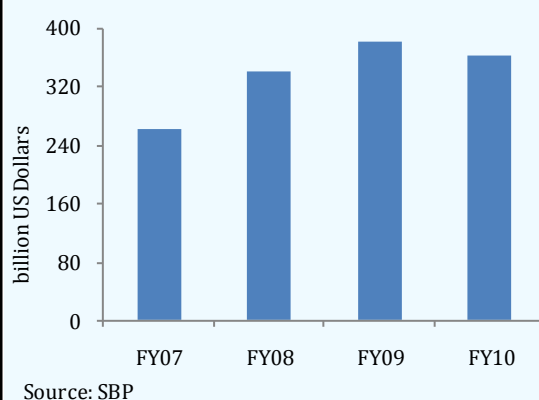
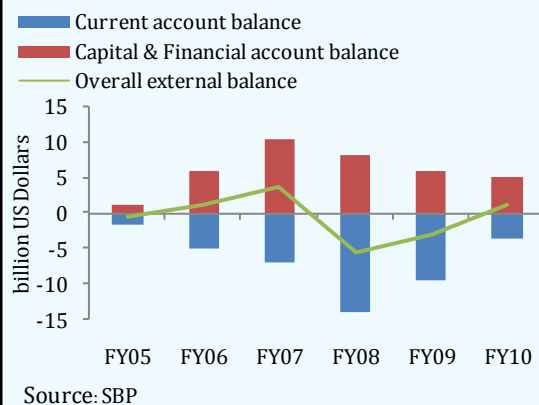


Figure 7.22: External Account Position



³¹ The Net Open Position of the banking system is defined as the difference between foreign currency assets and liabilities.

³² It may be noted here that exporters have foreign currency cash flows to retire foreign currency loans.

³³ This mainly reflects sustained inflows of workers' remittances and realization of Coalition Support Fund (CSF) receipts.

inflows been fully realized, the financial account would have had a higher surplus in FY10. On the other hand, the weakening foreign investment flows, particularly Foreign Direct Investment (FDI),³⁴ is a reflection of foreign investors' risk averseness in face of infrastructural factors as well as the deteriorating law and order situation in the country. In addition, uncertainty about the extent of global economic recovery has also kept the foreign investment subdued. Although portfolio investment staged an appreciable recovery in FY10,³⁵ these inflows are perceived to be rather unpredictable in nature, given the short-term focus of such investments. Major factors explaining substantial investment in the equity market in FY10 were: (1) re-entry of the country into the MSCI Frontier Market Index³⁶ in May FY09, and (2) considerable reduction in the country's risk premium as evident by the Credit Default Swaps (CDS) spread on outstanding sovereign bonds.³⁷

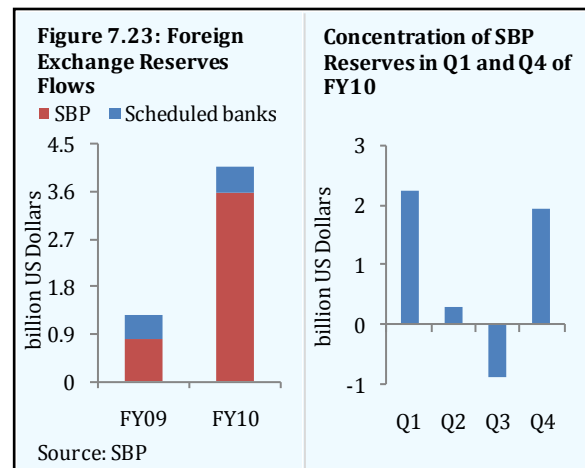
It is blatantly evident that without an increase in exports and investment flows, the sustainability of financing the CAD³⁸ would remain a concern, and in turn carries implications for maintaining sufficient foreign exchange reserves. Had the external CAD not contracted substantially in FY10, the overall external account would have recorded a deficit. This would have caused depletion in the country's foreign exchange reserves, leading to pressures on the exchange rate.

7.2.1 Foreign Exchange Reserves

Given the external account surplus of US\$ 1.3 billion and the US\$ 2.4 billion tranche received under the IMF SBA for balance of payments support, the country's overall foreign exchange reserves improved by US\$ 4.1 billion in FY10 to reach US\$ 16.9 billion by end-FY10 (**Figure 7.23**).³⁹

A look at the monthly trends suggests that SBP reserves increased sharply in the initial months of FY10, on the basis of increased SDR quota allocation⁴⁰ and disbursements under the IMF SBA (**Figure 7.23**).

Subsequently, with no further SDR allocation, the reserve accumulation slowed down in the ensuing months.⁴¹ SBP's reserves declined by US\$ 804 million in January FY10 mainly on account of repayment of the Sukuk bond which matured in January FY10.⁴² Subsequently, however, realization of CSF receipts and some expected official inflows helped the SBP reserves to recover by US\$ 192 million in the last quarter of FY10.



³⁴ Pakistan received US\$ 2.2 billion foreign direct investment in FY10 compared to US\$ 3.7 billion in FY09.

³⁵ The country received US\$ 600 million of net foreign investment inflow in the equity market during FY10 compared to net outflow of US\$ 409.8 million in FY09.

³⁶ Details in section 7.3 in this chapter.

³⁷ CDS spreads narrowed from 3084 bps in Dec FY09 to 500 bps in June FY10.

³⁸ Theoretically, sustainability of the current account deficit largely depends on the country's ability to finance it, mainly through non-debt creating flows.

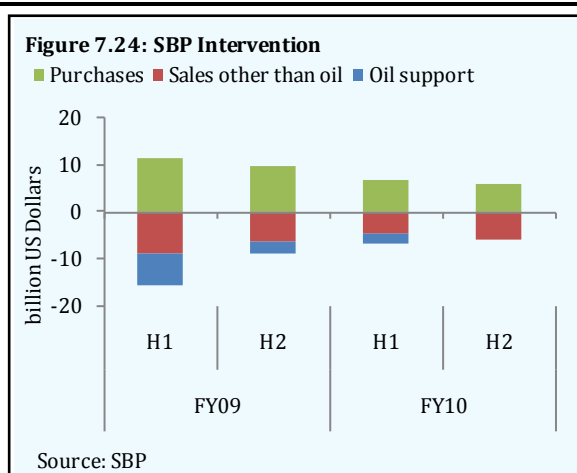
³⁹ In FY09, the overall reserves had only increased by US\$ 1.3 billion.

⁴⁰ On 29th August, 2009 IMF increased SDR quota allocation for its member countries as a priority response to mitigate the impact of the global financial crisis. The main purpose of this increased allocation is to provide significant unconditional financial resources to liquidity constrained countries.

⁴¹ For balance of payment support, the country received a total of US\$ 2.4 billion from the IMF in FY10. The first disbursement worth US\$ 455 million was received in August FY10 followed by another tranche of US\$ 826 million in Dec FY10 and US\$ 1,132 million in May FY10. In addition, the IMF also disbursed a total of US\$ 1,117 million for bridge financing purpose (i.e. temporary finance in lieu of expected external loans from FoDP) in FY10. The first tranche of IMF bridge finance of US\$ 745 million was received in August FY10 and the second tranche of US\$ 372 million was received in Dec FY10.

