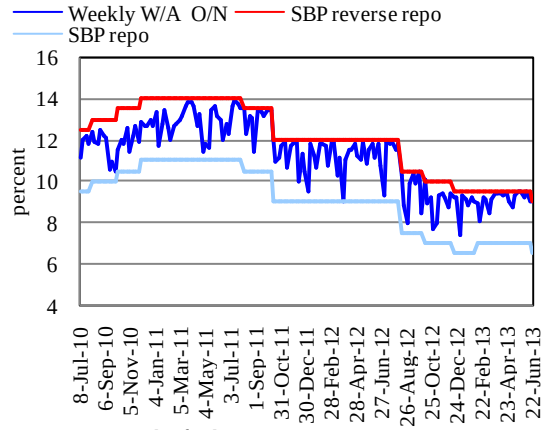
4 Monetary Policy and Inflation

4.1 Overview

Higher than anticipated decline in inflation created much needed room for SBP to cut interest rates to support economic activity during FY13. Specifically, headline CPI inflation came down to 7.4 percent in FY13, from 11.0 percent in FY12; while SBP reduced its policy rate by 300 bps (on cumulative basis) to 9.0 percent by end-June 2013.[1] As a result, the policy rate fell to a single-digit for the first time since FY07.

Monetary easing was more aggressive during the first half of FY13 with a 250 bps cut in the policy rate. This may appear surprising given that SBP's assessment at the start of the fiscal year had identified several risks to the economic outlook. For example, inadequate external inflows, persistent government borrowing and double digit projected inflation.

Figure 4.1: SBP Policy Rate

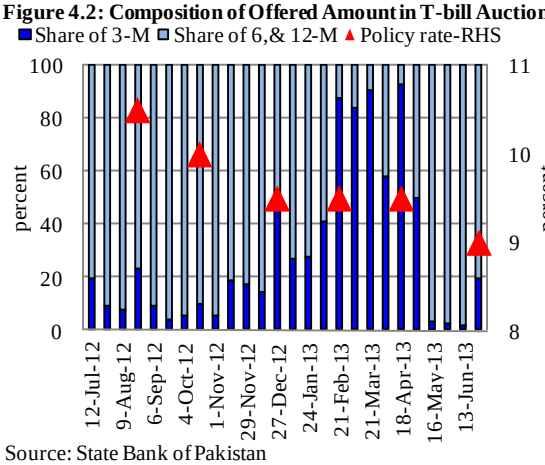


Source: State Bank of Pakistan

The policy environment, however, improved quickly. Headline inflation fell sharply, as administered prices were cut (e.g. piped gas) and oil & food prices remained subdued. Furthermore, the realization of coalition support funds (CSF) during first quarter of FY13 supported both the external and the fiscal accounts. These developments created an opportunity for SBP to signal that private sector activity could be stepped up. The discount rate was therefore slashed by 150 bps in August and 50 bps each in October and December 2012 (**Figure 4.1**).

During the second half of FY13, SBP became more cautious, with the deterioration in the capital and financial accounts (which pulled down SBP's liquid foreign exchange reserves), and growing fiscal pressures.[2] In addition, anticipating an increase in inflationary pressures due to the depreciating Pak Rupee, and high government borrowing to compensate for weak tax collections, SBP put further monetary easing on hold. Hence, SBP kept its policy rate unchanged at 9.5 percent in its policy decisions of February and April 2013.

Figure 4.2: Composition of Offered Amount in T-bill Auction



Source: State Bank of Pakistan

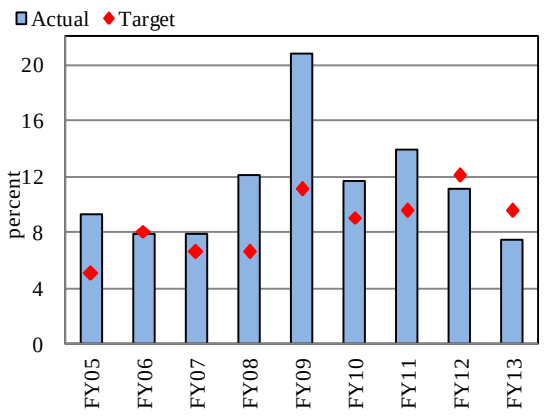
The central bank, however, decided to narrow the interest rate corridor by 50 bps in February 2013. Although SBP was aiming to reduce interest rate

[1] This is the reverse repo rate, serving as an upper limit of interest rate corridor.
[2] This also increased stress on the banking system to fund the large budgetary deficit.

volatility, the market perceived this move as monetary tightening.[3] This is clear from a substantial increase in amounts offered for investment in 3-month T-bills in subsequent primary auctions (**Figure 4.2**).[4]

Anticipation of further monetary tightening were only dampened towards the end of FY13 with the fall in inflation and easing inflationary expectations. An analysis of causative factors behind inflationary expectations suggests that households are more responsive to changes in fuel prices, whereas firms also look at the exchange rate to set their prices. In other words, different economic agents focus on different nominal anchors (**Special Section 4.1**). Hence, the stability in retail petroleum prices and lower depreciation of the exchange rate compared to the previous year, helped reduce inflationary pressures.[5] The actual average inflation for FY13 was 7.4 percent, which is well below the target of 9.5 percent (**Figure 4.3**).[6]

Figure 4.3: Inflation



Source: State Bank of Pakistan

While inflation continued to decline throughout the year, a favorable change in business sentiments on account of smooth political transition (which could attract private capital inflows), allowed SBP to remain focused on supporting economic activity. With this backdrop, SBP further reduced its policy rate by 50 bps in June 2013 to 9.0 percent.

Table 4.1: Net Rupee Injections through OMOs

billion Rupees

	FY11	FY12	FY13
Average volume of OMOs	-4.1	208.5	460.9
End period outstanding OMOs	-92	79.9	207.6
Total number of OMOs (numbers)	97	75	66

Source: State Bank of Pakistan

Despite an accommodating monetary policy, Rupee liquidity in the money market remained tight throughout the year. This was mainly on account of: (a) excessive government borrowing from commercial banks, both for budgetary finance and commodity operation; (b) increased credit demand by PSEs; and (c) depletion in SBP's NFA that drained Rupee liquidity from the market. The central bank, therefore, stepped up liquidity injections through open market operations (OMOs); the average volume of OMOs more than doubled in FY13, compared to the previous year (**Table 4.1**).[7]

SBP viewed these injections as necessary to ensure the smooth functioning of both the FX and the money markets, and to facilitate transmission of monetary policy decisions to retail rates. The commercial banks partially used this short-term liquidity for onward lending to the government. In

[3] Although SBP kept the policy rate unchanged in its monetary policy announcement of February 2013 (first decision in H2-FY13), it narrowed the interest rate corridor from 300 bps to 250 bps by raising its lower bound. The impact of this technical adjustment was perceived as a monetary tightening because the mid rate of interest rate corridor increased by 25 bps.

[4] Among other factors, bid pattern of T-bill auctions also reveals market expectations of short-term interest rate: if market views interest rates to fall, they would respond by investing in longer term papers (to lock-in higher returns on their assets). In contrast, market would invest in shorter maturities if they expect higher interest rate in future (this would allow them to re-price their assets at higher interest rate).

[5] The downward revision in fuel prices during the second quarter of the year even overshadowed the inflationary impact of higher wheat support price and imported inflation.

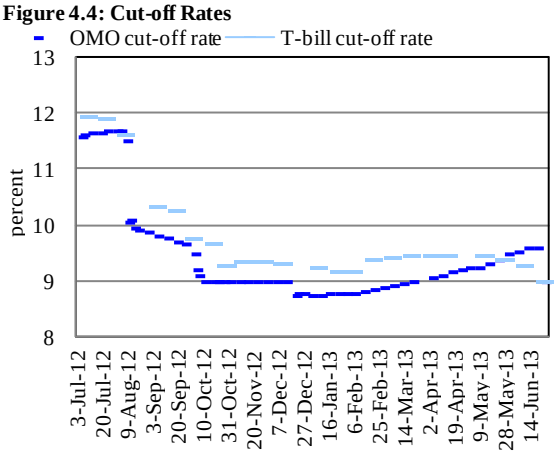
[6] The wide gap between the actual and expected inflation for the year shows the level of uncertainty for the conduct of monetary policy in Pakistan.

[7] Interestingly, the number of OMOs during the year has declined from 75 in FY12 to 66 in FY13.

fact, banks gained from these transactions as the cut-off rates of 3-month T-bills were consistently higher than the rate on one-week OMOs (**Figure 4.4**).

