

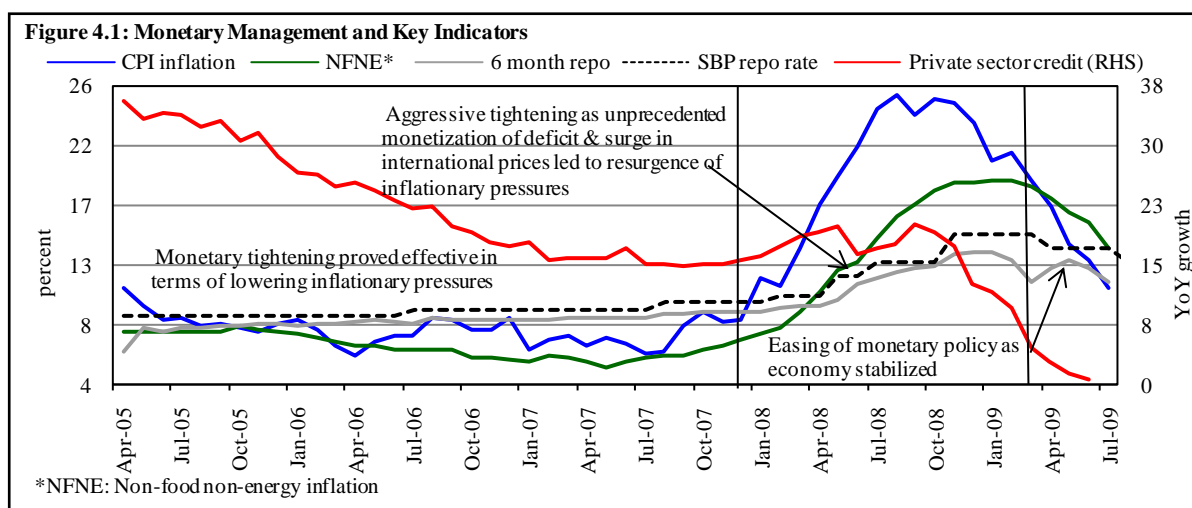
# 4 Money and Banking

## 4.1 Monetary Policy

Monetary policy underwent a substantial transition in FY09. In the initial months of the fiscal year, the central bank was forced to aggressively tighten its monetary stance to combat a rapid deterioration in the country's economic fundamentals, as the carryover stresses from the record fiscal and current account deficits in FY08 were exacerbated by continuing excess demand in the economy.

Accordingly, the policy rate was raised twice in the first half of the fiscal year, with a cumulative increase of 300 basis points, in contrast to an aggregate rise of only 250 basis points in FY08. The SBP policy supported the aggressive macroeconomic stabilization program initiated in November 2008.<sup>1</sup> This program which also contained limits on incremental deficit monetization finally began yielding dividends in subsequent months (see **Figure 4.1**). Indeed, this effective coordination between monetary and fiscal policies allowed SBP to loosen its monetary policy stance within five months of the start of aggressive stabilization efforts, i.e., April 2009 onwards (see **Box 4.1**).

Looking retrospectively, the recent change in policy direction should not obscure the challenges faced by the central bank in the first half of FY09. In particular, SBP had to deal with carryover of macroeconomic stresses of the previous year which aggravated in early FY09. This stress was stemming from: (1) sharply rising inflationary pressures in the economy, reflecting both excess domestic demand pressures as well as pass through of rising commodity prices in the international markets; (2) hang-over of exceptionally high fiscal deficit in the previous year, which was mainly financed through borrowings from the central bank. Adding to SBP's difficulties, the exceptional growth in government borrowings from central bank continued even in initial months of FY09.<sup>2</sup> The resulting demand stimulus, fed the already unsustainable external account deficit. In the face of declining external inflows due to the international financial crisis and deepening global recession, this deterioration in external account led to a substantial depletion of country's foreign exchange reserves, reduction in domestic liquidity, and a further impetus to domestic inflation (as the exchange rate depreciated).



<sup>1</sup> Both the SBP and the government agreed to undertake various policy measures under the stabilization program, detail of which is available in SBP's Monetary Policy Statement Jan-Mar 2009.

<sup>2</sup> The outstanding stock of Market related Treasury Bills (MRTBs) reached Rs 1393.4 billion by November 2008 from Rs 1053.1 billion at end-June 2008.

In this backdrop, the immediate challenge for the central bank was to moderate excessive demand pressures in the economy through further monetary tightening. In theory, for more effective transmission of monetary policy, liquidity conditions in the inter-bank market must be further restrictive. But the policy options for the central bank became more complex following the liquidity shock of October 2008 that hit the domestic financial system. Driven by rumors showing concerns on stability of some of the local banks in the backdrop of global financial crisis, some seasonal withdrawal of deposits, and the impact of depleting FX reserves, the banking system experienced an abrupt and large decline in deposits. More disturbingly, the resulting panic permeated through the equity market and affected the mutual fund industry as well. The SBP was therefore forced to inject substantial liquidity in order to quickly restore confidence in the financial system. The effect of this liquidity support continued even into early months of H2-FY09.

**Box 4.1: Policy Coordination**

The key objective of macroeconomic policies is to achieve economic stability with high rate of economic growth. Regardless of their common objectives, the instruments and preference of both policies can be different. Since these policies are executed by (different) independent authorities, decisions under one policy can impinge on the effectiveness of other. Thus, policy coordination is essential to achieve the desired objectives.

In this backdrop, it is important to note that the desirable improvement in macroeconomic indicators in FY09 was an outcome of well coordinated macroeconomic policies (e.g., monetary, fiscal and exchange rate). In contrast to previous years, all the three important policies this year had worked in the same direction. It can be argued that this policy coordination allowed SBP to loosen its monetary policy stance in April 2009 - within five months of the start of aggressive stabilization effort. .

In terms of coordination with fiscal policy, the fall in budget deficit in FY09 and introduction of quantitative ceiling on budgetary borrowing from the central bank under SBA contained one of the key sources of reserve money growth, i.e., government borrowing from SBP. In addition, government introduced certain changes in the framework of primary auction in April 2009. For example,

- (1) The Ministry of Finance is now deciding the cut-off rates in primary auctions of government debt instruments; earlier this was done by SBP. This measure will help market to clearly distinguish between changes in cut-off rate (which is purely driven by domestic debt consideration of the government) from monetary policy signals, thereby improving the transmission of monetary policy.
- (2) The auction decisions are now focusing on targeting volumes, instead of the cut-off rates. This measure will make market interest rates more responsive to government's financing needs.
- (3) The government is now preannounces quarterly auction volume. This will help SBP in better forecast liquidity available in the market. For the market, the increased predictability would lower the volatility in market interest rates.

The monetary policy was also complemented by sharp adjustments in the exchange rate. In particular, a sharp depreciation in the value of rupee against US dollar (16.3 percent in Jul-Oct period) helped in containing the local demand for foreign goods by raising their rupee cost. The overall gains from this contraction in import however, were partly eroded by the deceleration in export growth due to persistent recession in the international market.

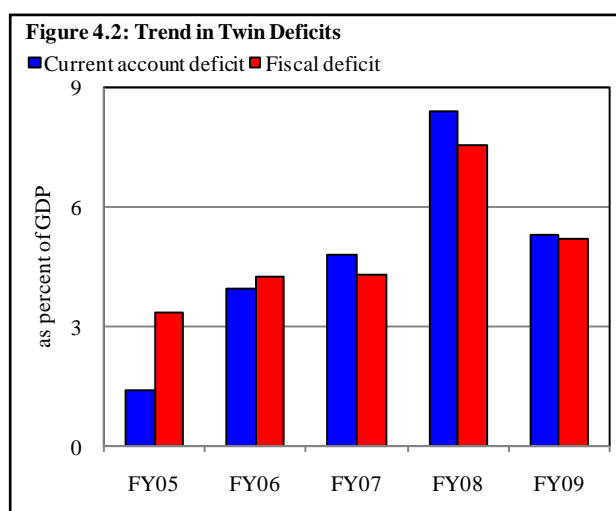
In short, central bank had to strike a balance between the need to reduce the excess demand pressure (so as to instill macroeconomic stability, which is essential to grow rapidly) and infusing liquidity (so as to ensure stability of the financial system). At the same time, given the dire need to stabilize the economy the government with the support of SBP, embarked upon an extensive macro stabilization program. As a part of this program, SBP raised the policy rate by 200 bps to 15 percent in November 2008. Besides aiming to address macroeconomic imbalances, this increase in discount rate clearly signaled to the market that exceptional liquidity support was not tantamount to a change in monetary policy stance. This monetary measure was supported by increased fiscal discipline, constraints on incremental monetization of the fiscal deficit (thus removing a major source of incremental demand) and a welcome sharp adjustment in the exchange rate.

With fiscal and monetary policies both moving to restrict demand, there was a visible decrease in aggregate demand pressures in the economy. This was evident particularly in; (1) contraction in current account deficit in response to gradual drop in YoY import growth; and (2) sharp slowdown in private sector credit. As a consequence, inflationary pressures in the domestic economy also eased, helped by a concurrent fall in international commodity prices.

While improvement in the macroeconomic indicators was very encouraging, SBP kept the policy rate unchanged in its monetary policy review of January 2009. The easing of monetary policy was constrained by the fact that it was not clear whether this improvement in key macro-indicators would continue. Specifically, the risks to current account deficit compounded from deceleration in export growth, whereas improvement in fiscal discipline became doubtful given possible slippages in tax revenue target due to slowdown in economic growth. More importantly, core inflation was still showing considerable stubbornness.

Nonetheless, as inflation began to fall, partly benefiting from a sharp decline in international prices coupled with dampening inflation expectations, and current account deficit narrowed substantially by the end of Q3-FY09, SBP reduced the policy rate by a 100 bps effective from April 21, 2009 to 14 percent. This decision was further supported by more pronounced weakening of excess demand pressures in the same period. For example,

1. An unusual collapse of private sector credit in H2-FY09, which contracted by 6.0 percent.<sup>3</sup> Though the second-half of each year generally coincides with retirement phase of credit cycle, the decline in credit during H2-FY09 was exceptional. More importantly, the slowdown was broad-based as a large number of industries have witnessed substantial retirement in credit during H2-FY09. While the role of weakening domestic demand pressures was significant, a combination of global and industry specific shocks, such as the fall in raw material prices, economic slowdown in US and EU markets and structural issues of textile industry (which led to fall in textile export) weakened the credit demand. Moreover, risk averseness of banks in the wake of rising NPLs further slowed down the credit growth during the period under review.
2. On the fiscal side, though the deficit remained higher than the annual FY09 target of 4.3 percent, it was well below that in the previous year. Most of the slippages emerged after March 2009 as expenditures increased significantly as the government sought to expedite the rehabilitation of IDPs (see **Figure 4.2**). Though additional requirement for unanticipated higher deficit in Q4-FY09 was met through domestic sources, borrowing from central bank remained subdued.<sup>4</sup>
3. Together with improvement in fiscal discipline, the contraction in current account balance gathered some pace by



<sup>3</sup> More importantly, the slowdown in H2-FY09 stemmed from both lower incremental demand for running finance and fixed investment loan.

<sup>4</sup> Budgetary borrowing from SBP, of Rs 49.4 billion in Q4-FY09 was lowered compared with Rs 81.5 billion in Jul-Mar FY09. Thus, the stock of Market Treasury Bills for Replenishment (MRTBs) with SBP declined to Rs 1107.9 billion by end June 2009 from Rs 1393.4 billion at end-November 2008.

end of Q3-FY09. This was mainly driven by a sharp drop in YoY import growth. Thus, in terms of GDP, the CAD reached to 5.3 percent in FY09 compared with 8.4 percent in FY08.

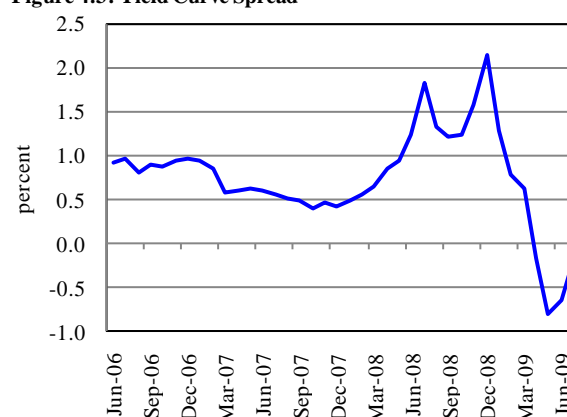
Encouragingly, the impact of slowdown in demand pressures did translate into desirable decline in inflation, both core and CPI, in H2-FY09. Indeed, the persistence in year-on-year inflation seen during H1-FY09 started to ease as CPI and both measures of core inflation (non food non energy, and trimmed) witnessed declining trend January 2009 onwards. This downturn in inflation accelerated further by end of Q3-FY09. In particular, YoY CPI inflation fell to 13.1 percent in June 2009 from its peak of 25.3 percent in August 2008.

Within CPI, it is encouraging that non-food component of CPI that had shown some resilience till February 2009 in the wake of uptrend in House Rent Index (HRI),<sup>5</sup> also began to weaken. The downward adjustment in domestic fuel prices in response to the decline in international fuel prices had a significant role in moderating non-food inflation and it is expected that HRI would also decline in months ahead in view of fall in international price of metal and other construction materials.

In addition, it appears that the second-round effects of high food inflation that was prevailing in past few years, has peaked out as (1) stubbornly high food inflation witnessed sharp drop; and (2) inflation expectation-channel through which second-round impact transmitted in overall inflation- finally started to dampen. The impact of latter is visible in the fall in yield curve spread (term premium i.e., difference between yields on long-term and short-term government papers) which even became negative in last few months of FY09 (see **Figure 4.3**). Since the market had already priced in some ease in monetary policy stance, market repo rates remained almost unchanged following the April 2009 cut in policy rate.<sup>6</sup>

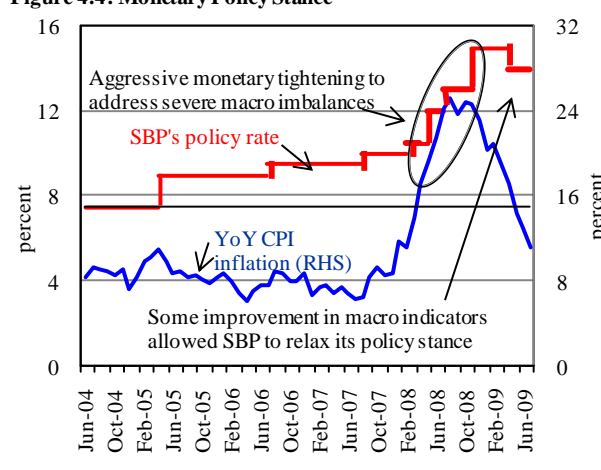
The market rates however started softening again in June 2009 following the release of CPI inflation for the month of May, which showed a considerable decline of 2.8 percentage points in YoY CPI inflation. Interestingly, the CPI inflation continued to slow down, and in July 2009 reached the level prevailing in February 2008, when the policy rate was 10.5 percent (see **Figure 4.4**). Not surprisingly, expecting a sharp decline in policy rate (and supported by liquidity injection due to

**Figure 4.3: Yield Curve Spread\***



\* 4 Year PKRV rates - 6 month PKRV rates

**Figure 4.4: Monetary Policy Stance**



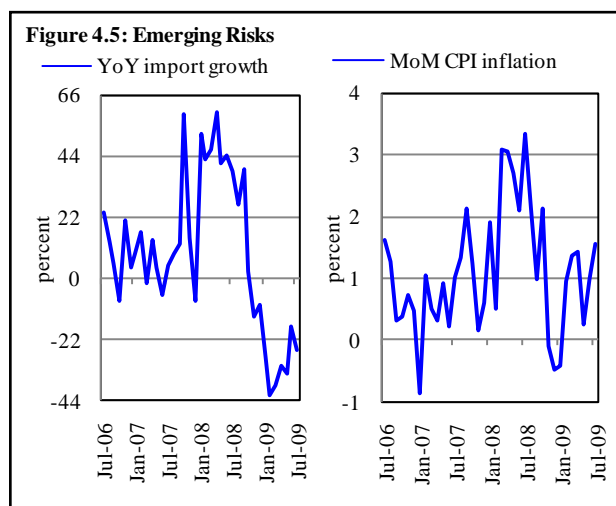
<sup>5</sup> HRI which constitute 23.4 percent of CPI or around 39.3 of CPI non-food inflation witnessed 18.3 percent YoY inflation in July 2009 compared with 18.9 percent in May 2009.

<sup>6</sup> Though the market rates increased towards the end of March 2009, this was mainly due to advance taxation payments and retirement of SBP budgetary borrowing. The market continued to anticipate downtrend in long term inflation as in PIB auction held on April 15, 2009, banks offered higher than targeted amount (i.e., Rs 49.3 billion against Rs 20 billion).

external flows), market interest rates also fell significantly ahead of the scheduled release of the Monetary Policy Statement on August 17, 2009.

The actual cut in the policy rate announced on August 17, 2009 was perhaps below market expectations. Indeed, the following risks to the recent recovery in macroeconomic stability largely constrained SBP's ability to aggressively reduce the policy rate.

1. The recent trends in month-over-month (MoM) inflation indicate that strong inflationary pressures are re-emerging (see **Figure 4.5**). Further, despite some decline in recent months, core inflation is still high. This suggests that underlying inflationary pressures are still significant. In fact, these underlying pressures may strengthen when the wage-price spiral stemming from the recent increase in salaries in the public sector would work through the economy.
2. Another risk is from imported inflation as international commodity prices have again started to show strength since CY09. This together with any further depreciation of rupee would put additional upward pressure on domestic prices.<sup>7</sup>
3. The risks emanating from external account imbalances are exacerbated by the likelihood of a small recovery in import growth in FY10. It may be noted that the deceleration in country's imports seems to have bottomed out as Q4-FY09 witnessed a slight YoY increase in imports and international commodity prices rebounded in the recent months (see **Figure 4.5**). At the same time, country's exports continued to slowdown. Further, there are concerns on Pakistan's ability to fund even smaller external deficits in the aftermath of the international financial crisis. The concerns on future path of financial flows become more relevant given the fact that the repayment of one of the sovereign bonds and other bilateral payments will start by end-FY10.
4. Finally, the weak fiscal position is also a concern. The need to increase spending on priority areas such as infrastructure development and post-conflict rehabilitation, together with the risk of slippages on revenue targets, raise risks to macroeconomic stability. Moreover, a limited fiscal space would constrain the government ability to absorb any commodity price shock.



The developments in macroeconomic indicators had implications for growth in monetary aggregates. In particular, the money supply growth dropped to 9.6 percent in FY09 from a robust growth of 15.3 percent the previous year.<sup>8</sup> The reduction in reserve money growth was far steeper as it fell from 22.3 percent in FY08 to 1.9 percent in FY09. This trend is different from the previous two years when the slowdown in M2 growth was accompanied by a sharp rise in reserve money. This change in trend in FY09 is largely explained by a sharp decline in government borrowings from SBP during this period.

<sup>7</sup> Prices of most of the Pakistan's import commodities continued to rise in FY09, except for a few significant commodities such as palm oil, POL and crude oil. But even here, the benefits of fall in the prices in dollar terms were offset by the substantial depreciation of the rupee.

<sup>8</sup> Resultantly, in terms of GDP the broad money reached to a lowest level (39.2 percent) in the last seven years.



Though the banking system in Pakistan remained largely insulated from the effect of global financial crisis, the build-up of macroeconomic imbalances and subsequent slowdown in economic growth posed a difficult business environment for banks.

The sharp increase in non-performing loans (NPLs) of the banking system has been one of the key concerns in FY09. The gross NPLs increased by Rs 156.6 billion whereas net NPLs that adjusts for provisioning,<sup>9</sup> rose by Rs 85.2 billion. On a positive note, a quarter-wise analysis of NPLs during FY09 shows that NPLs grew rapidly up to third quarter; after that growth in NPLs started to recede. This sharp rise in NPLs made banks more risk averse while lending to private sector. However, it may be noted that banks were ready to meet a substantial increase in financing demand of the public sector.

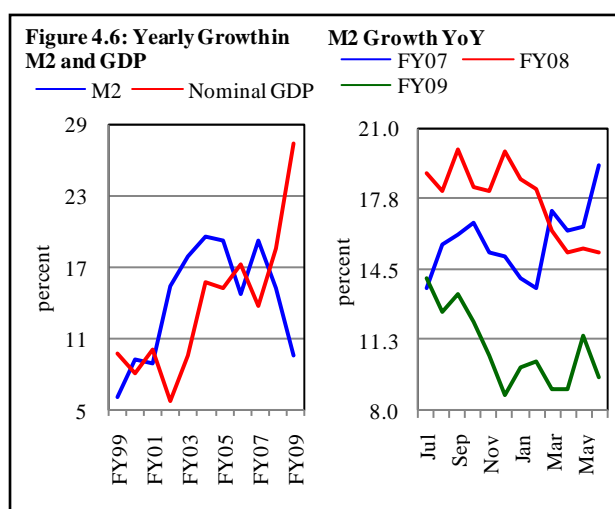
The growth in deposits of the banking system has been weakening since January 2008 in the wake of continued external account pressures and shift in public preference away from deposits due to high inflation. In October 2008, banks suffered a major shock as deposit base eroded by Rs 90 billion due to concerns on stability of local banks in view of global financial crisis. Though the banking system deposits showed some recovery in subsequent months, a number of developments suppressed their uptrend. For example, (1) slowdown in economic activities as evident from deceleration in private sector credit growth; (2) lower liquidity injections into banks following lesser budgetary borrowings from the central bank; (3) increased competition from National Saving Scheme (NSS); (4) perverse impact of SBP's liquidity support to banks, etc. This trend however changed in the last two months of FY09 when the deposit base sharply expanded by Rs 331.9 billion. Interestingly this was the period when banks were extending advances for procurement of agriculture commodities. In overall terms, deposit growth decelerated from 13.8 percent in FY08 to 7.8 percent in FY09.

Finally, in CY08, economic slowdown has also affected the banking activities. In particular, the banking system faced a sharp deceleration in private sector credit, weakening deposit growth, deterioration in asset quality, and losses in equity investments. Even in such difficult circumstances, banks remained adequately capitalized, and were able to post a profit of Rs 43 billion for 2008.

#### 4.2 Developments in Monetary Aggregates

Growth in broad monetary aggregate (M2) decelerated for yet another year in FY09; dropping to single digit growth for the first time in eight years. The deceleration in M2 growth during FY09 is particularly significant because:

- (1) The negative gap between growth in M2 and that of nominal GDP witnessed last year, grew very sharply during FY09 (see **Figure 4.6**). This, coupled with a decline in commodity prices in the international markets, has significantly improved the inflation trends of the country.
- (2) The YoY growth in M2 during FY09 has remained consistently below the previous year's level. In contrast, the YoY growth in M2 during FY08 exceeded previous year's growth for most part of the year (see **Figure 4.6**). Hence, the slowdown in M2 growth during FY09 possibly



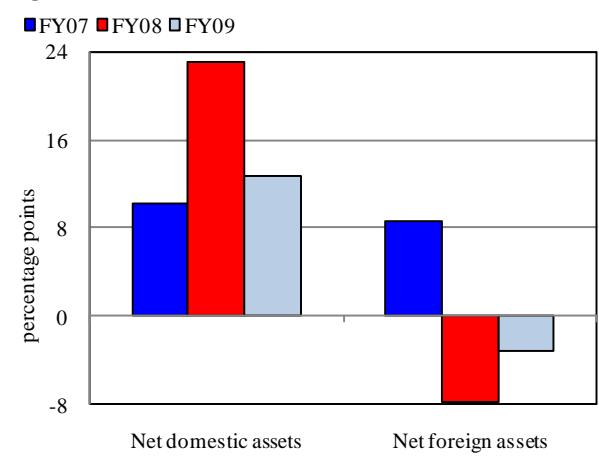
<sup>9</sup> Banks availed the benefit of 30 percent of Forced Sale value (FSV) of collateral while calculating provision requirement.

neutralized a major part of the monetary overhang created in the preceding year.

- (3) The deceleration in M2 growth to 9.6 percent by end-June 2009 was despite Rs 334.9 billion addition to the stock of monetary aggregate in the last two months of FY09. Indeed the cumulative growth in M2 was only 2.4 percent during Jul-Apr FY09. The large impetus to M2 growth April onward was caused by sudden expansion in reserve money and significant growth in banks' credit to PSEs and to the government for financing its budgetary as well as commodity operations. In particular, reserve money swelled by Rs 44.8 billion during May-Jun FY09 thereby raising the cumulative growth in the stock of reserve money to 1.9 percent by end June 2009 against a decline of 1.2 percent during Jul-Apr FY09. Similarly, advances by scheduled banks to PSEs and to the government expanded by Rs 213.5 billion in the last two months of the year against Rs 334.6 billion provided during Jul-Apr FY09.
- (4) While the decline in M2 growth during FY08 was driven exclusively by the negative contribution of NFA of the banking sector, the deceleration in the growth of broad monetary aggregate during FY09 is explained largely by the sharp deceleration in the growth of net domestic assets of the banking sector (see **Figure 4.7**).

A disaggregated analysis shows that the steep fall in the growth in net domestic assets of the banking system was accompanied by major changes in its composition. In particular, the growth in credit to private sector, which remained at 16.5 percent in FY08, collapsed to 0.7 percent during FY09. Similarly, budgetary borrowing from the banking sector was sharply contained during FY09, reflecting (1) a lower fiscal deficit; and (2) increased availability of funds from non-bank sources. More importantly, within the banking system, the share of budgetary borrowing from SBP was reduced to 69.3 percent against 75.8 percent in FY08, indicating active participation of the scheduled banks in the auction of government securities against a net retirement in the preceding year. Finally, scheduled banks' advances to the government for commodity operations and credit to PSEs rose strongly in FY09.

**Figure 4.7: Contribution to M2 Growth**



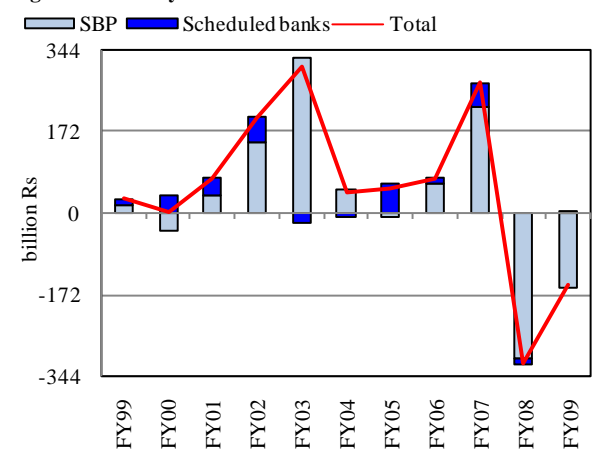
#### 4.2.1 Net Foreign Assets (NFA)

The stock of net foreign assets (NFA) of the banking sector contracted for yet another year in FY09. However, the depletion in net foreign assets of the banking sector fell to Rs 150.2 billion in FY09 compared to Rs 317.4 billion in FY08 (see **Table 4.1**).

Furthermore, in contrast to last year, the entire contraction was concentrated in SBP's NFA as scheduled banks witnessed an expansion of Rs 5.6 billion in their NFA (see **Figure 4.8**).

While the phenomenal decline in NFA of the banking sector in FY08 was caused by a

**Figure 4.8: Yearly NFA Flows**



sudden widening of the current account deficit as well as a deceleration in inflows in the financial account, the lower contraction of NFA during FY09 was mainly a result of significant decline in the current account deficit (as surplus in the financial account narrowed further).

Monthly trends show that, during the first five months of FY09, NFA stock had continued the steep fall witnessed in FY08, as deterioration in overall external account persisted.