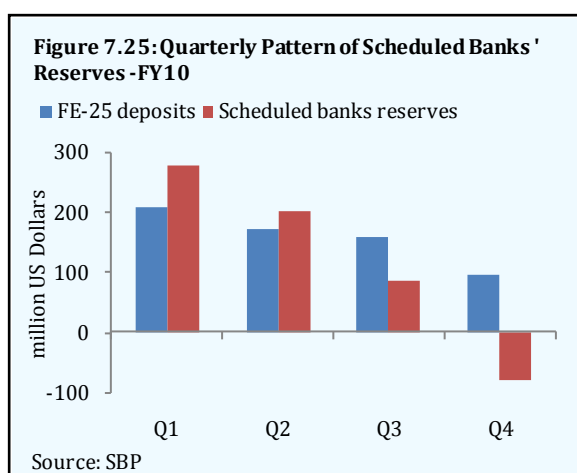
⁴² Government of Pakistan had issued a Sukuk bond worth US\$ 600 million in Jan FY05 for 5 years, which matured in Jan FY10. The bond was priced at 6 months US\$ LIBOR plus 220 basis points.

More importantly, a phased shifting of oil payments to the inter-bank market proved to be a supportive measure in shoring up and maintaining the requisite level of SBP reserves (**Figure 7.24**). It may be recalled that SBP had started to provide foreign exchange to the inter-bank market for oil related payments in November FY05. This was a temporary arrangement in order to curtail the speculative pressures on the domestic currency at that time. In July FY08, SBP started to shift part of these payments to the inter-bank market as market flows improved gradually. However, the unprecedented increase in international oil prices at that time did not allow SBP to continue with the gradual shifting of oil payments, leading it to resume full support for oil related payments in July FY09. It was the implementation of the macroeconomic stabilization program from November FY09 onwards, as well as the easing off of international oil prices, which helped SBP in re-focusing on the shifting of oil payments to the inter-bank market in a phased manner.⁴³ As a result, SBP's net forex intervention in the interbank market declined in FY10. The implementation of this policy measure has not only helped in containing a further drain of SBP reserves, but has also caused the exchange rate to become more responsive to market supply and demand conditions.



Although the final and complete shifting of oil payments to scheduled banks in December FY10 had positive implications for SBP reserves, it did cause some pressure on their trade nostro accounts, which registered a sharp fall in FY10, more so in the second half.⁴⁴ These pressures however proved to be temporary as on an overall basis, scheduled banks' reserves increased by US\$ 485 million to reach US\$ 3.8 billion by end-FY10. This is clearly indicative of the improved depth and capacity of the inter-bank foreign exchange market.

Supported by a substantial increase in foreign currency deposits and retirement of domestic trade related forex loans in H1-FY10, scheduled banks' reserves increased by US\$ 480 million (**Figure 7.25**). This is because in the initial few months of FY10, the weakening rupee-dollar parity together with expectations of further rupee depreciation not only attracted more inflows in foreign currency deposits but also raised the rupee value of foreign currency denominated trade loans, prompting both exporters and importers to retire their outstanding foreign currency loans.

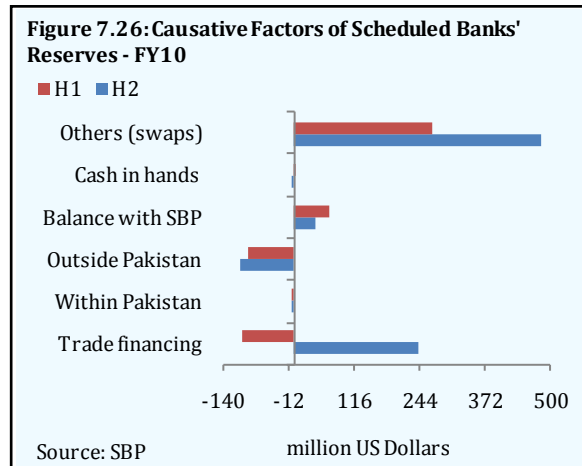


In subsequent months, however, scheduled banks' reserves came under pressure, with reserve accumulation limited to only US\$ 5 million in H2-FY10. This was mainly due to

⁴³ SBP has shifted oil payments to the inter-bank market vide F.E. Circular No.2 dated January 15, 2009, F.E. Circular No.3 dated July 15, 2009 and F.E. Circular No.9 dated December 05, 2009.

⁴⁴ In H2-FY10, scheduled banks' trade nostro balances contracted by US\$ 224 million, compared with US\$ 194 million increase in H1-FY10.

increased foreign exchange swaps⁴⁵ of banks with the central bank, more strongly visible in the last month of FY10, and net lending of trade loans against FE-25 deposits (**Figure 7.26**). In line with the acceleration in the growth of aggregate trade volume, trade related foreign currency loans increased substantially by US\$ 245 million in H2-FY10, compared with net retirement in H1-FY10. Apart from relative stability in the exchange rate in H2-FY10, foreign currency loans became more attractive for both exporters and importers because of the increasing spread between the rate of interest on rupee loans and that on FE-25 loans.⁴⁶



Reserves Adequacy

Accumulation of reserves serves as a buffer against internal and external shocks. An adequate level of foreign exchange reserves also indicates central bank's capacity to meet its short-term external payments related to import bills and debt servicing. The appropriate level of reserves that a country should maintain can be gauged through different reserve adequacy indicators. The most widely used indicators for this purpose are the import coverage ratio and the reserves to short-term debt and liabilities (STD L) ratio.

Aided by a gradual rise in the country's reserves, these indicators exhibited significant improvement in FY10 relative to the previous year (**Table 7.10**). Specifically, reserves' coverage in terms of weeks of imports increased to 28.7 weeks by end-FY10, from a rather dismal level of 9 weeks at end October FY09.⁴⁷ Apart from the increase in reserves, the decline in the import bill also contributed in improving the import coverage ratio. The reserves to STD L ratio,⁴⁸ which indicates the economy's capacity to repay its short-term external debt obligations, also improved for the second consecutive year in FY10 on account of fall in the stock of STD L mainly due to repayment of Kuwait and UAE deposits worth US\$ 100 million.

Table 7.10: Reserve Adequacy Ratios

percent	FY08	FY09	FY10
Import Coverage(weeks)	16.8	21.1	28.7
Reserves to STD L	5.8	6.7	8.8
Reserves to External Debt	0.3	0.3	0.3
Reserves to M2	0.3	0.2	0.3

Source: SBP

7.2.2 Exchange Rate

The rupee dollar parity has undergone significant changes in the last two years; from substantial rupee depreciation in Jan-Nov 2008, to a relatively more gradual pace of depreciation from January 2009 onwards (**Figure 7.27**).

