

5 Inflation and Monetary Policy

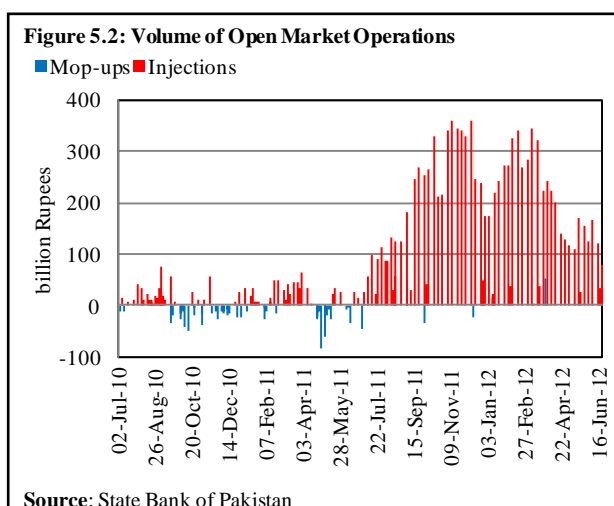
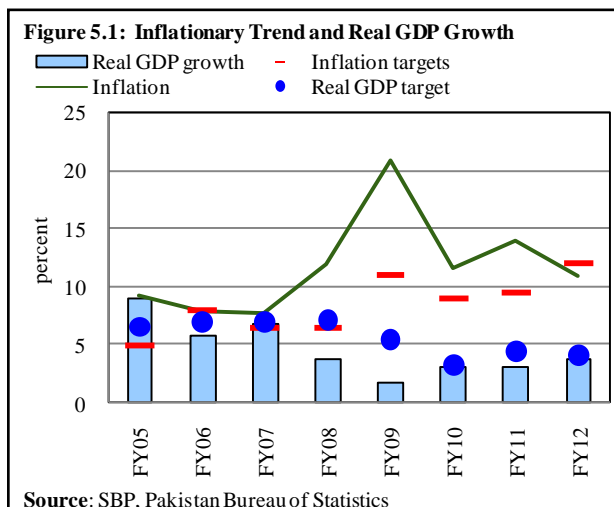
5.1 Overview

For the first time in five years, actual inflation for FY12 turned out to be lower than the annual target (**Figure 5.1**). This, along with a modest improvement in economic activities, is amongst the key positives for the year. In spite of these developments, the economy was unable to move away from a low-growth, high-inflation environment. This situation is challenging for the central bank, as policy measures to contain inflationary pressures carry the risk of choking nascent improvement in economic activity. Cognizant of these tradeoffs, SBP utilized any room available to support economic growth.

Broadly speaking, SBP adopted an accommodative monetary policy in FY12. The policy rate saw a cumulative reduction of 200 bps in the first two monetary policy announcements in the fiscal year.¹ However, the risks emanating from the external sector intensified during the initial months of the year, which forced SBP to put further easing on hold. Monetary management also became more challenging, with increasing government reliance on SBP funding as the year proceeded.

Despite the reduction in interest rates, overall monetary expansion decelerated in FY12.² This was largely due to the deterioration in the external account. The resulting depletion of FX reserves absorbed Rupee liquidity from the money market. This, along with increasing government borrowing from commercial banks, underlines the need for liquidity injections into the system to ensure that money market conditions remained calm. Not surprisingly, the volume of SBP's open market operations (OMOs) witnessed a sharp (one-sided) increase during the year (**Figure 5.2**).³

However, it is worth noting that the weighted average overnight rate remained near the upper bound of the interest rate corridor despite continuous liquidity injections through OMOs (**Figure 5.3**). This downward rigidity in interest rates on the very short-end of the yield curve, was also visible in other market rates, including lending rates of commercial banks. Specifically, following the 200 bps



¹ Policy rate was reduced by 50 bps to 13.5 percent in the first monetary policy statement issued on 31st July 2011. A more aggressive cut of 150 bps was announced in the second monetary policy statement issued on 7th October 2011.

² Theoretically, changes in interest rate and monetary expansion should be inversely correlated.

³ It is important to realize that extended temporary liquidity support from SBP is equivalent to inflationary financing.

cut in the policy rate, weighted average lending rates of commercial banks saw a reduction of 112 bps to 13.1 percent by June 2012, against 14.2 percent in June 2011.