Consequently, during Jul-Nov FY09, stock of NFA of the banking sector reduced by an exceptionally strong Rs 357.3 billion. However, sustained decline in current account deficit since November 2008 resulted in a corresponding improvement in the overall external account balance, with a surplus of US\$ 1.8 billion in the overall balance during the last two quarters of FY09. Following the upturn in Pakistan's overall external account balance, contraction in NFA of the banking sector eased gradually since December 2008 (see **Figure 4.9**). In fact, NFA of the banking system saw an expansion of Rs 141.7 billion during Dec-Jun FY09, resulting in a cumulative depletion of Rs 150.2 billion for the entire year.

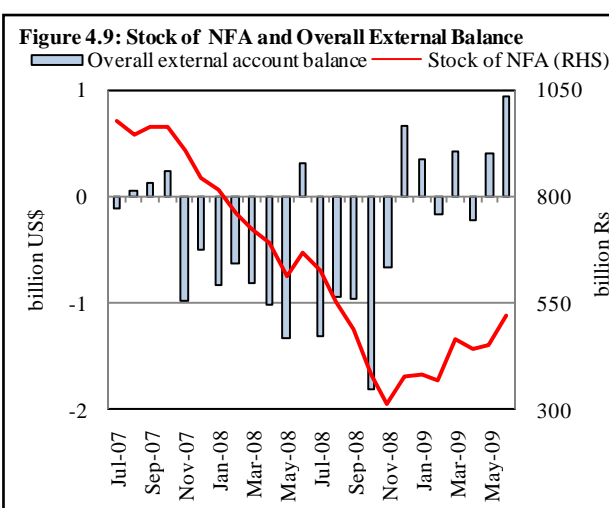
An analysis of foreign exchange flows reveals that the improvement in NFA of the banking system November onwards was a result of improved inflows in the public sector as well as lesser outflows by the private sector. While budgetary shortfall in external financing inflows reduced considerably, private sector foreign exchange outflows declined in the latter half of FY09 owing largely to smaller import payments. Specifically, a broad based decline of 10.5 percent in imports limited the trade deficit to US\$ 12.5 billion by end-June FY09 compared to US\$ 15.0 billion in FY08. This, coupled with relative improvement in services account and strong inflow of workers' remittances, considerably eased net foreign exchange outflow pressures during the year (see **Figure 4.10**).

**Table 4.1: Monetary Aggregates**

flows in billion Rupees, growth in percent

	Flows		Growth rate	
	FY08	FY09	FY08	FY09
M2	624.0	448.1	15.3	9.6
NFA	-317.4	-150.2	-32.2	-22.5
SBP	-308.0	-155.8	-39.1	-32.4
Scheduled banks	-9.4	5.6	-4.8	3.0
NDA	941.4	598.2	30.6	14.9
SBP	622.5	106.9	413.0	13.8
Scheduled banks	318.9	491.4	10.9	15.1
<i>of which</i>				
Government borrowings	583.8	524.0	63.0	34.7
For budgetary support	554.6	316.4	68.5	23.2
SBP	688.7	130.9	199.6	12.7
Scheduled banks	-134.2	185.5	-28.9	56.1
Commodity operations	28.7	209.0	29.1	164.3
Non-government sector	441.7	171.9	17.1	5.7
Credit to private sector	408.4	18.9	16.5	0.7
Credit to PSEs	33.0	152.6	40.9	134.3
Other items (net)	-84.1	-97.6	19.9	19.3
<i>Memorandum item</i>				
Total domestic credit <sup>1</sup>	1,025.5	695.8	29.3	15.4
Reserve money	269.7	27.5	22.3	1.9

<sup>1</sup>. Sum of government and non-government credit.





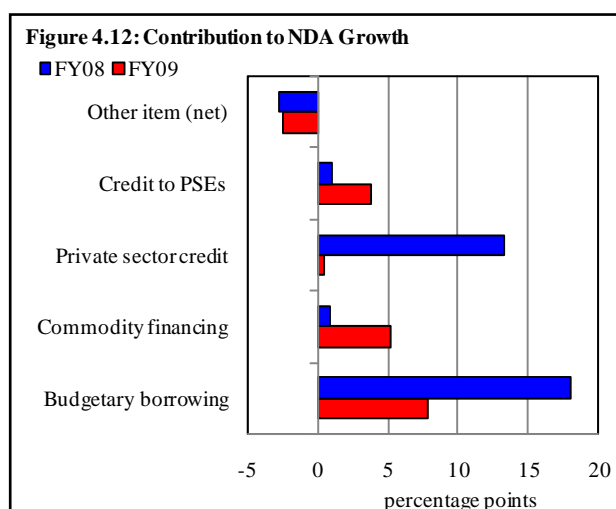
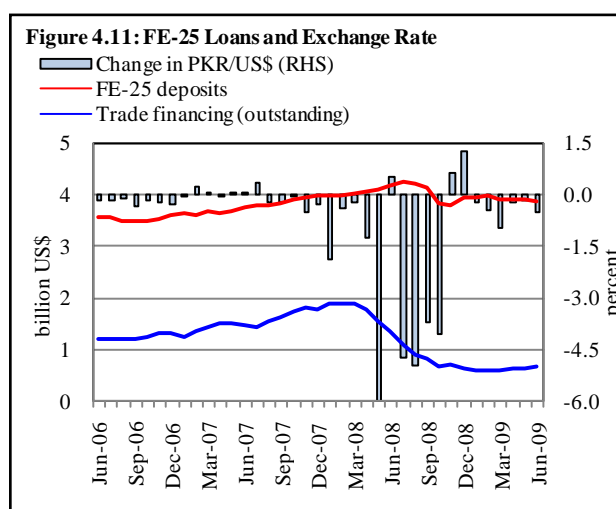
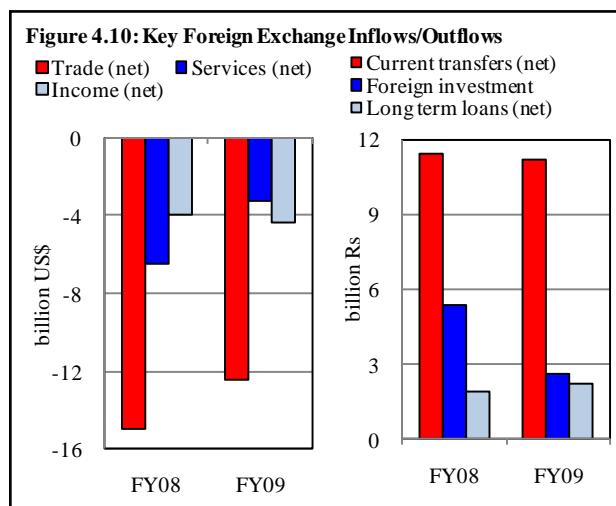
NFA of the scheduled banks registered a net expansion of Rs 5.6 billion during FY09 in sharp contrast to a decline of Rs 9.4 billion in the preceding year. Importantly, this reversal was despite the decision to shift foreign exchange requirements for payment of oil imports to the interbank market. The reversal in the growth of scheduled banks' NFA is mainly explained by strong rise in workers' remittances and substantial retirement of foreign currency loans by the business sector following large depreciation of rupee against major currencies during the first five months of FY09. The sharp rupee depreciation made foreign currency financing costlier resulting into strong net retirement of FE-25 trade loans during the initial months of FY09, and a corresponding rise in foreign assets of scheduled banks. With relative calm in foreign exchange market during rest of the year, the decline in the stock of FE-25 trade related loans was largely contained (see **Figure 4.11**).

#### 4.2.2 Net Domestic Assets

Growth in net domestic assets (NDA) of the banking sector slowed sharply to 14.9 percent during FY09 compared to 30.6 percent in FY08. This was because of large declines in the contribution to the stock of NDA by budgetary borrowing and private sector credit. While credit to public sector enterprises (PSEs) and financing for commodity operations expanded significantly, these were not large enough to arrest the deceleration in growth in NDA of the banking sector (see **Figure 4.12**).

#### Government borrowings for budgetary support

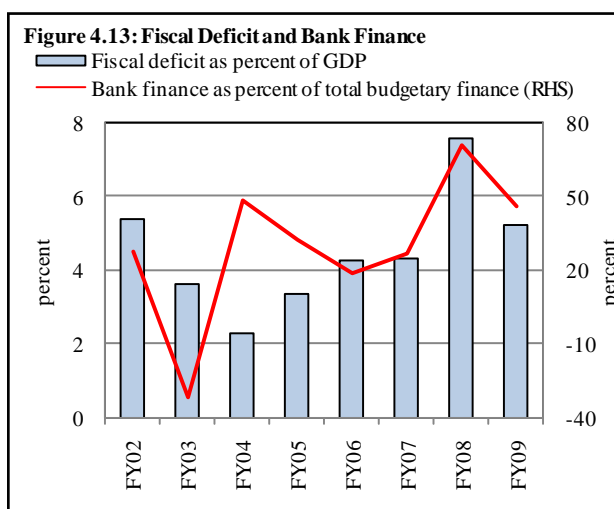
Budgetary borrowing from the banking system, during FY09, was considerably low following significant decline in fiscal deficit during the year and improved non-bank financing inflows, especially from NSS. As a result, net budgetary borrowing from the banking system increased by Rs 316.4 billion during FY09 compared with Rs 554.6 billion in FY08. Yet, bank borrowing constitutes nearly half of total budgetary financing in FY09 (see **Figure 4.13**).



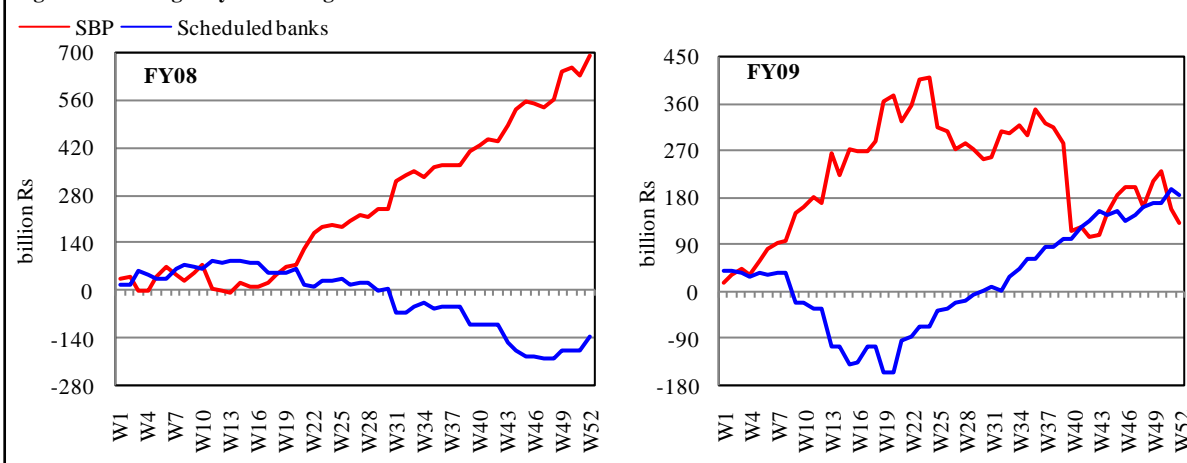
More important for the monetary policy during FY09 was the welcome shift in the composition of budgetary borrowing from the banking sector. The expansionary fiscal stance of the government in FY08 together with a shortfall in external financing and scheduled banks' reduced interest in government paper had caused high budgetary borrowings from the central bank. Indeed, the stock of outstanding MRTBs more than doubled during FY08. Realizing the adverse implications of heavy reliance on central bank borrowing for the macro-economy and effective monetary management, the macroeconomic stabilization program initiated under Stand-By Arrangement included specific conditionalities on quantitative ceilings on budgetary borrowing from SBP. As a result, budgetary borrowing from SBP of Rs 130.9 billion in FY09 was lower than Rs 668.7 billion in FY08.

Notwithstanding the decline in budgetary borrowing from SBP by end-June 2009, disaggregated data show an uptrend during the first five months of the year. It was only after the inception of the macroeconomic stabilization program in November 2008 that the government borrowing from SBP started tapering off. This was made possible by; (1) improved external financing inflows following Stand-By Arrangement; (2) scheduled banks' renewed interest in government paper; and (3) larger than budgeted inflows in NSS.

As a result of banks' willingness to finance budget deficit, the government was able to raise Rs 185.5 billion from the scheduled banks in FY09 against net retirement of Rs 134.2 billion in FY08. Consequently, scheduled banks financed major portion of government's budgetary borrowing from the banking system in FY09 (see **Figure 4.14**).



**Figure 4.14: Budgetary Borrowings**



Banks' greater desire to invest in government papers was mainly due to the fact that banks; (1) were expecting regular cuts in interest rates on government securities as inflation trends improved and external financing inflows increased; and (2) shied away from credit to the private sector due to perceived higher risks consequent to rising non-performing loans.

Additionally, demand for credit from the private sector shrank owing to slowdown in domestic economic activity exacerbated by power shortages, and decline in external demand for exports due to global recession. As a result, the increase in credit to private sector collapsed to only Rs 18.9 billion in FY09 compared to Rs 408.4 billion in FY08.

### Commodity Financing

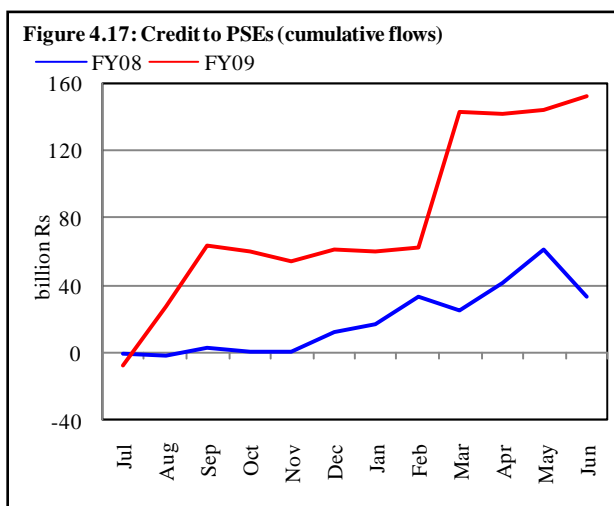
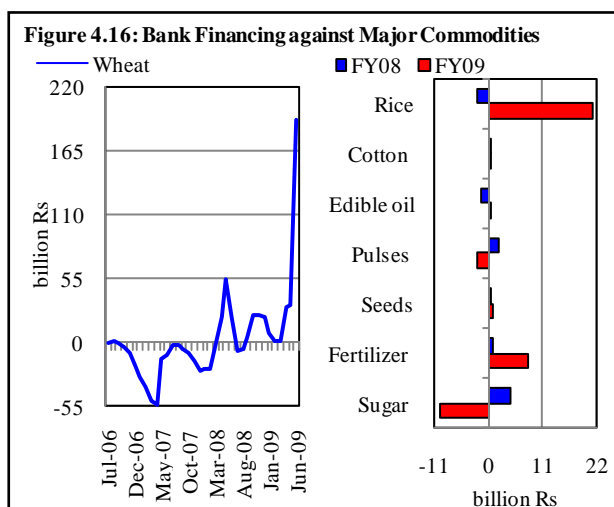
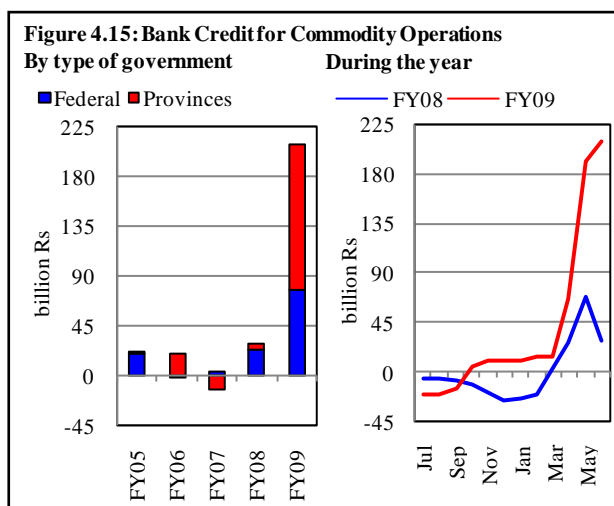
Credit to the government for commodity operations recorded an exceptional rise during FY09. Specifically, banks' advances to the government for commodity operations reached Rs 209.0 billion during FY09 compared to Rs 28.7 billion in FY08. Though contributed by both tiers of the government, the major part of the sharp increase came from commodity procurement by the provinces.

Monthly analysis show that while bank financing for commodity operations remained higher than the previous year since October 2008, the steep rise in commodity financing during FY09 was largely concentrated in the last quarter of the year (see **Figure 4.15**).

Commodity-wise breakup of banks' financing to the government reveals that procurement of wheat dominated commodity operations during the year. Thus while the October-2008 rise in commodity financing was caused by bank credit for wheat import, the sudden jump towards the end of the year relates mainly to domestic procurement of wheat. It is interesting to note that while the minimum guaranteed price of wheat was 52 percent higher than that of last year, the government procured over 9 million tons against the initial target of 6.5 million tons. Additionally, larger procurement of rice and fertilizer compared to other commodities contributed to the rise in commodity financing during FY09 (see **Figure 4.16**).

### Credit to PSEs

Growth in the credit to the PSEs increased sharply during most of FY09, mainly due to credit requirements of the energy sector on account of delays in settlement of oil price differential claims on the government. Specifically, credit to PSEs rose to Rs 152.6 billion during FY09 compared to Rs 33.0



billion last year (see **Figure 4.17**).

A further analysis reveals the progress of credit to PSEs in two sharp spikes. The rise in credit extended to PSEs during the initial months of FY09 apparently relates to credit demand by a public sector oil marketing company and a refinery. Non-settlement of price differential claims by the government and evolution of circular debt kept credit requirement of the PSEs at higher levels. The steep rise in credit to PSEs in March 2009 was however interesting given the fact that the government arranged partial settlement of circular debt through issuance of government backed term finance certificates, which was meant to offset part of commercial banks' claim on public sector enterprises (see **Box 4.2**). Apparently, a few PSEs, which had previously exhausted their prescribed credit limits with banks, have availed the cushion for fresh lending after settlement of part of their outstanding bank credit.

#### Box 4.2 Inter-Corporate Debt and Its Implications

The inter-corporate debt<sup>10</sup> actually emerged in FY08 when the government decided to provide fuel-related subsidy to domestic consumers following an unprecedented hike in international oil prices (see **Figure 4.2.1**). Given the weak fiscal position, government was facing difficulties in settling the price differential<sup>11</sup> claims with Oil Marketing Companies (OMCs) (see **Figure 4.2.2**).<sup>12</sup> Meanwhile, government was also subsidizing the electricity tariff rate in FY08 which generated price differential claims with Independent Power Producing (IPPs) companies.

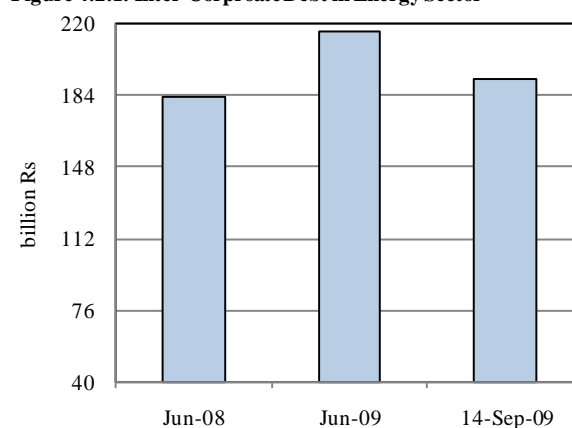
The circular debt problem during most of FY08 was mainly on account of oil price subsidies to domestic consumers. Subsidies relating to electricity tariffs were largely covered by the budgetary allocations.

During FY09, though the government had removed the subsidy on oil prices, the stock of circular debt continued to grow as the year progressed. Indeed, the continued subsidies on energy and delays in settlement of electricity tariff claims from FATA caused liquidity shortages in a state owned power company, which in turn led to buildup of large payables (both under fixed and variable tariff) to; (1) IPPs for the electricity purchased; and (2) fuel distribution companies for furnace oil and natural gas purchase.<sup>13</sup> Resultantly, a chain of unpaid claims among different entities (such as IPPs, OMCs, public sector gas distribution companies and refineries) in the energy sector has grown in FY09.

As the circular debt situation unfolded in FY09, this had two significant implications:

1. **Contraction in industrial productivity in a number of industries as energy slippages intensified.** The liquidity constraints in refineries and OMCs, resulted mainly from circular debt issue, did not allow them to import sufficient crude oil necessary to operate at their usual capacity. As a result, a number of refineries and power industries were forced to produce below capacity throughout the year (see **Table 4.2.1**).

**Figure 4.2.1: Inter-Corporate Debt in Energy Sector\***



\* Based on information collected from selected corporates

**Table 4.2.1: Impact of Circular Debt**

	Capacity utilization		Crude oil imports*
	Refineries	Power	
FY08	89.5	56.3	3.1
FY09	81.9	35.5	-7.0

Source: Pakistan Energy Yearbook 2008 for refineries and Economic Survey 2008 for Power

\* Quantum growth

<sup>10</sup> Inter-corporate debt is a situation where a company withheld payments to its suppliers thereby resulting into a situation where suppliers also stop making payments to their creditors.

<sup>11</sup> Government was supposed to compensate OMCs for the differential between the international oil prices and the domestic consumer prices of petroleum products.

<sup>12</sup> As a result, few OMCs had to borrow from the banking system (against government guarantees) in FY08; however, these entities were able to retire the banks' obligation by end-June 2008 in the wake of partial settlement of differential claims by government.

<sup>13</sup> Under the Power Purchase Agreement, power purchaser is liable to pay two components of tariff to the electricity generating companies, i.e., fixed and variable energy component.

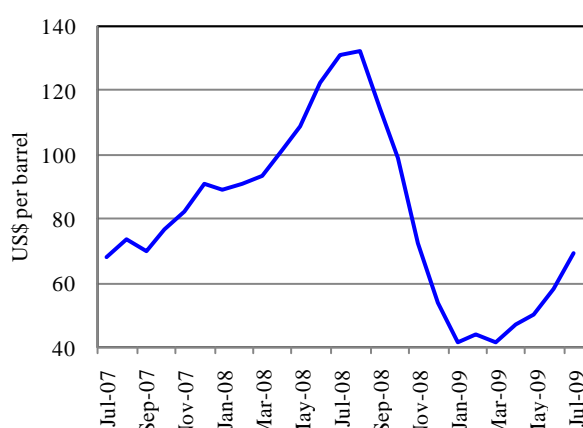
2. **High banks' exposure on energy and power entities as demand for banks' finance increased.** The delays in the settlement of differential claims with government and the utilities forced some of the corporates to obtain short-term bridge finance from banks. Thus, demand for banks' finance increased drastically during early months of FY09. This has not only caused immense pressures on banks' liquidity but also increased banks' exposures to these entities (see **Figure 4.2.3**). As the magnitude of exposure got closed to the prescribed limits; some banks became reluctant to extend incremental loans to these entities in H2-FY09.

Moreover, anecdotal evidence suggests that few companies even stopped payments to their creditors as their advances limits with banks were exhausted. Interestingly, although the advances to energy and petroleum sector have expanded robustly in FY09, this does not contribute significantly in the outstanding stock of non-performing loans (NPLs) in this sector. The explanation is that the large entities involved in the circular debt have short-term running finance lines with banks which were either rolled over, or in some cases, settled by these entities.<sup>14</sup> It may, however, be noted that a few small IPPs reported problems in servicing their banks' obligation and even recorded NPLs in the recent months. This situation arose mainly due to discontinuation of fixed tariff payments by a state owned power company in previous years which had grown in sizeable amount in FY09.

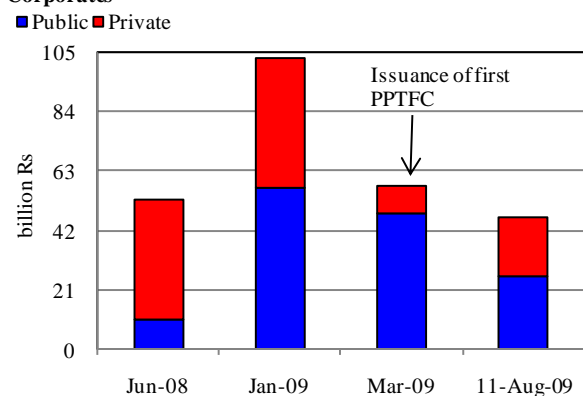
Given the severity of circular debt issue and the government commitment under SBA program to eliminate this problem, several measures have been taken in 2009. For example, the government has agreed to a gradual reduction in energy-related subsidy. For instance, electricity tariff for industrial consumers increased by 23.8 percent (12-m moving average) in FY09 compared with 14.9 percent in FY08.

Further government has issued Privately Placed TFCs (against government guarantee) twice in 2009, for a cumulative amount of Rs 175 billion. Specifically, PEPCO issued government backed PPTFCs worth Rs 80 billion at a rate of KIBOR plus 1.75 basis points in March 2009.<sup>15</sup> This issuance was meant to reduce significant part of banks' claims on public and private sector enterprises and shift the same to government sector through a debt swap.<sup>16</sup> Consequently, reducing banks' obligation on various entities and increasing their investments in PPTFCs. Though the issuance of PPTFCs had no immediate cash impact on banks' liquidity, it was observed that a few public sector enterprises had acquired more advances from banks to pay their due taxes as they got cushion for fresh borrowing. Similarly, in September 2009 another PPTFCs of Rs 85 billion was issued by newly established power holding company against the guarantee of government at a price of KIBOR plus 200 basis points.<sup>17</sup> In terms of cash impact, out of total issuance amount, Rs 40 billion is the cash injection and the remaining of Rs 44.9 billion is the settlement of banks' existing exposure on various entities in the energy chain.

**Figure 4.2.2: International Oil Prices**



**Figure 4.2.3: Banks' Outstanding Exposure on Selected Corporates\***



\* Includes selected public and private sector enterprises

<sup>14</sup> It is observed that few corporates paid their part of banks' advances to avoid rising financial charges.

<sup>15</sup> The maturity period of PPTFCs is five years.

<sup>16</sup> Banks' investments in PPTFCs had an offsetting impact on short-term banks' advances extended to the private sector (particularly the power sector) and a few public sector enterprises.

<sup>17</sup> The PPTFCs have five years maturity, inclusive of grace period of 24 months. The PPTFCs will be listed into CDC and may be considered in the list of approved securities for investment by public sector institutional investors (such as pension funds, gratuity funds, etc).



To sum up, the efforts made by the government to resolve circular debt paid dividend as the stock of circular debt has reduced significantly from Jun 2009 level; though still remains sizeable. Moreover, prompt adjustment in tariff differential subsidy is much desirable to attain the significant reduction in inter-corporate debt in the energy sector.

### Private Sector Credit (net)

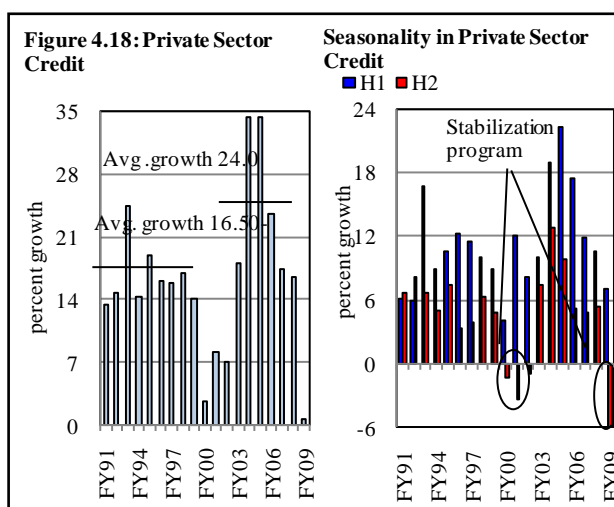
The growth in private sector credit fell sharply in FY09 to just 0.7 percent. This was in stark contrast to 16.5 percent growth recorded in the previous year and average growth of around 24 percent during the last six years ending in FY08 (see **Figure 4.18**).