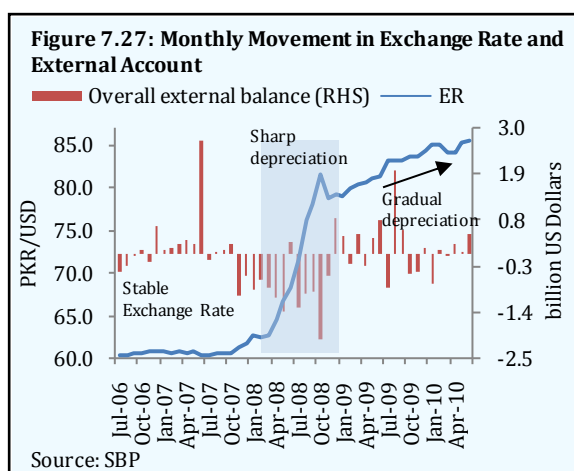
⁴⁵ During H2-FY10, most of the scheduled banks opted for buy-sell swaps (i.e. sell dollar against Pak rupee) with SBP in the wake of substantial increase in FE-25 deposits. These transactions, in turn, limited their accumulation of reserves.

⁴⁶ FE-25 export loans became more cost effective for exporters as the EFS rate was raised three times in FY10, with a cumulative increase of 150 bps. The EFS rate was increased by 50 bps in November 2009 followed by another 50 bps in January 2010 and 50 bps in April 2010. On the other hand, rise in FE-25 loans for imports was a function of the relatively lower LIBOR (a benchmark rate for foreign currency loans) compared with the rupee funding rate.

⁴⁷ The benchmark level of this ratio is 3 months of imports.

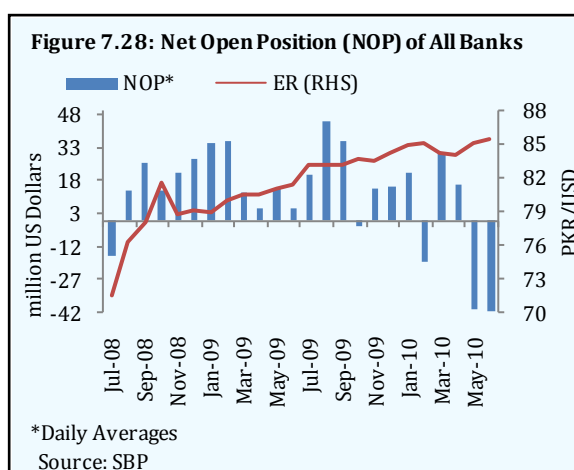
⁴⁸ In practice, two broad definitions are being used for Short-Term Debt and Liabilities (STD L). One is based on remaining maturity concept, i.e. all external debt obligations which are due in one year or less, regardless of its original maturity, are considered as STD L. On the other hand, World Bank defines short-term debt as external liabilities including official trade credits disbursed to developing countries, having original maturities of one year or less. At present, STD L in Pakistan is the sum of IDB loan and foreign exchange liabilities. It has been generally noted that the ratio of reserves to short-term debt and liabilities must be at least equal to 1 to enable an economy to withstand shocks.

To give a bit of background, in the first half of FY08, SBP oil-support related market interventions ensured stability in the rupee-dollar parity. However, the situation worsened substantially in January FY08 when persistent weaknesses in the external account were exacerbated by the unprecedented rise in international commodity prices, especially oil and slowdown in Pakistan’s export demand due to the global recession. Further, the repercussions of the GFC and unstable domestic political situation severely impaired the country’s ability to tap international capital markets. These various developments resulted in the depletion of the country’s forex reserves and an unprecedented depreciation in the rupee-dollar parity. The implementation of the macroeconomic stabilization program from November FY09 onwards not only helped in facilitating a sharp reduction in the external current account deficit, but also served to attract official loan inflows. These developments, in turn, helped in stabilizing the country’s dwindling reserves position. Consequently, the rupee-dollar parity saw a relatively smaller depreciation of 3.2 percent during November-June FY09.



Relative stability in the value of the Pak rupee against the US dollar seen in H2-FY09, continued in FY10 as well, as the macroeconomic fundamentals strengthened gradually. The rupee depreciation against the US dollar was thus limited to 4.8 percent in FY10, against the 16.3 percent depreciation in the first four months of FY09 and a full year depreciation of 16.1 percent.

During H1-FY10, the rupee depreciated by 3.4 percent. This was mainly visible in the first month of FY10 (when the depreciation was 2.2 percent), following SBP’s decision of shifting furnace oil payments to the interbank market. In H2-FY10, both the substantial increase in equity flows and relatively higher worker remittances, particularly in March and April FY10 helped the rupee to regain its value. As a result, rupee depreciated only slightly by 1.4 percent in H2-FY10. Notably, the marginal rupee depreciation in H2-FY10 is despite the complete transfer of oil payments to the interbank market in December FY10. However, oil payments did cause some pressures on commercial banks’ Net Open Position (NOP). Consequently, in most months of H2-FY10, banks maintained net short positions in foreign currency despite continued rupee depreciation (**Figure 7.28**).⁴⁹



Notwithstanding the gradual depreciation in exchange rate in FY10, the kerb market premium⁵⁰ increased substantially during the Oct-Feb FY10 period (**Figure 7.29**). The

⁴⁹ Banks are required to revalue their foreign currency assets depending upon the prevailing exchange rate at a point in time. Therefore, if the current and future exchange rate trend indicates rupee depreciation then to maximise the revaluation gain on foreign assets, banks prefer to maintain net long positions in foreign currency and vice versa.

⁵⁰ It is a difference between kerb market rate and interbank rate.

increase in demand for currency in Q2-FY10 reflected hajj related expenses and the phased shifting of oil payments to the inter-bank market. However, in Q3-FY10, the kerb market premium was mostly driven by speculative purposes, which suddenly disappeared in the subsequent months due to increase in market flows such as FPI and workers' remittances (Figure 7.29).

Pak rupee movement against major international currencies

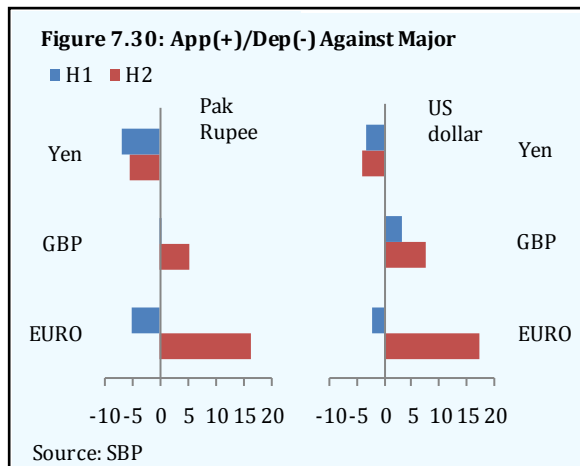
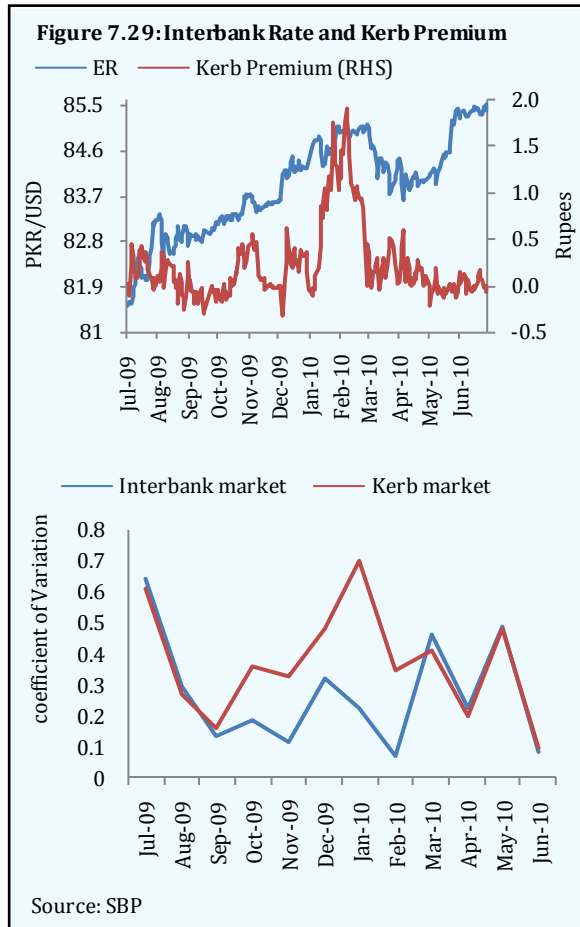
In contrast to a relatively small depreciation of the rupee against the US dollar in H2-FY10, it actually appreciated substantially against major international currencies i.e. Euro and Pound Sterling (Figure 7.30).