In fact, given the government's large borrowing requirements, commercial banks had little incentive to reduce lending rates in line with the cut in the discount rate, and channel funds towards the private sector. It also seems that banks were using liquidity from SBP for onward lending to the government. In practice, it makes sense for commercial banks to do so, as long as liquidity in the market is available at a rate lower than the T-bill cut-off rate. A positive spread between cut-off rates of 3-month T-bills and of OMOs, allowed commercial banks to do this for most of the year (**Figure 5.4**).

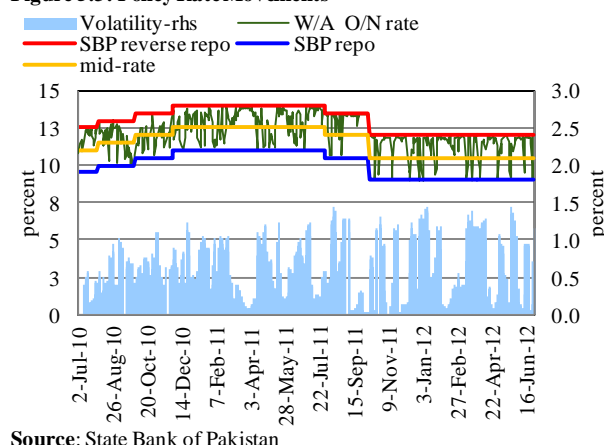
The extent of government borrowing in FY12 can be judged from the fact that the stock of budgetary finance from the banking system grew by 46.1 percent to Rs 3.8 trillion.⁴ Within the banking system, commercial banks' lending for budgetary finance has substantially increased in recent years, including FY12. Not too long ago (in FY07, in fact), the stock of budgetary finance was 18.8 percent of private sector credit; as of end FY12, this ratio has increased to 62.0 percent.

In addition to budgetary financing, government borrowing for commodity operations and bank lending to PSEs (usually against government guarantees), have also led to a rise in banks' exposure to the public sector. Although understandable from the banks' point of view, the changing composition of their balance sheets is discomfiting, as banks are moving away from intermediating between private savers and investors.

The private sector appears to have been marginalized due to the shift in banks' lending strategy and the government's appetite for funding. Credit expansion to the private sector remained subdued for yet another year. A slight improvement in *overall* credit to the private sector, compared with FY11, is primarily driven by bank lending to (and investments in) non-banks finance institutions (especially mutual funds), which then invested these funds largely in government T-bills. As a result, loans to private sector businesses grew by less than one percent during the year – the lowest growth rate since FY08.

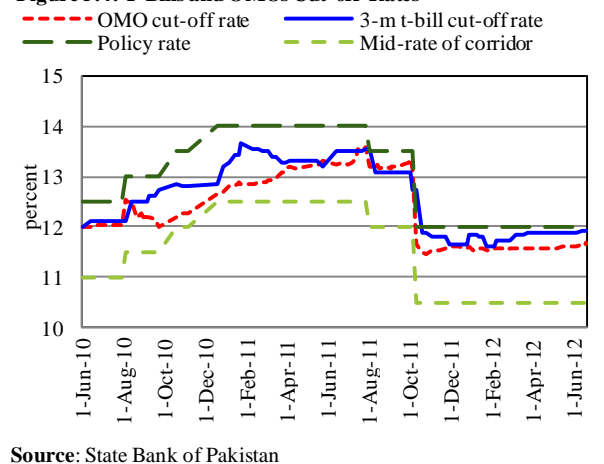
Looking ahead, SBP's decision to cut its policy rate by 250 bps to 9.5 percent in the initial months of FY13, is partially aimed at reviving private investment in the economy. It is expected to help consolidate the modest improvement in underlying economic activity seen in FY12. In addition to this, the government has also amended the SBP Act 1956 to limit the flow – as well as the stock – of

Figure 5.3: Policy Rate Movements



Source: State Bank of Pakistan

Figure 5.4: T-Bills and OMOs Cut-off Rates



Source: State Bank of Pakistan

⁴ In terms of GDP, government borrowing for budgetary finance reached 18.4 percent by end FY12, compared to 14.4 percent for the previous year.

government borrowing from the central bank. Specifically, a limit of zero quarterly borrowing from SBP was explicitly included in the Act. The government is also mandated to retire its outstanding borrowing from SBP within eight years from April 2011. While it is too early to gauge the medium-to-long term impact of these changes in the Act (as the amendments were passed in March 2012), the limit of zero quarterly borrowing for the last quarter of FY12 was not met. A strong commitment from the fiscal authority to limit its borrowing from SBP would not only help its credibility, but also facilitate SBP in managing inflationary expectations. In this context, meeting the stipulated limit on government borrowing from SBP during first quarter of FY13, is a positive development.