As the cut-off rates on OMOs started inching up, particularly in Q4-FY13, commercial banks responded by scaling down the offered amount in T-bill auctions at the prevailing interest rates.[8] Thus, as the government could not rollover maturing T-bills in Q4-FY13, the financing burden fell directly on SBP.[9]

Figure 4.4: Cut-off Rates



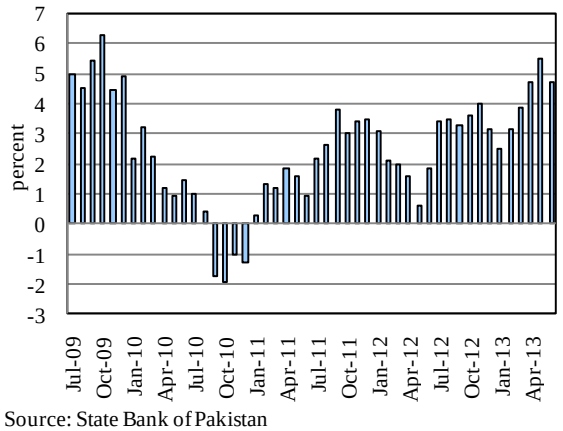
Source: State Bank of Pakistan

In overall terms, the government borrowed Rs 506.9 billion from SBP during FY13, in addition to the Rs 505.3 billion borrowed in FY12. Quarterly analysis shows that the realization of CSF helped the government contain its borrowing from SBP in the first quarter, enabled it to meet the zero quarterly limit as prescribed in the SBP Act.[10] The government could not observe this limit in subsequent quarters.

Ample OMO support throughout the year, and government borrowing from SBP (especially in the last quarter), expanded the net domestic assets (NDA) of the central bank by Rs 448.0 billion (or 29.7 percent YoY). Meanwhile, SBP's net foreign assets (NFA) recorded a net contraction of Rs 261.1 billion due to the fall in FX reserves. In net terms, reserve money grew by 15.8 percent during FY13, which was significantly higher than 11.3 percent in FY12.

Following the trend in reserve money growth, broad money supply (M2) also expanded by 15.9 percent in FY13, compared to 14.1 percent in FY12. Exceptionally high government borrowing dominated the M2 growth. Specifically, government borrowing saw an expansion of Rs 1,479.2 billion during the year, compared to an increase of only Rs 11.7 billion in credit to the non-government sector.

Figure 4.5: Inflation adjusted Lending Rate



Source: State Bank of Pakistan

The subdued growth in credit to private sector businesses, remained a source of discomfort for policymakers. However, within private sector businesses, loans to the manufacturing sector grew by 4.2 percent in FY13, compared to 0.3 percent for FY12 – a sign of some revival in manufacturing activity. This is a welcome development, as the manufacturing sector is currently facing several constraints, like excess capacity; energy shortages; security concerns; and frequent changes in economic policies. In addition, real lending rate for businesses actually increased in FY13 despite the 300 bps cut in the policy rate (**Figure 4.5**).

[8] For details, please see Section 4.2.2 on government borrowing.
[9] The government mobilized Rs 1,272.6 billion in T-bills auctions during Q4-FY13, against the maturity of Rs 1,309.2 billion, indicating a shortfall of Rs 36.6 billion during the quarter.
[10] Section 9C of SBP Act 1956 (amended in March 2012) restricts federal government borrowing from SBP by imposing a limit of zero borrowing on a net basis during a quarter.

4.2 Developments in Monetary Aggregates

FY13 was another year of excessive government borrowing from the banking system and deterioration in the external accounts. Specifically, NDA of the banking system repeated its FY12 performance, by posting more than 20 percent growth in FY13. This reflects persistently high demand for funds by the government. However, the expansionary impact of this growing NDA was partially offset by a contraction in net foreign assets of the banking system (due to weakening of the external account), as has been the case in FY12 (**Table 4.2**).

Table 4.2: Changes in Monetary Aggregates

change in billion Rupees, growth in percent

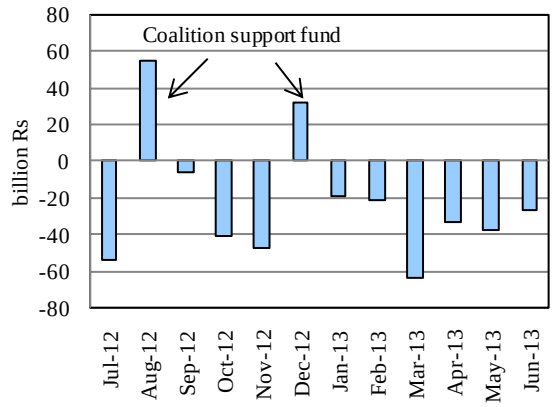
	Absolute Change in stocks			YoY growth in stocks	
	FY11	**FY12**	**FY13**	**FY12**	**FY13**
Broad money (M2) (A+B)	918.0	946.6	1,216.0	14.1	15.9
A. Net foreign assets (NFA) (i+ii)	235.0	-248.1	-263.3	-31.8	-49.5
i) SBP	235.3	-219.9	-261.1	-35.8	-66.3
ii) Scheduled banks	-0.3	-28.2	-2.2	-17.0	-1.6
B. Net domestic assets (NDA) (i+ii)	682.9	1,194.7	1,479.3	20.2	20.8
i) SBP	48.7	469.3	448.0	45.3	29.7
ii) Scheduled banks	634.2	725.4	1,031.3	14.9	18.4
of which					
a). Government borrowing	579.6	1,237.4	1,479.2	41.0	34.7
i) Budgetary support (I+II)	590.2	1,198.3	1,446.5	46.1	38.1
I) SBP	-8.0	505.3	506.9	42.1	29.7
II) Scheduled banks	598.2	692.9	939.6	49.5	44.9
ii) Commodity operations	-15.7	38.6	31.6	9.7	7.2
b). Non-government sector	158.5	104.9	11.7	3.0	0.3
i) Credit to private sector	121.3	235.2	-19.0	7.5	-0.6
ii) Credit to PSEs	36.3	-130.5	30.9	-33.7	12.0

Source: State Bank of Pakistan

4.2.1 Net foreign assets (NFA)

The deterioration in Pakistan's external balance during FY13, led to a 49.5 percent contraction in NFA of the banking system - this was on top of the 31.8 percent reduction recorded in FY12. Hence, the share of NFA in broad money supply has dropped to the only 3.0 percent by end-FY13.

Figure 4.6: Monthly Changes in Net Foreign Assets of SBP



Source: State Bank of Pakistan

The fall in the banking system's NFA can be traced back to depletion in SBP reserves. Pressure stemming from debt repayments (other than the IMF, which does not impact NFA), SBP's intervention in the foreign exchange market, and weak financial inflows, more than offset the US$ 1.8 billion CSF inflow during FY13. **Figure 4.6** shows that contraction in SBP's NFA was more severe in the second half of FY13.

The NFA of commercial banks also witnessed a contraction in FY13, but this was only Rs 2.2 billion, compared to Rs 28.2 billion in FY12. A host of factors such as the net retirement of trade financing loans, and decline in non-resident foreign currency accounts, helped commercial banks contain the depletion of their reserves despite rising oil payments.

4.2.2 Net domestic assets (NDA)

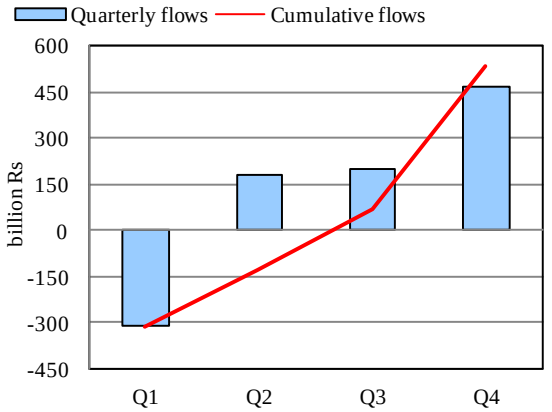
After showing an expansion of Rs 1,194.7 billion in FY12, the NDA of the banking system posted another sharp rise of Rs 1,479.3 billion in FY13 (**Table 4.2)**. Of this, commercial banks contributed Rs 1,031.3 billion, and the rest was done by SBP. In terms of use of resources, the government remained the dominant borrower, as loans to private businesses only increased by Rs 17.1 billion.[11]

No Let up in Government Borrowing for Budgetary Finance

The continued fiscal pressure during FY13 had strong implications for the conduct of monetary policy; short-term liquidity management; and availability of funds for private businesses.

The actual budget deficit of 8.0 percent of GDP for FY13, exceeded the target of 4.7 percent by a wide margin. This was a repeat of last year's performance, when the deficit reached 8.5 percent of GDP (including *one-off* payments for the settlement of circular debt). More importantly, with the drying up of external sources of funding, the burden of financing this large deficit, once again fell on domestic sources.