Monthly trend shows a gradual slowdown in credit growth since November 2008. The unusual development however was the sudden collapse of credit off-take during H2-FY09. Though the second-half of each year generally coincides with decline in net credit expansion, the decline in credit during H2-FY09 was exceptional as it contracted by 6.0 percent (see **Figure 4.18**).

More worrying is the fact that this slowdown in industrial credit was broad-based as large number of industries has witnessed substantial retirement in credit during H2-FY09 (see **Table 4.2**). Further, the credit slowdown during H2-FY09 is evident in the incremental demand for both, running finance and fixed investment loans (see **Figure 4.19**).

Nonetheless, demand for fixed investment loans remained stronger than that of running finance (see **Figure 4.19**). The resilience in demand for long-term loans came from power, fertilizer and construction sectors. Power sector, in particular, witnessed remarkable growth in long-term loans mainly on account of disbursement committed under power policy of 2002. But fresh disbursement under power policy 2002 may not increase in months ahead as most of the companies have exhausted their sanctioned limits with banks in FY09.

A further analysis suggests that a combination of various factors has led to this sluggish growth in private sector credit. For example,

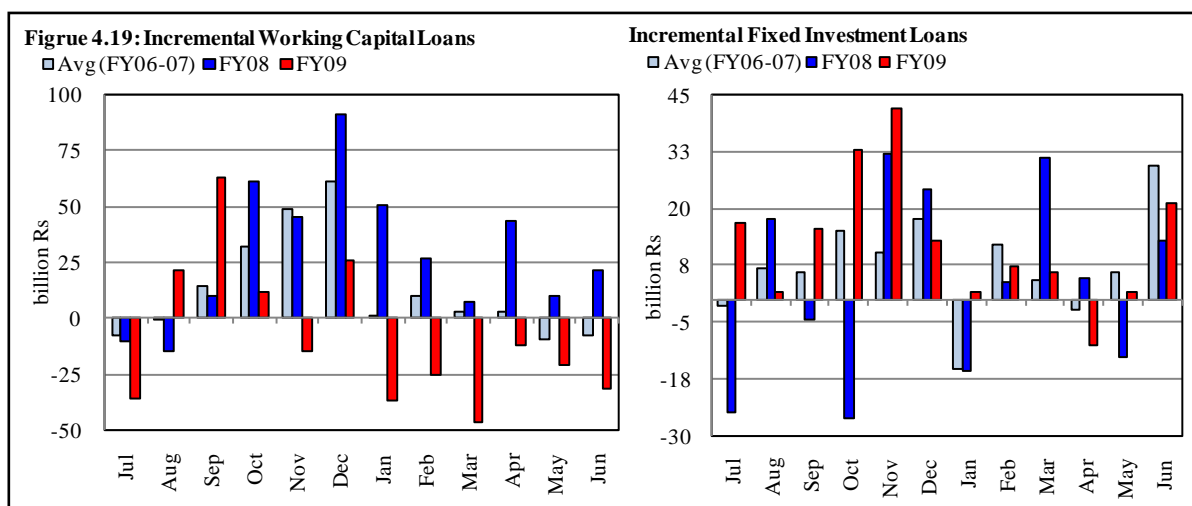


**Table 4.2: Most of the Sectors Witnessed Fall in Advances Growth in H2**

percent	FY09	
	H1	H2
<b>Sectors showing fall</b>		
Agriculture	6.9	-4.5
Mining & quarrying	3.1	-6.5
Food products & beverages	10.6	-4.2
Textile	5.1	-11.0
Refined petroleum products	26.1	-7.4
Fertilizer	61.4	-13.6
Cement	12.2	-0.8
machinery and equipment	1.6	-20.6
Construction	-1.7	-9.3
Commerce & trade	3.5	-9.6
Transport & communications	6.9	-2.9
Other business	1.9	-2.6
<b>Sectors showing deceleration</b>		
Basic metal	4.1	3.5
Electrical machinery & apparatus	25.3	2.7
Power	33.0	4.6

#### 1. The slowdown in credit growth coincides with deceleration in economic growth

The effective and coordinated implementation of stabilization policies (monetary, exchange rate and fiscal policies) aiming at addressing the severe macroeconomic imbalances faced by the economy, led to slowing economy. In this backdrop some deceleration in credit growth was expected.



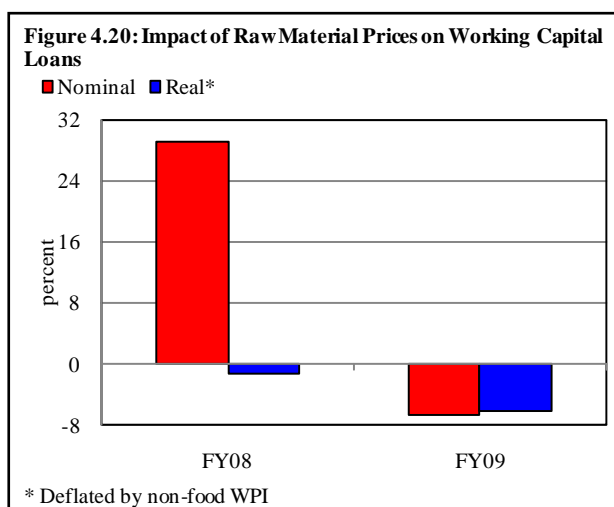
Interestingly, a net retirement in credit demand of lesser magnitude was also observed in H2-FY00 when the country implemented stabilization program (see **Figure 4.18**).<sup>18</sup>

It may be pointed out that monetary tightening has been in place since April 2005 but a desirable moderation in aggregate demand could not be achieved. The situation was distinctive in FY09 as the monetary policy received a key support from the fiscal policy. In particular, reduction in fiscal deficit and lesser reliance on central bank financing helped the monetary policy in achieving its objectives. At the same time, a cut in development spending made a direct impact on demand for credit, particularly in construction, and related industries, such as cement and basic metals.

## 2. Global and industry specific factors further dragged down the demand for credit

A combination of global and domestic industry-specific shocks, which kept the economy under stress, further weakened the demand for credit. These mainly include following:

- It was the steep rise in raw material prices last year that helped in partly explaining the resilience seen in private sector credit demand during FY08 (see **Figure 4.20**). However during FY09, prices of raw material (such as palm oil, cotton and iron & steel) in domestic and international markets have fallen sharply, thereby lowering the demand for credit as well.<sup>19</sup>
- The decline in country's trade volume during FY09 further weakened the credit demand. While the stabilization policies curtailed the growth in country's imports, severe recession in global markets led to a decline in export volumes. Anecdotal evidences indicate a build-up of inventories in the textile sector following delays in the settlement



<sup>18</sup> Country had signed two more stabilization program in 1994 and 1997; however, those were not completed successfully.

<sup>19</sup> It may, however, be noted that a part of fall in raw material prices, international prices in particular, was offset by rupee depreciation against US\$;

- of export orders by trading partners. In such circumstances, incremental demand for trade financing weakened sharply during the year.
- (c) While the demand for credit by some industries was responding to tight monetary policy,<sup>20</sup> a number of industries were facing decline in their productivity given the energy slippages, structural problems, and security concerns. This in turn led to lowering of fresh credit demand.
- (d) The credit demand during FY08 was partly overstated as some of the corporates in power and oil marketing sector resorted to financing from banks following delays in the settlement of their claim by oil price differential claims.<sup>21</sup> In March 2009, some of the IPPs settled a part of the bridge financing using resources mobilized through TFC issuances.<sup>22,23</sup> This retirement of loan depressed the overall growth in credit to private sector.

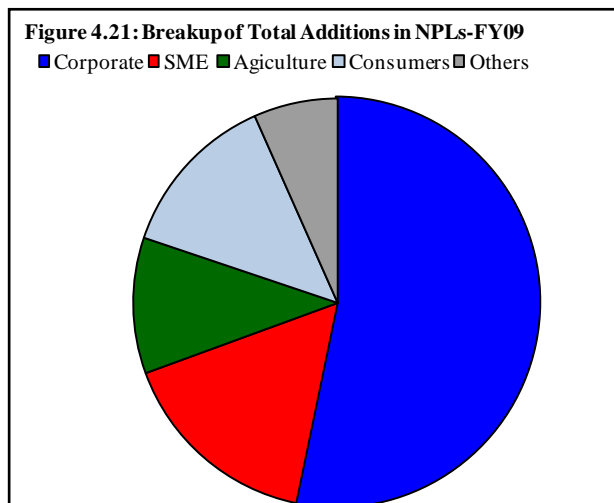
### 3. Banks were more cautious while lending

Not only that the credit demand from the private sector decelerated during FY09, banks were also hesitant while lending. There were several factors which contributed to this change in lending behavior of banks. For example,

#### (a) Rising NPLs affected the incremental bank credit

The growing concerns on credit quality compelled banks to become more cautious. The recent steep uptrend in total addition in non-performing loans (NPLs), particularly in the corporate segment, is quite worrisome (see **Figure 4.21**).<sup>24</sup> It may be noted that the repayment capacity of corporates came under stress due to rising financial charges and narrowing of their profits. While monetary tightening in recent years largely explains the former, the latter is owing to domestic and global economic slowdown that had adversely affected sales of corporates. The stress on corporate liquidity magnified as a few international buyers were not able to settle their payments on time.

The credit quality concerns are visible in most of the banks as by March 2009, number of commercial banks recording net NPL to loans ratio above 10 percent increased to 12 compared to only 5 banks as of March 2008 (see **Figure 4.22**).<sup>25</sup> The sector-wise NPLs indicates that sharp increase in net NPLs to



<sup>20</sup> The monetary tightening led to higher financial expenses for corporates. This, together with a decline in their net worth, resulted in lowering of their demand for credit. This suggests that the interest rate channel of the monetary policy transmission mechanism was effective in FY09.

<sup>21</sup> This temporary financing was aimed to smooth their cash flows.

<sup>22</sup> Indeed, in the initial months of FY09 a few Independent Power Projects (IPPs) and Oil Marketing Companies (OMCs) increased their borrowings from the banking system as those corporates were facing problems in their cash flows following delay in settlement of furnace oil and natural gas claims with WAPDA.

<sup>23</sup> It must be noted here that no cash transfer was involved in this transaction and only book adjustments were made in the accounts of government and private sector. For detail see Box 4.2 on **Inter-Corporate Debt and Its Implications**.

<sup>24</sup> Total addition in NPLs during FY09 was Rs 220.5 billion compared with Rs 130.6 billion in FY08; similar breakup of total addition in NPLs is not available for comparable period.

<sup>25</sup> Though the increase in banks' NPLs limited their lending activity to the private sector, the resilience of banking industry remained intact. This was particularly apparent in the capital adequacy ratio which stands at 13.3 percent by end-Mar-09 (for detail see financial indicators of the banking industry).

loans ratio of the banking industry came from textile sector; recording 18.8 percent in June 2009 as against 12.6 percent in June 2008. Thus, during FY09 most of the banks were reluctant to extend credit to the textile sector.

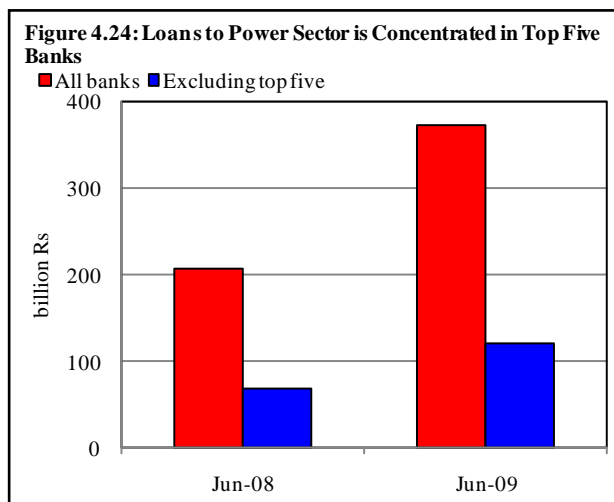
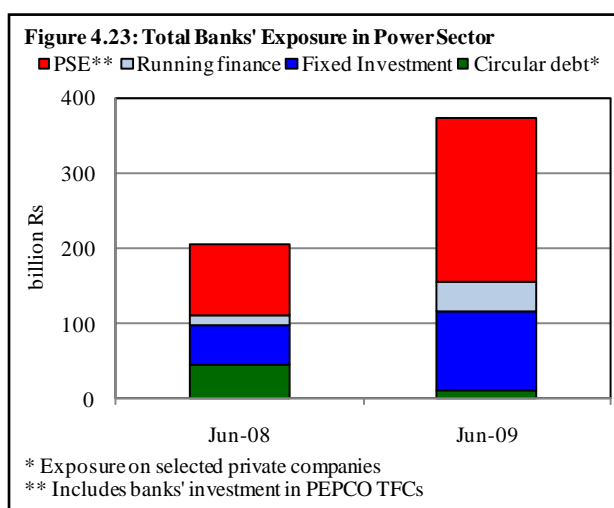
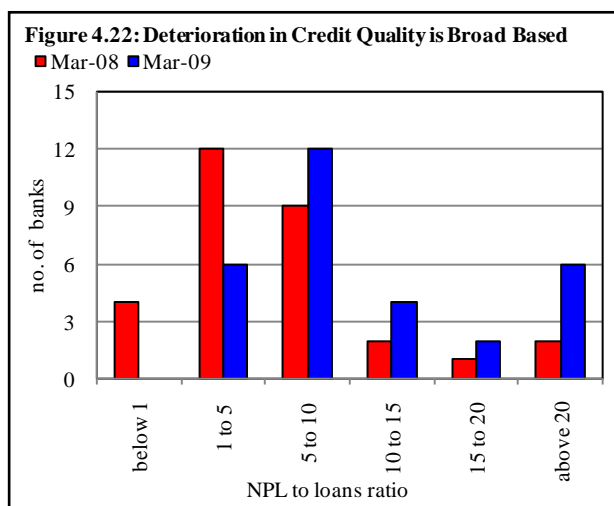
*(b) Constrained in the wake of significant Sectoral Exposure*

Some of the banks were constrained by exposure limits while lending, particularly to the power sector (see **Figure 4.23**). The power sector had recorded sizeable financing for different projects committed under power policy of 2002. Besides fixed investment demand, running finance requirements from a few power companies increased in response

to inter-corporate debt developed in the power and oil marketing sector. Though, government-guaranteed TFCs were issued worth Rs 80 billion in March 2009 and few power companies have settled some of their loans obligations with the banks, this transaction did not reduce the overall exposure of banking industry on power sector.<sup>26</sup>

Further, a bank-wise analysis suggests that the loan extended to the power sector (both public and private) during FY09 was concentrated in top five banks (see **Figure 4.24**). Given that (1) these banks traditionally have a considerably large share in overall credit extended to private sector; (2) banks were reluctant to increase their exposure in textile sector mainly because of rising NPLs; and (3) credit limits on power sector are almost completely utilized, these banks can only expand their credit by taking exposure in new areas.

Since banks' exposure in the power sector is already sizeable and growing further (as circular debt has not been resolved yet and a few commitments of IPPs are in the pipeline), banks are now reluctant to finance any new project in the power sector, including the rental power projects.<sup>27</sup> Further, being a new



<sup>26</sup> In fact, banks exposure on the power sector shifted from private to the government as investment in TFC have an offsetting impact on short-term banks' advances extended to the private sector (particularly the power sector) and a few public sector enterprises.

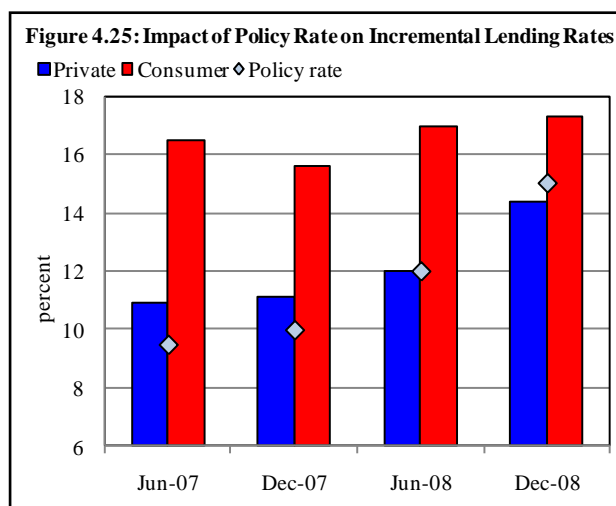
<sup>27</sup> The government intends to install rental power project to resolve power crisis.

project, there are uncertainties regarding their future cash flows.<sup>28</sup> This raises concerns for banks and therefore a few banks have sought government guarantee for these projects.

Apart from NPLs and sectoral exposure, liquidity constraints in the inter-bank market also affected the lending decisions of a few banks. The liquidity crunch of October 2008 was eased to an extent due to a series of measures taken by SBP. Though SBP measures partly diluted the impact of tight policy stance, these were needed to ensure availability of credit to the private sector. Thus, despite the fact that liquidity strain was broad-based,<sup>29</sup> the private sector credit continued to grow at 12.8 percent on YoY basis by December 2008.

Indeed December 2008 onwards the private sector credit started to plunge despite the fact that inter-bank money market remained fairly liquid as the overnight repo rate was significantly below the policy rate.

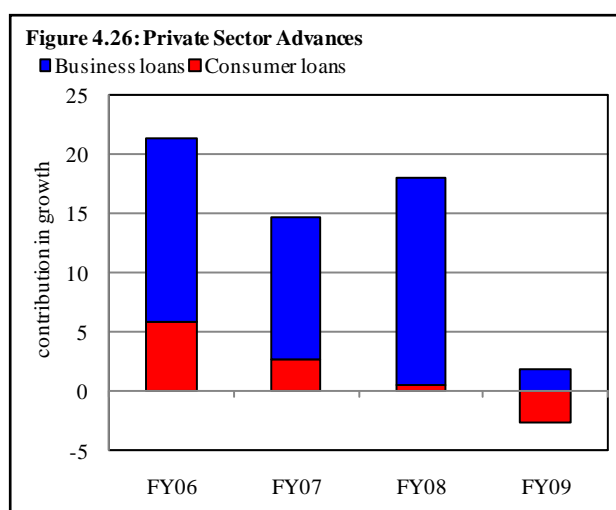
The continued tight monetary policy increase in sectoral credit risk and liquidity strains in the banking industry translated into higher lending rate, particularly in H2-FY09. It may, however, be noted here that the impact of above mentioned factors was more evident on business sector lending rates as rise in lending rates on consumer finance is not significant (see **Figure 4.25**).<sup>30</sup> Nonetheless, consumer credit which had been slowing down from the preceding two years, declined more steeply in FY09, recording YoY decline of 18.9 percent. This sharp decline also depressed the overall growth in private sector credit.



Finally, during FY09, availability of financing from non-bank sources was also limited. Unlike previous year when a part of the loan demand was met from NBFIs (including mutual funds and other non-bank financial institutions investment in corporate debt papers) and foreign inflows,<sup>31</sup> credit supplies through these sources were lower. This was mainly because of continued pressure on domestic capital market, poor performance of mutual funds following a freeze on issuance and redemption of open-end mutual funds in early October 2008.

### Sectoral Analysis

Private sector advances dropped sharply by 1.2 percent in connection with economic



<sup>28</sup> Banks are now giving more weight to cash flows of borrowers.

<sup>29</sup> By November 2008, a large number of banks were having excess liquidity ratio below 4 percent. Further during Oct-Dec 2008 period, number of visits at SBP discount window swelled to 57 compared to 28 visits during Jul-Sep 2008.

<sup>30</sup> The weighted average lending rates was 14.3 percent by end-June 2009.

<sup>31</sup> A few corporates issued Sukuk and TFCs to (1) refinance expensive banks' advance, and (2) fund expansion related activities, for example in sectors such as chemical, fertilizer, real estate, shipyard, etc.



downturn in FY09-first time in last six years (see **Table 4.3**). This decline entirely came from consumer loans (see **Figure 4.26**). While a part of fall in consumer loans was anticipated, in the wake of continued deceleration seen from the preceding two years, business sector advances slowdown markedly (see **Figure 4.26**). A monthly trend shows a slowdown in advances since October 2008; but a large part of this slowdown was concentrated in H2-FY09. Although the deceleration in H2 was a common factor in preceding three years, the decline in growth during H2-FY09 was stronger; even a number of industries which had seen growth in Jul-Mar FY09 fell sharply thereafter (see **Table 4.3**).

A part of this sluggish demand for advances is attributed to stabilization efforts initiated since November 2008. Besides, a confluence of domestic and external impediments further contributed to weak credit demand. For instance, acute power shortages, structural issues in industries, worsening security situation and rising production cost has contained the production activity in a number of industries which in turn lowered the incremental demand for banks' advances. The impact of these adverse developments at domestic front was complemented by the continued slump in international demand for country's export and fall in raw material prices of few commodities.<sup>32</sup> The latter factor also suggests that the FY09 advances slowdown is exaggerated to an extent by a higher base of last year.

When viewed purpose-wise, most of the fall in advances growth was observed in working capital loans which more than diluted the resilience seen in demand for long-term loans in FY09. Though total working capital loans recorded a net retirement in FY09, demand for trade finance increased slightly by 2.5 percent –but was still significantly lower (i.e., 19.4 percentage points) than in FY08. The weakness was because of deceleration in country's trade volumes in FY09.

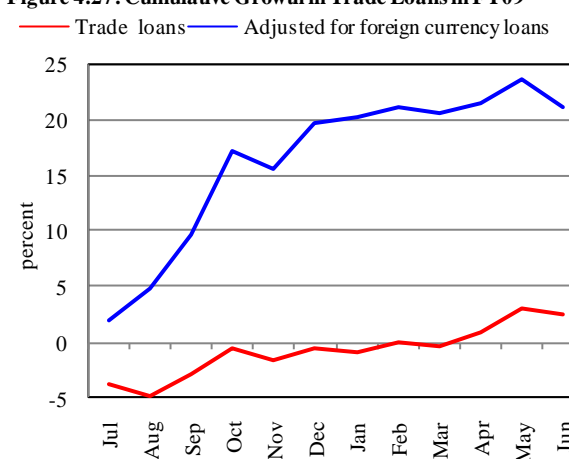
An analysis of trade loans shows that in the initial few months of FY09, sharp depreciation of rupee against US dollar made foreign currency loans more expensive for traders resulting into net retirement of foreign currency loans. In fact, trade loans adjusted for foreign currency component depict a strong

**Table 4.3: Business Sector Advances**  
growth in percent

	FY08	FY09		
		Jul-Jun	Jul-Mar	Apr-Jun
<b>Private Sector</b>	<b>18.3</b>	<b>-1.2</b>	<b>1.0</b>	<b>-2.2</b>
<b>Consumer Sector</b>	<b>3.1</b>	<b>-18.9</b>	<b>-15.8</b>	<b>-3.8</b>
<b>Business sector</b>	<b>22.4</b>	<b>2.3</b>	<b>4.8</b>	<b>-2.3</b>
A. Agriculture	8.2	2.1	5.4	-3.1
B. Mining & Quarrying	69.5	-3.6	-7.6	4.3
C. Manufacturer	20.0	2.3	7.3	-4.7
a. Food products & beverages	13.3	5.9	17.5	-9.8
b. Textile	17.8	-6.5	0.3	-6.7
c. Refined petroleum products	84.3	16.8	28.9	-9.4
d. Fertilizer	71.4	39.4	45.3	-4.1
e. Machinery & equipment	20.3	-19.3	-3.9	-16.1
f. Cement	-1.0	11.3	10.1	1.1
g. Electrical machinery & apparatus	70.5	28.8	22.8	4.8
h. Basic Metal	34.8	7.7	-9.0	18.3
D. Construction	45.0	-10.9	-8.6	-2.5
E. Commerce & trade	20.1	-6.5	-3.0	-3.6
F. Transport & communications	17.0	3.8	2.6	1.2
G. Power	161.9	39.1	20.0	15.9
H. Others business*	19.5	-0.7	-2.1	1.4

\* Mainly includes loans to stock brokers

**Figure 4.27: Cumulative Growth in Trade Loans in FY09**



<sup>32</sup> The contribution of the working capital loans in overall slowdown in advances was 5.1 percent in FY09 compared a robust contribution of 16.7 percent last year.

growth of 17.4 percent in Jul-Oct FY09 (see **Figure 4.27**). Moreover, to avoid exchange rate losses most of the exporters had substituted their FE-25 outstanding stock with EFS.<sup>33</sup>

In the following months of FY09, weakening country's trade volume following the continued recession in the international market slowed down the pace of growth in other than foreign currency loans.

However, some recovery in demand for foreign currency loans was seen in last few months of FY09 probably reflecting somewhat greater stability in rupee against US dollar.<sup>34</sup> Resultantly, the steep fall in share of foreign currency loans in total trade finance, visible in the recent months, began reversing from April 2009 onwards (see **Figure 4.28**).

#### Manufacturing

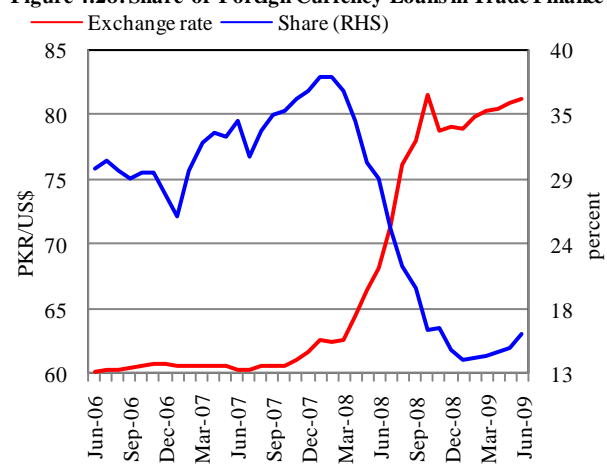
On the back of disappointing performance of manufacturing industries, advances extended to this sector declined sharply in FY09; lowest growth in last six years (see **Figure 4.29**). In fact, advances to the manufacturing sector had been slowing down in the period of FY05-07; though it remained in double digits. Even the uptick in FY08 reflected the strong demand on the back of uptrend observed in raw material prices in domestic and international market in number of industries.

Breakup of manufacturing sector advances shows that entire decline in FY09 came from working capital loans as fixed investment loans stayed substantially higher from FY08 level. Within working capital loans, a number of industries including textile, construction, commerce & trade, telecom, mining & quarrying witnessed more pronounced fall.

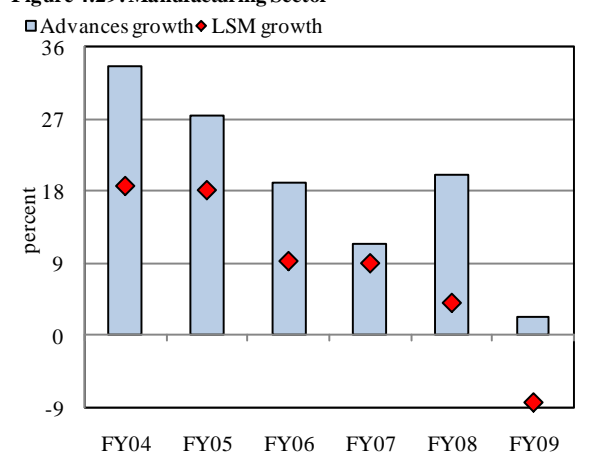
#### Textile

FY09 was a difficult year for textile industry.