5.2 Monetary Aggregates

Growth in broad money supply decelerated slightly in FY12, for the first time since FY09. This was attributed *entirely* to the depletion of net foreign assets (NFA) of the banking system. On the other hand, net domestic assets (NDA) saw an expansion of 20.3 percent in FY12, compared to a relatively lower growth of 13.1 percent in FY11. The drivers of monetary expansion in FY12 are shown in **Table 5.1**.

Table 5.1: Changes in Monetary Aggregates
change in billion Rupees, growth in percent

	<i>Absolute change during Jul-June</i>			<i>YoY growth in stocks</i>	
	FY10	FY11	FY12	FY11	FY12
Broad money (M2)	640.0	918.0	946.6	15.9	14.1
NFA	49.4	235.0	-253.6	43.1	-32.5
SBP	75.9	235.3	-225.4	62.1	-36.7
Scheduled banks	-26.4	-0.3	-28.2	-0.2	-17.0
NDA	590.6	683.0	1200.2	13.1	20.3
SBP	86.4	48.7	474.9	4.9	45.8
Scheduled banks	504.2	634.3	725.3	14.9	14.9
<i>of which</i>					
Government borrowing	406.6	579.6	1237.4	23.7	41.0
For budgetary support	330.4	590.2	1198.3	29.3	46.1
SBP	44.0	-8.0	505.3	-0.7	42.1
Scheduled banks	286.4	598.2	692.9	74.5	49.5
Commodity operations	77.0	-15.7	38.6	-3.8	9.7
Non government sector	198.8	158.5	105.4	4.7	3.0
Credit to private sector	112.9	121.3	235.2	4.0	7.5
Credit to PSEs	85.0	36.3	-130.5	10.3	-33.7
Other items net	-14.9	-55.1	-142.6	9.2	21.8

Source: State Bank of Pakistan

5.2.1 Net Foreign Assets

The challenge to monetary management during the year, is amply shown from the overall external account deficit of US\$ 3.3 billion in FY12, compared to the surplus of US\$ 2.5 billion in FY11 (**Figure 5.5**).

Within the banking system, NFA contraction was primarily driven by the depleting foreign exchange reserve of SBP. The main reasons for the decline were the drying up of external financial inflows; the repayments of IMF loans; and market support by SBP.⁵

⁵ It is important to note that SBP's FX market interventions are aimed at reducing excessive volatility in the exchange rate, and not at managing the exchange rate at a specific level. The 9.1 percent depreciation of the Pak Rupee, against the US Dollar during FY12, also supports this argument. For further details, please see **Chapter 8**.

Commercial banks also contributed to the net contraction in overall NFA. Specifically, NFA of commercial banks saw a net contraction of Rs 28.2 billion during the year. This is surprising, at least on the face of it, since net liquid foreign exchange reserves of commercial banks recorded a healthy increase of US\$ 1.0 billion during FY12. The confusion arises because of definitional issues. While the NFA of commercial banks reflect their net claims on foreign residents, net foreign exchange reserves are their liquid assets denominated in foreign currency.⁶ This implies that the ownership and the utilization of foreign currency accounts (popularly known as FE-25 deposits), impact commercial bank NFA differently from their holding of net liquid foreign exchange reserves.⁷

Data on the ownership of foreign currency deposits indicate that more than half of the increase in FCAs came from non-residents. This has increased commercial banks' liabilities to non-residents. At the same time, a decline in banks' placements outside Pakistan has reduced their claims on non-residents, which led to a net contraction in the NFA of commercial banks.

5.2.2 Net Domestic Assets

Monetary expansion in FY12 was entirely driven by a rise in net domestic assets of the banking sector. Within NDA, the driving force was government borrowing, as credit expansion to the private sector remained subdued as shown in **Figure 5.7**.