Figure 4.7: Government Borrowing from SBP in FY13

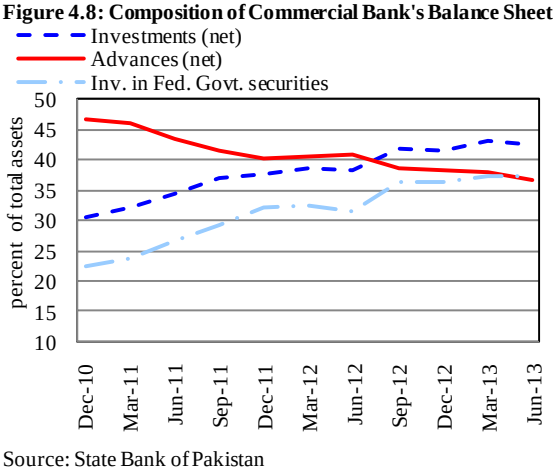


Source: State Bank of Pakistan

Consequently, government borrowing for budgetary support recorded a YoY rise of 38.1 percent in FY13, to top the 46.1 percent increase in FY12. Thus, the stock of government borrowing from the banking system saw a two-fold increase in just two years (i.e., from Rs 2.6 trillion at end-June 2011, to Rs 5.2 trillion at end-June 2013). As expected, its share in the stock of broad money supply (M2) also went up from 38.9 percent to 59.2 percent during this period. The sharp increase in the banking system's exposure to GoP has major implications:

(a) ***Breach of Limit on Quarterly Borrowing***:
The government borrowed Rs 506.9 billion from SBP during FY13, well above the target of *zero* borrowing envisaged in the budget. While such large volumes of central bank financing raise inflationary concerns, it is also a breach of the borrowing limit specified under SBP Act, 1956 (amended in March 2012). Specifically, the Act restricts the federal government's net borrowing from SBP to *zero*, on a quarterly basis. **Figure 4.7** shows that the federal government only meet this restriction in the first quarter of the year, when it received CSF inflows.[12]

Figure 4.8: Composition of Commercial Bank's Balance Sheet



Source: State Bank of Pakistan

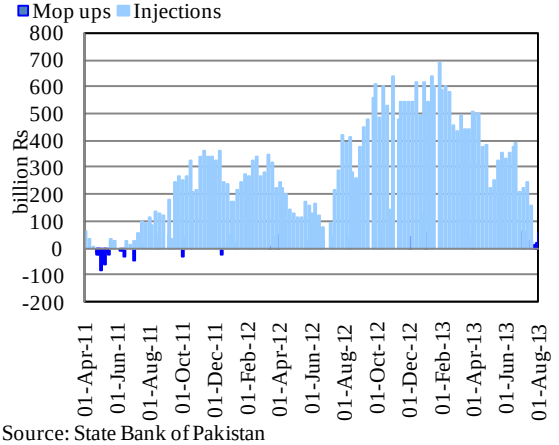
(b) ***Impairing Financial Intermediation***:
Excessive government borrowing from the banking system has had a major impact on the balance sheet of commercial banks. Investment in federal government securities now constitutes 37.2 percent of commercial banks' assets, up from 26.5 percent as of June 2011 (**Figure 4.8**). While

[11] In fact, a contraction of Rs 11.6 billion in '*Other items (net)*' offset the small increase of Rs 11.7 billion in credit to non-government sector (private sector and PSEs).
[12] SBP has consistently informed the government when the quarterly limit has been breached.

this surge in banks' exposure to GoP papers has allowed them to improve their financial health (as investment in government securities is risk free), this has also marginalized the private sector. Apparently, banks have little incentives to intermediate funds between savers and private investors.[13]

(c) ***Complicating Liquidity Management***: The sharp growth in credit demand from the government, made SBP's task of liquidity management more difficult. As shown in **Figure 4.9**, SBP had to increase its one-way injections to provide liquidity to the market. The volume of OMOs crossed Rs 600 billion during FY13, but eased in the last quarter of the year as OMO cut-off rates gradually inched up, and government borrowing from SBP added to market liquidity.

Figure 4.9: Open Market Operations



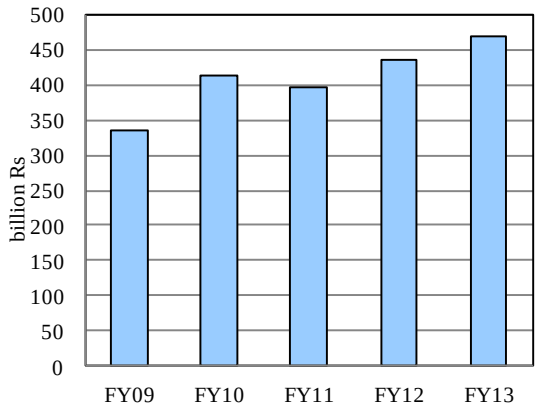
Source: State Bank of Pakistan

(d) ***Impacting Debt Management***: While the sharp rise in government borrowing had led to a higher debt burden, the focus on short-term T-bills (up to one-year maturity) has reduced the average maturity of Pakistan's domestic debt. SBP has repeatedly highlighted that if such a trend persists, the country could move into a debt trap (see **Chapter 7 on Domestic and External Debt** for more details).

Commodity Operations

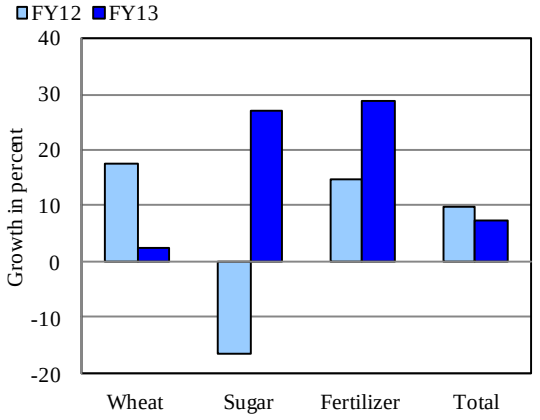
The government also borrowed from commercial banks for its commodity operations. The outstanding loans under this head reached Rs 467.7 billion by end FY13, showing an increase of Rs 31.6 billion during the year (**Figure 4.10**). Fresh borrowing for the procurement of sugar, fertilizer, and wheat, largely explains this increase (**Figure 4.11**).

Figure 4.10: Outstanding Loans for Commodity Operations



Source: State Bank of Pakistan

Figure 4.11: Stock of Outstanding Commodity Finance



Source: State Bank of Pakistan

In the case of fertilizer, increase in loan demand was to fund higher urea imports by Trading Corporation of Pakistan (TCP).[14] Similarly, the government needed financing for the procurement of sugar to stabilize domestic sugar prices. It was expected that the outstanding stock of such loans would fall following the sale of sugar stock; however, this did not happen as TCP had to procure additional sugar during the second half of the year.

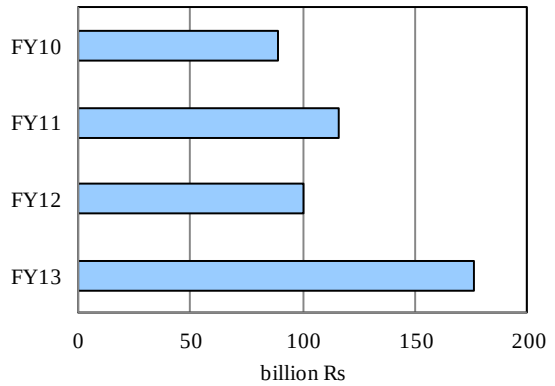
Loans for wheat procurement, which accounts for 77.7 percent of total commodity loans, witnessed

[13] See Special Section 3.1, in SBP's *Third Quarterly Report on State of the Economy* for FY13.
[14] The domestic production of fertilizer fell by 4.0 percent during FY13 due to persistent gas shortages.

a net increase of Rs 8.5 billion during FY13, compared to Rs 52.8 billion in FY12. This slowdown was largely because of heavy retirement during the year. Reportedly, Food Departments of Punjab and Sindh aggressively offloaded their wheat stocks in the domestic market before the commencement of new procurement season. This, along with the export of wheat during FY13, allowed for the large retirement of wheat loans. However, *gross* disbursements for wheat procurement remained considerably higher in FY13 compared to FY12.

Nonetheless, a steady rise in the outstanding loans for wheat procurement in recent years has become a major concern. Given the self-liquidating nature of commodity operations, the outstanding amount should be approximately equal to the value of commodity stocks held by the procurement agencies.[15] However, a continued buildup of receivables has impaired the repayment capacity of procurement agencies. More specifically, subsidy receivables reached Rs 176.1 billion during FY13 (**Figure 4.12**),[16] which accounts for 37.6 percent of the outstanding loans. There is also the issue of stock losses from pilferage, rotting and vermin.

Figure 4.12: Stock of Outstanding Subsidies (Receivable) for Commodity Operations



Source: State Bank of Pakistan

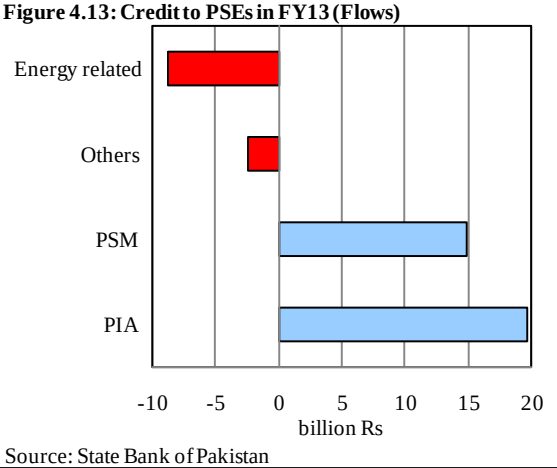
Timely payment of subsidies would not only contribute to fiscal transparency, but also reduce the cost of government borrowing in a consolidated budgetary framework. Delays in subsidy payments impose a significant cost on procurement agencies, as borrowing for commodity operation is priced at KIBOR plus a margin. At the same time, the federal government borrows from the banking system at T-bill rates, which is always lower than the KIBOR. This implies that the government can substitute expensive borrowing for commodity operations with cheaper T-bills.