It may be noted here that the rupee parity against major international currencies is linked indirectly (via conversion of these currencies) to the US dollar.⁵¹ Therefore, strengthening of the US dollar against Pound Sterling and Euro from December FY10 onwards, with the emergence of sovereign debt problems in Greece and other European countries, also caused the rupee to appreciate against these currencies in nominal terms.

On an overall basis, a relatively small depreciation of the Pak rupee against the US dollar in comparison with a sharp strengthening of the US dollar against the basket of currencies, led Pakistan's Nominal Effective Exchange Rate (NEER) to appreciate by 4.6 percent in H2-FY10; after witnessing depreciation in the first four months of FY10. Nominal appreciation in conjunction with domestic inflation, which remained consistently higher than Pakistan's trading partners', resulted in a sharp real appreciation of the Pak rupee by 10.2 percent in H2-FY10 (Figure 7.31). In all of FY10, the REER appreciated by 8.3 percent compared to a marginal depreciation of 0.3 percent in FY09, indicating a likely reduction in country's external competitiveness.

7.2.3 Forward Swap Points

The movements in forward rates generally follow the rupee-dollar trends in the interbank market. Thus, the gradual increase in swap points in FY10 coincides with depreciation in the rupee-dollar exchange rate (Figure 7.32). Specifically, swap points for 6 months forward



⁵¹ The value of these currencies against the US dollar and the rupee dollar exchange rate determines the parity of the Pak rupee against these currencies.

transaction moved in a narrow range of 3.8-4.9 Rs per US dollar in FY10, compared with a wide range of 1.2-5.3 Rs per US dollar in the previous year.

7.2.4 Conclusion

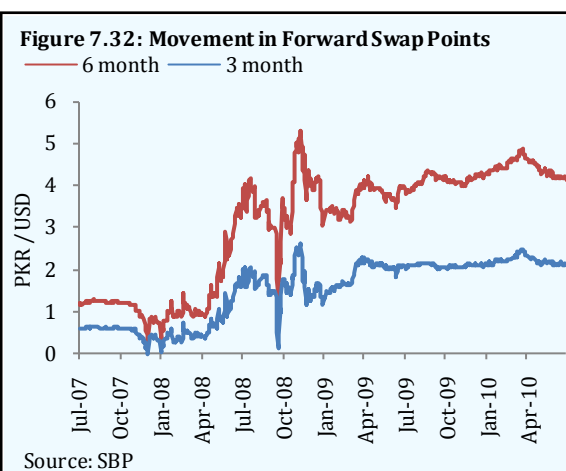
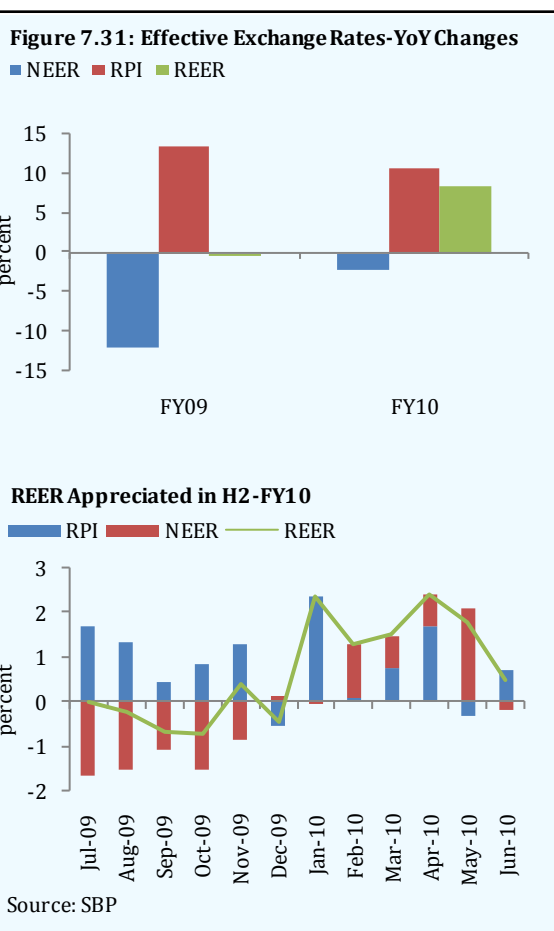
To sum up, the domestic foreign exchange market in FY10 benefited by strong growth in worker remittances, foreign investment flows, receipt of tranches of IMF loans and rising trade activities. As a result, the overall country's reserves reached a level of US\$ 16.9 billion by end-FY10. These developments in turn allowed SBP to further liberalize the foreign exchange market. The most important measure on this front is the complete shifting of oil payments to the inter-bank market by December FY10. This policy shift was supportive in containing a further drain of SBP reserves. More encouragingly, the relative stability in the exchange rate during FY10 despite shifting of oil related payments is primarily a reflection of the increasing depth of the inter-bank foreign exchange market.

7.3 Capital Markets

Capital markets provide necessary funding for financing private as well as public sector projects and serve the key function of price discovery in consonance with the performance of corporate ventures undertaken in the economy. In Pakistan, the equity market is the predominant form of capital market, with the corporate debt market constituting less than 1 percent of the GDP.

7.3.1 Equity Markets

After facing challenging circumstances in FY09, the equity market underwent a period of recovery from FY10 onwards. Tumultuous macroeconomic circumstances in FY08 and FY09 warranted extraordinary measures⁵² to be taken. With the onset of the macroeconomic stabilization program in November FY08, international rating agencies upgraded Pakistan's sovereign rating⁵³ and foreign investors' viewed the equity market with renewed interest, such that the market rebounded and the KSE-100 index increased to the 7,000 points level by end-FY09. After a gap of more than seven quarters,⁵⁴ on March 12 FY10, the KSE-100



⁵² Details in Chapter 4 and 7, FSR 2008-09, SBP.