Government Sector Borrowing

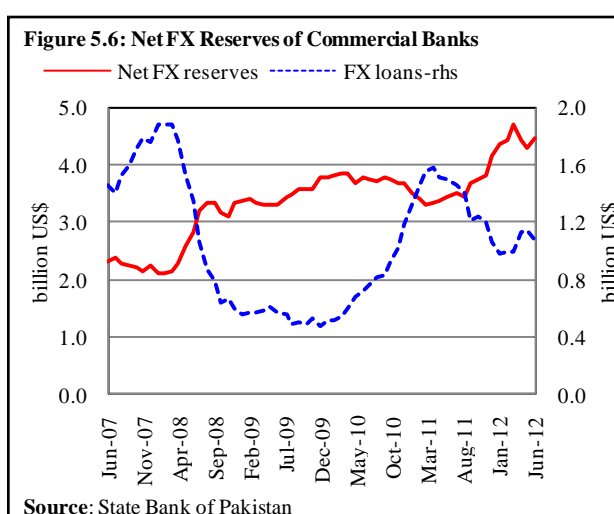
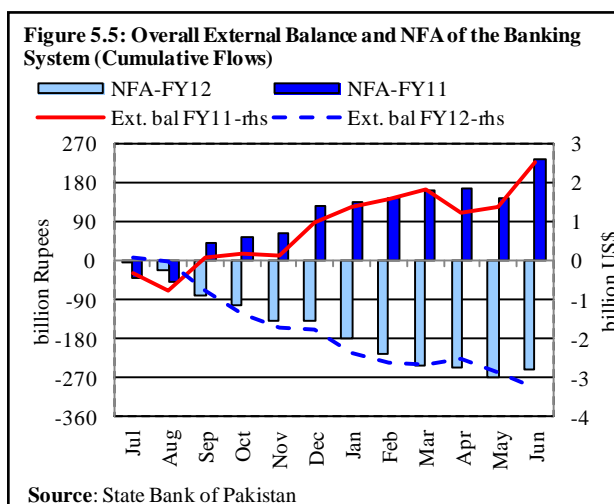
Changes in NDA of the banking system were almost entirely attributed to government borrowing. It saw an increase of Rs 1.2 trillion in FY12, compared to Rs 579.6 billion in the previous year. Within government borrowing, budgetary finance accounted for 89.2 percent of the increase, while the rest of the borrowing was for commodity operations. In terms of stocks, the outstanding amount of government sector borrowing from the banking system has overtaken the credit to non-government sector (**Figure 5.7**).⁸ Although demand for private sector credit is low due to a host of factors (more on this issue later), crowding-out due to public borrowing cannot be ruled out.⁹

⁶ It may be noted that net liquid foreign exchange reserves with commercial banks do not include trade financing against FE-25 deposits.

⁷ For example, the utilization of foreign currency deposits revealed that foreign currency loans for trade financing saw a net retirement of US\$ 423 million in FY12, compared to a net expansion of US\$ 778 million in FY11. This led to an increase in commercial banks' balances held outside Pakistan, which helped them accumulate foreign exchange reserves (**Figure 5.6**).

⁸ Credit to non-government sector includes loans (including investments) to private sector, PSEs and financial institutions.

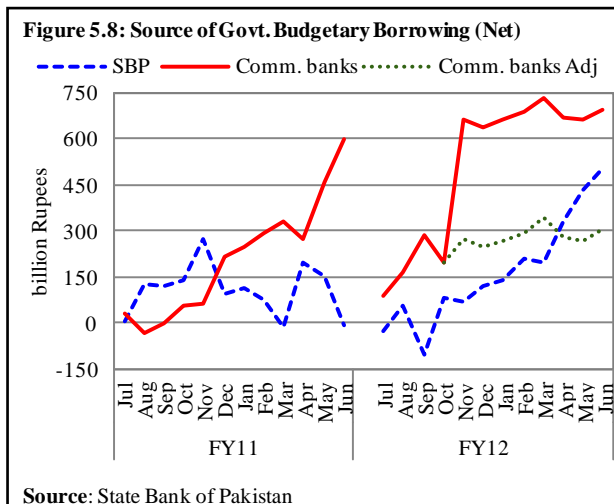
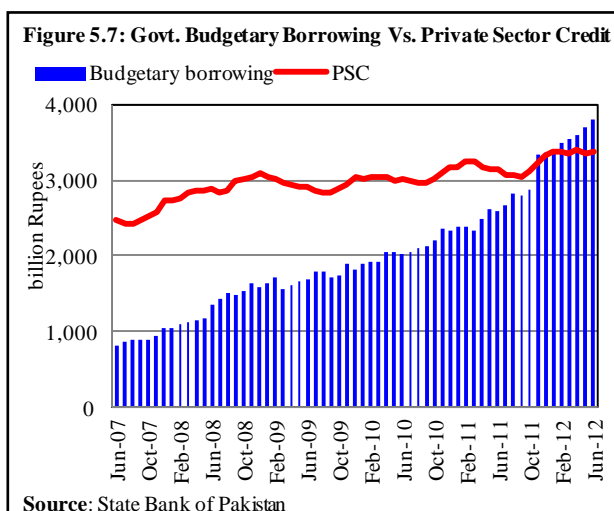
⁹ To make it clearer, let us take the government out from the credit market and leave liquidity with the banking system. This will put downward pressures on interest rates, which will help in supporting private sector business activities.