Surge in the Credit to the PSEs

Besides causing a continuous drain on scarce fiscal resources, PSEs also borrowed from the banking system. Credit to PSEs reached Rs 288.1 billion by the end of FY13, showing an increase of Rs 30.9 billion during the year, compared with Rs 181.4 billion in FY12.[17]

Credit demand from Pakistan International Airlines and Pakistan Steel Mills, overshadowed the net retirement by energy related PSEs like Sui Southern Gas and WAPDA during the year (**Figure 4.13**).

Figure 4.13: Credit to PSEs in FY13 (Flows)



Source: State Bank of Pakistan

- Pakistan Steel Mills (PSM) sought fresh credit from commercial banks to maintain its operations. As capacity utilization reached a historic low, PSM is facing difficulties in making salary payment to its employees and purchasing raw material. PSM management is

[15] This includes provincial food departments, TCP and Pakistan Agriculture Storage and Services Corporation (PASSCO).
[16] It may be noted that the government paid Rs 78.0 billion to procurement agencies in FY12 to reduce the increasing amount of outstanding subsides.
[17] This excludes the impact of *one-off* settlement of Rs 312.0 billion, when PSEs debt was shifted to the government. Including this adjustment, PSEs retired Rs 130.5 billion in FY12.

looking for a bailout package from the government in a bid to improve its financial position and operations.

- Pakistan State Oil (PSO) initially borrowed Rs 13.3 billion from the banking system to meet its working capital requirements. However, PSO was able to retire this loan by the end of FY13.
- Pakistan International Airlines (PIA) also borrowed from the banking system to repay some of its existing external loans.
- All other PSEs that sought fresh credit during FY13 belonged to the power sector. Problems with their cash flows due to the circular debt issue, contributed to their credit demand, but many banks shied away from increasing their exposure to the power sector. The government decision to pay-off the circular debt in June 2013, allowed the energy sector to repay their bank loans.

Table 4.3: Change in Credit to Private Sector

billion Rupees

	FY12					FY13				
	Q1	Q2	Q3	Q4	**Jul-Jun**	Q1	Q2	Q3	Q4	**Jul-Jun**
Overall	-88.7	282.2	7.0	34.7	**235.2**	-84.9	189.5	35.2	-158.8	**-19.0**
of which										
Loans to private sector businesses	-95.3	181.3	-43.2	-24.6	**18.3**	-39.6	186.1	18.6	-148.0	**17.1**
Investments in shares & securities	2.9	9	-4.4	-12.3	**-4.8**	-1.1	12.3	4.4	3.3	**18.9**
Consumer financing	-4.5	-2.8	-1.2	-4.3	**-12.9**	-1.8	8.4	1.9	6.5	**15.0**
Credit to NBFCs	6.3	18	41.7	55.1	**121.0**	-65.7	-12.6	2	-9.3	**-85.6**

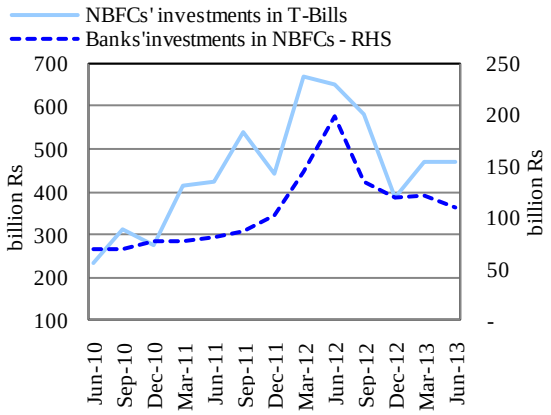
Source: State Bank of Pakistan

4.3 Credit to Private Sector

Despite the accommodating monetary policy, overall credit to the private sector (CPS) posted a net *retirement* of Rs 19.0 billion in FY13, which was significantly lower than the *expansion* of Rs 235.2 billion in FY12 (**Table 4.3**). Further analysis identifies the withdrawal of tax incentives on investment in mutual funds, and a large repayment of energy-related loans following the partial settlement of circular debt, as key reasons behind such depressed numbers. Loans to the manufacturing sector – more closely associated with business activities – expanded by Rs 58.9 billion during FY13, compared with 4.5 billion in FY12.

Credit to NBFCs: Despite their low share in outstanding credit to the non-government sector, bank lending to NBFCs had a strong influence on overall private sector credit (**Table 4.3**).[18] Specifically, after showing an expansion of Rs 121.0 billion during FY12, credit to NBFIs recorded a net *contraction* of Rs 85.6 billion in FY13. The government's decision to phase out tax incentives on investments in mutual funds, largely, explains this sharp reversal.[19] Not only did banks' investment in NBFCs fall during FY13, investment of NBFCs in government securities (e.g., T-bills) also declined by Rs 180.6 billion in this period (**Figure 4.14**).

Figure 4.14: Banks' Investments in NBFCs



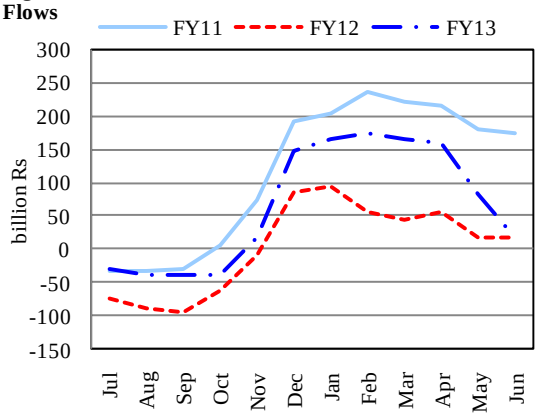
Source: State Bank of Pakistan

[18] Banks' lending to NBFCs accounts for only less than 6 percent of outstanding credit to non-government sector in recent years (based on two year's average).

[19] In the Federal Budget for FY13, government raised the tax rate on dividend income received from Money Market Funds and Income Funds to 25 percent, from 10 percent in FY12. The rate will increase further to 35 percent in FY14, to make it consistent with the income tax rate of 35 percent for banks.

Loans to Private Sector Businesses: The headline numbers show that loans to private sector businesses expanded by only 0.7 percent in FY13 – almost unchanged from the 0.8 percent growth in FY12. These numbers must be interpreted with care due to the impact of circular debt settlement. Clearly, repayment of energy sector loans, particularly in Q4-FY13, pulled down the overall loans to private sector businesses (**Figure 4.15**). However, loans to large-scale manufacturing (which excludes the energy sector) grew by 4.2 percent in FY13, compared to 0.3 percent in FY12.

Figure 4.15: Loans to Private Sector Businesses - Cumulative Flows



Source: State Bank of Pakistan

Distribution of loans by types of financing revealed that fixed investment loans to private sector businesses saw a net contraction of 0.1 percent during FY13 compared with an increase of 3.0 percent during FY12 (**Figure 4.16**). In contrast to fixed investment loans, trade loans saw an expansion of Rs 20.2 billion during FY13, compared to a net contraction of Rs 27.9 billion in FY12 (**Table 4.4**). While net retirement in FY12 was largely on account of stricter criteria for EFS loans (and decline in textile exports), the rise in trade loans during FY13 was largely driven by higher trade volumes. Sector-wise distribution of trade loans identifies textiles as the major recipient as it availed nearly three-fourths of concessional lending (EFS) in FY13. The cuts in the EFS rate by 150 bps during the first half of the year, along with overall increase in exports,[20] were the major contributory factors to the rise in EFS loans.

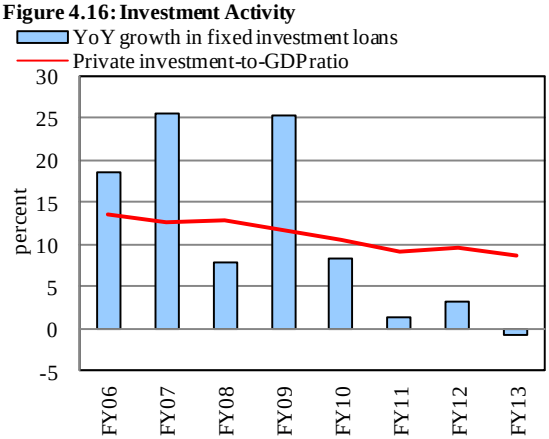
Table 4.4: Flows of Loans under Trade Finance

billion Rupees

	FY11	FY12	FY13
EFS	10.7	-23.9	3.7
Other than EFS	16.3	4.1	10.6
Import finance	29.7	-8.1	5.9
Total	**56.7**	**-27.9**	**20.2**

Source: State Bank of Pakistan

Figure 4.16: Investment Activity



Source: State Bank of Pakistan

As mentioned earlier, the upturn in private business loans is encouraging given the rise in real lending rates during the year; continued non-price constraints (e.g., energy, law & order, weak external demand, and excess capacity); and excessive government borrowing from the banking system, which squeezed the supply of loan-able funds to the private sector.[21]

An analysis of borrowers indicates that sector specific factors also influenced lending during the year.

Food Products and Beverages: Strong growth in the food and beverage sector, was one of the prominent positives in FY13. These loans saw an expansion of Rs 26.5 billion in FY13, compared to

[20] Total exports in FY13 stood at Rs 2,402.3 billion compared to Rs 2,206.1 billion in FY12.
[21] For detail discussion, please see **Special Section 3.1,** 'Macroeconomic Dynamics with a Dominant Borrower (Government)' in *SBP's Third Quarterly Report* for FY13.