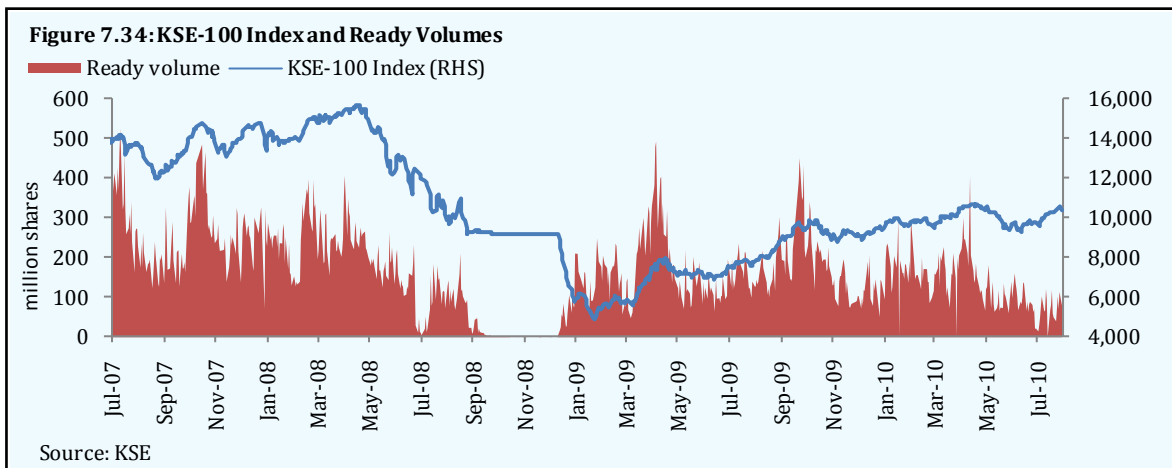
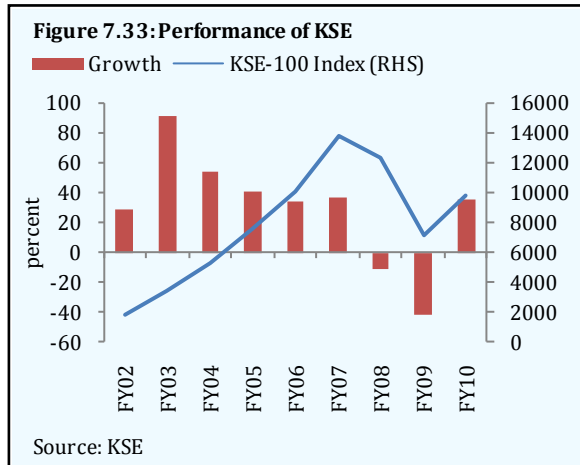
⁵³ Moody's Investor Services upgraded Pakistan's rating on 12th December 2008 from -B3 to +B3 soon after Pakistan entered into a stabilization program with the IMF, and S&P upgraded Pakistan sovereign rating on 24th August 2009, from CCC+ to B- after the macroeconomic situation stabilized.

⁵⁴ Before the decline in the KSE-100 index, 21st August 2008 was the last time the KSE-100 crossed the 10,000 points mark.

crossed 10,000 points. Since then, the benchmark index has moved within a range of almost 1,000 points.

Notably, the equity market trades at relatively low valuations compared with regional markets, and therefore offers potentially higher returns to foreign investors. However, discontinuation of the Continuous Funding System (CFS) facility in FY09⁵⁵ created financing difficulties for investors and a leverage product is still awaited.

Compared to the worst ever performance of the KSE-100 index in FY09, in FY10 the benchmark index recovered by 36 percent on YoY basis, as against the decline of 42 percent in FY09 (**Figure 7.33**). Consistent with this development, the market capital increased by 28.8 percent by end-FY10, compared to the decline of 43.9 percent in FY09. Moreover, average daily volume increased from 105.6 million shares during FY09 to 160.7 million shares in FY10 (**Figure 7.34**). **Table 7.11** gives detailed summary of key variables of the 3 equity markets in Pakistan.



Trends in International Markets

World markets rebounded in FY10, dismissing fears of a prolonged global recession. However, it was soon realised that the earlier than expected recovery is slow and erratic, implying that a medium-to-long-term strategy is required to tackle the extreme nature of shocks⁵⁶ to the global financial system. Not surprisingly, global economic recovery is led by the emerging market economies (EMEs) (**Table 7.12**), with nearly all the EMEs witnessing a strong rebound in their equity markets.⁵⁷ The positive element of this recovery in EMEs is that it is largely broad-based with all the markets witnessing substantial upswing in their indices (**Table 7.12**).

⁵⁵ SECP Press Release, April 7, 2009.

⁵⁶ Subprime crisis of August 2007 and collapse of global financial giants including Lehman Brothers in September 2008.

⁵⁷ As of May 27, 2010 emerging markets index of MSCI Barra includes Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

Table 7.11: Overview of Capital Market

Amount in billion Rupees, million USD

Equities (KSE)		FY05	FY06	FY07	FY08	FY09	FY10	FY11*
Listed Companies	numbers	659	658	656	652	651	651	645
Listed Capital	billion Rs.	439	496	631	706	781.8	815.5	914.6
Market Capitalization	billion Rs.	2,068	2,801	4,019	3,778	2,121	2,732	3,116
Market Capitalization as % of GDP		31.8	36.7	46.3	36.1	16.2	18.6	-
New Listed Companies	numbers	18	4	18	8	8	6	5
New Listed Capital	billion Rs.	32.3	7.8	7.9	36.8	1.4	4.3	3.5
Debt Instruments (listed)								
New Debt Instruments Listed	numbers	12	7	8	7	2	2	-
Amount	billion Rs.	15.6	7	11.2	22.5	6.1	5.5	-
KSE-100 index		7,450	9,989	13,772	12,289	7162	9721	11,431
High		10,303	12,274	9,504	15,676	12,222	10,677	11,481
Low		4,890	6,971	13,772	11,162	4,815	7,271	11,408
KSE-30 Index				16,993	14,326	7,571	9,557	11,056
KSE All Share Index		4,876	6,708	9,758	8,937	5,122	9,722	7,984
Lahore Stock Exchange								
LSE-25 Index		3,762	4,379	4,850	3,869	2,132	3,093	3,604
LSE Market Capitalization	billion Rs.	1995	2693	3185	3514	2018	2623	2,999
Market Capitalization as % of GDP		30.3	34.9	35.1	33.5	15.8	18.1	17.9
Islamabad Stock Exchange								
ISE-25 Index		11571	11528	2,716.0*	2749	2444	2441	
ISE Market Capitalization	billion Rs.	998	2,102	3,061	3,810	3,618	2,262	
Market Capitalization as % of GDP		15.2	27.2	33.6	36.4	34.5	15.6	
SCRA Investment (net flows)	mln US\$		354.8	979.6	-199.1	-511.4	521.5	75.4

Source: Stock Exchanges

*Available data as on December 7, 2010

On a global scale also, world markets index⁵⁸ witnessed a positive growth of 9.5 percent in FY10 against a plunge of 31.3 percent in FY09. The only exception in regional performance was seen in 'frontier' markets, which took longer than others to fully recover from the adverse impact of the global financial crisis (**Table 7.13**). Within frontier markets however, performance of some markets has remained impressive (**Table 7.14**).