Budgetary Finance: one-offs and more:

Overall budgetary borrowing from the banking system doubled in FY12 compared to the year before – the government borrowed Rs 1198.3 billion during FY12, compared to Rs 590.2 billion during FY11. A part of this increase includes a one-off adjustment of Rs 391 billion, which was used to settle accumulated subsidies/arrears of PSEs and commodity procurement agencies. Even after adjusting for this one-off, budgetary borrowings stood at Rs 807.3 billion for FY12, which was still substantially higher compared to the previous year (**Figure 5.8**).¹⁰

Sources of budgetary borrowing indicate revival of monetization. As the year proceeded, government reliance on SBP funding increased. Specifically, there was a major shift towards SBP, and away from commercial banks, in the fourth quarter of FY12. For the entire fiscal year, the authorities borrowed Rs 505.3 billion from SBP, compared to a net retirement of Rs 8.0 billion in FY11. On the other hand, government borrowing from commercial banks (excluding the one-off adjustment) stood at Rs 301.9 billion in FY12, compared to Rs 598.2 billion in the year before. This allowed commercial banks to lend to PSEs and commodity financing (more on this issue later).



The limits on quarterly borrowing from SBP: The new Section 9C, in SBP Act 1956, limits federal government borrowing from SBP.¹¹ The Act prescribes two types of limits. Firstly, the flow of federal government borrowing from SBP has been restricted by imposing a limit of zero quarterly borrowing on a net basis. Hence, the federal government is now required to retire its borrowing from SBP to zero at the end of each quarter.¹² The second restriction is related to the stock of government borrowing from SBP. The Act states “the debt of the Federal Government owed to the Bank [SBP] as on the 30th April, 2011, shall be retired not later than eight years from that date”. While the second limit on government borrowing is open to interpretation in terms of how it will be staggered, the limit on quarterly borrowing is straightforward. Budgetary borrowing of Rs 306.3 billion from SBP in Q4-FY12, is a breach of the quarterly borrowing limit.¹³

¹⁰ For a detailed discussion on fiscal operations, please see **Chapter 6**.

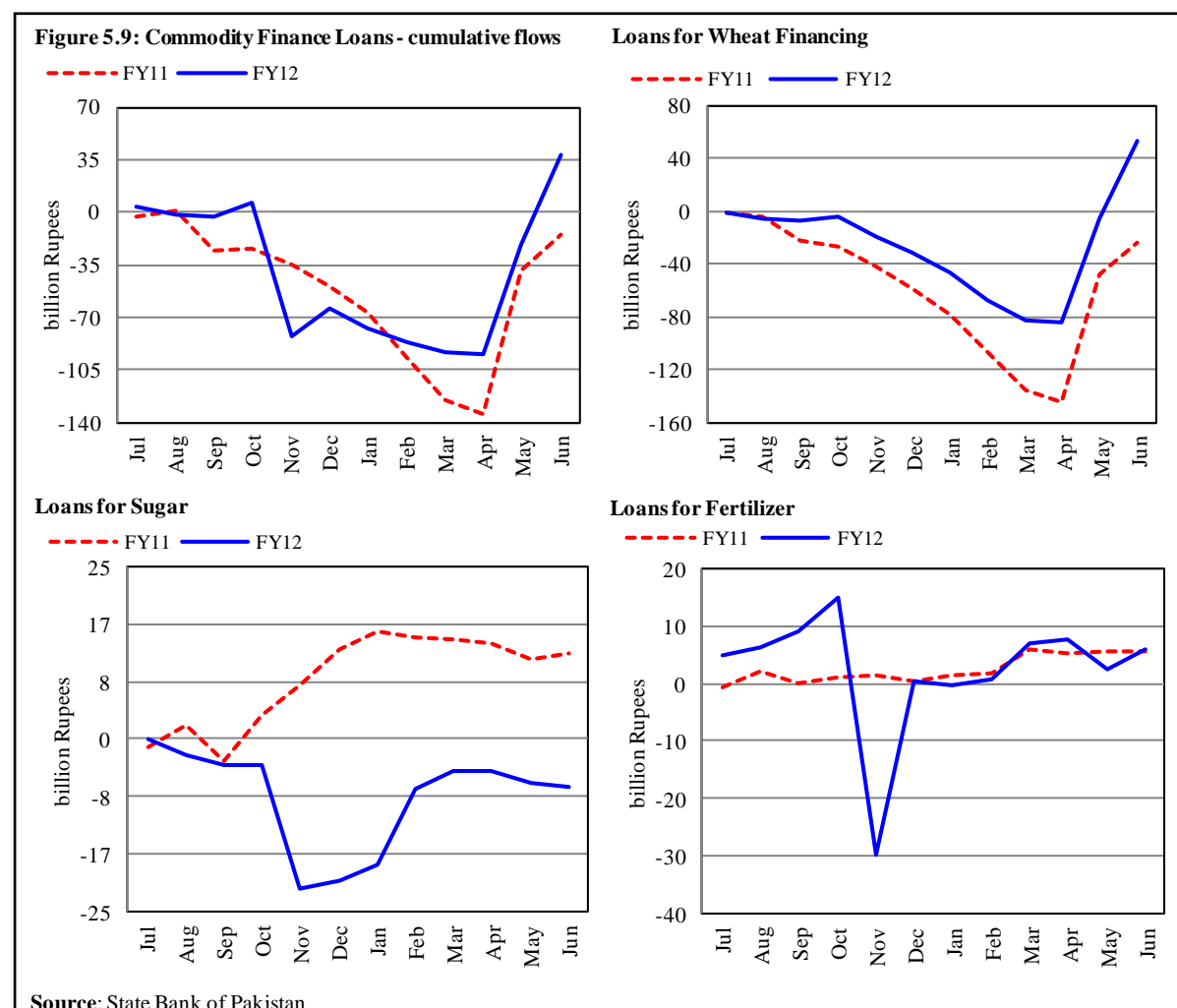
¹¹ Act No. IX of 2012, dated March 13, 2012.