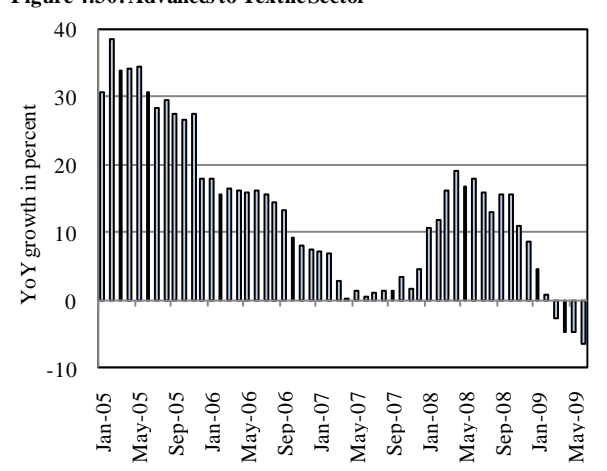
**Figure 4.28: Share of Foreign Currency Loans in Trade Finance**



**Figure 4.29: Manufacturing Sector**



**Figure 4.30: Advances to Textile Sector**



<sup>33</sup> The EFS loans exhibited a strong growth of 20.7 percent during FY09 compared with 11.0 percent rise in FY08. On the other hand, export loans other than scheme witnessed a fall of 33.5 percent in FY09 in contrast to a growth of 6.5 percent in last year.

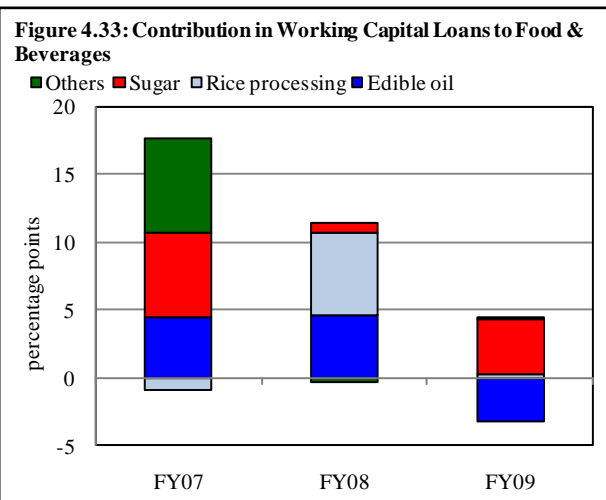
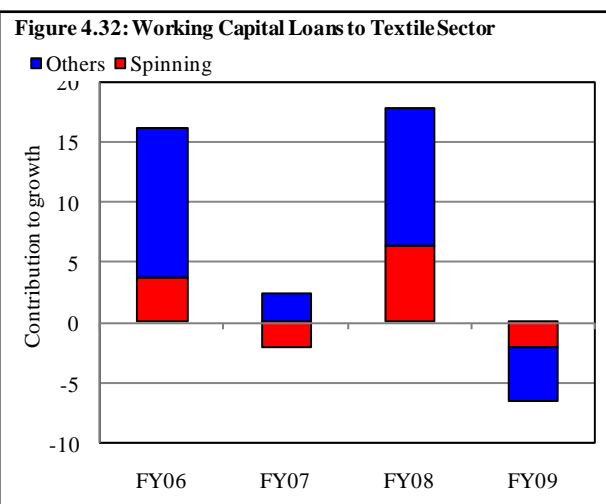
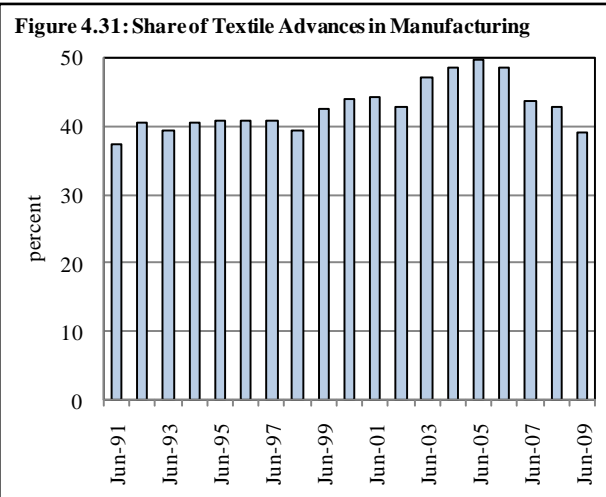
<sup>34</sup> In absolute terms, the foreign currency loans increased by Rs 8.5 billion in Feb-Jun FY09 compared with net retirement of Rs 47.9 billion in Jul-Jan FY09.

Power slippages, structural impediments in the industry and slackened international demand were major factors for the poor performance of this industry. Further, liquidity constraints in a number of industries partly due to delayed settlement of export order by importers translated into rising inability to service bank obligations. Resultantly, NPLs of textile sector increased sharply and banks become more cautious in lending to this sector (6.5 percent fall in advances growth during FY09-first time in last three years) (see **Figure 4.30**). Therefore, the share of textile in advances to manufacturing reached a lowest level of

39.2 percent by end June 2009 compared with a peak of 49.8 percent in June 2005 (see **Figure 4.31**).<sup>35</sup>

When viewed by categories, impediments faced by textile industry affected the performance of spinning sector, particularly small industries, more adversely. As a result, approximately 20 percent of the spinning industries have reported closures in FY09 which in turn lowered the fresh demand for running finance. Given the fact that a significant portion of textile sector advances is extended to spinning sector, the adverse performance of this sector in FY09 partly dragged down the textile advances, and working capital loans in particular (see **Figure 4.32**).<sup>36</sup>

To ease the pressures on textile industry emanating from the domestic and external developments, SBP has taken several measures during FY09. For instance, not only more industries are now eligible for concessional financing, the repayment period of loans under various schemes has been extended.<sup>37</sup> Despite all these measures, recovery in this sector will probably take much time given the structural impediments and continued weakness in international demand. To address the former issue



<sup>35</sup> In terms of purpose-wise, fall in advances during FY09 originated from both working capital and fixed investment loans while advance extended under EFS observed a significant growth.

<sup>36</sup> The share of spinning sector advances in textile advances is approximately more than 45.0 percent.

<sup>37</sup> In particular, one year extension in mark-up subsidy to the spinning sector resulted into a cumulative saving of Rs 1.3 billion in Jul 2007-Dec 2008.

government has proposed the textile policy for the first time.<sup>38</sup>

### Food & beverages<sup>39</sup>

Despite a dismal performance of this industry in response to: (1) poor crop of sugarcane; and (2) relatively muted pass-through of fall in palm oil prices (major input) to consumer in the formal sector by edible & cooking oil manufactures in FY09<sup>40</sup>; advances increased by 5.9 percent in FY09 (though decelerated sharply from the robust growth seen in last three years). During FY09, deceleration in advances to food & beverages came from working capital loans where the largest decline was observed in the edible oil & ghee industry followed by rice processing. In contrast, advance to sugar industry was significantly up in FY09 (see **Figure 4.33**). The decline in advances to edible oil & ghee industry is attributed to sharp drop in international Palm oil prices and poor industry performance which resulted from a fall in competitiveness of a few major industries as they passed on a lower benefit of fall in input cost to consumer relative to other small industries.<sup>41</sup>

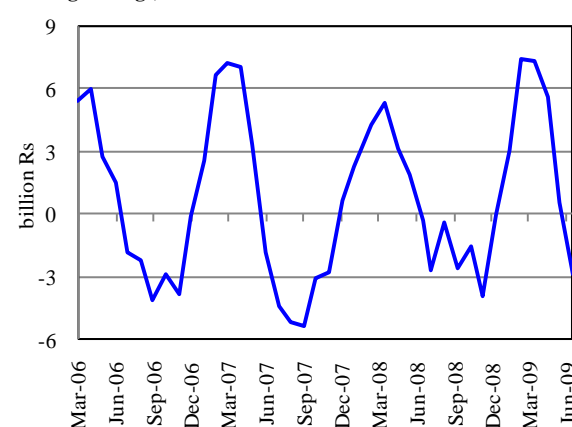
Similarly, advances to rice processing industry could not maintain the robust growth seen in the wake of bumper crop during the initial few months of FY09 and declined sharply thereafter. Anecdotal evidence suggests that for a shorter period, i.e., during Nov-Jan FY09, a large number of rice processing industries have closed down their operations in response to intervention made by PASSCO to procure rice at a higher support price aimed to protect farmers from an expected fall in domestic prices due to bumper crop.<sup>42</sup> The higher domestic price has not only led to lower the country's export competitiveness, as international rice prices are falling since May 2008, but also lowered the incremental demand for advances in the same period.

In contrast, advances to sugar mills, mainly to procure sugarcane and meet crushing related expenses, seen strong growth of 13.4 percent in FY09 compared with 4.2 last year. This acceleration came largely from running finance requirement despite a fall in sugar production in FY09 that recorded a robust growth of 11.9 percent in FY09 as against 2.1 percent rise in FY08 (see **Figure 4.35**).<sup>43</sup> Indeed, higher net advances to sugar mills were mainly a reflection of higher sugarcane prices in FY09 whereas prices were lower in FY08 on the back of bumper sugar crop.

### Fertilizer

In contrast to a robust growth in the preceding

**Figure 4.34: Working Capital Loans to Sugar Industry (3- months moving average)**



<sup>38</sup> For detail see section on trade account.

<sup>39</sup> Advances under this category are usually obtained for running finance and follow a seasonal trend which starts with crop cycle.

<sup>40</sup> The 12 month moving average of Palm oil YoY prices dropped by 38.3 percent in July 2009 compared with a YoY rise of 67.1 percent in July 2008. It may be noted here that a sharp rupee depreciation and increase in other costs (such as energy and wages & salaries) constrained a complete pass through of lower palm oil prices to consumer, particularly in formal sector. Moreover, import of Pam oil also fell by 14.4 percent in FY09 compared with robust rise of 81.3 percent last year.

<sup>41</sup> On the basis of 12 month moving averages, YoY increase in vegetable ghee prices (Tin pack) was 8.9 percent in July 2009 whereas loose ghee YoY prices fell by 2.6 percent in the same period.

<sup>42</sup> Under commodity finance operation, PASSCO obtained Rs 9.8 billion from banks to procure rice in Nov-Jan FY09.

<sup>43</sup> Advance for running finance requirement in this category are mostly disbursed against security of sugar stock (approximately 60 percent) and generally follows a seasonal trend which starts from October and ends in April every year in line with crushing season (see **Figure 4.34**). Therefore, the retirement of advances usually resulted into corresponding reduction in the pledge stock.

three years, advances to fertilizer manufacturer decelerated in FY09; although it remained strong at 39.4 percent on the back of few pre planned capacity expansion project financing (see **Table 4.3**). Given deceleration in advances, the strong performance of this industry (20.2 percent growth) during FY09 appears to be surprising. The explanation is that a part of the increase in domestic production reflects a low base effect, as one major phosphatic fertilizer plant remained close for BMR in FY08.<sup>44</sup>

An analysis of monthly trends reveals that deceleration in working capital loans was visible through out FY09 with an exception of initial few months. This was due to a bridge financing facility arranged for a few companies to meet cash flow gap resulting from delays in settlement of DAP subsidy claims with government. However, the settlement was made in the following months which in turn allowed companies to repay their bank loans. Excluding this one-off element, the slower pace of advances off-take is mainly attributed to decline in urea production. Besides urea, accumulation of DAP inventories and falling price of phosphoric acid (main raw material used in DAP production) also led to lower the incremental demand for advances. Therefore, loan demand is likely to pick up once the off-take of DAP will start. In this regards, the last three months of FY09 indicates a depletion of inventories.<sup>45</sup>

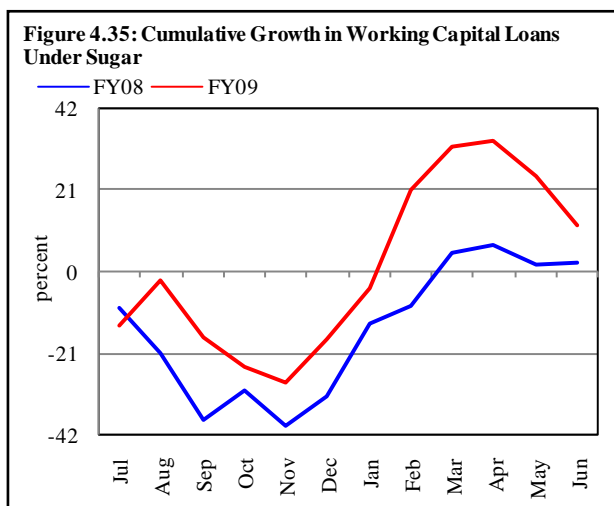
### Construction

After witnessing remarkable growth during FY06-08 (36.6 percent average), advances to construction sector dropped sharply in FY09 (10.9 percent) - in line with worst ever performance in construction activities during decade.<sup>46</sup> The decline in investment activity following the cut in PSDP hit adversely the advances demand for infrastructure related construction. Moreover, falling purchasing power in the wake of inflationary pressure, drop in building material prices in the initial months of FY09 and lower availability of mortgage finance from HBFC due to rising NPLs slowed down a few ongoing projects in the construction sector.<sup>47</sup>

This said, construction sector may see higher demand for advances in the months ahead as; (a) government has allocated more funds for PSDP in recent budget for development and rehabilitation projects;<sup>48</sup> and (b) anecdotal evidence suggests a shifting of construction capital from uncertain Middle East markets.

### Cement

Cement sector performed well during FY09, though growth decelerated on the back of depressed domestic demand. Resultantly, credit demand from this sector remained robust as it grew by 11.3 percent in FY09 compared with fall in growth of 1.0 percent last year. A purpose-wise break up of advances to cement sector suggests that cement manufacturer availed concessional financing under EFS to meet sustained demand in international market, particularly in India, Africa and Middle East. Besides running finance requirement, a few capacity augmentation project financing was also observed in FY09 (see **Figure 4.36**). Moreover, to overcome the power shortages, a few cement manufactures are intended to setup



<sup>44</sup> For detail see section on Industry.

<sup>45</sup> For detail see section on industry.

<sup>46</sup> Please see economic survey 2009.

<sup>47</sup> Anecdotal evidences suggest that residential construction activities are directly influenced by the mortgage finance availed from banks and NBFIs. Indeed, the availability of mortgage finance enhances the paying capability of individuals thus help constructors to initiate new residential projects.

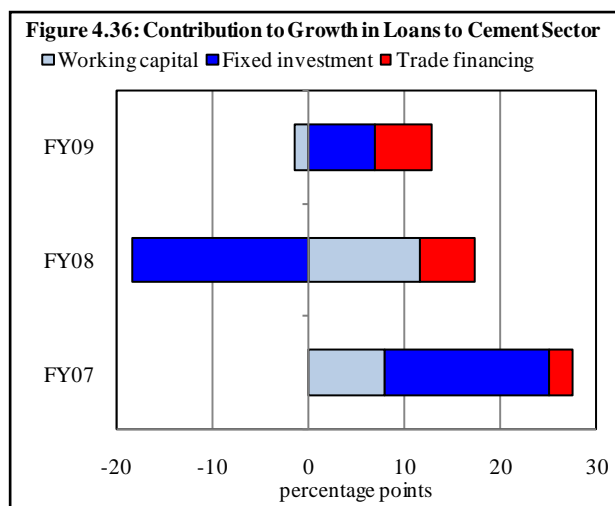
<sup>48</sup> Budget for 2010.



their power generation plants through heat recovery system. This will likely add up the fixed investment demand from this sector in the months ahead. Moreover, higher allocation of PSDP and reduction of federal excise duty on cement production are additional incentives to cement manufacturers.

#### *Basic Iron and Steel*

Besides cement, marked fall in construction activity also hit the local demand for iron and steel which in turn lower imports in this category. Besides lower domestic demand, downward rigidity in steel import prices further contributed in the fall in country's import of iron and steel. All these factors have led to lower the additional demand for running finance in this sector, resultantly loans extended to this sector grew by 7.7 percent in FY09; 27.0 percentage point lower than FY08.<sup>49</sup>



#### *Power*

The advances to electricity and gas distribution were significantly higher compared with advances to other sectors in FY09; though it showed sharp deceleration (see **Table 4.3**). This growth came from project financing committed under power policy of 2002. Besides long-term finance, in the early months of FY09, a significant amount of short-term borrowing went to smooth the liquidity constraints emerged due to buildup of inter-corporate debt. Thereafter, the issuance of TFCs in March 2009 allowed a few IPPs to settle part of their circular debt claims. However, the resulting space of short-term borrowing with banks was availed by IPPs given that circular debt issue has not been resolved yet.

#### *Domestic Durable*

The ongoing slowdown in economic growth has hampered the purchasing power of individuals which not only resulted into fall in demand for domestic durable but also led to piling up of inventories in this industry. The impact of these factors was further compounded by the acute power shortages faced by the industry. All these factors aptly explain poor performance of this industry in FY09 which in turn dragged down the demand for bank advances in this category by 21.4 percent during FY09 compared with strong growth of 21.1 percent in FY08.

#### *Refineries*

Though the financial constraints in some refineries stemming from circular debt issue did not cause any significant increase in demand for bank loan; it resulted into lower import of crude oil during FY09.<sup>50</sup> Moreover, fall in international price of crude oil since August 2008 further lowered the incremental demand for bank finance during the period under review. Resultantly, advances to refineries grew by 16.8 percent in FY09.

#### *Electrical machinery and apparatus*

Electricity shortfall caused severe productivity loss in number of industries, and resulted in an

<sup>49</sup> It is noted here that the monthly trend suggests some recovery in credit demand in the last three months of FY09 in line with surge in import demand.

<sup>50</sup> Demand for bank finance from one refinery was attributed to fill the financing gap due to rising circular debt claims in the early months of FY09. However, it decelerated in March 2009 on the back of settlement of part of inter-corporate debt.

increase demand for generator, UPS and other related equipments. This has created incremental demand for advances from the sector of electric motors, generators and transformers during FY09. Similarly, a slight demand for advances was also seen under electricity distribution and control apparatus such as circuit breakers, switches and stabilizer in FY09. In overall terms, advances extended to electrical machinery and apparatus witnessed a growth of 28.8 percent in FY09 compared with strong growth of 70.5 percent in FY08.

#### *Transport, storage and communications<sup>51</sup>*

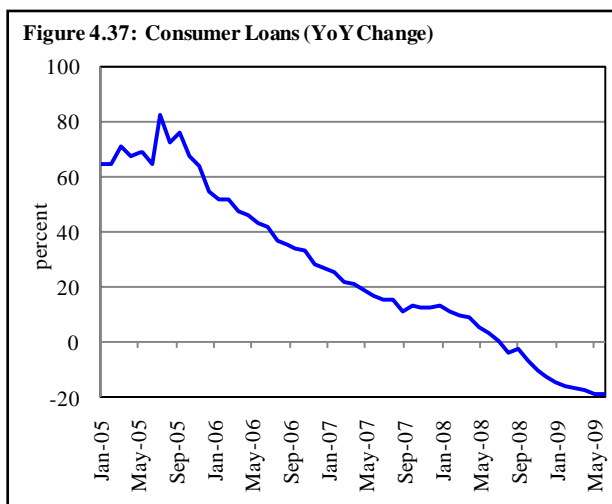
The lucrative performance of telecom industry made this sector more attractive for banks to lend in the preceding three years. However, in FY09 decline in total investment, foreign investment in particular, marginal growth in profitability on the back of growing competition, and rising tax burden put a dent on the performance of this industry.<sup>52</sup> Resultantly, incremental demand for advances also slowed down by 7.8 percent in FY09 compared with 31.6 percent average growth during FY06-08. The increase in demand was mainly observed in fixed investment loans in the wake of continuous up gradation of technology and wireless internet facility.

Although the cellular market has reached at saturated stage with a 94.3 million subscriber base by end-June 2009<sup>53</sup>, other telecom related segments such as LDI, Local loop, value-added and broadband services portray positive prospects for future growth. In particular, broadband services with huge investment potential and high subscribers' growth may provide new venture for banks lending businesses.

#### *Other Sectors*

The heightened security issues in northern areas affected adversely the investment activities, mining and quarrying in particular, in turn lowered the demand for running finance in this sector during FY09. Similarly, given the poor industrial performance and falling trade volume, activity in the whole sale and retail markets also dropped sharply. Resultantly, the incremental demand for advances under commerce & trade recorded substantial drop of 6.5 percent in FY09 compared with robust growth of 20.1 percent in FY08.

#### *Consumer Credit*



**Table 4.4: Causative Factors of Decline in Consumer Loans**

	Jun-07	Jun-08	Dec-08
<i>Movement in WALR</i>			
Mortgage	12.5	13.7	14.6
Auto	12.8	14.6	14.7
Credit cards	32.5	30.5	29.4
Consumer durable	13.9	16.6	11.4
Personal	16.0	16.1	17.1
<b>Consumer finance</b>	<b>16.5</b>	<b>17.0</b>	<b>17.3</b>
<i>Movement in NPL to loans ratio</i>			
	Jun-07	Jun-08	Jun-09
Mortgage	2.9	6.1	11.9
Auto	2.4	5.9	6.6
Credit cards	6.6	4.7	7.7
Consumer durable	15.7	21.8	7.8
Personal	3.8	5.5	9.5
<b>Consumer finance</b>	<b>3.6</b>	<b>5.7</b>	<b>9.1</b>

<sup>51</sup> This sector mainly comprises loans extended to telecom sector.

<sup>52</sup> Average revenue per user declined sharply to 3.1 percent in FY08 compared with 5.7 percent in FY06.

<sup>53</sup> [www.pta.gov.pk](http://www.pta.gov.pk)

Growth in consumer credit which had been slowing down during the preceding two years, declined more steeply in FY09; recording first ever YoY fall of 18.9 percent (see **Figure 4.37**). While a large part of the fall in consumer loans emanated from the inflationary pressures and low activity in the economy that have curbed the purchasing power of individuals, increase in interest rate in few categories also adversely affected the fresh demand for consumer finance.<sup>54</sup> This was compounded by banks' cautious behavior about granting loans in view of deteriorating credit quality and higher insolvencies of borrowers. The concern on individuals' ability to repay loans was particularly apparent in mortgage and personal loans during FY09 (see **Table 4.4**).

As a result, marked drop in lending mainly came from auto loans followed by personal and mortgage loans. Together with increase in interest rate, higher manufacturing cost of automobile industry and rupee depreciation against yen increased price of the domestic cars which in turn moderated the demand for auto finance during FY09.

### 4.3 Monetary and Banking Indicators

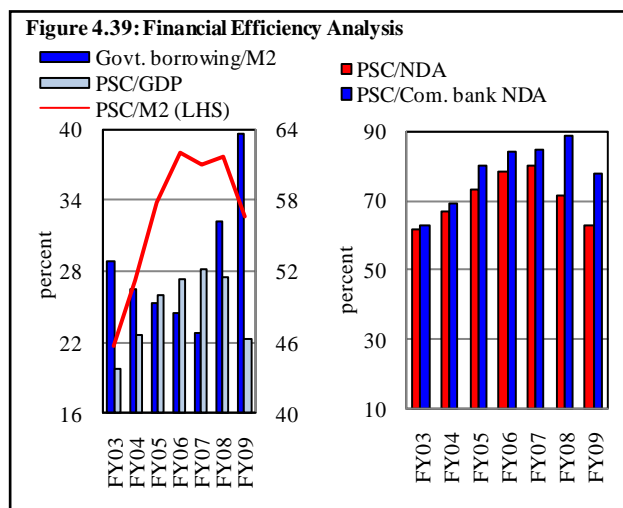
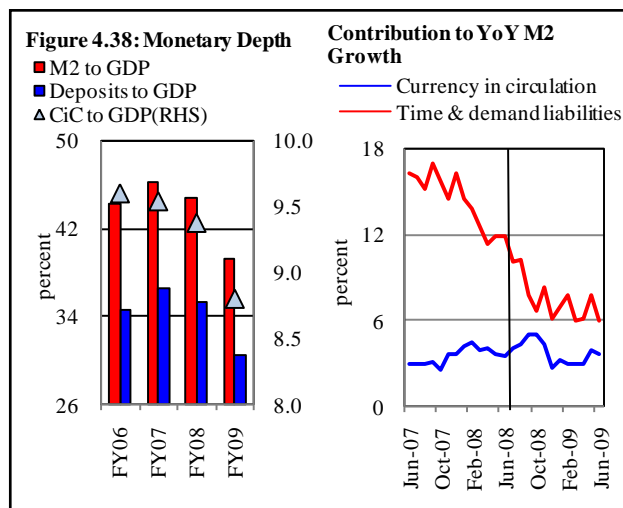
#### 4.3.1 Monetary Indicators

The implication of monetary developments can also be assessed by analyzing trends in various monetary indicators.

#### Financial depth

The M2-to-GDP ratio reflects the degree of financial development in the economy. Considering M2 as a proxy for the size of the financial sector, a rising M2/GDP ratio indicates that in nominal terms the financial assets are growing faster than the non-financial assets. In other words, one can say that use of financial intermediation services is expanding in the economy.

Further, a trend analysis shows that this ratio has declined for the second successive year in FY09 (see **Figure 4.38**). The high inflation in last year resulted in a sharp rise in nominal GDP growth, whereas the M2 growth slowed down in response to SBP's tight monetary policy stance in place through most of the period under review.



A break-up of M2 shows that both, the *currency in circulation* as well as *demand & time liabilities* (TDL) have declined (as percentage of nominal GDP) during the year. Yet, the slowdown in growth of TDL is a dominant factor explaining deceleration in M2 growth.<sup>55</sup> This probably suggests that the role of scheduled banks in the financial intermediation has diminished over the period.

<sup>54</sup> The overall increase in interest rates on consumer finance is not significant.

<sup>55</sup> The growth in currency in circulation was marginally higher in FY09 compared to the previous year.

An analysis of financial intermediation from the asset side of monetary aggregates shows that the reduction in financial deepening was associated with substantial decline in private sector credit/GDP ratio. The contribution of the government in financial sector however continued to increase for the second year in a row (see **Figure 4.39**). Since the economic agents in the private sector are generally believed to be better placed to efficiently use financial resources, this change in the composition of monetary assets is indicating a relatively less efficient utilization of assets in the economy.

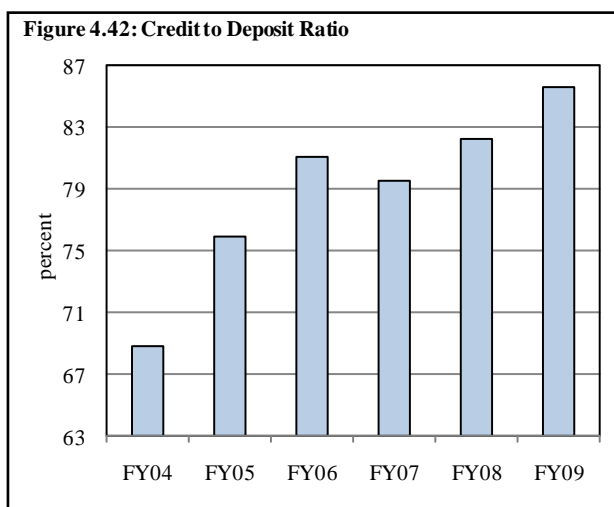
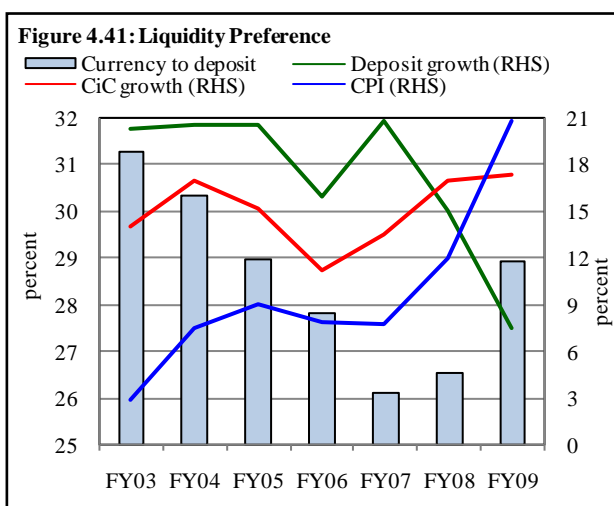
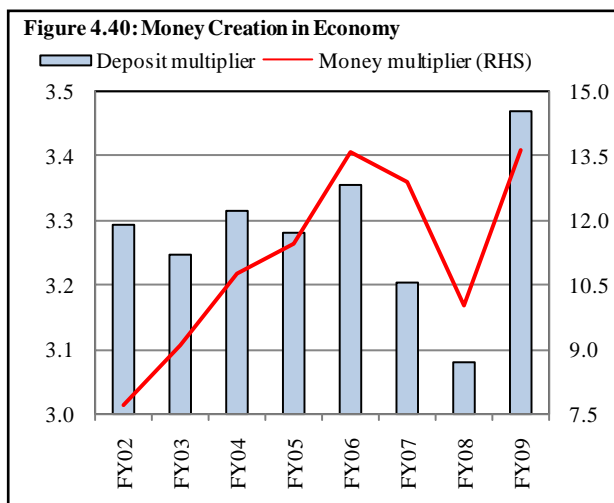
### *Pace of money creation*

The developments in broad monetary aggregate can also be viewed in relation to changes in the base money. This relationship is captured by the money multiplier –which is also a proxy for the pace of money creation in the economy. Interestingly, the trend decline in money multiplier during FY06-08 reversed in FY09 (see **Figure 4.40**). This abrupt rise in money multiplier is largely a reflection of a reduction in reserve requirements of banks.