Rs 15.1 billion in FY12 (**Table 4.5**). A healthy *sugarcane* crop,[22] and delays in payment of freight subsidy on sugar exports,[23] added to the credit needs of the sugar sector during the period under review. Similarly, many firms utilized fixed investment loans for capacity expansion and investment in alternate energy arrangements.[24] However, the growth in fixed investment loans was partially offset by substantial retirement from a beverage company, which borrowed earlier for the construction of three greenfield bottle plants in a bid to meet increased domestic demand.

Table 4.5: Net Change in Loans to Private Sector Businesses

billion Rupees

	%Share	Overall Loans		Trade Financing		Working Capital		Fixed Investment	
	in FY13	FY12	FY13	FY12	FY13	FY12	FY13	FY12	FY13
Manufacturing	58.7	4.5	58.9	-16.2	24.6	7.0	25.2	13.7	9.2
Food products and beverages	12.8	15.1	26.5	7.6	8.6	3.0	3.5	4.5	14.4
Sugar	5.2	-1.2	12.5	2.5	4.2	0.4	-0.7	-4.0	9.0
Beverages	0.7	-1.9	-2.0	-2.0	2.0	-3.3	-1.3	3.4	-2.8
Textiles	20.9	-23.7	23.9	-18.5	9.7	-11.8	9.0	6.7	5.1
Spinning	8.7	-10.7	-4.1	-5.1	-3.6	-8.9	0.7	3.2	-1.2
Weaving	3.6	-7.1	4.7	-2.0	3.9	-6.8	1.1	1.7	-0.2
Finishing	3.4	0.6	7.0	-0.6	-1.6	1.2	2.1	0.1	6.5
Made-up textile articles	2.0	-4.5	6.9	-6.3	2.2	0.2	4.6	1.6	0.1
Paper and paper board	1.2	-1.5	5.6	-1.0	0.3	-1.4	5.4	0.9	-0.1
Fertilizers	4.0	8.9	0.1	2.8	-0.9	3.7	3.5	2.3	-2.6
Rubber and plastics	1.0	2.0	7.7	0.7	1.4	1.0	3.7	0.3	2.7
Cement	2.2	-20.7	-9.5	-5.8	-4.7	-9.6	2.9	-5.3	-7.7
Electricity distribution and control apparatus	1.9	0.9	6.1	-0.1	2.5	1.7	0.2	-0.7	3.4
Electricity, gas and water supply	9.3	8.7	-49.2	-5.4	0.8	11.5	-27.8	2.6	-22.2
Transport, storage and communications	3.6	5.2	-21.4	1.5	-1.5	-3.6	1.4	7.4	-21.3
Telecommunications	2.1	-5.5	-22.9	0.1	0.0	-2.2	1.1	-3.4	-24.0

Source: State Bank of Pakistan

Textile Sector: Loans to the textile sector also posted a significant rise during the year (**Table 4.5**). This sector benefited from strong demand for yarn and fabric from China.[25] The outlook for this sector is promising, as major retailers are actively seeking larger production capacities in South East Asian countries due to rising production cost in China.[26] In addition to global factors, a surge in domestic demand for designer outfits, especially summer lawns, also explains the increased lending to the textile sector. Furthermore, some textile firms are borrowing to overcome the energy shortage by investing in alternate sources of energy.

Fertilizer Sector: Working capital loans to the fertilizer sector fell during FY13, in line with dwindling production. Irregular supply of gas (a key input), and the availability of imported urea, adversely impacted fertilizer production during the year. Fixed investment loans also posted a net retirement of Rs 2.6 billion in FY13, compared with an expansion of Rs 2.3 billion in FY12. In fact, almost all large firms are in the retirement phase vis-à-vis long-term debt.

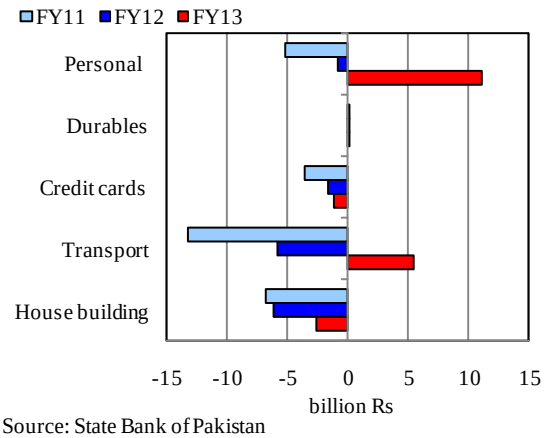
[22] The realized sugarcane crop was 62.5 million tons in FY13 against the target of 59 million tons (see **Chapter 2**).
[23] Sugar exports stood at 1,061.5 thousand MT during FY13 compared to 49.2 thousand MT last year.
[24] Sugar sector borrowed to achieve self sufficiency in power generation by using bagasse and biomass for fuel.
[25] Cotton yarn exports reached 737.4 thousand MT in FY13 compared to 575.8 thousand MT in FY12. Both, the lower price of Pakistani yarn in international market and the emergence of China as a key buyer along with Hong Kong and EU, helped exports by the textile sector.
[26] "The End of Cheap China", *The Economist,* Mar 10th 2012. Online: http:/ /www.economist. com/node/21549956

Cement Sector: Large retirements were also witnessed in the *cement sector*. Better financials due to strong and persistent domestic demand;[27] declining international coal prices;[28] and higher local prices, could explain this lower demand for bank credit.

Electricity, Gas and Water Supply: The buildup of circular debt led to a significant change in credit patterns to power related entities in recent years. While there was no major change in credit to power distribution companies, credit to power generating and gas supply companies, witnessed a net retirement of Rs 49.2 billion in FY13, compared to an expansion of Rs 8.7 billion in FY12. Monthly data indicates that the retirement was entirely concentrated in the last month of FY13, when the government settled a large part of the circular debt.[29]

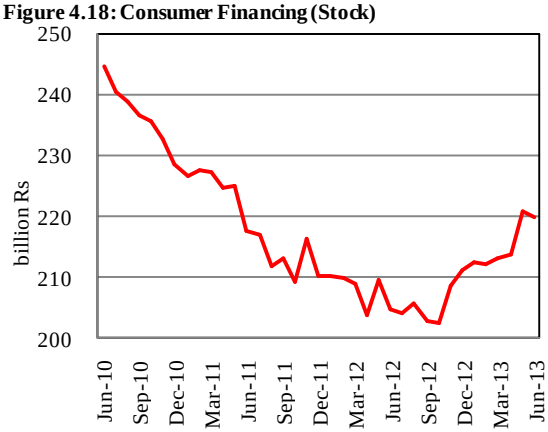
Loans to Households: After a prolonged period of net retirement, consumer financing finally showed some upturn in FY13 (**Figure 4.17** & **4.18**). Distribution of consumer loans by types of financing indicates that the expansion is largely confined to personal loans and auto financing - other categories of household loans are yet to recover from the retirement phase.

Figure 4.17: Net Flows in Consumer Loans



Source: State Bank of Pakistan

Figure 4.18: Consumer Financing (Stock)



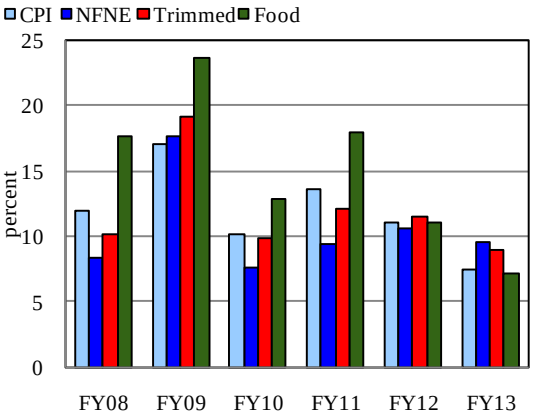
Source: State Bank of Pakistan

4.4 Inflation

By recording single-digit CPI inflation for all the months in FY13, Pakistan has finally come out of the longest spell of double-digit inflation (**Figure 4.19**).[30] Inflationary pressures eased considerably during the year, as average headline CPI growth fell from 11.0 percent in FY12, to 7.4 percent in FY13, which was well below the annual target of 9.5 percent.