After its re-inclusion in the MSCI Barra FM index in May 2009, Pakistan equity market has clearly exhibited marked improvement, rising by 24 percent. Notably however, the market is still at low levels in comparison to those on December 15, 2009 when normal trading resumed in the Karachi Stock Exchange (KSE) after the imposition of the floor on August 27, FY09 (**Box 7.4**).

Table 7.12: Country-wise performance of MSCI Emerging Markets Asia\Far East

	FY09	FY10	Since	
			May 29, 2009*	Dec 15, 2008*
EM	-30.0	20.6	35.1	85.6
EM Asia	-20	20.4	34.0	82.5
EM Far East	-21.7	18.9	32.6	77.4
Pakistan	-57.2	**	24.0	-6.8
Indonesia	-25.7	62.4	93.9	182.7
Thailand	-20.9	30.4	71.7	123.2
Korea	-31.4	30.6	46.4	90.2
Taiwan	-26.1	12.8	18.1	73.8
India	-6.2	30.2	43.1	122.8
China	-10.7	8.5	21.5	57.2
Malaysia	-14.6	30.2	56.7	99.4
Philippines	-2.6	31.8	63.3	107.3
Russia	-61.8	24.2	17.8	73.2
Brazil	-40.5	18.6	32.7	112.7

Source: MSCI Barra

* Upto September 20, 2010

** Since May 29, 2009 Pakistan has been included in frontier

⁵⁸ Morgan Stanley Capital International (MSCI) Barra index is a prominent global equity benchmark being used widely by investors.

Trends in Portfolio Investment

Improved activity in the domestic equity markets during FY10 is also visible in the volume of portfolio inflows to the economy (Figure 7.35 & 7.36). To give a brief background, FY09 ended on a dismal note owing to disappointing events in the global equity markets. On the domestic front, the KSE-100 index rapidly declined from its climax at 15,676 points in April FY08, and reached as low as 4,815 in January FY09. This downtrend was, among others, contributed by substantial portfolio outflows: the Special Convertible Rupee Accounts (SCRAs)⁵⁹ witnessed a net outflow of US\$ 511.38 million in FY09.

FY10 on the other hand saw improved activity in the local market, strengthened by improved foreign portfolio investment inflows, with SCRAs witnessing a net inflow of US\$ 521.49 million. These positive developments in the equity market and resultant investment inflows during FY10 mainly emanated from a myriad of factors which include: (a) improved foreign outlook amid recovery in global markets,⁶⁰ (b) improved domestic economic activity,⁶¹ (c) decline in CPI from 20.8 percent to 11.7 percent during FY10, (d) visible decline in current account deficit from 5.7 to 2.0 percent of GDP, (e) improved foreign exchange reserves on the back of better external flows besides IMF support (up from US\$ 9.5 billion to US\$13.1 billion), and (f) better perception of local market as evident in improved credit rating of the country. All these factors helped in boosting investors' confidence in the domestic economy.

Challenges, Risks and Regulatory Developments

The equity market in Pakistan, after rapid growth since FY04, came under stress from FY08 onwards due to various factors discussed above. Subsequent to the lifting of the floor on KSE-100 index in August FY09,

Table 7.13: MSCI Index Performance in other Regions\Countries

	FY09	FY10	Since	
			May 29, 2009*	Dec 15, 2008*
MSCI_FM	-51.2	-3.6	10.4	4.5
MSCI_EM	-30.0	20.6	35.1	85.6
MSCI_World	-31.1	9.5	22.5	36.7
Asia Pacific ex Japan	-24.7	18.0	36.0	80.7
Asia Pacific	-24.5	9.3	22.3	41.6
Asia ex Japan	-20.3	19.6	33.5	80.7
United Kingdom	-37.2	4.7	22.1	32.7
Singapore	-27.2	25.1	39.9	84.7
Hong Kong	-18.5	11.0	26.8	67.4
USA	-28.5	12.0	24.4	32.7
Japan	-24.6	-0.9	6.0	7.3
UAE	-61.4	-9.4	4.4	5.7

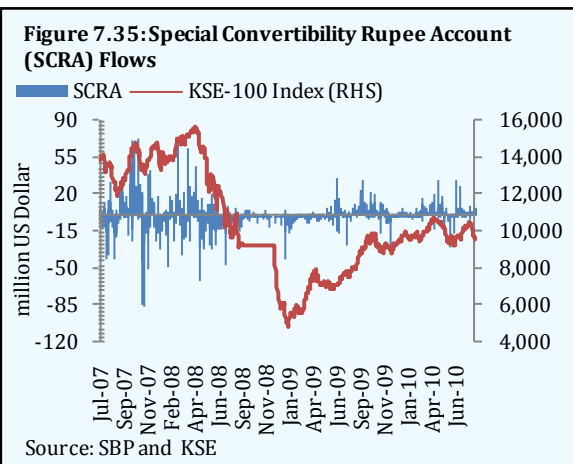
Source: MSCI Barra

*upto September 20, 2010

Table 7.14: Performance of MSCI Frontier Markets

	FY09	FY10	Since	
			May 29, 2009*	Dec 15, 2008*
FM (Frontier Mkts.)	-51.2	-3.6	10.4	4.5
FM Central & Eastern Europe	-50.5	2.4	0.03	22.6
FM Africa	-53.7	-1.0	-9.7	4.5
FM Asia	NA	22.6	28.7	NA
Sri Lanka	0.2	44.3	128.3	298.0
Pakistan	NA	26.8	24.0	-6.8
Vietnam	10.9	16.6	9.5	20.1

*upto September 20, 2010

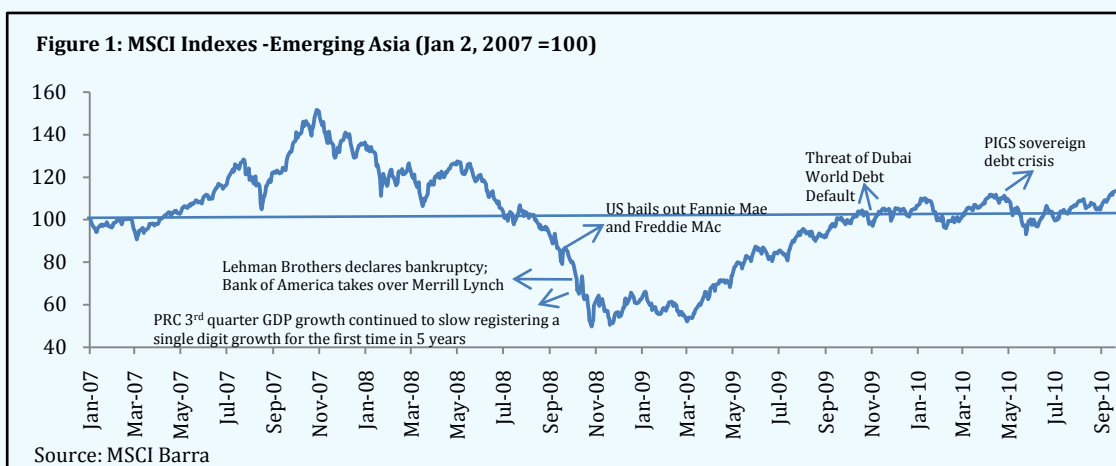


⁵⁹ Accounts held by foreign residents with the authorised dealers in Pakistan, for the purpose of trading in shares quoted in Stock Exchanges as well as debt instruments. Movements in these accounts are thus a reflection of foreign investors' interest in the domestic market.