Another indicator for the pace of money creation is the deposit multiplier.<sup>56</sup> Since SBP aggressively reduced the reserve requirements for the banking system during H1-FY09 to ensure stability in the financial market,<sup>57</sup> this helped in increasing the extent to which banks can multiply their deposits (see **Figure 4.40**). Nevertheless, the overall deposit growth decelerated from 13.8 percent in FY08 to 7.8 percent in FY09 (see **Box 4.3** for more details on deposit growth).

### *Liquidity preference*

As mentioned earlier, the high inflationary environment during FY09 had induced people to move away from holding financial assets. A further analysis suggests that within the financial assets, preference was more for holding currency, instead of keeping financial assets in the form of deposits, which were



<sup>56</sup> Deposit multiplier is measured as bank deposits to bank reserves ratio.

<sup>57</sup> On 11<sup>th</sup> October 08 SBP decreased the CRR requirement from 9 to 8 percent, on 18<sup>th</sup> October 08 the CRR further reduced by 200 bps. From 1<sup>st</sup> November 08 CRR is at the level of 5 percent. It is roughly calculated that a 100 bps decrease in CRR requirement immediately inject Rs 32 billion in economy.

offering negative returns in real terms. Thus currency to deposit ratio registered a sharp rise in FY09 (see **Figure 4.41**).

Looking at demand for liquidity, credit needs for commodity operation and funding requirement from public sector enterprises partially offset the slowdown in private sector credit. Thus overall credit demand during FY09 remained stronger than the growth in deposits. As a result, credit to deposit ratio (that gauges the room available to banks for funding the credit demand) has increased in FY09 (see **Figure 4.42**). Banks however managed to finance credit requirements as they were liquidating their investments.<sup>58</sup> The investments to deposits ratio declined to 27 percent in CY08 from the level of 34.7 percent recorded last year.

#### Box 4.3: Recent Trends in Deposit Growth

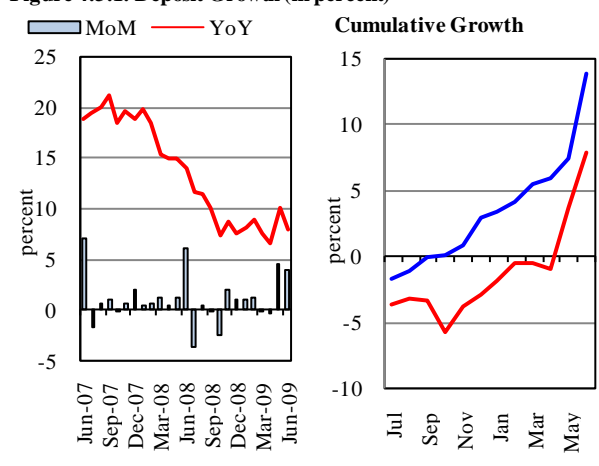
The slowdown in deposit growth intensified further in FY09 as overall deposit growth decelerated from 13.8 percent in FY08 to 7.8 percent in FY09. It may be noted that the deposit growth has been weakening since January 2008 (see **Figure 4.3.1**) in the wake of continued external account pressures and shift in public preference away from deposits due to high inflation.

In October 2008, banks suffered a major shock as deposit base eroded by Rs 90 billion during a month due to concerns on stability of local banks in the backdrop of global financial crisis. As the panic spread to equity markets, investors in mutual funds rushed for redemptions of their investments, which added to already high pressures on deposits.

In subsequent months, though the banking system deposits were showing a recovery, a number of developments suppressed their uptrend. For example, (1) slowdown in economic activities as evident from deceleration in private sector credit growth; (2) lower liquidity injections into banks following lesser budgetary borrowings from the central bank; (3) increased competition from National Saving Scheme (NSS);<sup>59</sup> (4) perverse impact of SBP's liquidity support on banks, etc.<sup>60</sup> Not surprisingly the cumulative growth in deposits remained negative till April 2009 (see **Figure 4.3.1**) despite a considerable ease in external account pressures.

This trend however changed in the last two months of FY09 when the deposit base sharply expanded by Rs 331.9 billion. Interestingly this was the period when banks were extending advances for procurement of agriculture commodities.<sup>61</sup> This increase in deposits has following features: (1) most of this rise stemmed from private businesses and personal deposits (see **Table 4.3.1**); (2) this growth also coincided with seasonal increase in deposits in the month of June which is generally followed by withdrawal in subsequent

**Figure 4.3.1: Deposit Growth (in percent)**



**Table 4.3.1: Sector-wise Growth of Deposits in May-June 2009**

	May-June billion Rupees	Share in total percent
Foreign constituents	9	2.9
Government	24	7.7
Public sector enterprise	5	1.6
Non-bank financial institutions	20	6.5
Private business	104	34.2
of which:		
Agriculture	17	5.4
Manufacturing	22	7.3
Manu. of Chemical	12	3.8
Construction	9	2.9
Commerce and trade	14	4.6
Telecommunications	18	5.7
Real estate, renting & business activities	11	3.5
Trust funds	-4	-1.4
Personal	144	47.4
Others	3	1.1
<b>Total</b>	<b>305</b>	

<sup>58</sup> In CY08 banks liquidated their investments by Rs 195.8 billion.

<sup>59</sup> Government mobilized Rs 267.2 billion through NSS instruments during FY09 compared to Rs 89.5 billion in the previous year.

<sup>60</sup> The extensive post-October 2008 liquidity support from SBP removed the compulsion on banks to undertake extraordinary efforts for mobilizing deposits.

<sup>61</sup> During May-June 2008, advances for commodity operation increased by Rs 157.3 billion. This was significantly higher than just Rs 0.4 billion in the corresponding period of the previous year.



month;<sup>62</sup> (3) in terms of category, current and saving deposits recorded an increase of Rs 234 billion; and (4) this upsurge was highly concentrated in a few banks.<sup>63</sup>

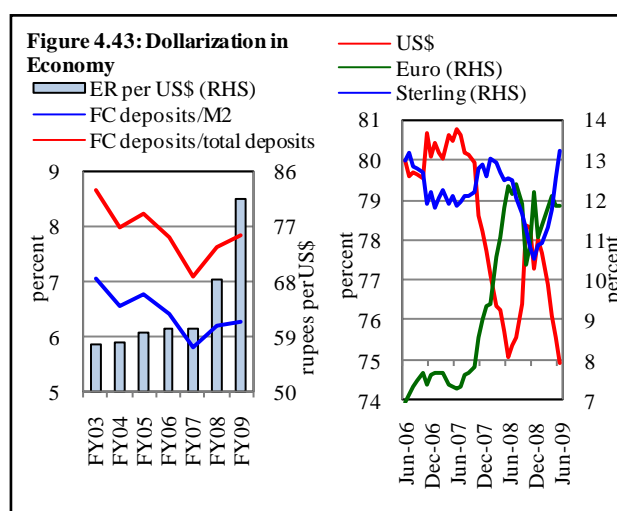
### Dollarization

While the overall deposit growth remained low during FY09, the share of foreign currency to total deposits continued to rise during the year.

Despite significantly lower rate of return on foreign currency deposits, these deposits remained attractive largely due to exchange gains stemming from sharp depreciation of rupee against major currencies during H1-FY09.<sup>64</sup> It may be pointed that in October 2008, foreign currency deposits had registered a withdrawal of Rs 22 billion following rumors raising concerns on stability of domestic banking system. These withdrawals limited the increase in foreign currency deposits during the year. Currency wise comparison shows sharp increase in the share of sterling denominated deposits due to its stable position against other currencies (see **Figure 4.43**).

### 4.3.2 Banking Soundness Indicators<sup>65</sup>

The dynamics of banking sector in Pakistan has gone through a major change during the last few years in terms of regulatory environment, earnings, and institutional strengthening. In particular high economic growth and macroeconomic stability increased the earning prospects for banks which were reflected in unprecedented profits. At the same time, banks' capital base strengthened and provisioning requirement were made more stringent. These improvements increased the resistance against shocks from both the external (global financial crisis and subsequent economic recession) and domestic (severe build up of macroeconomic imbalances) environment during the year.



In CY08, economic slowdown has also affected the banking activities. In particular, the banking system faced a sharp deceleration in private sector credit, weakening deposit growth, deterioration in asset quality, and losses in equity investments. Even in such difficult circumstances, banks remained adequately capitalized, and were able to post a profit of Rs 43.3 billion for 2008.

### Capital Adequacy

The capital of banks acts as a buffer against unforeseen losses. Capital requirements are set to protect the solvency of individual banks and overall banking system. The recent global financial crisis has encouraged a trend towards tougher capital requirements. But such trends in the face of slowing global economy, means that not only the financial institutions would find it difficult to raise the

<sup>62</sup> The increase Rs 135 billion in deposits during June 2009 was followed by a withdrawal of Rs 54.9 billion in July 2009.

<sup>63</sup> Only nine banks (which recorded more than Rs 10 billion increase in deposits) contributed Rs 278.3 billion of the total increase of Rs 331.9 billion in deposits during May and June 2009. Further, top-five banks in terms of deposit base posted a rise of Rs 196.6 billion (59.2 percent) in deposits during these two month. It may be noted that during July 2008 to April 2009, these five banks had recorded a net withdrawal of Rs 72.2 billion in their deposit base.

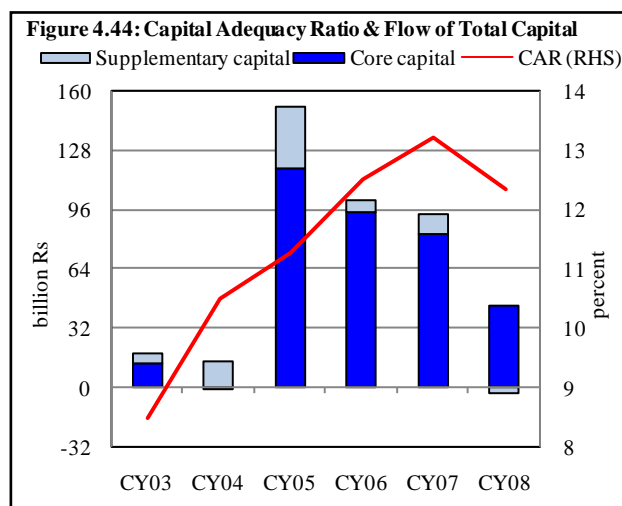
<sup>64</sup> The immense pressure of global price hikes has increased the import payments which deplete the foreign exchange reserves and put adverse impact on exchange rate.

<sup>65</sup> The analysis is based on audited annual balance sheets of banks. It may be noted that in CY2008, banks were allowed to avail (1) concession (by SBP) of 30 percent of Forced Sale Value of collateral while provisioning, and (2) relaxation (by SECP) in the form of deferment of impairment losses on investments (in the category of available for sale) to next year.

needed capital, tougher conditions may slowdown the global economic recovery as banks would be reluctant on lending to private sector.

The total eligible capital<sup>66</sup> of the banking industry in Pakistan though recorded a reasonable growth of 8.8 percent in CY08; it was significantly lower than the average rise of 31.8 percent in previous two years. This relative weakness in capital growth was due to:

- (1) The increment in share capital – a major component of the core capital – was relatively low in CY08 compared to the previous year. Specifically, the share capital grew by 19.4 percent (Rs 48.2 billion), which was much lower than the growth of 47.3 percent (Rs 79.7 billion) recorded in CY07.<sup>67</sup>
- (2) Considerably high impairment losses suffered by banks following 2008 crash in the stock market<sup>68</sup> also contained the growth in banks' capital (see **Box 4.4**). Specifically, the KSE-100 index declined by more than 55 percent from over 14000 mark in December 2007 to less than 6000 by December 2008. As a consequence, market value of banks' investment portfolio fell.



A break up of incremental capital shows that the entire increase came from tier-I category (i.e., core capital). The supplementary capital on the other hand, registered an absolute decline of 8.6 percent, which was mainly due to a fall in revaluation surplus (see **Figure 4.44**).

#### Box 4.4: Stock Market Breakdown and Recognition of Impairment Losses

The KSE100 Index plunged from its all time peak of 15676 on 18<sup>th</sup> April 2008 to 9145 on 27<sup>th</sup> August 2008, a decline of 41.3 percent in just four months. In response to this steep fall in stock prices, the Stock Exchange introduced a floor price mechanism. According to this mechanism, equity prices could not go below their closing level of 27<sup>th</sup> August 2008. The implementation of floor impeded the essential market mechanism of price discovery. Nevertheless, the floor was eventually removed on 15<sup>th</sup> December 2008, and subsequently KSE100 index further declined by 36 percent to 5865 by end-December 2008.

Since the investing companies were required to mark-to-market their investments held in available for sale (AFS) category at the market value of December 31, 2008, this would have led to significant impairment losses which were to be recognized in the income statement of corporate (including banks).<sup>69</sup> Naturally, there was a view among corporates that the share prices as on December 3, 2008 are not the true reflection of their fair value.

On 13<sup>th</sup> February 2009, Securities & Exchange Commission of Pakistan (SECP) directed all companies to mark-to-market their investment held in AFS at the market value of December 31, 2008. At the same time, SECP allowed the companies to defer the impact of impairment losses on income statement for one year. Accordingly, companies may recognize the impairment losses on income statement in the calendar year 2009 on quarterly basis after adjusting the price fluctuations in that year.<sup>70</sup> Thus balance sheet of corporate for 2008 would reflect the market value as of December 31, 2008, and

<sup>66</sup> Eligible capital consists of core capital (tier I) and supplementary capital (Tier II and III).

<sup>67</sup> In CY07, two of the large privatized banks raised capital through issuance of Global Depository Receipts (GDRs) and Initial Public Offering (IPOs).

<sup>68</sup> According to IAS, impairment loss of financial assets is defined as significant or prolonged decline in the market value of equity instruments below its book value.

<sup>69</sup> According to Rule 39 of International Accounting Standards (IAS), companies are required to book impairment loss in the profit and loss account.

<sup>70</sup> However, for the distribution of dividend, the amount taken to equity shall be treated as a charge to profit and loss account.

impairment losses (after adjusting valuation for subsequent movements in equity prices) will hit the income statement in 2009. Nonetheless, companies opting to avail this relaxation by SECP were required to disclose the benefits in their financial statements.

According to estimates, the banking industry carried forward a loss of Rs 12.5 billion (on account of impairment losses on AFS investments as on December 31, 2008) for recognition on quarterly basis in the income statements for 2009. However, the eventual losses hitting the 2009 financial statements would be less as the KSE100 Index has already shown some recovery from end-December 2008 level.

In September 2008, SBP introduced measures to strengthen solvency of the banking system. Specifically, banks were required to increase minimum paid up capital (MCR) gradually to Rs 23 billion by 2013. At the same time, benchmark for capital adequacy ratio (CAR) was enhanced to 10 percent which was to be achieved by end-December 2008.

However, given the slowdown in domestic economy (which was expected to adversely affect performance of the domestic banking system) and global financial crisis (posing difficulties for banks intending to access international financial markets for raising capital), SBP in April 2009 softened the capital requirements. Specifically the future increases in MCR were revised downward and benchmark for CAR for December 2008 was reduced to 9 percent.<sup>71, 72</sup> This rationalization of MCR and the time period in which it needs to be implemented is likely to provide a breathing space to the banking industry in present difficult conditions, foster competition and a level playing field in the industry.

In the case of MCR, despite an increase of Rs 1 billion in the required capital for CY08, 26 banks have successfully met the needed level.<sup>73</sup> The remaining banks are putting their efforts to meet the mark of Rs 5 billion.

It may be pointed out that the CAR for the banking industry had been improving sharply since CY03. This year however CAR deteriorated marginally to 12.3 percent (see **Figure 4.44**) from previous year's level of 13.2 percent. Even at this level, CAR is much higher than the benchmark of 9 percent for the industry.

The marginal deterioration in CAR is due to recognition of operational risk as per Basel-II. It may be noted that following the Basel II, the banks in Pakistan have started recognizing the charge on operational risk while calculating risk weighted assets. This practice would help banks to cover against the risks arise from failure of internal processes like frauds, legal risks, staff negligence, IT problems, etc.

Further, out of 36 banks, only 4 were unable to meet CAR requirement mainly due to sharp increase in non-performing loans (NPLs) and decline in their earnings.

### ***Asset Quality***

The buildup of macroeconomic imbalance and subsequent economic slowdown also has a bearing on the quality of assets of the banking sector. This is evident in sharp increase of Rs 156.6 billion (64.9 percent) in gross non performing loans (NPLs) that reached Rs 397.9 billion at end-June 2009 (see **Figure 4.45**).

In January 2009, SBP allowed banks to avail the benefit of 30 percent of Forced Sale value (FSV) of collateral while calculating provision requirement.<sup>74</sup> This relaxation, together with deteriorating

<sup>71</sup> See Special Section 2 in SBP's Third Quarterly Report for FY09 on State of Pakistan's Economy.

<sup>72</sup> See BSD circulars No. 19 and 30 of 'Minimum capital requirements for banks'/DFIs.

<sup>73</sup> This category does not include specialized banks.

<sup>74</sup> This relaxation led to a total benefit of Rs 7 billion for the banking industry.

earning ratios in CY08, led to lower provisioning by banks. Thus, net NPLs increased by Rs 85.2 billion to Rs 118.5 billion at June 2009 with a corresponding worsening of the coverage ratio and infection ratio.

A further analysis shows that the NPLs in corporate sector account for a major share in incremental NPLs. The NPL/loan ratio for SME sector doubled to 22.4 percent from 11.2 percent a year earlier (see **Table 4.5**). This reflects both a rising share of NPLs as well as banks' increased reluctance to extend loans to this sector.<sup>75</sup> Further, usually the SMEs have less resistance to withstand financial shocks. In the case of consumer loans, NPLs have increased by Rs 9.4 billion, mainly in the category of mortgage finance and personal loans.

A sector wise analysis shows that the textile sector contributed 24.4 percent of Rs 156.6 billion increase in total NPLs during FY09 (see **Table 4.6**). It merits noticing here that the share of textile sector in total NPLs has declined this year while that of electronic and transmission of energy has increased considerably. It may be recalled that the energy and power sector has been facing cash constraints due to a build up of circular debt. Bank group wise analysis shows that 57.7 percent of the total rise in NPLs during FY09 was concentrated in five banks, of which two are public sector banks and three are privatized banks. Last year, five banks having the largest share in NPLs together accounted for 77.7 percent of the total rise in NPLs.

This suggests that more banks are now facing bad loans. Group wise analysis shows that private banks accounted for 37.3 percent of total rise in NPLs followed by public banks (35.4 percent) and privatized banks (25.7 percent) – (see **Figure 4.46**).

Nonetheless, a quarter-wise analysis of NPLs during FY09 shows that NPLs grew rapidly up to third quarter; after that growth in NPLs started to decelerate. Not only the total addition to NPLs has started tapering off, the reduction in NPLs has also increased particularly in Q4-FY09.

**Table 4.5: Segment-wise Contribution**

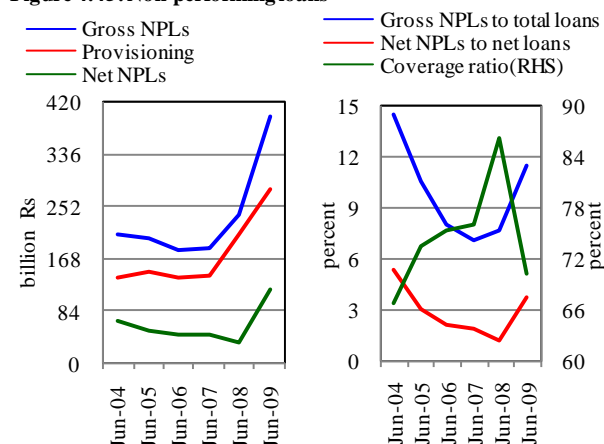
billion Rupees

	Increase in NPLS		NPL/Loan ratio (percent)	
	FY08	FY09	FY08	FY09
<b>Total</b>	<b>68.2</b>	<b>156.6</b>	<b>7.8</b>	<b>11.5</b>
Corporate	47.8	111.3	7.6	12.1
SME	8.2	31.9	11.2	22.4
Agriculture	-2.3	-0.5	16.6	16.6
Consumers	7.8	9.4	5.6	9.1
Commodity finance	0.2	2.3	0.8	1.0
Staff	0.2	0.2	0.0	1.1
Others	6.3	2.0	0.6	12.1

**Table 4.6: Sector-wise Contribution**

billion Rupees

	Increase in NPLS		NPL/Loan ratio	
	FY08	FY09	FY08	FY09
<b>Total</b>	<b>68.2</b>	<b>156.6</b>	<b>7.8</b>	<b>11.5</b>
<i>of which</i>				
Textile	18.7	38.1	12.6	18.8
Elec. & transmission of energy	1.7	23.5	2.8	8.2
Automobile & transport equipment	0.9	9.5	6.3	17.7
Financial	-0.2	6.2	0.8	12.5
Sugar	0.1	4.1	5.0	10.2
Cement	3.8	3.4	8.0	11.4
Chemical & pharmaceuticals	1.5	1.9	8.8	8.3

**Figure 4.45: Non-performing loans**

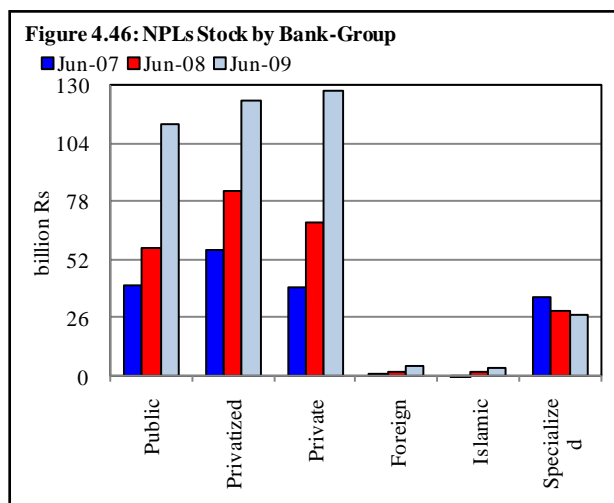
<sup>75</sup> Of the total increase in NPLs in the SME sector, 73 percent was caused by five banks.

### Banking Efficiency

The efficiency of any banking system is generally associated with cost of intermediation, which includes the expenses banks incur in the process of channeling funds from savers (depositors) to investors (borrowers). It can be argued that an inefficient banking system, which incurs higher intermediation cost, impedes investment activities by increasing the cost of borrowing that in turn erodes the payment capacity of borrowers. Banking spread<sup>76</sup> is the most often used proxy for gauging efficiency of the banking industry.

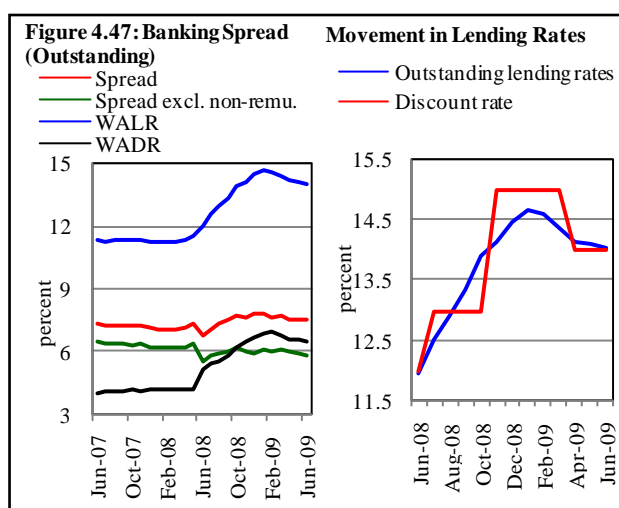
In FY09, the banking spread has widened by 74 bps (see **Figure 4.47**) compared to a fall of 57 bps in the previous year. Domestic private banks experienced the largest increase in spread. Spread of foreign banks though declined by 92 bps, it still remained the highest in the banking group (see **Table 4.7**). The increase in the spread of overall banking industry was because:

1. The fall in last year's spread was mainly the result of a policy decision, i.e., imposition of 5 percent floor on saving deposits by SBP in May 2008.<sup>77</sup>
2. Following the large withdrawal of deposits in October 2008, SBP provided extensive liquidity support to the inter-bank market using various policy tools (such as discount window, open market operation, reduction in reserve requirement, encouraging export refinance facility). While these measures were necessary to quickly restore the confidence on the financial system, availability of liquidity may have relieved banks from the compulsion to undertake extraordinary efforts for mobilizing more deposits. This, in turn, would limit the upward pressure on deposit returns.
3. In the face of aggressive monetary tightening by SBP, which was essential to contain significantly high inflationary pressures in the domestic economy, it was expected that the lending rates would rise (see **Figure 4.47**). At the same time, evidence for Pakistan suggests that



**Table 4.7: Group wise Lending & Deposit Rates (outstanding)**

	Jun-08			Jun-09		
	Lending	Deposits	Spread	Lending	Deposits	Spread
PSCB	12.00	4.64	7.36	13.74	6.37	7.37
DPB	11.94	5.27	6.67	14.23	6.49	7.74
FB	15.05	5.99	9.06	15.62	7.48	8.14
<b>All</b>	<b>11.96</b>	<b>5.18</b>	<b>6.78</b>	<b>14.02</b>	<b>6.50</b>	<b>7.52</b>



<sup>76</sup> It is measured as difference between weighted average lending and weighted average deposit rates.