¹² In this context, the only exception is limited borrowing through ways and means.

¹³ In the event of a breach, the government is required to provide a justification before the Parliament.

Government Borrowing for Commodity Finance

In addition to budgetary finance, the government also borrowed from commercial banks for its commodity operations. These loans have seen a substantial increase in outstanding amount in the recent past, despite their self-liquidating nature. The stock of commodity finance grew by 9.7 percent (Rs 38.6 billion) in FY12 to Rs 438.1 billion, despite the release of Rs 78.0 billion to procurement agencies by the government, for the settlement of accumulated subsidies. Moreover, this net expansion during FY12 is in sharp contrast to a net retirement of Rs 14.7 billion in the previous year (**Figure 5.9**). Details reveal that the expansion is primarily attributed to increased borrowing for wheat procurement.



In FY12, the government not only increased the wheat support price from Rs 950 to Rs 1050 per 40 kg, but also announced a higher procurement target of 7.7 million tons, compared to the actual procurement of 6.2 million tons last year. However, due to wheat stocks carried over from the previous season, the actual volume of wheat procured during FY12 stood at 6.0 million tons, which was substantially lower than the target. Despite this, the government borrowed Rs 153.5 billion from commercial banks in FY12 for wheat procurement, compared to Rs 138.8 billion in FY11. As shown in **Figure 5.9**, FY12 witnessed an increase in net wheat financing, while FY11 saw retirement.¹⁴

¹⁴ It is pertinent to mention here that a slight decline in the *repayment* of wheat financing loans in FY12 was expected, since last year's repayments benefited from the government's decision to allow wheat exports in FY11.

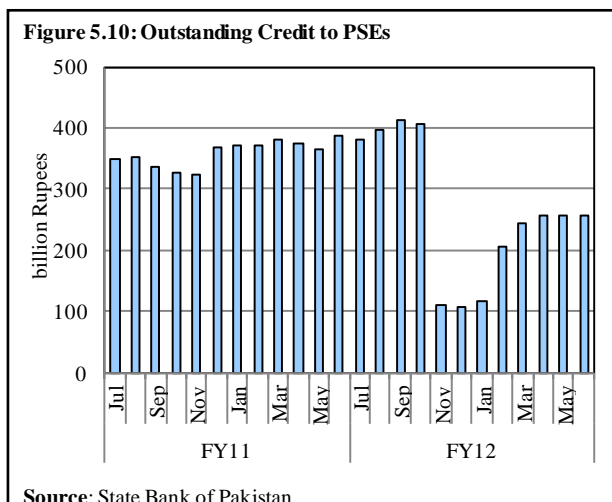
Besides wheat, the government also intervened in the sugar and fertilizer sectors during the year, but their volumes were smaller than wheat's. In the case of sugar, mills held back their stocks in the hope that domestic sugar prices would recover before the crushing season. However, prices remained subdued, and sugar mills were not willing to offload their stocks. This led to a delay in the crushing season. In view of this, the government intervened by purchasing 4.75 million tons of sugar, which stabilized sugar prices in the market, and jumpstarted the crushing season by improving cash-flows for sugar mills.