A part of the falling inflation rate stemmed from a global decline in primary commodity prices.[31] Not surprisingly, low inflation was observed across most emerging economies. The magnitude of disinflation, however, appears more

Figure 4.19: Annual Average Inflation



Source: Pakistan Bureau of Statistics

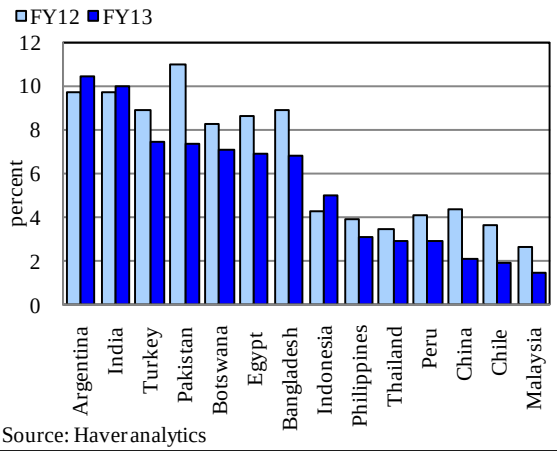
[27] PSDP rose in the period under review. Moreover, anecdotal evidence suggests higher demand for private construction due to an increase in workers' remittances.
[28] Declining prices of coal (a major raw material for cement) improved margin and cash flows of cement manufacturers.
[29] July-May numbers for FY13 indicate a net credit expansion of Rs 6.3 billion to electricity, gas and water supply companies.
[30] CPI inflation stayed in double-digits for consecutive five years, i.e., from FY08 to FY12.
[31] Commodity price index prepared by the IMF declined by 3.3 percent on average during FY13, compared to a rise of 7.1 percent in FY12.

pronounced in Pakistan (**Figure 4.20**), and can be traced to a sharp reduction in administered prices – mainly gas tariffs and CNG charges. This *deflation* in administered prices was also instrumental in easing inflationary expectations, and eventually led to a broad-based fall in inflation. Hence, even after excluding administered prices, CPI inflation for FY13 was 8.6 percent – still below the annual target (**Figure 4.21**).[32]

Other factors that helped subdue inflationary pressures in Pakistan included: no shocks to food supplies that helped contain food inflation; and a lower depreciation of the Pak Rupee compared to FY12, which stabilized the prices of imported products.

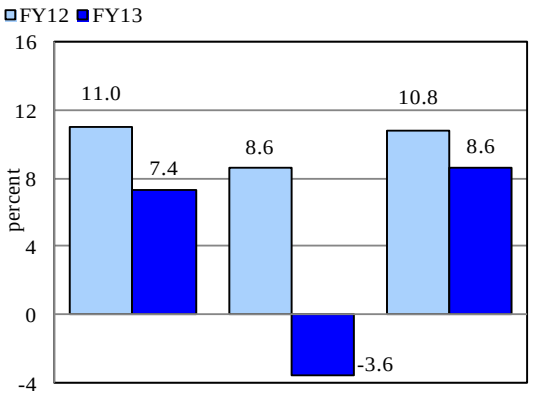
Going forward, managing inflation at current level appears difficult, given the looming price pressures in the short-term. Although the government has set the 12-month moving average inflation target at 8.0 percent for FY14, we believe the actual outcome will be much higher. The reasons are quite obvious: the Pak Rupee has lost almost 8 percent of its value in Q1-FY14; power tariffs have increased sharply for heavier users; gas tariffs are expected to increase equally sharply in January 2014; POL prices have been adjusted upwards several times; and GST has been increased in rate and scope (for details, see **Section 4.3.2**). Therefore, we expect inflation to be in the range of 10.5 - 11.5 percent for FY14. The need to reduce subsidies potentially explains the expected increase in prices.

Figure 4.20: Average CPI Inflation in Emerging Economies



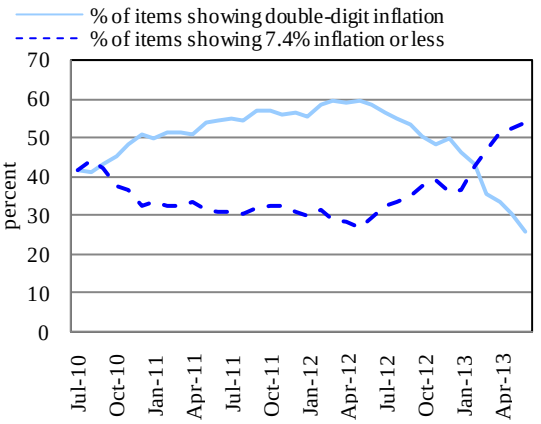
Source: Haver analytics

Figure 4.21: CPI Inflation and Administered Price Changes



Source: Pakistan Bureau of Statistics

Figure 4.22: Inflation Diffusion



Source: Pakistan Bureau of Statistics

4.4.1 Inflation Trends

The decline in inflation during FY13 was broad-based: 8 out of 12 groups in the CPI basket showed lower inflation in FY13 compared to the previous year.[33] More importantly, the number of items in the CPI basket recording an increase (equal to (or less than) the headline inflation of 7.4 percent), kept *rising* throughout the year (**Figure 4.22**). This increasingly widespread disinflation was due to a decline in key energy prices, and

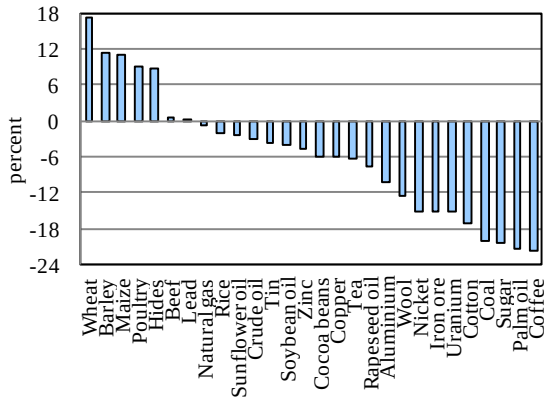
[32] Administered price index includes commodities whose prices are *administered* by the government. The most important of these are: wheat; sugar; electricity; petrol; diesel; CNG; LPG; and piped gas (for details see **Box 3.1** in SBP's *Second Quarterly Report* for FY13.

[33] The 8 groups are: Food & non-alcoholic beverages; clothing & footwear; housing, water, electricity, gas & other fuels; furnishing & household equipments; transport; education; restaurant & hotels; and miscellaneous. The other 4 groups are: alcoholic beverages & tobacco; health; communication; and recreation & culture.

stability in domestic food prices, which seeped into a wider range of goods & services in the CPI basket. The high-profile exception to this trend was the prices of certain consumer goods, which continued to show double-digit inflation during the year.[34]

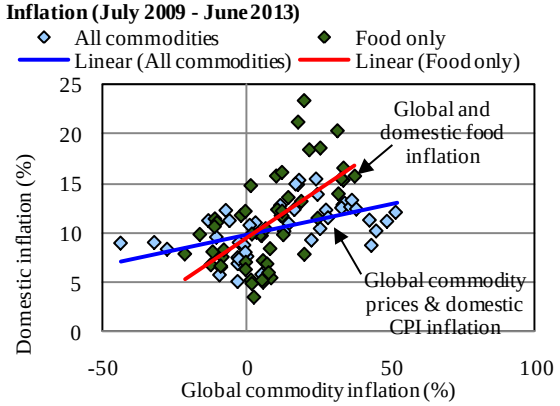
The fall in global commodity prices in FY13, mainly represented weak demand conditions, and an uncertain economic outlook. Except for some food items, international prices of most commodities declined during the year, with major deflation seen in rubber, sugar, palm oil and industrial metals (**Figure 4.23**). This trend brought stability in domestic prices, since imported products constitute a significant proportion of our intermediate and final consumption.[35] The impact of global prices was more pronounced on domestic food prices compared with other commodities (**Figure 4.24**). Also, floods did not do as much damage in FY13 compared to previous years.

Figure 4.23: Period Average Changes in Global Prices of Key Commodities in FY13



Source: International Monetary Fund

Figure 4.24: Relationship b/w Global and Domestic Inflation (July 2009 - June 2013)



Source: IMF and PBS

Similarly, changes in the value of the Pak Rupee also contribute to the inflationary pressures in the country. In addition to the Rupee price of imported final products, the exchange rate also influences manufacturing costs via imported raw-materials. SBP's survey results suggest that around a quarter of the manufacturing costs have an exchange rate pass-through via imported petroleum products and other imported inputs.[36] During FY13, the milder depreciation of Pak Rupee (4.5 percent compared to 9.1 percent in FY12), and lower volatility in the exchange rate, significantly influenced inflationary expectations, which in turn, were reflected in reduced inflationary pressures.

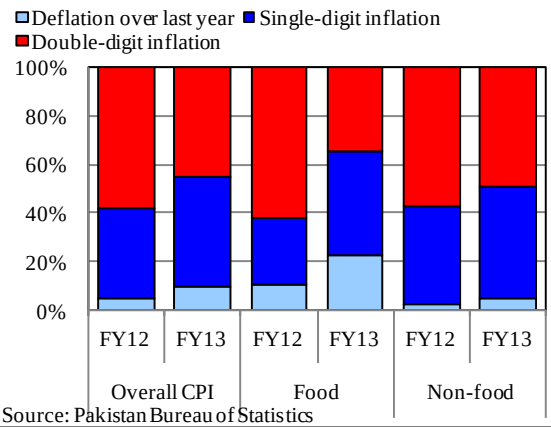
As far as administered prices are concerned, most of the decline in FY13 was seen in energy related products: gas tariffs for households were halved in July 2012, and CNG prices were sharply reduced during October 2012.[37] Retail petroleum prices remained more or less stable throughout FY13, whereas electricity tariffs have been kept fixed since May 2012, when these were increased by 10 percent (**Chapter 3** on energy). Within food-related items, the price of wheat and sugar are partly under administrative control.[38] While the price of wheat grew at a faster pace in FY13 compared to FY12 (due to higher support price and reduced stocks), sugar prices continued to decline for the second year in a row, as global prices declined and domestic supplies improved.