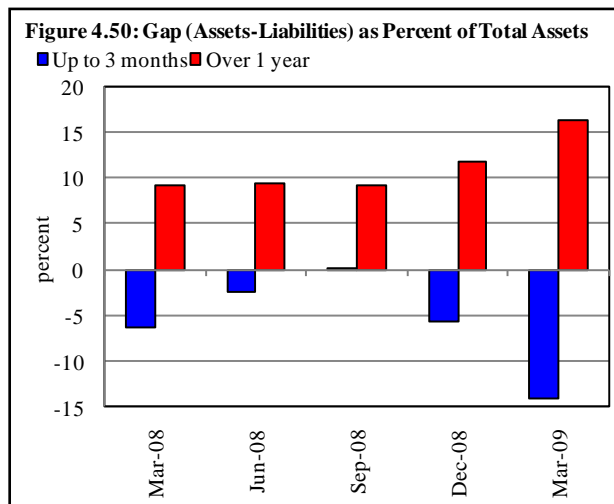
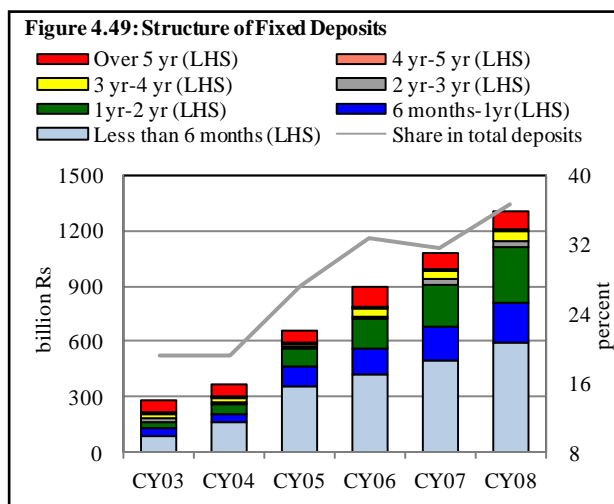
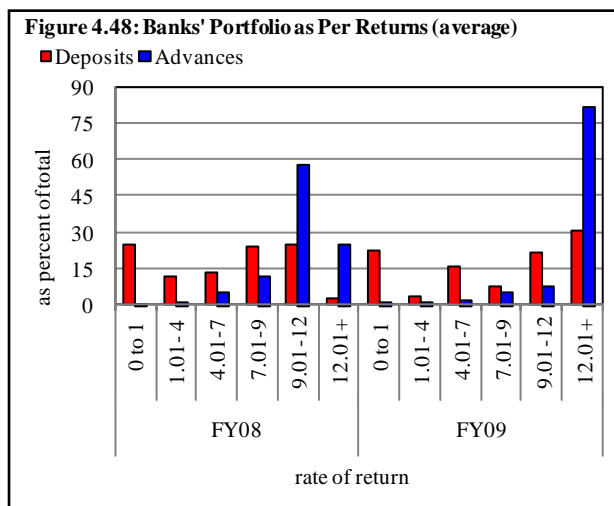
<sup>77</sup> Following the imposition of floor on deposits rate, the weighted average return on deposits of the banking industry increased by 120 bps in June 2008. The rise in lending rate was however only 63 bps despite as 150 bps jump in policy rate in May 2008.

deposit rates have been relatively rigid in upward direction. This asymmetrical response of lending and deposit rate to interest rate increases has resulted in higher banking spread.

Thus, it is not surprising that the increase in advances disbursed at lending rate of 12 percent and above, is far greater than the rise in deposits placed on return of 12 percent and above (see **Figure 4.48**).<sup>78</sup>

4. The wide maturity gap is one of the key determinants for higher spreads. In CY08 the share of fixed deposits in total has reached to 36.6 percent from 19.3 percent in CY04, following various incentives from SBP, such as exemption of term deposits of over one year maturities from CRR (see **Figure 4.49**). This increased share of fixed deposits can support banks in bridging up the maturity gaps between assets and liabilities.<sup>79</sup>

Market expectations regarding interest rate movement is another key factor that affects the maturity gaps.<sup>80</sup> As evident from **Figure 4.50**, negative gap in 3-month maturity narrowed as banks were expecting a rise in policy rate. Thus, instead of locking in their funds in long term investment, banks preferred to invest in debt papers of shorter maturity (e.g. 3-month maturities). It may be pointed out that following the 200 bps rise in policy rate in November 2008, market expectations changed as there was a view that interest rates have peaked out. Accordingly, banks' interest in longer term government papers increased. For maturities of over 1 year, banks have a large positive gap as the assets of banks have longer maturities than liabilities.



<sup>78</sup> In CY08, on average, more than 80 percent of advances were disbursed at lending rate of 12 percent and above; whereas deposits placed on return of 12 percent and above have a share of 30.5 percent in the total deposits.

<sup>79</sup> It is measured by the difference between assets and liabilities (for a given maturity period) adjusted by the total assets.

<sup>80</sup> While most of the deposits of the banking system are of short-term maturity, their advances are long term in nature. This maturity gap means that long-term funding needs would have to be financed through a continual rollover of short-term liabilities. In times of liquidity shortages, rolling over maturing obligations would be expensive. This rollover risks is generally reflected in higher spread.

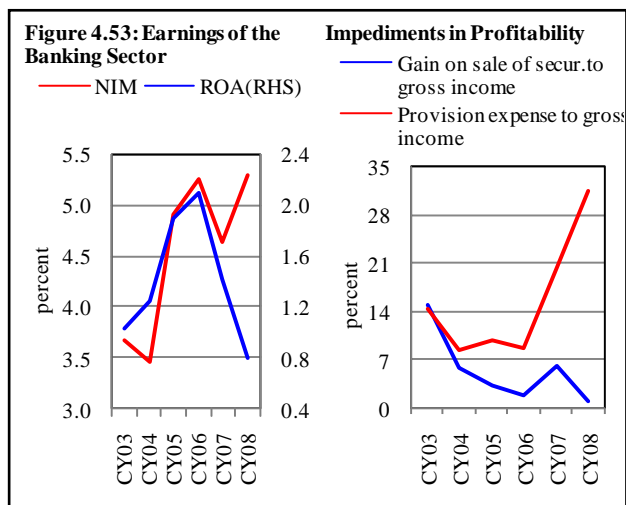
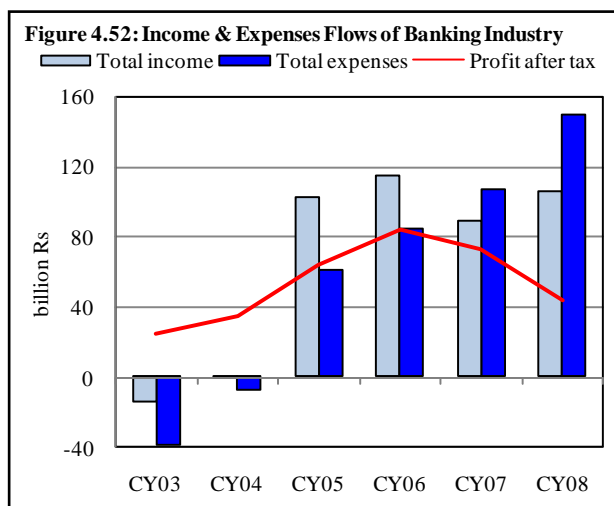
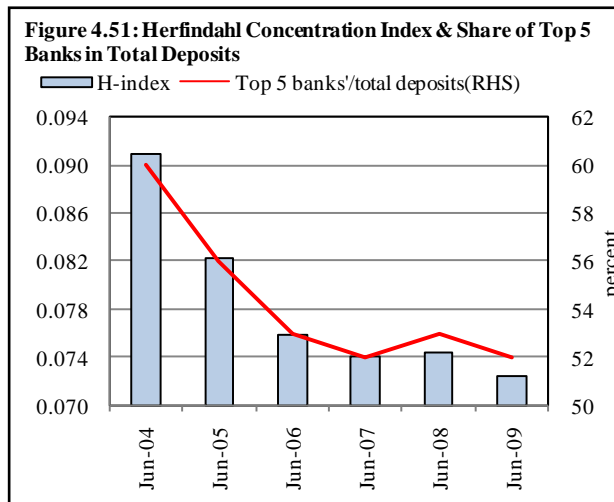


Even though the efficiency conditions have deteriorated due to high banking spread, the degree of concentration in industry has improved. Over the years not only the value of H-index has reduced significantly but also the share of top five banks in total deposits has declined from 60 percent in Jun-04 to 52 percent in Jun-09 (see **Figure 4.51**). This index captures the competition among banks. It may be noted that not the competition among banks is essential but also the competition in different investment avenues; which at present is almost absent in Pakistan. It can be argued that to have a marked influence on the banking spread, a vibrant private debt market is essential which will force banks to improve their efficiency.

### Profitability

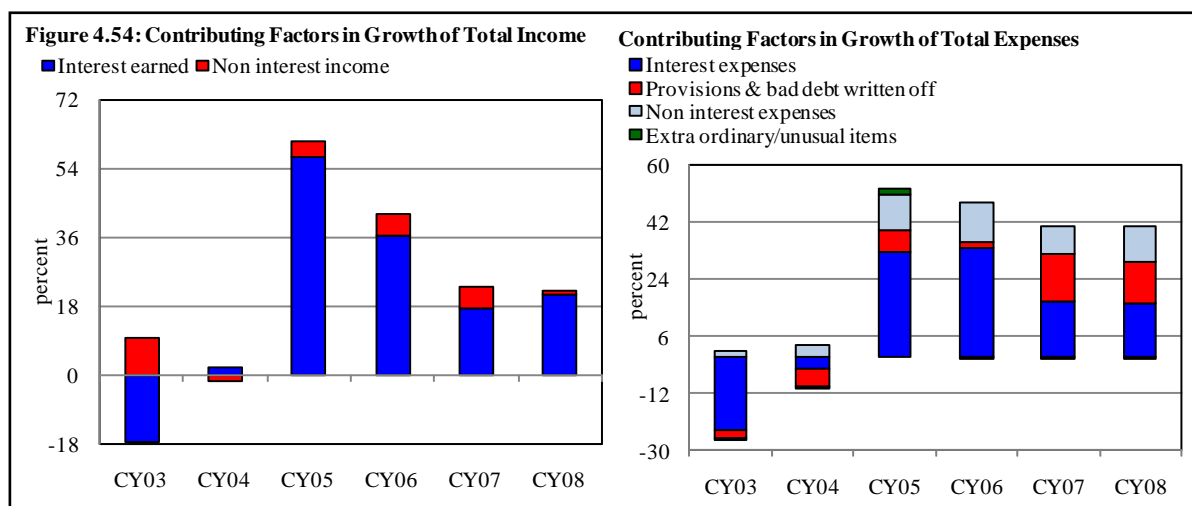
The soundness and security of any banking system depend on its capability to earn from its assets. The profits of banks also act as front line defense to soak up losses without disturbing the capital base. During CY08 investments of banking industry faced losses due to the crash of stock market. Some of the banks booked impairment losses. Thus, the banking system recorded a total profit of Rs 43.3 billion in CY08 compared with Rs 73.1 billion CY07. This is the second consecutive year when banks are facing decline in their profits (see **Figure 4.52**). As a result, the return on assets (ROA) has declined from 1.4 percent to 0.8 percent in CY08. Group wise comparison shows sharp decline in the profits of public sector and foreign banks (see **Figure 4.53**).

Further details suggest that the increase in total expenses was almost twice the growth in total income. The factors that contributed to growth in expenses included non-interest expenses (due to high administrative cost of banks), provisioning (due to deteriorating asset quality), and bad debt write offs (see **Figure 4.54**). The ratio of provisioning expense to gross income has increased sharply as the growth in provisioning is much higher than gross income. This was despite the fact that SBP had provided the 30 percent benefit of FSV.<sup>81</sup>



<sup>81</sup> See circular BSD 'Amendments in prudential regulations- provisioning for loan and advances' dated January 27, 2009.

On the income side, the share of non-interest income has declined in total income due to negative contribution of 'other income' (see **Figure 4.54**).<sup>82</sup> However, the banks have gained Rs 10.2 billion in their foreign currency dealings.

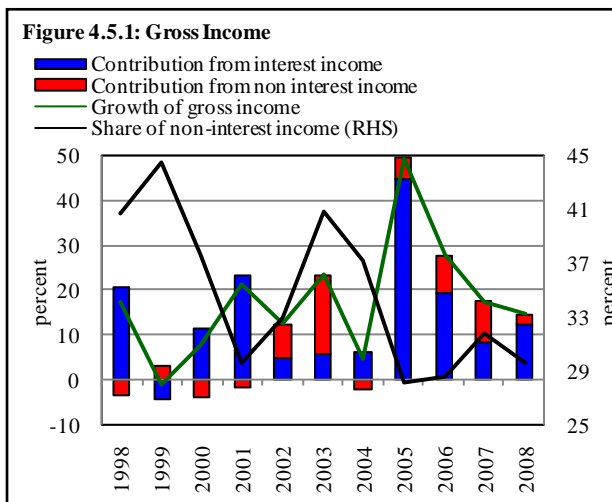


The net interest margins of banking industry have increased to 5.3 percent due to relatively high interest rate prevailing during the period under review. As the result, the net interest income has registered a higher growth of 18.3 percent compared to 12.1 percent in CY07. It may be noted here that non-interest income makes a significant part of the total income of the banking system, but this is more volatile in nature (see **Box 4.5**).

#### Box 4.5: Diversification in Banking and Volatility of Earning Sources

Banks' earning sources are generally categorized into two categories: interest income and non-interest income. The interest income, which is often a major source of earning, is generated by intermediating between depositors and borrowers. At the same time, banks also charge their customer fees in exchange for a variety of financial services which become banks' non-interest income.<sup>83</sup> Considering that the activities that generate interest income are uncorrelated or at least imperfectly correlated with activities producing non-interest income, a diversification in income sources (i.e., between interest and non-interest income) can reduce the total risk for the bank. This in turn would result in a relatively more stable stream of income and profits.

The view that a diversification yields benefits was substantiated by some empirical studies. For example,



<sup>82</sup> It consist of income from several heads such as rent on property/lockers, sale of property & equipment, income from interest derivative contracts, bad debts recovered, exchange income on import/export bills purchased/negotiated etc. In CY08 the 'other income' of banks decreased as they earned less on sale of fixed assets, income from interest derivatives remained low and less charge recoveries were made from customer.

<sup>83</sup> Many of these financial services are traditional banking services: transaction services like checking and cash management; safe-keeping services like insured deposit accounts and safety deposit boxes; investment services like trust accounts and long-run certificates of deposit (CDs); and insurance services like annuity contracts. In other traditional areas of banking—such as consumer lending and retail payments—the widespread application of new financial processes and pricing methods is generating increased amounts of fee income for many banks. And in recent years, banking companies have taken advantage of deregulation to generate substantial amounts of non-interest income from nontraditional activities like investment banking, securities brokerage, insurance agency and underwriting, and mutual fund sales [Source: Robert D Young and Tara Rice (2004)].

1. Rogers (1998) found that large amount of fee-based or non-traditional products or services improved bank efficiency in the 1980s and 1990s in the US.
2. Using a sample of bank holding companies in US from 1990 to 1994, Klein and Saldenberg (1997) found that diversification through holding companies yields some benefits as a holding company would hold less capital and engage in more lending.
3. Analyzing the banking systems of EU countries for the years 1994-98, Smith R, Staikouras C, and Wood, G (2002) found that the increased importance of non-interest income did, for most but not all categories of bank, stabilize profits in the European banking industry in those years.

On the contrary, DeYoung and Roland (2001) argued that non-interest income may increase volatility. This was because (1) the customer-bank relationship is stronger in the traditional lending business, i.e., for many of the new fee-based activities it is easier for customers to switch to another bank; (2) expanding into fee-based services can considerably increase fixed costs (e.g., by investments in technology and human resources) whereas, if a lending relationship is already established, the only cost of an additional loan are the bank's interest expenses; and (3) in contrast to the lending business, fee-based activities require less regulatory capital, which suggests a higher degree of financial leverage and therefore leads to a higher earnings volatility.

Examining the aggregate and individual bank data from the late 1970s to 2001 for US, Stiroh, K.J (2002) found that greater reliance on non-interest income is associated with higher risk and lower risk-adjusted profits. These results suggest little obvious diversification benefit from the ongoing shift toward non-interest income.

In Pakistan, the analysis of data from 1998-2008 indicates that non-interest income makes a significant part of the total income of the banking system, visibly lower than the interest income in most of the years under review (see **Figure 4.5.1**). Further, there is a negative correlation between interest income and non-interest income; this means that banks may gain some benefit from diversifying their revenue sources. But more importantly, non-interest income is relatively more volatile than interest income (see **Table 4.5.1**). Within non-interest income, the fee income<sup>84</sup> is relatively stable revenue source for banks. However, *other income*<sup>85</sup>, *income from dealing in foreign currency dealings*, and *dividend income* which together form a significant portion of non-interest income, are more volatile. This means while the non-interest income may increase the overall income of banks but this would also add to volatility in banks earning.

**Table 4.5.1: Group Comparison of Volatility in Income Sources**  
percent

	PSCB	LPB	FB	SB	All
<b>Total non -interest income</b>	<b>93</b>	<b>189</b>	<b>174</b>	<b>213</b>	<b>157</b>
Fees, commission & brokerage	106	92	329	418	83
Dividend income	123	179	460	277	178
Dealing in foreign currencies	247	250	164	543	249
Other income	216	450	377	200	367
<b>Net interest income</b>	<b>125</b>	<b>84</b>	<b>185</b>	<b>338</b>	<b>96</b>
<b>Correlation coefficient b/w growths rates of interest and non-interest income -0.25</b>					

Note: These results are based on data of audited annual balance sheets from 1998-2008

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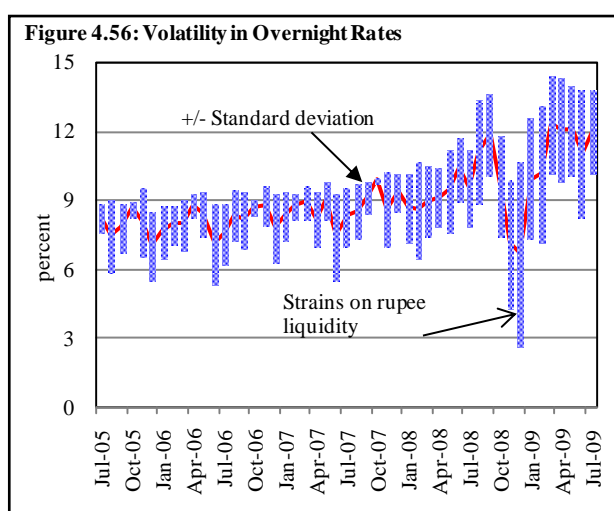
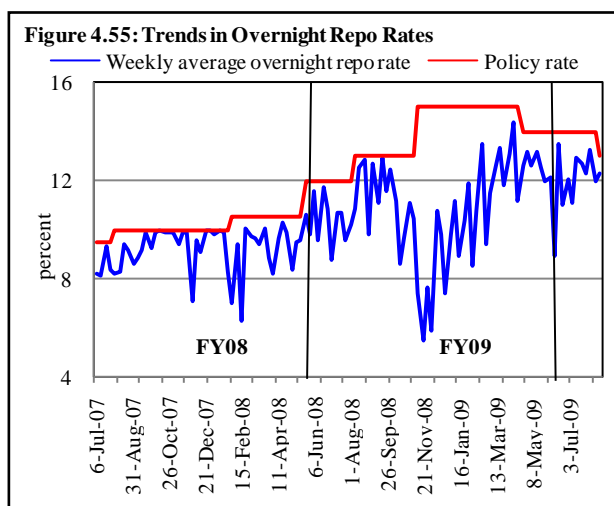
<sup>84</sup> Major source of fee income includes credit card fee, deposit service charges, fee associated with electronic funds transfer, etc.

<sup>85</sup> This includes income from derivative contracts, sale of property and equipment, gains on sale of securities, surplus on revaluation of shares, etc.

#### 4.4 Money Market

The liquidity management remained quite challenging during FY09 as SBP had to maintain a balance between overall monetary policy objective of containing excess demand pressures and at the same time ensuring smooth functioning of the domestic financial system.

Specifically, serious macroeconomic imbalances of the previous year required SBP to maintain restrictive liquidity conditions in the inter-bank money market. During the initial months of FY09, rupee liquidity in the market was relatively restrictive due to depletion of FX reserves and some seasonal withdrawal of deposits. However, the unexpected liquidity drain in October 2008 in the wake of rumor-fed large withdrawal of banking system deposits, which was exacerbated by concerns on stability of domestic financial system in view of global financial crisis, necessitated sufficient liquidity in the financial system. The challenge for SBP compounded as (1) the lingering effect of liquidity shock continued in the latter half of FY09,<sup>86</sup> and (2) in the last quarter, pressure on market liquidity increased owing to significant demand from Public sector enterprises (PSEs) and for commodity finance.<sup>87</sup> Thus, not surprisingly, the weekly average overnight repo rate remained significantly more volatile in FY09 compared to the previous year (see **Figure 4.55**).



The developments in the money market can be categorized into three phases based on the changes in liquidity conditions in the system and market expectations regarding interest rate.

##### *First Phase (Jul-Oct 2008)*

SBP had introduced aggressive monetary tightening measures in May and July 2008.<sup>88</sup> Thus, during the initial months of FY09, overall market liquidity was relatively restrictive and the overnight repo rate remained close to the policy rate. This was despite continued sharp rise in government borrowing from the central bank. While these borrowings led to some rupee injections into the market, their

<sup>86</sup> SBP only gradually allowed the interbank overnight repo rate to reach close to the policy rate as banking system was still recovering from October 2008 shock (see **Figure 4.55**).

<sup>87</sup> During H2-FY09, private sector experienced a net retirement of Rs 184.3 billion. The resulting liquidity ease was more than offset by budgetary borrowings of Rs 198 billion from scheduled banks during this period. Thus, exceptional credit demand from PSEs and for commodity finance exerted stress on market liquidity.

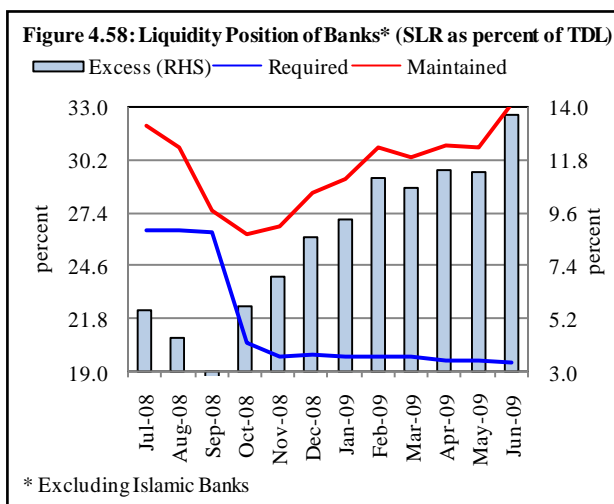
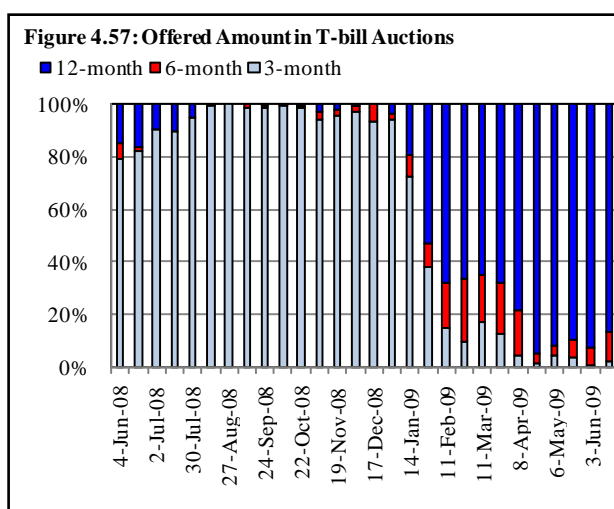
<sup>88</sup> On 22<sup>nd</sup> May 2008, SBP introduced 150 bps increase in policy rate, and 100 bps rise each, in cash reserve requirement (CRR) and statutory liquid ratio. On 30<sup>th</sup> July 2008, the policy rate was further increased by 100 bps to 13 percent.

erratic behavior and large volume considerably increased volatility in overnight repo rate (see **Figure 4.56**).<sup>89</sup>

The challenges for liquidity management increased further due to low deposit growth of the banking system and heavy credit demand from the private sector and the PSEs during this period. In addition, the deterioration in the current account deficit, mainly due to huge oil payments, caused further liquidity drains from the market.

Banks responded to this increasing demand by reducing their stock of government securities. This conduct of banks was bolstered by expectations of a further rise in policy rate. Thus, not only banks' participation in T-bill auction was low,<sup>90</sup> most of their offerings were in 3-month T-bills<sup>91</sup> (see **Figure 4.57**) and the minimum rates offered in auctions were often higher than the cut-off yields decided in previous auctions.<sup>92</sup> In aggregate terms, banks invested Rs 401.0 billion in T-bills auctions during Jul-Oct 2008 (out of which Rs 394.4 billion were in 3-month T-bills), but large maturities of 3-month and 12 month T-bills in this period, led to a net injection of Rs 110.1 billion into the banking system (see **Table 4.8**).

The huge retirement of government securities held by banks had implications for liquidity management. Besides shifting the burden of funding government credit demand to the central bank, this reduced the stock of government securities held by banks over and above SLR requirement (see **Figure 4.58**).<sup>93</sup> This in turn limited the ability of some of the banks not only to access discount window but also to participate in Open Market Operations (OMOs) (see **Figure 4.59**). Meanwhile, the liquidity condition came under further stress with large withdrawals of banking system deposits following rumors regarding concerns



<sup>89</sup> For example, contrary to cumulative retirement of Rs 13.9 billion to the central bank during Jul-Sep 2007, government had borrowed Rs 226.7 billion from SBP in Jul-Sep 2008 period. The volatility of overnight repo also increased as evident from higher co-efficient of variation which has risen from 0.12 in former period to 0.19 in the latter.

<sup>90</sup> During 13<sup>th</sup> August to 5<sup>th</sup> November 2008, banks had offered Rs 379.8 billion in T-bill auctions against the cumulative target of Rs 450 billion. Thus, in net terms, the banks' offered amount fell short of the target by Rs 70.2 billion. Since the total auction maturity during this period was Rs 445.2 billion, this led to net retirement to scheduled banks and a corresponding fall in their stock of government securities.

<sup>91</sup> Banks' lack of interest in other tenor can be gauged from the fact that from 2<sup>nd</sup> July to 27<sup>th</sup> August, 2008, banks did not bid any amount for 6-month T-bills auctions.

<sup>92</sup> This was because banks were seeking higher returns on government papers in line with excessive demand pressures on market liquidity.

<sup>93</sup> The excess liquid assets with banks declined to the 1.8 percent of the time and demand liabilities (TDL) by 11<sup>th</sup> October 2008 from 5.4 percent at end-June 2008.



on the stability of some of the local banks.<sup>94</sup> As a consequence, banks started borrowing in the interbank call market, leading to an abnormal jump in the overnight call rate during this phase (see **Figure 4.60**). The effect of tight liquidity conditions was also visible on kibar, which had been rising since July 2008 (**Figure 4.61**).<sup>95</sup>

In response to these liquidity shortages, not only banks made use of SBP's discount window (availing Rs 481.3 billion during Aug-Nov 2008 period), SBP provided extensive liquidity support of Rs 396 billion through OMOs. Given the scale of liquidity crunch, SBP reduced the cash reserve requirement (CRR) for the banking system in a phased manner (during 11<sup>th</sup> October to 1<sup>st</sup> November 2008) by 400 bps to 5 percent of time and demand liabilities. SBP also exempted the time deposits from SLR requirement. These measures were introduced to restore the confidence of the banking system quickly. But these measures subsequently diluted the effect of monetary tightening being pursued by the central bank to address the macroeconomic imbalances faced by the country.

### **Second Phase (November 2008 to February 2009)**

The inter-bank market was excessively liquid during this phase as evident from overnight repo rates which remained significantly lower than the policy rate (see **Figure 4.55**). In addition to earlier extensive support, SBP decided to provide 100 percent refinance to banks under EFS on November 12, 2008. Further, slowdown in credit demand from the private sector and improved foreign exchange inflows reflecting gains in external account balance eased the liquidity condition in the market. SBP however refrained from aggressively removing the excess liquidity from the market in view of the continuing risks to smooth functioning of the financial market.<sup>96</sup>

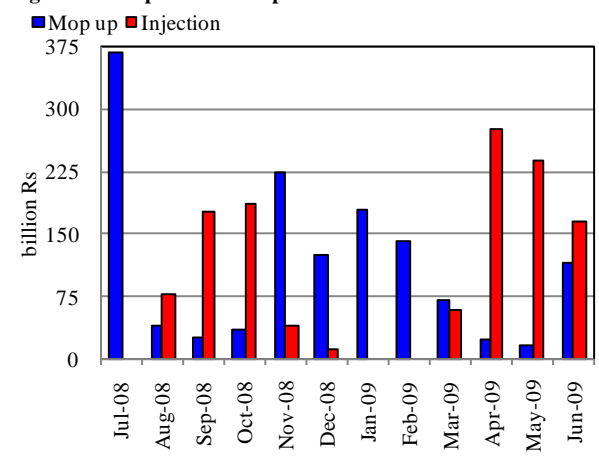
The overnight repo rate therefore increased only gradually to align with the policy rate. In the meanwhile, considering continuing macroeconomic imbalances, SBP raised the policy rate by 200 bps on 13<sup>th</sup> November 2008. Interestingly, 6-month Kibar had already partly incorporated this rise in

**Table 4.8: Indicators of Liquidity Conditions**

billion Rupees

	FY09		
	Jul-Oct	Nov-Feb	Mar-Jun
<b>1. T-bill Auctions</b>			
Auction target	560.0	760.0	525.0
Auction maturity	523.0	627.5	407.2
Net target	37.0	132.5	117.8
Net offer	46.7	1,022.0	703.9
Net acceptance	-110.1	249.5	160.0
<b>2. OMOs</b>			
Injects	442.0	50.6	741.5
Absorptions	472.1	669.3	226.3
Net absorption	30.1	618.7	-515.2
<b>3. Discounting</b>			
Amount	377.1	327.0	170.4
Average amount discounted per day	9.0	5.3	9.0
Average number of banks visiting per day	5.9	3.2	4.3

**Figure 4.59: Open Market Operation**



<sup>94</sup> During the month of October 2008, deposits of the banking system fell by Rs 90.0 billion.