In the case of fertilizer, persistent gas shortages continued to limit domestic production. To meet the demand for fertilizer, especially during the sowing season, the government imported 1.45 million tons of urea in FY12. This increased the requirement for commodity financing since PSEs use bank financing for importing urea.

To summarize, the space created by settling accumulated subsidies for fertilizer and sugar, was almost entirely used up by fresh borrowing (**Figure 5.9**). This is evident from the amount of outstanding loans, which stood at Rs 82.2 billion by end-FY12, against Rs 83.3 billion in FY11.

Net Retirement in Credit to PSEs

Credit to PSEs witnessed a net retirement of Rs 130.5 billion in FY12, compared to a rise of Rs 36.3 billion in FY11. This turnaround was largely due to the *one-off* payment by the government, which was used to reduce the circular debt in energy-related PSEs, and the receivables of procurement agencies.¹⁵ Consequently, banks' exposure to PSEs saw a reduction of Rs 296.5 billion in November 2011 as the PSEs' debt liabilities were taken over by the federal government (**Figure 5.10**).¹⁶ While this adjustment had no immediate monetary impact, it had notable implications for the banking and energy sectors:



- (i) Both commercial banks and the government benefited from the settlement of PSE debt. The commercial banks were able to transform their illiquid assets (lending to PSEs) into liquid assets (government securities). The cost of this substitution for commercial banks was the loss in interest income due to a positive gap between lending rates to PSEs, and the yield on government securities. However, this loss was largely compensated by the improvement in risk-weighted capital requirements, as investments in government securities are assigned zero weight for the calculation of credit risk. The government, on the other hand, was able to replace costly PSEs borrowing with relatively low-cost government securities.
- (ii) The *one-off* adjustment also created room for further borrowing by PSEs from commercial banks, which appears to have been the intent. This enabled the government to shift the receivables of independent power projects (IPPs) to the Power Holding Company. As a result, the borrowing of

¹⁵ PSEs' borrowings from the banking system have increased many folds in recent past. It jumped from Rs 81 billion as of end FY07 to Rs 388 billion by end FY11: a rise of 4.8 times in just four years. Prior to the intervention in November 2011, outstanding stock of credit to PSEs had reached Rs 412.9 billion by end Q1-FY12.

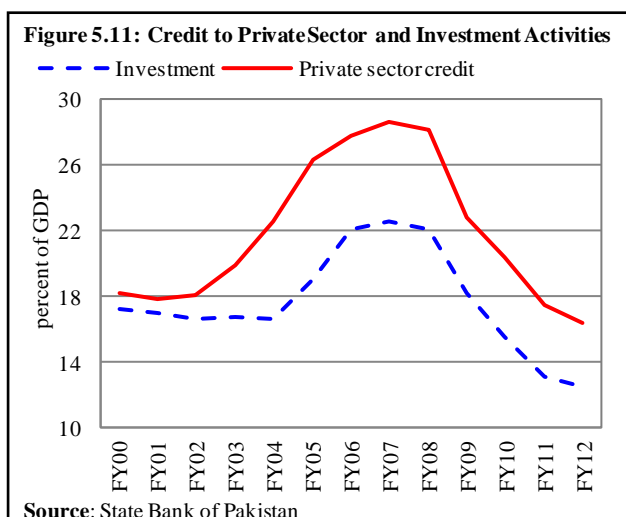
¹⁶ In November 2011, government budgetary borrowing increased to Rs 460.8 billion.

Power Holding Company saw a rise of Rs 141.8 billion in H2-FY12 (for details, please see **Chapter 3 on Energy**).

5.3 Credit to Private Sector

On the face of it, overall credit to the private sector (CPS) grew by 7.5 percent in FY12 – the highest YoY growth since FY08. However, this provides little comfort to economic managers, since it was driven primarily by credit to non-bank finance companies (NBFCs), which predominantly lent to the government.¹⁷ Loans to private sector businesses (PSB), on the other hand, grew by only 0.8 percent during FY12.

Given the double-digit rate of inflation in recent years, CPS in general, and loans to PSB in particular, have been shrinking in real terms. Not surprisingly, private sector credit-to-GDP has been on a continuous decline since FY07 (**Figure 5.11**). A similar decline in the investment-to-GDP ratio is a clear reflection of a continuous slowdown in investment. The factors responsible for this deterioration are quite familiar: excess capacity in the manufacturing sector due to persistent energy shortages; heightened security concerns that have pushed up the cost of doing business; issues and costs related to governance; and the government's appetite for credit. In addition to these factors, several sector-specific issues were also at play.