[34] Items such as readymade garments, tailoring, woolen cloth, hosiery, dopatta, cleaning & laundering, utensils, clinic fees, text books, rice, milk powder, cigarettes showed double digit inflation in most of the months during FY13.
[35] Around one fourth of our total inputs, and one-sixth of our consumption goods, are imported.
[36] Choudhary, A, Naeem, S., Faheem, A., Hanif, N., and Pasha, F. (2011) "Formal Sector Price Discoveries: Preliminary Results from a Developing Country." SBP Working Paper Series. 42. This paper compares how frequently prices in the manufacturing sector are revised relative to EU and U.S. averages.
[37] Tariffs for piped gas for households was reduced by an average of 49 percent in July 2012, whereas, CNG prices were decreased by 35.1 percent in the last week of October 2012.
[38] Government sets the support prices for wheat and sugarcane.

In our view, the cut in gas tariffs and stability in other energy-related prices, have helped ameliorate inflation expectations in the country. Since energy is used as input in most industries, the trend in their prices have a significant impact on overall price setting of manufactured goods. Furthermore, as noted in the 2nd Quarterly Report for 2012-13, these administered prices have a strong impact on public expectations, since media regularly tracks and gives coverage to the prices of energy and basic food items.

To summarize, in our view, supply-side dynamics (driven by external prices) and domestic inflationary expectations mainly guided the disinflationary trend in the country during FY13. Domestic demand pressures were also subdued as both the measures of core inflation (NFNE and trimmed), have declined during the year. Some domestic demand pressures may have lingered in the first half of FY13, as reflected in a double-digit inflation in nearly half of the non-food items (**Figure 4.25**).[39] However, as the year proceeded, these pressures subsided; the number of items showing double-digit inflation almost halved from around 60 percent in July 2012, to less than 30 percent in June 2013 (**Figure 4.26**).

Figure 4.25: Percentage of Items as per Period Average Inflation Outcome

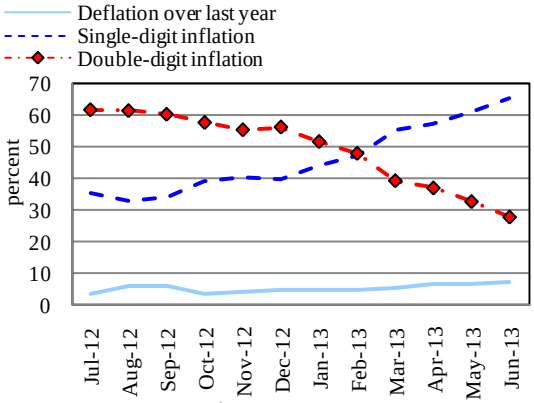


Source: Pakistan Bureau of Statistics

4.4.2 Inflation Outlook

FY13 was the second year in a row with inflation below the target set by the government. This trend may have encouraged the government to further lower the target to 8.0 percent for FY14. However, as mentioned before, inflation is likely to be higher than target due to: the recent upward adjustment in tariffs on power (and likely increase in gas tariffs in January 2014); the weakening of the Pak Rupee and resulting rise in POL prices; the revision in GST from 16 to 17 percent; and lower than target wheat production this season (**Box 4.1**). Our research shows that these factors can have a pronounced effect on inflation via their influence on inflationary expectations. More specifically, households anchor their expectations primarily to POL prices, which in turn, are affected by the PKR. Interestingly, movements in the Dollar-PKR parity directly influence inflationary expectations of private sector businesses. Our survey results specifically show that manufacturing units set their prices with an eye on the PKR parity (see **Special Section 4.1**).[40]

Figure 4.26: Percentage of Items in Non-food Category as per Inflation Outcome - YoY



Source: Pakistan Bureau of Statistics

As far as global prices are concerned, the declining trend seen in FY13 has already reversed in the first quarter of FY14. Oil prices, in particular, had increased to US$ 109.5 per barrel (Brent as of end-October 2013), mainly due to supply disruptions in Libya and growing concerns about Syria; however, prices have eased recently with the thawing in relations between the US and Iran. The US

[39] Most of these items were related with clothing, footwear, household equipments and personal care, which are strongly influenced by price setting anchored to the chosen seminal anchor.
[40] See footnote 37.

Energy Information Administration (EIA) expects the Brent prices to decline gradually to US$ 104 per barrel during FY14.

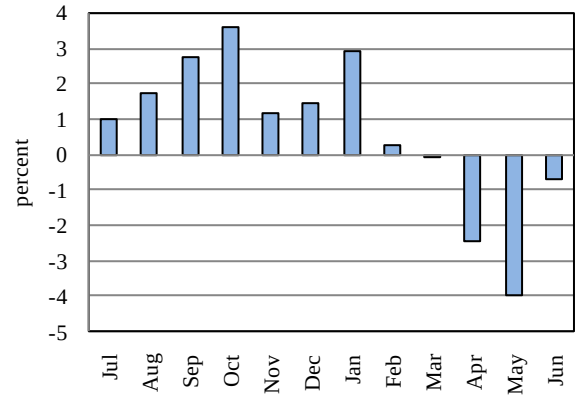
Box 4.1: Recent Trends in Wheat Prices in Pakistan

Domestic wheat prices generally experience downward pressure during Apr-June each year – this period also overlaps with the arrival of new crop (**Figure 4.1.1**). However, FY13 was different, as wheat prices continued to rise throughout May and June.

While below-target wheat production (i.e., 24.3 million tons vis-à-vis target of 25.5 million tons) was one of the reasons for unusual pressure on prices, the uncertainty associated with production estimates also translated into higher prices of wheat and allied products. Specifically, Suparco projected a wheat crop of 26.35 million tons as early as in May 2013. However, market reports based on information from Provincial Agriculture Departments, were indicating a below-target wheat production. Later, US Department of Agriculture came up with output estimates of 23.3 million tons for Pakistan. [41]

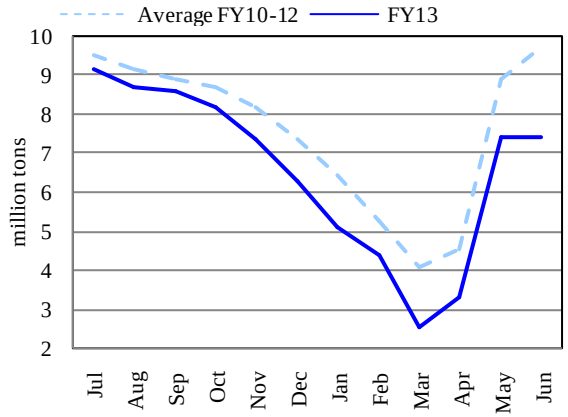
Furthermore, wheat stock in the country remained under pressure throughout FY13 (**Figure 4.1.2**). However, concerns became deeper towards the end of fiscal year, when government could not meet the procurement target. At the same time, wheat crop in Kazakhstan – the largest wheat supplier to Afghanistan – suffered heavy damages. This not only led to a considerable rise in the demand for Pakistani wheat in Afghanistan,[42] but also pushed domestic wheat prices higher.

Figure 4.1.1: Wheat Inflation (MoM)



Source: Pakistan Bureau of Statistics

Figure 4.1.2: Wheat Stocks held by Procurement Agencies



Source: State Bank of Pakistan

While higher wheat prices contribute directly towards CPI inflation,[43] this also has indirect influence since wheat serves as a benchmark in negotiating nominal wages. Survey results for Pakistan clearly show that wages constitute around 11 percent of the overall cost in manufacturing firms, and 39 percent in service providing firms. [44] This means, the recent increase in wheat prices would continue to influence CPI inflation during FY14.

[41] United States Department of Agriculture's World Agriculture Supply and Demand Estimate Report No 521 dated August 12, 2013 estimated Pakistan's wheat output during FY13 at 23.3 million tons, even lower than USDA consumption estimate for Pakistan for FY14 at 24.0 million tons.

[42] See Global Agriculture Information Network report (of USDA Foreign Agriculture Service) on 'Grain and Feed – Afghanistan' dated April 8, 2013. According to this report, Afghanistan attracted almost 22 percent (or 90,000 tons) higher supply of wheat flour from Pakistan during FY13, compared to FY12.

[43] Wheat & allied products (like wheat flour, suji, maida, vermicelli, bread plain, bread tandori, and rusk etc.) constitute significant part of CPI basket.

[44] See footnote 37.

Special Section 4.1: The Expectations Channel in Determining Inflation [45]

If households expect a certain rate of inflation in the future, they will negotiate a higher wage from firms. Firms, in turn, will face an increase in their costs of production and are likely to pass that increase on to consumers in the form of higher prices. Similarly, firms may also *expect* an increase in the cost of production, and preemptively raise their own prices. As shown in these cases, prices rise, in part, because economic agents expect prices to rise – this is the self-fulfilling property of inflationary expectations.

There is good reason to believe that inflationary expectations play an important role in explaining the process of inflation in Pakistan. This is partially because CPI year-on-year inflation in Pakistan is sticky; in other words, when inflation goes up, it stays up.[46] This is consistent with the view that prices are frequently revised in Pakistan, for which SBP has survey evidence.[47] In fact, survey evidence from the manufacturing sector shows that firms revise their prices almost every quarter.[48]

This means that if actual inflation depends on its expectations, then ways of lowering such expectations, must also be part of a policymaker toolkit. As a result, it becomes necessary to monitor expectations and also understand how they are formed. Let us consider each in turn.