<sup>95</sup> Further the rising differential between repo rates and the KIBOR suggests that extending credit to private sector was more attractive for banks than investing in government papers.

<sup>96</sup> The central bank allowed banks to avail Rs 342.9 billion through its discount window during this phase. At the same time, SBP absorbed Rs 618.7 billion through OMOs.



policy rate as between 28<sup>th</sup> October to 12<sup>th</sup> November, 2008 (i.e., a day before policy rate decision); the 6-month KIBOR had risen by 110 bps.<sup>97</sup>

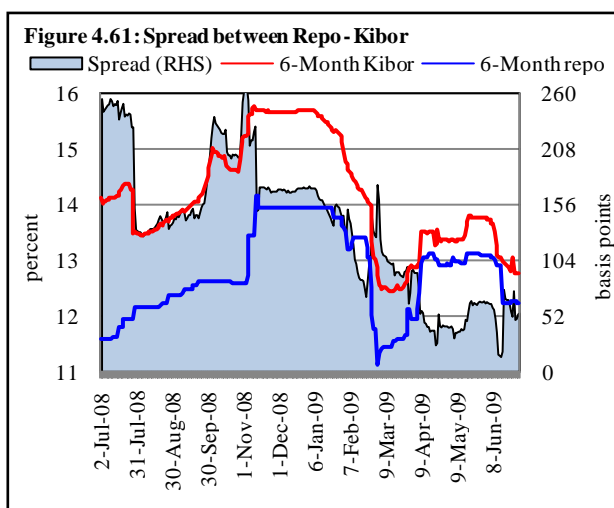
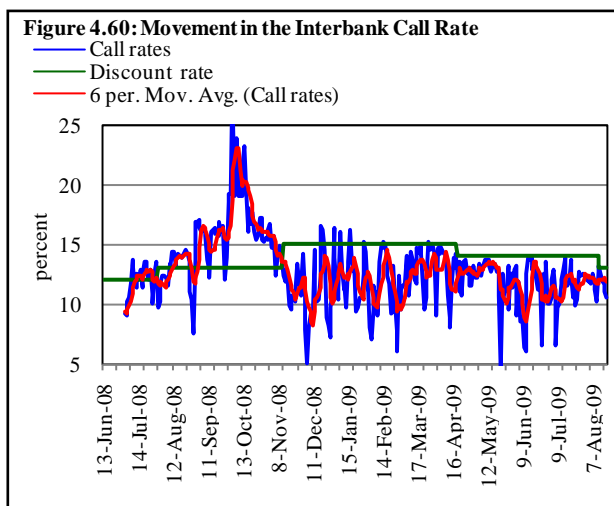
The aggressive policy rate increase by SBP, however, changed market expectations regarding interest rate outlook January 2009 onwards. Specifically, banks were of the view that interest rates in the economy have peaked out. This change in expectations was also reflected in heavy participation of banks in T-bill auctions; particularly in longer tenor papers (see **Figure 4.57**). Besides reducing the government reliance on funding from the central bank, this change in expectations led to softening of market repo rate.<sup>98, 99</sup> KIBOR which were already falling due to slowdown in private sector credit demand came under further pressure.<sup>100</sup>

The government was able to borrow Rs 249.5 billion, net of maturity, in nine T-bill auctions held during this phase. It can be argued that it was essentially the slowdown in demand for private sector credit and some degree of risk averseness among banks that allowed government to borrow from scheduled banks without putting pressures on market rates.

During this phase, a number of steps were taken to make the distinction between debt management and liquidity management function more visible. For example, (1) government started making prior announcement of auction calendar for T-bill and PIBs auctions; (2) the auction results are now volume based, and (3) the responsibility of deciding cut-off yields in primary auction of T-bills and PIBs was transferred from SBP to Ministry of Finance. The latter measure will help in improving the transmission of monetary policy as now movements in cut-off yields would not be construed as signals for monetary policy changes.

### **Third Phase (March 2009 onwards)**

The liquidity conditions stabilized during this phase as overnight repo rate remained relatively less volatile and gradually converged to the policy rate. The market however came under some pressures due to advance taxation payments by banks,



<sup>97</sup> The KIBOR of shorter tenor, which are mainly driven by liquidity conditions in the market, continued their softening trend during this period.

<sup>98</sup> The increased risk averseness among banks due to rise in non-performing loans also helped in reducing the government reliance on funding from the central bank.

<sup>99</sup> Indeed, with slowdown in CPI inflationary pressures, particularly after January 2009, there were clear expectations of a cut in policy rate which was reflected in the bid-pattern of T-bill auctions. Specifically, most of offered rates by banks were less than the cut-off yield realized in the previous auction.

<sup>100</sup> From end-December 2008 to mid-March 2009, the 6-month repo (offer) rate fell by 263 basis points, whereas KIBOR of similar tenor declined by 327 basis points.

credit demand from some PSEs following the partial settlement of their loans with banks,<sup>101</sup> and borrowings by the government to meet SBA's end-March 2009 quantitative target. These pressures were partly offset by some inflows as (1) there was some improvement in external account position, and (2) SBP provided liquidity support through OMOs. As a consequence, overnight rate gradually came close to policy rate.

The market however continued to anticipate downtrend in long term inflation as in PIB auction held on April 15, 2009 banks offered higher than targeted amount (i.e., Rs 49.3 billion against Rs 20 billion). Later on, as risks from macroeconomic imbalances reduced and disinflationary trend firmed up, SBP reduced the policy rate by 100 bps on April 21, 2009. The market rate however remained almost unchanged, suggesting that market had already taken into account lower interest rates. Further, there were some additional demands on market liquidity from public sector enterprises (PSEs) and for commodity operation.

The market rate however started to decline steeply following the release of CPI inflation for the month of May 2009. The decline in YoY CPI inflation from 17.2 percent in April to 14.2 percent in May 2009 strengthened market expectations that the slowdown in inflationary pressures will continue and SBP would ease its monetary policy. The downtrend in interest rate accelerated with the release of June 2009 number for CPI inflation. The 6-month Kibor offer rate fell from 13.63 percent on 9<sup>th</sup> June 2009 to 11.88 percent on July 24, 2009

The market interest rate adjusted upward as (1) SBP first delayed the announcement of its Monetary Policy Statement which was initially scheduled for July 24, 2009, and (2) the eventual reduction of 100 bps in policy rate on 17<sup>th</sup> August, 2009 was less than market expectations.

Finally, in August 2009, SBP also adopted a new framework for its monetary operation by announcing an interest rate corridor. Under this framework, SBP introduced an overnight standing deposit facility. The rate on this facility will be 300 bps below the discount rate and would effectively act as a floor rate for the overnight interbank repo borrowings. The SBP policy discount rate on the other hand would serve as ceiling on the upward movement in the money market repo rate.

The introduction of this corridor would help in containing the excessive volatility in overnight repo rate, would make monetary policy transmission more effective and foster transparency in money market operations.

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<sup>101</sup> In March 2009, Pepco issued a government guaranteed TFC of Rs 80 billion as an effort to settle the circular debt issue. This TFC had no immediate cash impact as receivables and payables of various entities involved in the circular debt were settled only through mapping exercise. It was however found that a few PSEs acquired more loans from banks as they got room for additional bank borrowings.

## Special Section 4.1: Capital Market Developments

### 1 Overview

In the background of sluggish economic growth,<sup>102</sup> large twin deficits, high inflation, heightened security risks and poor law & order situation as well as dwindled manufacturing activities amid power outages, asset markets remained under severe stress. Given continued expansionary fiscal policy and heavy reliance of the government on borrowings from the central bank to finance budget deficit, tight monetary policy was the only option to bleed off excessive aggregate demand pressure to contain inflationary pressures. The impact of these developments was further compounded due to liquidity crunch in the banking system and political noise. In addition, within equity market, regulator's decision to impose a floor for about 3½ months on KSE-100 index as well as depletion of leverage due to gradual elimination of CFS MKII and weakness in corporate earnings adversely impacted the performance of bourses during FY09.

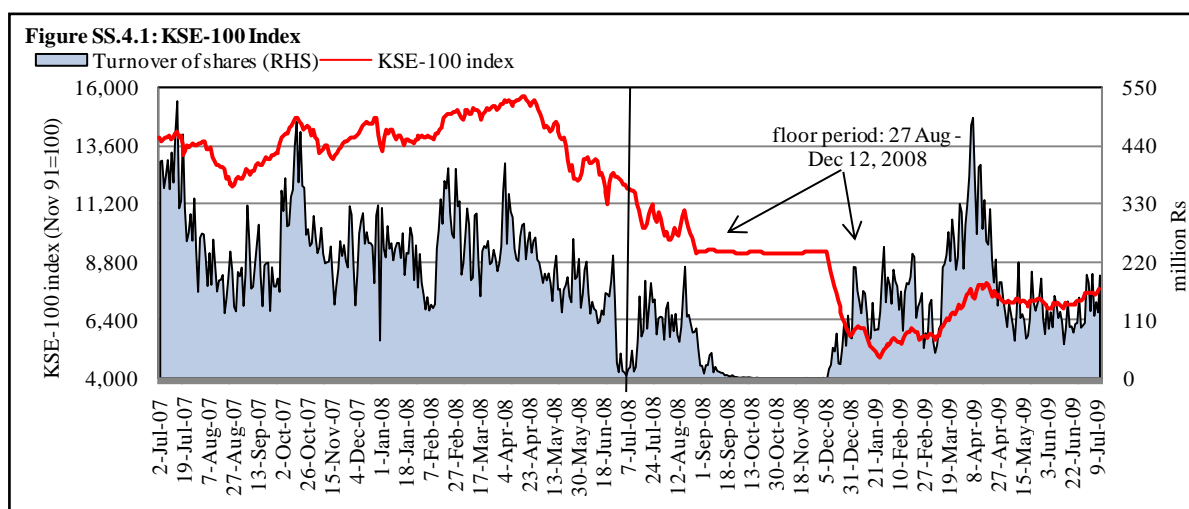
These negative domestic developments coupled with global recession amid financial crises also led to massive outflow of portfolio investment. Consequently, downtrend in KSE-100 index, which was started in April 2008, was extended up to end-January 2009. As a result, KSE-100 index witnessed a massive decline of 43.7 percent during FY09, though recovered 48.7 percent by end-June 2009 from its lowest level of 4815.3 seen on January 26, 2009 (see **Table SS.4.1**). Similarly, the other markets of the country, (i.e., the Islamabad Stock Exchange and Lahore Stock Exchange) also showed net decline of 42.6 percent and 48.9 percent in their indices during FY09.

**Table SS.4.1: Overview of Capital Market**

end-period		FY07	FY08	FY09
<b>Equities (KSE)</b>				
Listed companies	numbers	658.0	652.0	651.0
Listed capital	billion Rupees	631.0	706.0	782.0
Market capitalization	billion Rupees	4019.4	3777.7	2120.7
Market capitalization as % of GDP	percentage	46.3	36.7	16.2
New listed companies	numbers	16.0	7.0	8.0
<b>Debt instruments (all listed)</b>				
New debt instruments listed	numbers	3.0	7.0	1.0
Amount	billion Rupees	11.1	22.25	21.25
<b>KSE-100 Index</b>		13,772.5	12,289.0	7,162.2
High		13,772.5	15,676.3	12,21.5
Low		9,504.5	11,162.2	4,815.3
<b>Turnover (KSE)</b>				
Average volume per day (shares)	billion	0.2123	0.2416	0.1056
Average total value	billion Rupees	22.3	25.6	4.4
<b>Total trading days</b>		244.0	247.0	245.0
<b>Lahore Stock Exchange</b>				
LSE-101 index		4,849.9	3,868.8	2,132.4
LSE market capitalization	billion Rupees	3,860.0	3,514.0	2,018.0
<b>Islamabad Stock Exchange</b>				
ISE-10 index		2,716.0	2,749.6	1,713.0
ISE market capitalization	billion Rupees	3,060.6	2,872.0	1,705.0

<sup>102</sup> Real GDP grew by only 4.1 percent in FY08 and 2 percent in FY09 compared to a long-term average of above 5 percent.

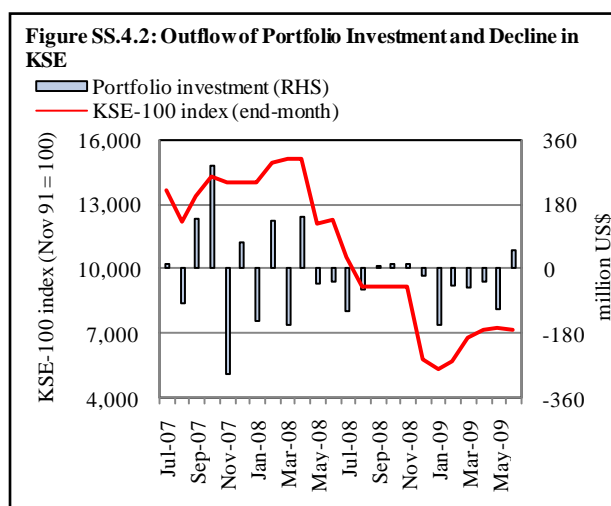
More important and catastrophic, however, was the decision of imposition of a floor on KSE-100 index to stop the free slide and to protect the investors. Dull trading sessions during floor period led to a sharp decline of 56.3 percent in average daily turnover at KSE (see **Figure SS.4.1**). Not only did foreign investors shy away in a non-market environment, domestic mutual funds which are in their infancy stage, were badly hit by this decision. In addition, the imposition of floor also posed significant challenges to the stability of the country's banking system. It could potentially be more damaging, if the central bank not taken appropriate measures to improve liquidity in the banking system.<sup>103</sup> Imposition of floor practically made market non-functional and MSCI Pakistan Index has



been excluded from MSCI Emerging Market Index by end-December. The adverse developments during the floor period – such as deadly bomb attack on a high profile hotel, political deadlock between Pakistan and India after Mumbai attack, increased insurgency in the Northern areas, as well as, muddled domestic political scenario – made investors' sentiments further negative. Each passing day made it clear that market was set to have a steep slide in post-floor period.

The substantial decline in forex reserves, fiscal slippage, surge in inflation, losses in rupee parity, weakened growth profile accompanied with political chaos and insurgency led to deterioration in credit rating of the country, which further compounded the impact of global recession and resulted in massive outflow of portfolio investment from the country. As a vicious cycle, this outflow of foreign investment from the equity market added panic in the market (see **Figure SS.4.2**).

However, it is important to note that the performance of most of the equity markets around the globe remained lackluster during FY09 due to the impacts of financial turmoil and recession (see **Figure SS.4.3**). The only exception to bearish sentiments were India, China and Vietnam, all three had showed recovery from significant declines in the previous year. In particular, rise in Indian equity market (SENSEX) is a reflection of



<sup>103</sup> For details, please see SBP Second Quarterly Report for FY09 on the State of Pakistan's Economy.

continuity of policies as Congress won the elections this year. However, despite substantial losses during FY09, the relative standing of Pakistan's equity market in the region is promising (see **Box SS.4.1**). There is a need to resolve issues related to implementation of regulation, at the same time availability of financing with risk management tools and improvement in law & order situation in the country may help boost the performance of the market with significant domestic and foreign investment.

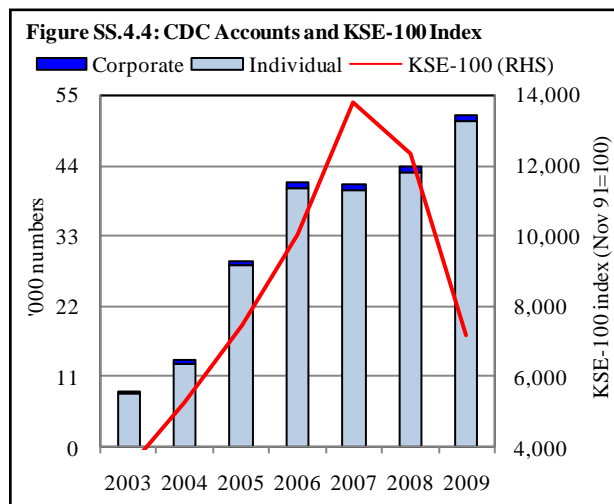
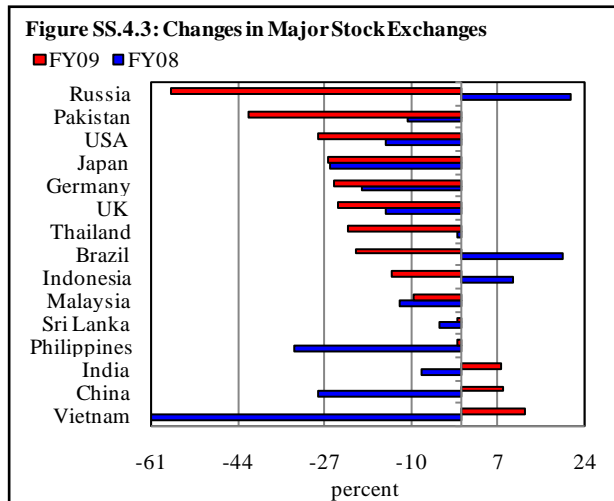
The optimism also comes from the fact that despite the weaker performance of the equity market, number of accounts with the Central Depository Company (CDC) has increased by 18.2 percent by end-June 2009 compared with only 7.1 percent in June 2008 and a decline of 0.5 percent in June 2007 when performance of stock market was strong (see **Figure SS.4.4**). The rise in number of accounts with the CDC in FY09 is probably a function of low leveraged holdings and discounted valuations, which directed genuine investors to focus with medium to long-run perspective rather than investors with short-term and speculative motives in the preceding years. The principal factor is probably the sharp decline in equity prices made investment in equities more attractive, and in absence of leverage instruments, speculators kept themselves away from the market.

It is important to note here that traditionally speculative trades have contributed significantly to the overall trading volumes. In fact, present low volumes indicate towards absence of leveraged trading through the *Continuous Funding System Mark-II* (CFS MK-II), which was banned in April 2009. SECP has recently introduced deliverable future contract market (DFCM) for only selected stocks. Both SECP and KSE are trying to introduce *marginal financing* (MF) facility with the consultation of stakeholders.

Finally, the adverse developments during the last two years coupled with high interest rate environment also reflected in listings of new debt instruments in the corporate debt market. Only one new TFC of Rs 4.3 billion listed in December 2008. The rate offered was 14.15 percent (KIBOR + 1.65%), compared to 11.52 percent (KIBOR + 1.42%) for the same credit rating corporate in February 2008.

## 2 Market Developments

A free slide in KSE-100 index continued till August 27, 2008, which started in mid-April 2008 (see **Figure SS.4.1**). This phase is marked with lower volumes as well. Given the continued deterioration in law & order situation and political noise and subsequent massive outflow of portfolio investment in



shares and securities,<sup>104</sup> floor on KSE-100 index was imposed on August 27, 2008. While a free slide of KSE-100 index was halted; intervention in normal functioning of the market through ad hoc measure proved to be catastrophic for the market and all investors – individual, institutional and brokerage houses. Subsequently, MSCI also removed Pakistan from its MSCI Emerging Market Index by end-December 2008.

#### Box SS.4.1: Regional Standing of Pakistan's Equity Market

Pakistan's per capita income on purchasing power per capita basis is quite low compared with other regional countries. Pakistan's rank is 126<sup>th</sup> in terms of per capita income (PPP) out of a total 207 countries according to the S&P's recent report on Global Stock Market Factbook. However, it is heartening to note that key indicators of equity market suggest that bourses in Pakistan are well developed and earned significantly higher ranking at most places (see **Table SS.4.1.1**). For example, only Vietnam and Bangladesh have lower per capita income among the selected sample of 13 regional countries, however, in terms of stock market turnover, Pakistan's rank is 5<sup>th</sup> in this sample and 20<sup>th</sup> in the world. Similarly, Pakistan's is at 5<sup>th</sup> position in the region in terms of number of listed companies, and enjoys 15<sup>th</sup> position in the world. Pakistan's equity markets are at 9<sup>th</sup> position in the region in terms of value traded, and at 39<sup>th</sup> number in the world. While average company size is at the same level as of per capita income in the region, Pakistan is at 88<sup>th</sup> position in the world in terms of average company size. Similarly, country's rank in terms of market capitalization is also better.

**Table SS.4.1.1: Regional Comparison of Pakistan's Equity Market**

Country	GNI Per capita-PPP (2007)	Stock market turnover (%)	Market capitalization, (million US Dollar )	Value traded, (million US Dollar )	Number of listed domestic companies	Average company size (million US Dollars)
Bangladesh	1,330	137.3	6,671	9,240	290	32.6
China	5,420	121.3	2,793,613	5,470,529	1,604	1741.7
India	2,740	85.2	645,478	1,049,748	4,921	183.5
Indonesia	3,570	71.3	98,761	110,678	396	249.4
South Korea	24,840	181.2	494,631	1,465,999	1,798	275.1
Malaysia	13,230	33.2	187,066	85,214	977	300.8
<b>Pakistan</b>	<b>2,540</b>	<b>116.0</b>	<b>23,491</b>	<b>54,359</b>	<b>653</b>	<b>59.1</b>
Philippines	3,710	22.2	52,101	17,213	244	335.4
Singapore	47,950	101.3	180,021	270,909	455	395.7
Sri Lanka	4,200	17.2	4,326	1,022	234	24.4
Thailand	7,880	78.2	102,594	116,769	476	361.4
Turkey	12,810	118.5	117,930	239,713	284	415.2
Vietnam	2,530	28.8	9,589	4,195	171	65.0

Source: Standard & Poor's Global Stock Markets Fact book -2009

These statistics, albeit with some weaknesses, show the growth potential of the domestic stock exchanges. There is a need to adopt best international practices, software, transparency and prudent regulations to gain investor confidence.

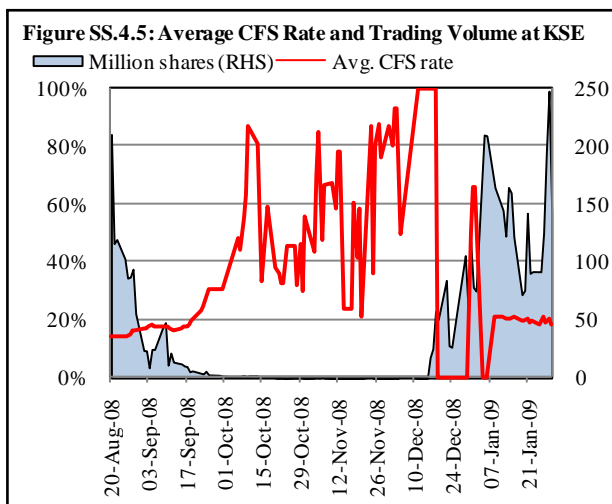
Unfortunately, pressures on rupee parity, resilience in inflation at around 24 percent YoY level, bombing of Marriot Hotel, Islamabad, further tightening of monetary policy and, more importantly, rumor driven liquidity crunch in the banking system were some very significant developments during the floor period. These developments added further steam in negative sentiments and evaporated any hopes of recovery in the market. Thus, amid fear of a crisis, floor period was extended. The floor restricted the investors to square their positions, which had serious implications for all investors – small, big, institutions and foreign.

In particular, mutual fund industry, in its development phase in the country, was hit hard by these developments, as the impacts of a decline in asset prices and subsequent disinvestment from mutual funds were quite strong. In fact, despite imposition of floor, which made it impossible to liquidate the equity investment during that period, mutual funds faced massive withdrawals. These withdrawals

<sup>104</sup> A net outflow of US\$ 177 million was registered in portfolio investment during Jul-Aug 2008.



were due to a sharp decline in NAVs and gloomy outlook amid floor. In this background, liquidity crisis hit the banking system in October 2008, which was primarily driven by rumors. However, a part of this crisis was fueled by extraordinary drop in deposits amid disinvestment from mutual funds. As a result, not only short-term overnight rates in money market soared to record high, CFS rates also rose significantly to as high as 100 percent (see **Figure SS.4.5**). The pressures on CFS rates were also compounded by increased risk, as investors were unable to settle their position due to floor and institutions were unwilling to take further exposure in non-market environment (see **Box SS.4.2**). However, as market started functioning normally and stress on institutional liquidity eased by early January 2009, short term money market rate and CFS rate at KSE also stabilized.



As mentioned above, the distressed investors were looking for a chance to settle their positions; as the floor removed, selling pressure drove market to a five year low level of 4815.3 by closing on January 26, 2009.<sup>105</sup> However, attractive prices and expected handsome payouts from leading scrips on the back of inventory gains, revaluation and higher prices coupled with some stability in country's macroeconomic fundamentals once again reinvigorated investors' interest in the market. Consequently, market recovered and within 52 sessions, KSE-100 reached to its local peak of 7872.5 from its bottom. This period is also marked with higher volumes comparable to the first half of FY08.

In the final quarter of FY09, trading volumes shrank again due to (1) uncertainty about the market direction, as well as (2) absence of leverage products in the market as the facility of CFS MK-II was discontinued and outstanding amount of financing was required to be gradually settled. This restricted investors' ability to take leveraged position in the market. In absence of leveraged positions, market initially remained depressed and at many occasions KSE-100 index declined to below 7000 level up to mid-June 2009. However, both volatility in stock market and volumes reduced significantly during H2-FY09 (see **Table SS.4.2**).

**Table SS.4.2: KSE-100 Stabilized in H2-FY09**

	Standard deviation	
	KSE-100	change in KSE-100
Q1-FY08	638.4	166.6
Q2-FY08	483.3	206.8
Q3-FY08	555.9	171.1
Q4-FY08	1354.7	249.5
Q1-FY09	666.5	240.1
Q2-FY09 (floor period)	922.4	117.3
Q3-FY09	483.9	138.3
Q4-FY09	267.5	131.3

Consequent on restoration of normal functioning of market mid-December 2008 onwards, MSCI Pakistan Index was included again in MSCI Frontier Emerging Market Index in May 2009.<sup>106</sup> Market witnessed substantial gains thereafter, though with lower volumes mainly due to absence of financing instruments and liquidity shortages with the investors. It is worth noting that the fall in equity market was also complemented with the decline in other asset prices; such as real estate. At the same time exposure of domestic investors in real estate and businesses in Middle East also either turned into losses or stuck up. The combined impact of

<sup>105</sup> Earlier market observed the level of 4809.5 on 26<sup>th</sup> February 2004.