⁶⁰ World Economic Outlook, October 2010, puts world GDP growth at 4.8 percent for 2010 against a decline of 0.6 percent in CY09.

⁶¹ GDP growth up from 1.2 percent to 4.1 percent.

Box 7.4: Emerging Asia’s Equity Markets post Global Financial Crisis



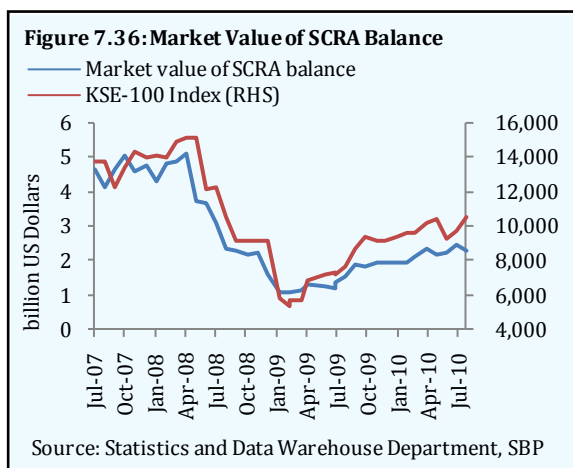
Global economic recovery, very low returns on safe assets in developed countries, and attractive valuations drove the post-crisis rebound in emerging Asian equity markets. Despite a moderate correction early this year, emerging Asian equities have made steady gains since their plunge following Lehman Brothers’ bankruptcy in September 2008. Notably, Emerging Asia (EA) MSCI Barra index reached as low as 187.7 on October 27, 2008 (Figure 1). Other challenging events like the Greek debt crisis and related fear of contagion weighed on investor sentiment, however its impact on emerging Asia’s capital markets has remained limited.

Compared to equity markets in the developed world, Emerging Asian markets benefited from (a) undervaluation of equities which resulted in generous yield to the tune of 73 percent in US dollar terms in 2009, (b) market capitalization in emerging Asian economies increased 83 percent annually in 2009 (it is substantially below the pre-crisis peak) and that would compensate the investors for loss of firm value in 2008, and (c) Increased turnover and reduced price volatility across emerging Asia’s stock markets indicates liquidity conditions have improved. A combination of these factors have pushed capital flows to emerging Asia — particularly equity portfolio investments — contributing to the robust growth in the region’s stock markets. Foreign holdings of emerging Asian equities average about 20 percent of total market capitalization.

Source: Asia Capital Markets Monitor, April 2010, Asian Development Bank.

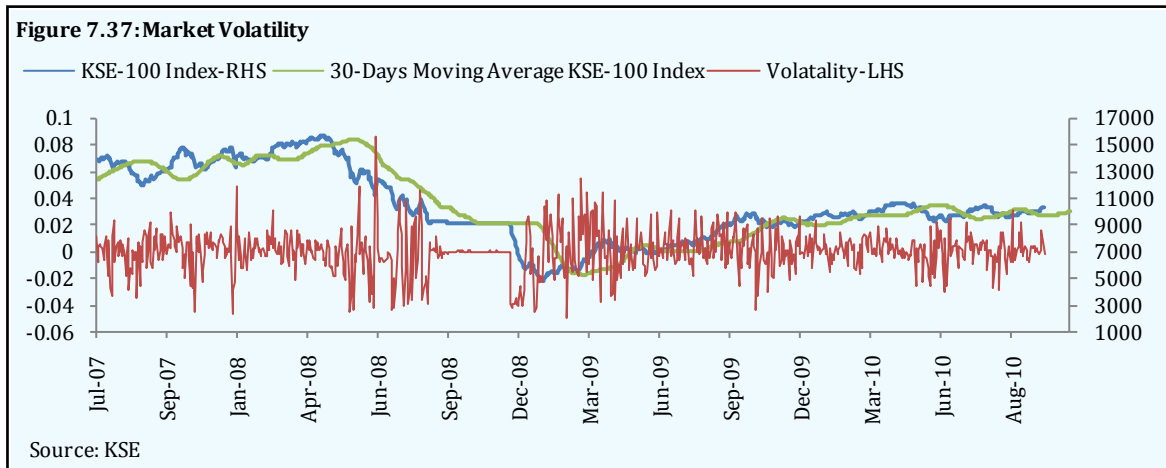
the KSE-100 index resumed normal trading from December 15, FY09. This unprecedented event led to a major crisis of confidence among investors, and plunged the benchmark KSE-100 Index to its 5-year low on January 26, FY09.

Compared to an eventful H1-FY09 when the KSE-100 declined by 52 percent, H2-FY09 saw substantial recovery in the stock market. Positive developments like lowering of policy rate by SBP, stable exchange rate, positive reviews by IMF and rising inflow of home remittances supported investor sentiments and the KSE-100 index increased by 22.1 percent during H2-FY09 (Figure 7.37).

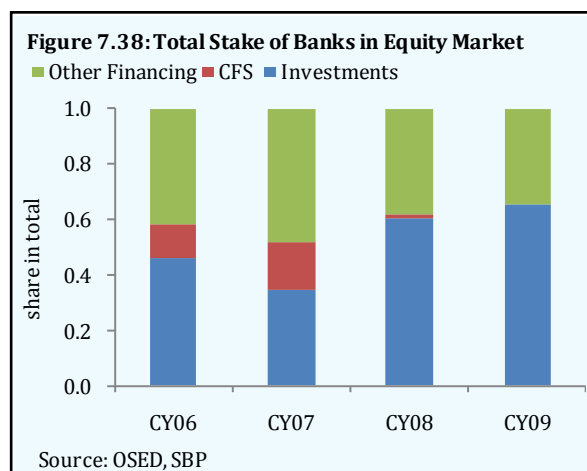


Risk to Financial Stability: Impact of stock market performance on the Banking System

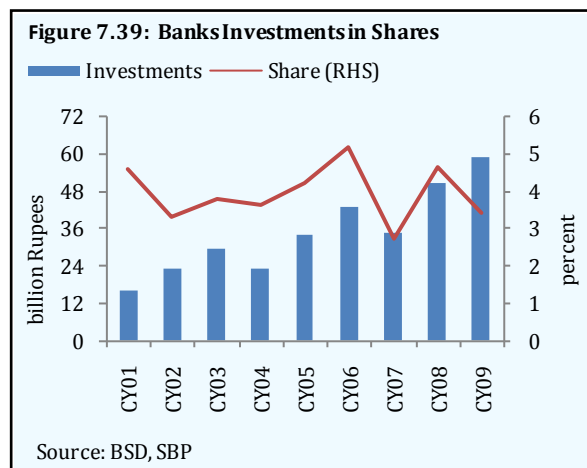
An assessment of banks’ total exposure in the equity market shows a relatively comfortable situation, with banks remaining within the limits specified in SBP’s Prudential Regulations. Data shows that the sum of banks’ direct and indirect exposure (discussed ahead) in the



equity market has increased by 8.8 percent to Rs. 90.4 billion⁶² in CY09, from Rs. 83.1 billion in CY08. Furthermore, since CY07, the ratio of total exposure to total equity has fallen from 18.5 percent to 13.7 percent in CY09 (**Figure 7.38**). Further investigation shows that the continuous fall in this ratio is primarily backed by improvements in overall equity position of the banking sector. However since CY08, an absolute decline in indirect exposure is also observed.