There are essentially three methods for measuring, and hence monitoring, inflationary expectations: (i) using existing data to infer expectations (e.g., the yield curve on government bonds); (ii) making assumptions about how inflationary expectations are formed and then using statistical methods to formulate forecasts; and (iii) asking people directly about their inflation expectations.

The first method is especially useful when the country has indexed-bonds, which the Government of Pakistan does not issue. In their absence, one can consider, as a second best, differences in the returns on treasury bills at various maturities and infer market's expectation therein. However, such inference is imprecise because the difference in returns on various T-bill maturities is composed of two parts: (i) the inflation premium; and (ii) inflationary expectations. These components are not easy to disentangle in practice.

The second method assumes that agents hold *rational expectations*, which implies that they make maximum use of all available information to generate forecasts using statistical models. However, evidence supporting such precise thinking in the average person, is weak.[49] Furthermore, statistical techniques suffer from an excess of technical models that sometimes divert the attention from the real policy issues, and to some extent, have an in-built subjectivity.

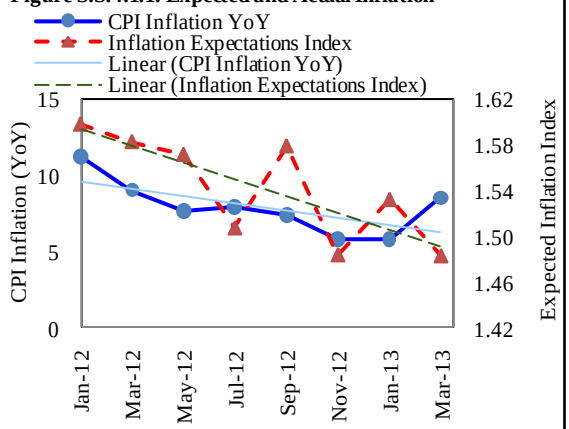
Finally, the direct method of approaching people is the most credible, but the method carries concerns that the sample may not represent the population. Also, some economists do not take surveys responses seriously, when they have lots of *theories* about how people ought to behave. However,

[45] This special section was written by Dr Ali Choudhary and Dr Mushtaq Khan.
[46] See Hanif, N., Malik, J., and Iqbal, J. (2012), Intrinsic Inflation Persistence in a Developing Country,' SBP Working Paper Series, 52.
[47] These findings are based on the results of 1,086 structured interviews conducted during Dec 2009 - Dec 2010, regarding the price-setting behavior of the formal firms in the manufacturing and services sector of Pakistan. The median frequency of price changes in these sectors is 4 and 2 times a year, respectively. The equivalent figures are 1 and 1.4 times a year in Europe and US, respectively. This result translates to one-quarter of Pakistan's total GDP being re-priced 3 times a year (see Choudhary et al. (2011) for details).
[48] See footnote 37.
[49] See Souleles, S. Nicholas (2004), 'Expectations, Heterogeneous Forecast Errors, and Consumption: Micro Evidence from the Michigan Consumer Sentiment Surveys', Journal of Money, Credit, and Banking, Vol. 36, No. 1 (February) Haltiwanger, J, and Waldman, M. (1985), 'Rational Expectations and the Limits of Rationality: An Analysis of Heterogeneity', The American Economic Review, Vol. 75, No. 3 (June), pp 326-340.

latest research shows that differing views of people, to use the jargon heterogeneous expectations, is an essential part of the inflation process.[50] Over the last two years SBP's has been investing in this last method.

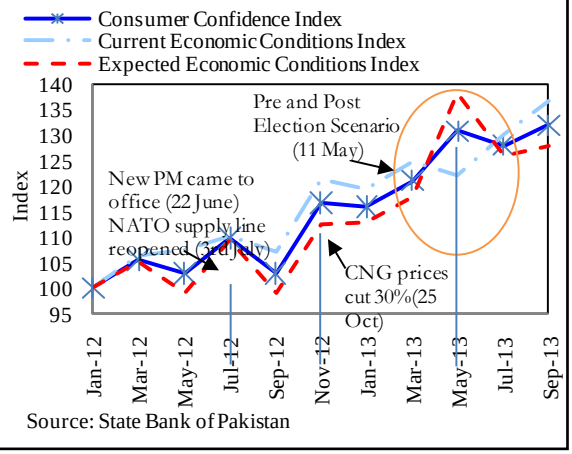
In January 2012, SBP in collaboration with the Institute of Business Administration,[51] launched a consumer confidence and inflation expectations telephone survey conducted every two months. The survey uses a stratified random sample of more than 1,800 households, which is representative of Pakistan's population. The survey measures inflationary expectations both qualitatively (i.e., if inflation is expected to remain the same, increase or decrease) and quantitatively. It also measures household perceptions about the current state of the economy relative to the past, and their expectations about the future state of the economy. These results are then translated into a consumer confidence index (CCI). Finally, it gathers information about households' future behavior, which provides a sound proxy for consumer demand in the future.

Figure S.S.4.1.1: Expected and Actual Inflation



Source: State Bank of Pakistan

Figure S.S.4.1.2: Consumer Sentiments and Major Events



Source: State Bank of Pakistan

With the first survey having been conducted in January 2012, the indices that have been developed using the survey remains under examination before any concrete conclusion could be drawn from them. Having said this, preliminary results are encouraging: in **Figure S.S 4.1.1** we have mapped what people expected six months down the road[52] with what actually happened six months later. Given our limited data, it is comforting that on a trend basis, actual inflation has followed the path of survey expectations. Households' expectations regarding the *quantum* of the increase in prices, is less meaningful at the moment, since those surveyed will compare their own responses to actual inflation, and are likely to calibrate their future expectations more realistically. As mentioned earlier, these surveys also query households about their own outlook on economic conditions, and how they are currently faring. In **Figure S.S.4.1.2**, we provide a snapshot of these indices, which shows that they capture well the state of the economy (see for example, the election 2013 euphoria). The SBP now hosts a web-based tool at www.sbp.org.pk/CCS to allow for dissemination and wider exploration of the indices and its components.

Lets us now shed some light on the formation of inflationary expectations. This is examined in Abbas, Beg and Choudhary (2013)[53] using the survey dataset. As a brief preview, results suggests

[50] See Mankiw N. G., Ricardo R., and Wolfers J. (2004), Disagreement about Inflation Expectations, NBER Macroeconomics Annual 2003, Volume 18, The MIT Press

[51] We acknowledge the support of NY FED, CIMS University of Surrey and Yale University for theoretical background, development and implementation of the Centre for Survey Research.

[52] The question on inflation expectations ask households about inflation over a six-month horizon.

[53] Abbas, H., Beg, S. and Choudhary, A. (2013), 'Inflation Expectations in a Developing Country Setting [Draft Version],' www.sbp.org.pk/ccs/reports.

that: (i) perceptions about future prices are correlated more so with retail energy prices, and to a lesser extent, with food and other commodities;[54] (ii) expectations differs by demography (e.g., age, education, sex), a fact also observed in Bryan and Venkatu (2001 a & b);[55] (iii) fuel price announcements play a more important role on the formation of inflation expectations compared to electricity and gas tariffs; (iv) after taking into account difference in inflationary expectations due to demography, expected inflation is highly correlated with what economic agents want for their income; and (v) the Rupee/US$ parity has figured quite prominently as a key determinant in firms' price setting behaviour. In fact, the Rupee/US$ parity indirectly affects household expectations through fuel prices (for it is an imported item), but directly impacts the price-setting behaviour of firms.

The results of the deeper (micro) analysis of inflation expectations in Pakistan are bearing fruit. For example, the finding that retail fuel prices play an important role in formulating expectations led SBP to develop an 'administered price' index. This index, together with an assessment of headline inflation numbers, was better able to explain why inflation continued to fall in FY12 and FY13, despite the continuous easing in monetary policy.[56]

To conclude, the consumer confidence and inflation expectation surveys, have begun to serve as useful tools for our monetary policy decisions and overall analysis of the economy. These insights can only be appreciated against the backdrop of conventional analysis of inflation, which focus on determinants covering either *demand-pull* or *supply-push* factors. Our assessment shows that rising inflationary expectations that push up actual inflation rates, could be confused with demand pressures. If so, the policy response (e.g., demand management to narrow the twin deficit) that could be imposed, may, in fact, exacerbate inflationary expectations and subsequent inflation. Indeed, a review of inflation expectations will become a regular feature in forthcoming Quarterly and Annual Reports.

[54] Choudhary, A., Naeem, S., Abdul, F., Hanif, N. and Pasha, F. (2011), 'Formal Sector Price Discoveries: Preliminary Results from a Developing Country,' SBP Working Paper Series, 42.

[55] Bryan F. M and Venkatu, G. (2001a). 'The Demographics of Inflation Opinion Surveys'. Federal Reserve Bank of Cleveland Economic Commentary Series.

Bryan F. M. and Venkatu, G. (2001b). The Curiously Different Inflation Perspectives of Men and Women. Federal Reserve Bank of Cleveland Economic Commentary Series.

[56] See Quarterly Report (2nd Quarterly Report FY13, 3rd Quarterly Report FY13), Annual Reports (State of the Economy Annual Report FY 2011-12 pp 59-60) and Monetary Policy Statement (12th April 2013, 13th September 2013, 21st June 2013,).