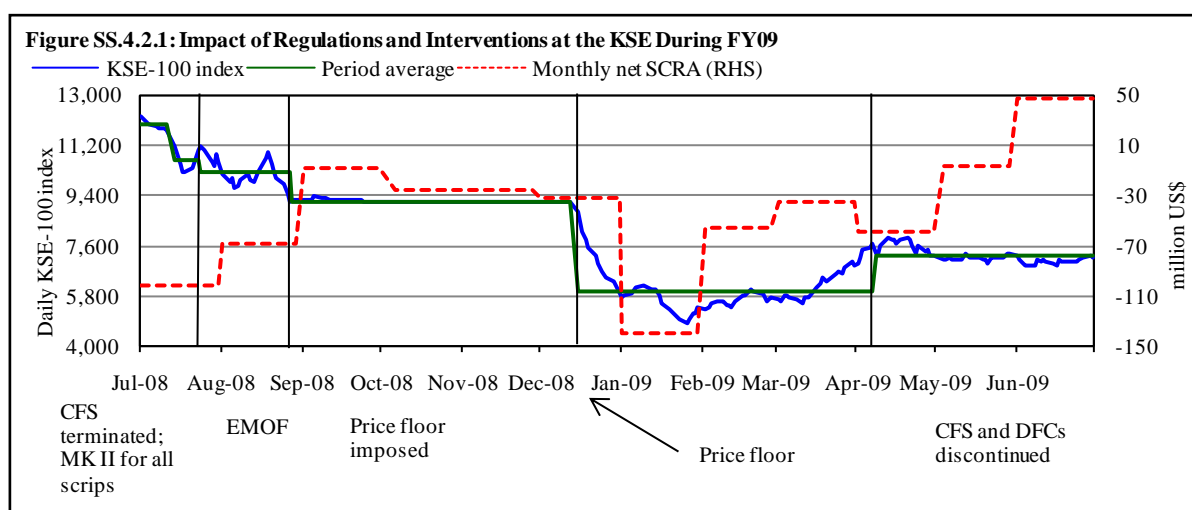
<sup>106</sup> 12 Pakistani companies included in MSCI-EMI, these are MCB, NBP, UBL, NIB, OGDC, POL, PSO, KAPCO, HUBCO, FFC, JSCL and PTC with a combined weight of about 45 percent in KSE 100 index.

losses in asset markets disturbed the cash flows and investors became extraordinary cautious. Although, deliverable futures have been introduced by end-July 2009, it is limited to fewer stocks and market and this product has not attracted market participants so far. A major factor for lack of interest of investors in deliverable futures is probably high uncertainty about the future direction of the market.

There is increasing need for a standardized financing instrument in the local bourses where investor can avail finance direct from the financial institution, i.e., without involvement of broker. This could be a Pareto efficient solution as both investors and financial institutions will be in a better situation. Financial institutions may charge a rate of return and set margin limits as per risk profile of the investor, and investor is still able to find lower and competitive rates.

#### Box SS.4.2: Developments of Financing Instruments at KSE during FY09

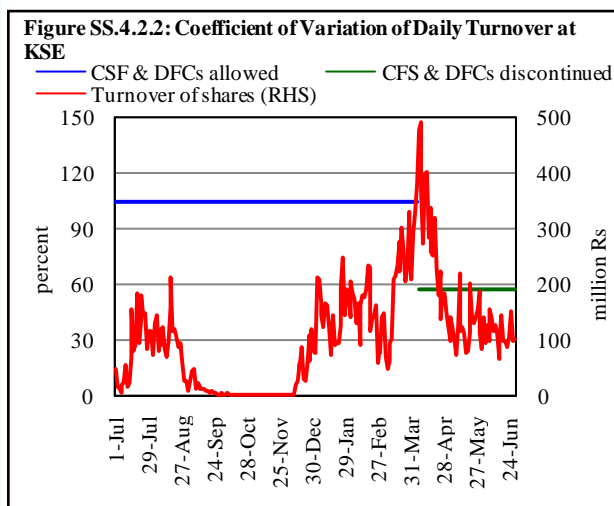
FY09 was a challenging year for the stock markets. While the domestic market remained liquidity-starved on account of high interest rates and a sharp decline in consumer credit, foreign capital inflows also shrank due to the global recession. As expected, the beginning of FY09 observed a steep downside in the country's major stock indices. However, to arrest this rapid de-capitalization of the equity markets, the Securities and Exchange Commission responded through a number of key market interventions, including the introduction of an equity market opportunity fund (July 24, 2008); implementation of a price floor (August 28, 2009); and lastly, the discontinuation of high-risk financial products – continuous funding system and deliverable futures (April 8, 2009) (see **Figure SS.4.2.1**).



High-leverage products, continuous funding system mark two (CFS MKII) and deliverable futures contracts (DFCs), essentially generated liquidity by allowing transactions to be carried-over. But the extra liquidity came with inherent problems:

1. In bearish markets where securities continuously lose value, the investors could default, leading to what is known as the 'counter-party' risk;
2. Margins might not suffice under large-scale defaults, leading to 'systematic risk' – the risk of destabilizing the entire market; and
3. 'Pump and dump': The broker-financier had the incentive to boost the price of a stock through false or misleading recommendations and then sell the same. This led to price volatility which impedes equity market growth.

As liquidity constraints eased by H2-FY09, with lowering of discount rates and a gradual increase in net Special

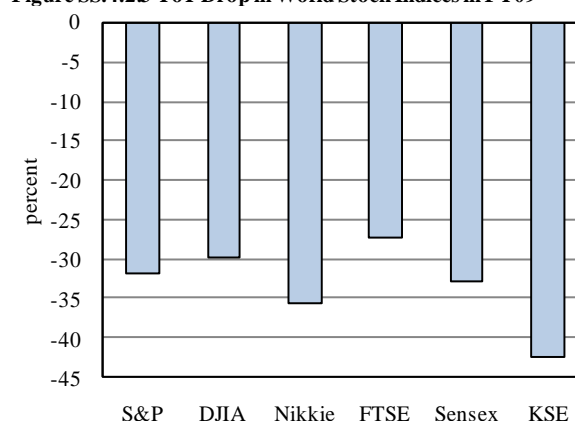


Convertible Rupee Accounts (SCRA) inflows, the SECP decided to do away with CFS and DFCs and declared the low-risk cash-settled futures (CSF) as the single alternative. Although, market reports suggest that CSF did not manage to acquire much attention from investors, the post-discontinuation average stock market index remained higher than the mid-December to March low; the period immediately following the removal of price floor. Moreover, volatility in share turnover dropped considerably vis-à-vis the prior period (see **Figure SS.4.2.2**).

Finally, during the period under review, a global liquidity crunch prevailed as asset values declined worldwide and uncertainty about the economy led to a rise in precautionary savings. Consequently, there was a worldwide downslide in equity markets (see **Figure SS.4.2.3**). In Pakistan, the impact of the global liquidity crunch was felt through net outflow of capital via the SCRA (see **Figure SS.4.2.1**) – which contributed to 6.8 percent of market capitalisation in FY07.

For these reasons, FY09 was perhaps not the best time to introduce a low liquidity-producing instrument (CSF) or disable modes of financing which the investors are most familiar and comfortable with. The new product might as well have fared better in an expansionary phase of the market. Considering this, the SECP's decision to revive deliverable futures in July 2009, albeit with sterner risk-management clauses (i.e., risk-based cash margin), raises concerns about the Commission's direction and vision for the development of stable equity markets.

**Figure SS.4.2.3 YoY Drop in World Stock Indices in FY09**



Source: Bloomberg & Reuters

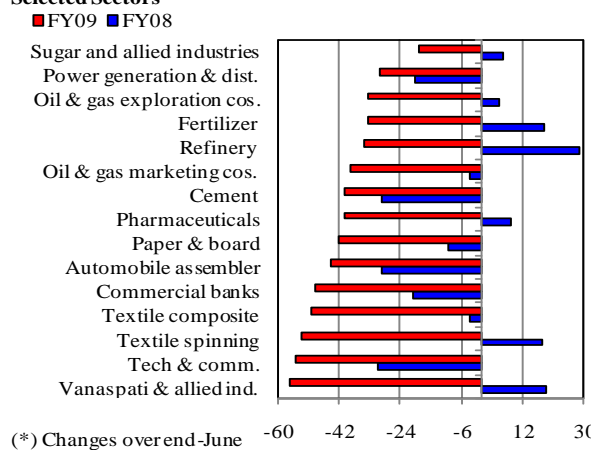
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### 3 Sectoral Performance

Almost all the sectors contributed in dismal performance of KSE during FY09, principally following overall trend of the market (see **Figure SS.4.6**). However, some sector specific reasons were also responsible for decline in their profitability. In particular, circular debt issue, and decline in refinery margins compounded the impact of overall bearish sentiments for refineries during the year. Similarly, weaker profitability caused by rising NPLs, and liquidity crunch during the year under review resulted in substantial decline in market capitalization under commercial banks. A lackluster performance of paper & board sector is probably magnified due to poor payouts during the past two years. Although companies are undertaking substantial expansions in this sector, payouts to investors are relatively negligible. Automobile sector was also hit by weaker demand, rising input cost and depreciation in this period. As a consequence, some leading companies in this sector either did not announce dividend or other payouts, or their

**Figure SS.4.6: Percentage Change in Market Capitalization of Selected Sectors\***



(\*) Changes over end-June

payouts were substantially lower than expected based on their recent record.

However, despite reasonable payouts by fertilizer sector, market capitalization declined in this sub-sector, which, inter alia, is attributed to accumulation of inventories amid unanticipated weaker demand due to falling fertilizer prices during FY09. Similarly, sharp cut in development expenditures by the government further compounded the impact of weaker private demand for cement during FY09. However support from cement exports helped earn good profits. Although, sugar & allied industries also registered decline in market capitalization in FY09; the decline in this sector was quite low compared with other sectors as rising sugar prices raised hopes for increase in profitability of sugar industry.

#### 4 New Listings

In contrast with the weaker performance, new listing at KSE saw a rise during FY09. Specifically, 8 new companies were listed at KSE with the total paid capital of Rs 10.7 billion during FY09 compared with 7 new companies with a higher paid up capital of Rs 14.3 billion in the preceding fiscal year. The most significant offering during FY09 was that of Engro Polymer & Chemicals Limited followed by Media Times Limited and Descon Oxychem Limited. Although, the total amount offered to general public was slightly higher during FY09, principally due to relatively larger offers of the above mentioned companies, the amount subscribed was significantly lower in FY09. It is important to note that over 80 percent of FY09 public issues were launched during the first quarter, when bearish sentiments were dominating the market. As a result, three IPOs were under-subscribed during FY09 as against nil in the preceding years. The most successful launch was of the Engro Polymer as it was significantly oversubscribed (see **Table SS.4.3**), principally due to goodwill of the group.

**Table SS.4.3: Floatation in FY09**

million Rupees

Company	Formal listing date	Total paid-up capital	Already paid-up	of which public issue	Amount subscribed	Times subscribed	Amount subscribed by underwriter
Engro polymer & chemicals limited (Offer for sale) Rs 8 premium per share	21-Jul-08	5,203.7	5,203.7	500.0	1,578.5	3.16	
KASB securities limited (Offer for sale) Rs 57.50 premium per share	4-Aug-08	1,000.0	1,000.0	228.0	31.5	0.14	1326.1
Colony sugar mills limited <sup>1</sup>	13-Aug-08	990.2					
First credit and investment bank limited	21-Aug-08	650.0	400.0	250.0	19.5	0.08	230.5
Arif Habib investment management limited (Offer for Sale) Rs 115 premium per share	28-Aug-08	300.0	300.0	71.3	76.9	1.08	
Descon oxychem limited	15-Sep-08	1,020.0	695.0	308.8	331.0	1.07	
Media times limited	2-Feb-09	1,341.4	1,004.8	336.6	3.3	0.01	333.3
IBL healthcare limited <sup>2</sup>	27-Mar-09	200.0					
<b>TOTAL</b>		<b>10,705.3</b>	<b>8,603.5</b>	<b>1,694.6</b>	<b>2,040.7</b>		<b>1,889.9</b>

<sup>1</sup>The Company is being listed on the Exchange under Listing Regulation No.25 pursuant to distribution of specie dividend by Colony Mills Limited to its shareholders.

<sup>2</sup> The Company has been listed without public offering pursuant to distribution of specie dividend by Searle Pakistan Limited, which divested its shareholding in IBL Healthcare Limited to its shareholders inform of specie dividend.

Source: KSE

#### 5 Corporate Debt Market

Given an unfavorable environment for investment throughout FY09, the activity in corporate debt market also remained dull, as only one listing of Rs 4.3 billion was launched compared with 7 listings

worth Rs 23.5 billion in the preceding year (see **Table SS.4.4**). The market appetite was so low that even this small amount had been under-subscribed,<sup>107</sup> despite a very good credit rating by PACRA (AA-) and leading position of the company in cellular services. Besides slowdown in economy and negative sentiments, another important reason of a relatively inactive corporate debt market was high interest rates with increasing expectations for a decline in interest rates. In this backdrop, corporates did not want to lock-in at higher interest rates, as evident in the significant difference between the coupon rates for FY08 and FY09.

## 6 Corporate Earnings

A sharp downturn in economic activities, commodity price shock, increased cost of financing, depreciation of rupee, weakness in global demand for export based industries, as well as production losses due to power outages and unrest in the country during most of 2008 resulted in decline in the earnings by the corporate sector. Specifically, corporate earnings fell by a substantial 15.5 percent during 2008 (see **Table SS.4.5**) compared with a rise of 5.7 percent in 2007.

Industry-wise analysis suggests that refineries, oil market companies, textile composites, etc., benefitted from inventory gains following the commodity price shock and sharp depreciation of rupee during the final months of 2007 and early 2008 period. Another factor, which bolstered their earnings, is their export sales (denominated in dollar terms) which allowed these sectors to book gains from fall in rupee parity. Restoration of refinery margins also helped rise in their profitability during the year.

**Table SS.4.4: Term Finance Certificates Issuance during FY08 and FY09**

Amount in million Rupees

Company	Issue date	Coupon rate	Tenor (years)	Amount
<b>FY08</b>				
Orix leasing Pakistan limited (II)	2-Jul-07	10.33% (KIBOR + 1.50%)	5	2500
Engro chemical Pakistan ltd. (II)	14-Jan-08	11.52% (KIBOR + 1.55%)	8	4000
Faysal Bank Limited	1-Feb-08	11.52% (KIBOR + 1.40%)	7	1250
Pakarab Fertilizers Limited	31-Mar-08	17.50% (KIBOR + 1.50%)	7	5000
NIB Bank Limited	31-Mar-08	11.21% (KIBOR + 1.15%)	8	4000
Saudi Pak Leasing Co. Ltd.	22-Apr-08	11.84% (KIBOR + 1.50%)	5	750
United Bank Limited (IV)	30-Apr-08		10	6000
<b>Total</b>				<b>23,500</b>
<b>FY09</b>				
Pakistan Mobile Communication Limited	5-Dec-08	14.15% (KIBOR + 1.65%)	5	<b>4,256.9</b>

Source: Karachi Stock Exchange

In contrast, most of industries which are heavily dependent on imported inputs with lower requirements of inventory (such as automobiles, chemicals, pharmaceuticals, vanaspati & allied, engineering, etc.) were hit hard by rising commodity prices and depreciation of rupee. Industry specific factors also played an important role in weaker corporate earnings during 2008. For example, closure of plants of paper & board, and fertilizers for expansion and BMR purposes resulted in lower production in 2008.

In addition, in contrast with the increased area under cultivation, fertilizer demand was remained weak due to uncertainty over prices as farmers delayed purchases in anticipation of low prices. Electronics

<sup>107</sup> The public offer was for an amount of Rs 5667 million, however it was under-subscribed and due to non-underwritten offer, the total issue size is reduced.

and automobiles were also hit by banks' risk averse lending, particularly for consumer financing, and continued rising prices of these products amid rising input costs and falling rupee parity. Similarly, decline in earnings of the commercial banks was due to higher provisioning for rising NPLs, as well as, tight liquidity position during second half of 2008.

It may be noted that a substantial rise in the earnings by investment bank is principally attributed to increase in the sample size. Adjusted for this, the growth in earnings dropped from 527.6 percent to 210.3 percent during 2008.

A turn around in the earnings of technology & communication sector, from profits to losses, is

**Table SS.4.5: Corporate Sector**

PAT in million Rupees

	Annual earnings				
	2007		2008		% growth
	Sample Nos.	PAT	Sample Nos.	PAT	
Auto assembling	12	8,639.0	13	5,622.4	-34.9
Auto parts & accessories	12	312.0	12	281.5	-9.7
Cable & electric goods	9	3,278.5	9	2,229.4	-32.0
Cement	21	4,104.5	21	-1,558.9	-138.0
Chemical	24	3,835.4	26	3,155.9	-17.7
Commercial banks	26	71,485.3	25	40,586.2	-43.2
Engineering	14	1,971.6	13	1,568.5	-20.4
Fertilizer	4	21,190.0	4	16,727.8	-21.1
Food & personal care products	22	5,531.6	22	6,161.6	11.4
Glass and ceramics	10	473.7	10	50.5	-89.3
Inv Banks / Inv. Cos	26	10,123.2	30	63,532.2	527.6
Insurance	38	32,364.8	38	-4,765.4	-114.7
Jute	6	848.7	5	773.8	-8.8
Leather and tanneries	5	516.6	5	815.7	57.9
Leasing	19	-555.1	18	1,038.0	-287.0
Miscellaneous	28	1,874.1	26	2,299.1	22.7
Modaraba	35	770.4	34	1,790.5	132.4
Oil and gas exploration	4	69,396.2	4	80,497.9	16.0
Oil and gas marketing	6	10,046.0	6	25,164.8	150.5
Paper and board	10	4,842.8	10	217.0	-95.5
Pharmaceutical	8	3,639.6	8	2,971.2	-18.4
Power generation	13	-4,439.6	13	-5,395.5	21.5
Refinery	4	4,521.2	4	14,279.1	215.8
Sugar and allied	37	-834.1	37	220.1	-126.4
Synthetic & rayon	19	804.4	19	-2,773.0	-444.7
Tech & comm.	9	15,848.4	9	-5,116.0	-132.3
Textile composite	59	5,376.8	60	8,806.6	63.8
Textile spinning	108	58.1	107	-586.2	-1,109.3
Textile weaving	18	-506.6	18	-573.5	13.2
Transport	5	-11,610.3	5	-34,936.0	200.9
Tobacco	3	4,160.6	3	3,643.5	-12.4
Vanaspati and allied	12	-79.1	10	8.9	-111.2
Woolen	5	238.4	5	7.5	-96.8
<b>Total PAT</b>	<b>631</b>	<b>268,227.1</b>	<b>629</b>	<b>226,745.1</b>	<b>-15.5</b>



attributed to (1) stiff competition which forced companies to reduce charges on services and increase expenses on advertisements, and (2) decline in average revenues per subscriber due to rise in taxes in the budget of 2008-09.

However, it is important to note that changes in earning profiles on the back of inventory gains/losses and depreciation of rupee would have stark opposite impact in 2009 on different corporate groups. It appears that despite low levels of inventories, domestic businesses are avoiding inventory accumulation due to uncertain movements in international commodity prices.

**Table SS.4.6: Numbers of Funds as on June 30\***

Funds Category	FY08	FY09	Change
Equity	13	16	3
Income & Money Market	24	30	6
Balanced & Asset Allocation	10	10	0
Islamic Equity	3	4	1
Islamic Income	4	6	2
Islamic Balanced & Asset Allocation	3	3	0
Special	4	4	0
<b>Total</b>	<b>61</b>	<b>73</b>	<b>12</b>

(\*) Excluding Pension and capital protected funds.

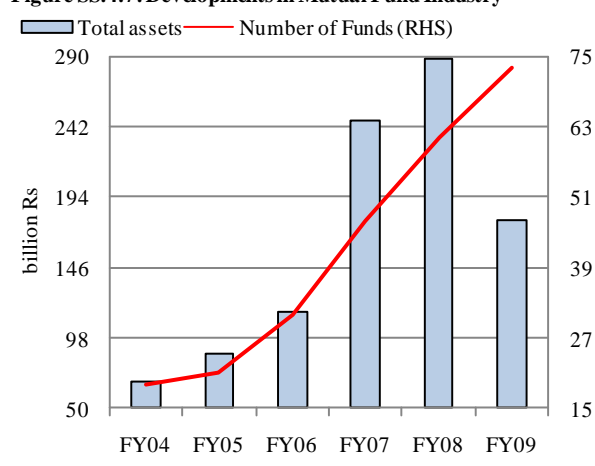
## 7 Mutual Funds

The growth in mutual funds witnessed a trend reversal during FY09. Total assets of mutual funds declined by 38.6 percent in FY09 as against an average growth of 53.4 percent during FY04-FY08 (see **Figure SS.4.7**). While a sharp fall in KSE-100 with imposition of floor for over 3 months hit equity funds, revaluation of TFCs under a rising interest rate scenario was responsible for a drag in income funds. The decline in these funds was the combined impact of substantial withdrawals and a fall in NAVs. Despite these adverse developments, it is heartening to note that the number of funds increased to 73 during FY09 from 61 in FY08.

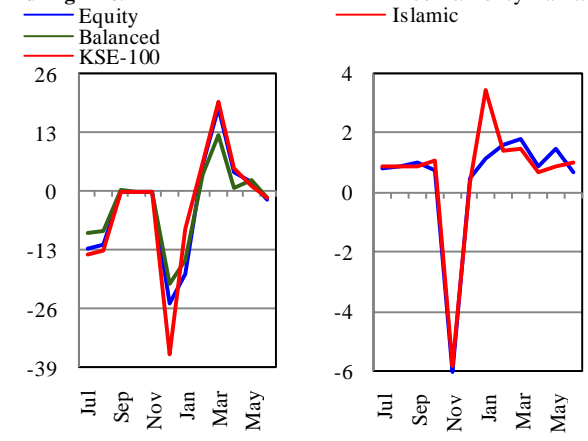
The major additions in the numbers of mutual funds were registered in the category of income or money market funds during FY09, followed by equity market funds (see **Table SS.4.6**). The same trend was followed in the Islamic funds. A relatively higher growth in money market funds is probably a reflection of risk averseness in both investors and fund managers given massive losses during FY09.

It may be noted that the decline in rate of return was higher in equity funds as compared to income funds. Even balanced funds with diversified investment in equity and money markets performed little better than the equity market funds (see **Figure SS.4.8**). The returns on all funds were better than the KSE-100, except for December 2008 to April 2009 period, which principally reflects cautious behavior and settlement of open positions by the fund managers and to align their funds amid significant withdrawals in September 2008 (early floor period) and January 2009 after the lifting of floor at KSE-100 index. Net assets in equity funds

**Figure SS.4.7: Developments in Mutual Fund Industry**



**Figure SS.4.8: Monthly Returns During FY09**

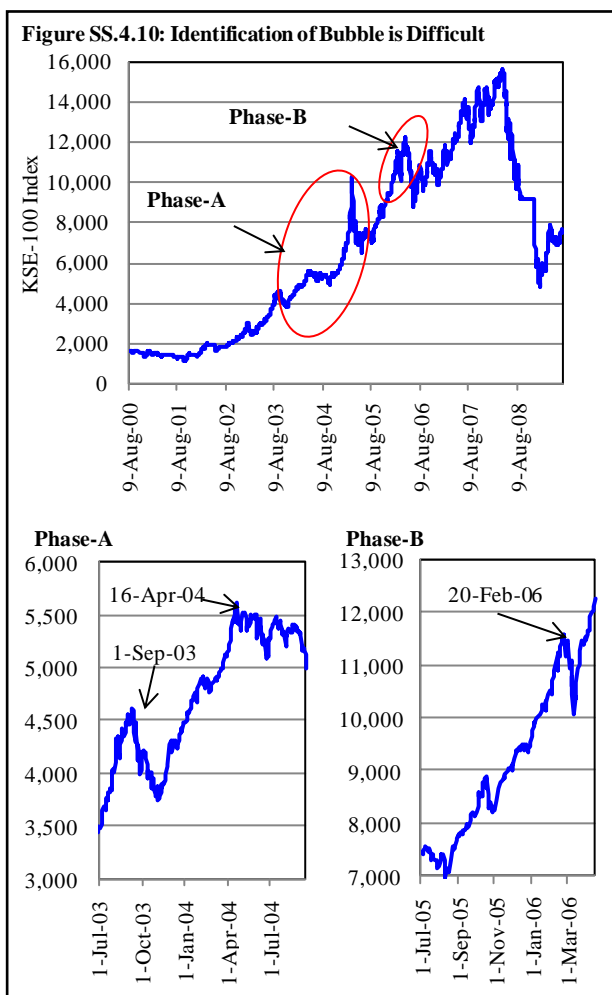
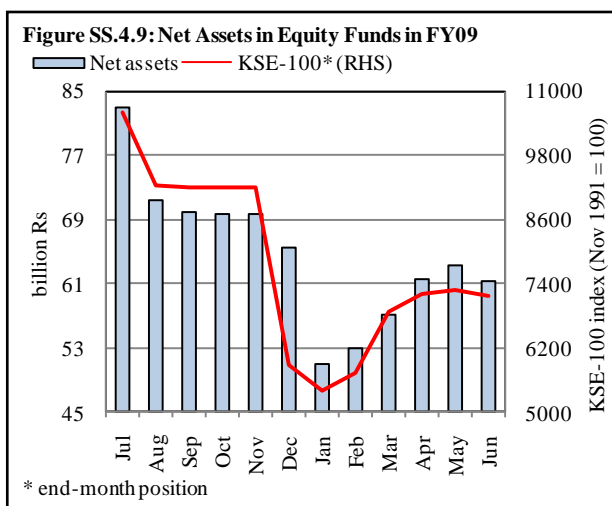


declined by 38.6 percent by January 2009 over July 2008; however this decline was partially compensated by an increase of 20.5 percent in the remaining months of FY09 (see **Figure SS.4.9**).

However, instability in equity market amid political noise, deterioration in macroeconomic fundamentals including liquidity crunch due to depletion of forex reserves and more importantly news about the collapse of some large financial institutions in advanced economies, also fueled rumors about the health of the banking system. These rumors led to massive withdrawals from the bank deposits, particularly from FCAs. To protect the banking system from a typical bank-run, SBP pumped substantial liquidity in the banking system with ease in reserve requirements, which was contrary to its tight monetary stance<sup>108</sup> (for details see **Chapter 4 on Money & Banking**). These measures helped restore the confidence of the depositors and eased liquidity conditions in the banking system.

The lesson of developments in asset market during FY09 on the conduct of monetary policy is that asset prices should be monitored by the monetary authorities as commodity prices. Not only monetary policy actions have significant impact on asset prices (for details see **Box 4.1 SBP Third Quarterly Report for 2004-05**), extraordinary changes in asset prices may change the course of monetary policy. For example, a key trigger of the current financial crisis was the decline in housing prices in US. As a result, policy interest rate declined to historical low in several advanced economies including US. It is interesting to note that the decline in US house prices was largely a function of monetary tightening by the Fed to contain inflationary pressures.

However, the direct impacts of collapse in real estate and equity prices on financial sector are negligible in Pakistan due to negligible share of mortgage loans in total assets of the banking system, as well as, effective banking regulations for the exposure of banks in equity market. However, indirect impacts cannot be taken too lightly. As mentioned above, the impact of a decline in



<sup>108</sup> SBP tightened monetary policy throughout 2008 by raising policy discount rate four times.

equity prices on net assets of mutual funds and subsequently on bank deposits were significant. In addition, anecdotal evidence suggests that a part of working capital loans was also invested in real estate and stock exchanges, particularly during bullish trends. Thus, a significant low demand for working capital loans amid bearish assets markets and a part of the rising NPLs of the banking system may be attributed to collapse in assets markets. This suggests that monetary policy formulation should also consider asset prices, not necessarily focusing on elimination of asset price bubble since it is very difficult to identify bubbles. **Figure SS.4.10** illustrate that various local peaks formed in the equity market during the last 6 years, which looked like bubbles, however any preemptive efforts to burst the formation of bubble at these levels could be more damaging for the market and price discovering process. Therefore, any assessment should be done in the perspective of overall performance of the corporate sector, macroeconomic fundamentals, as well as, regional and global structure of returns on different portfolios.