Banks' direct exposure on the equity market is measured by their investments in stocks. Consolidated banking data shows deceleration in the YoY growth of banks' investments in fully paid-up ordinary shares, from 46.0 percent in CY08 to 16.7 percent in CY09. Consequently share of banks' investments in shares as a percentage of total investments, declined from 4.4 percent in CY08 to 3.4 percent in CY09 (**Figure 7.39** and **Figure 7.40**). This development is partially explained by banks' preference to invest in risk-free government securities, and other TFCs. Moreover, due to discontinuation of CFS facility,⁶³ share of the indirect exposure⁶⁴ as a percentage of total exposure of banks in the equities market, dropped from 38.1 to 34.8 percent. From a financial stability perspective, the existing level of banks' exposure to the equity market is within safe limits.



⁶² This includes banks' exposure in the form of investment in the equity market and other financing.

⁶³ SECP Press Release, April 7, 2009.

⁶⁴ Indirect exposure is defined as banks' exposure towards loans which are secured by shares.

New Listings

The number of new listings in FY10 was the same as in FY09 i.e. 8 new companies, which however added Rs. 39.8 billion as new total listed capital in FY10 which was 13 times higher than total paid-up capital of Rs. 2.9 billion listed in FY09 (Table 7.15).

7.3.2 Corporate Debt Market

In a typical setting, private sector companies as well as the government compete among themselves to attract investible funds. Risk and return profile of

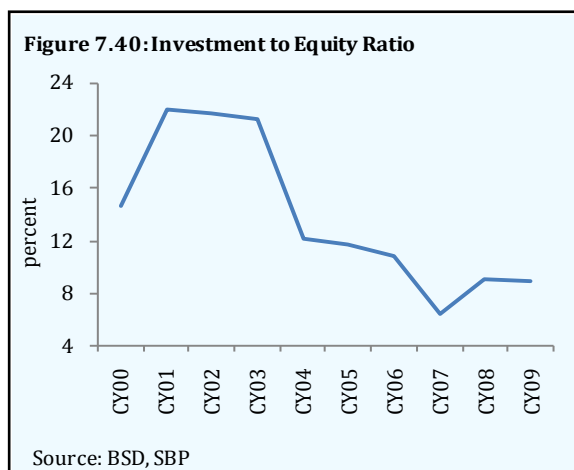


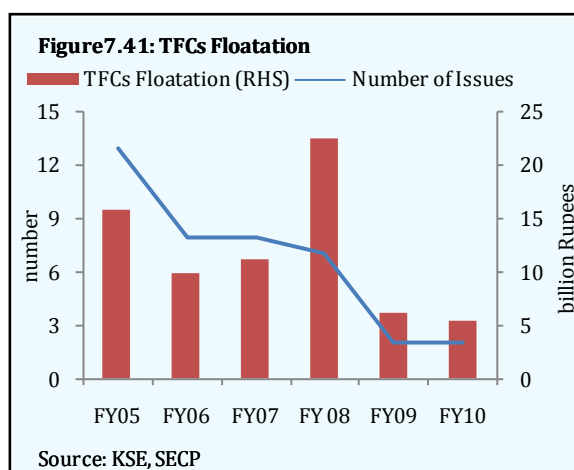
Table 7.15: New Listing At Karachi Stock Exchange during FY10

Amount in million Rupees

Name of Company	Date of Formal Listing	Total Amount Subscribed At Face Value	Premium Of Total Amount Subscribed	T. Amount Subscribed Including Premium Amount	Total Paid-up Capital
1 Ghani Gases Limited (Offer for Sale @ Rs. 4 per share)	5-Jan-10	53.6	21.4	75.0	725
2 Fatima Fertilizer Company Limited Rs. 3.50 per share	8-Mar-10	583.6	204.3	787.9	20,000
3 Safe Mix Concrete Products Limited Rs. 2.50 per share	18-Mar-10	101.9	25.5	127.4	200
4 Agritech Limited (Offer for Sale @ Rs.20 per share)	12-Apr-10	38.4	76.8	115.2	3,924
5 Amtex Limited (Rs.3 per share)	13-Apr-10	183.8	55.1	238.9	2,415
6 Wateen Telecom Limited	27-May-10	2,006.9	383.0	2,389.9	5,275
Total		3,949.0	766.0	4,715.6	39,843

Source: KSE

various debt securities offered by these seekers of funds defines a matrix of offer price in the market. Potential investors, which includes individuals and firms – local as well as foreign – bid for those debt instruments, and finally an equilibrium is determined by the interaction of demand and supply conditions in the market. In case of domestic financial system, the government, with an insatiable demand for funds, is the dominant player in the debt market.⁶⁵ In addition, the private debt market is not very active and private firms seldom resort to issuance of debt



instruments directly to the investors. An investigation of capital markets data shows that issuance of new TFCs remained weak in FY10. Only 2 new TFCs worth Rs. 5.5 billion were issued in FY10 as against 2 new issues worth Rs. 6.1 billion issued in FY09 (Figure 7.41).

⁶⁵ Details in Chapter 2 in this edition of the FSR.

With this development total amount of outstanding (listed) TFCs has marginally increased from Rs. 68.3 billion in FY09 to Rs. 69.8 billion in FY10.

7.3.3 Corporate Financing Patterns

Table 7.16 gives detail on corporate financing patterns in Pakistan. As mentioned elsewhere, bank credit is the main source for financing for firms. Time series data on Initial Public Offerings (IPOs) and TFCs show that there were only few episodes of issues and the aggregate volume of those issues is negligible when compared to the volume of bank credit.

7.3.4 Conclusion

From FY10 onwards, visible signs of recovery were seen in the equity market, though the recovery is more concentrated in few sectors, and in the second half of FY09 and first half of FY10. During H2-FY10, equity market showed signs of stability and sustained the gains achieved in the earlier part of the year. Benchmark KSE-100 Index which plunged during FY09 and saw its 5-years low in the last week of January 2009, rebounded, and by end-FY10 it was at a level above 10,000 points. This upsurge in the market partially compensated the companies for the loss in their market value suffered during the previous year.

Like in any other developing country, the equity market has a limited role in meeting financing needs of the economy. Moreover, banks which are the main source of finance, have less than 4 percent of their total investment portfolio in the stock market. This implies that limited disruptions and shocks in the equity market are hardly of any consequence for overall financial stability.

Table 7.16: Sources of Corporate Financing

Amount in billion Rupees

Year	Banks	IPO*	TFC*
CY02	525	0.1	4.7
CY03	607	2.5	19.5
CY04	873	21.7	0.0
CY05	1076	9.8	6.6
CY06	1270	3.0	3.0
CY07	1520	4.9	4.0
CY08	2016	6.9	12.6
CY09	2065	1.1	0.0

Source: SBP and KSE

* The IPOs and TFCs issued by financial institutions are not included.