Sharp Deceleration in Loans to Manufacturing Sector: Loans to the manufacturing sector grew by only 0.3 percent in FY12, compared to 9.6 percent last year. The deceleration was broad-based, as a large number of industries, either paid off existing loans, and/or reduced their fresh credit demand (**Table 5.2**). In this context, following points are worth noting:

- (i) The textile sector, one of the biggest users of bank credit with a 20 percent share in loans to private sector businesses, saw a net contraction of Rs 23.7 billion in FY12, compared to an expansion of Rs 44.5 billion last year. This sharp turnaround can be traced to a significant decline in cotton prices during the year. Specifically, domestic cotton (lint) prices in FY12 averaged Rs 4,067 for 40 kg, against Rs 7,867 last year – a YoY decline of 48.3 percent. This not only reduced credit demand from the spinning and weaving sectors, but also eased the credit requirements of upstream industries like garments and knit-wears.
- (ii) Loans to the cement sector also witnessed a net contraction for the second year in a row, but the pace has accelerated. A steady rise in domestic cement prices and healthy exports contributed to strong corporate earnings.^{18,19} In our view, this availability of internal funding allowed the cement sector to retire its outstanding loans.

¹⁷ Non-bank holdings of government securities saw a rise of Rs 360 billion during FY12.

¹⁸ Average retail price of 50 kg cement bag jumped from Rs 350 in FY11 to Rs 420 in FY12: indicating YoY increase of 20 percent. Revival in construction activities facilitated cement sector to sustain this healthy growth in retail prices. Construction grew by 6.5 percent in FY12 compared to only 2.5 percent last year. However, it is interesting to note that loans to construction sector witnessed a net retirement of Rs 14.2 billion in FY12 against a small expansion of Rs 0.6 billion last year. In fact, revival in construction activities is primarily driven by the reconstruction in flood affected areas and housing demand by individuals. None of these activities are financed through bank loans.

Table 5.2: Net Flows in Manufacturing Loans

billion Rupees

	FY09	FY10	FY11	FY12
Overall manufacturing	27.28	31.83	121.86	4.49
Food products and beverages	11.36	10.83	61.04	15.09
Edible oil and ghee	-1.38	-5.41	6.05	11.09
Dairy products	-2.32	1.89	7.41	4.79
Rice processing	1.75	0.92	5.99	-4.84
Sugar	8.79	3.43	38.65	-1.19
Textiles	-33.43	-12.83	44.48	-23.68
Spinning	-10.82	-15.27	18.77	-10.72
Weaving	-10.56	1.00	11.76	-7.14
Finishing	-6.34	-3.68	5.98	0.61
Made-up textile articles	-2.56	9.38	-5.34	-4.49
Coke, refined petroleum products	3.18	5.38	4.53	1.58
Fertilizers and nitrogen compounds	19.28	18.07	2.36	8.87
Cement	9.04	1.01	-6.45	-20.74
Basic metals	2.87	1.36	3.04	12.32
Motor vehicles, trailers and semi-trailers	5.31	-2.56	-0.37	2.37

Source: State Bank of Pakistan

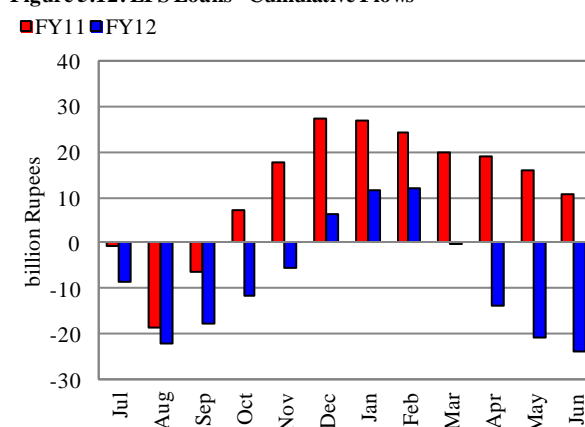
(iii) Similar to textiles and cement, the sugar sector also witnessed a net retirement in outstanding loans in FY12, which is in sharp contrast to credit expansion in the previous year (**Table 5.2**). This reversal is largely attributed to: (i) a sharp decline in the price of sugarcane that reduced overall demand for credit; and (ii) the government intervention, which improved cash-flows for sugar mills.

Some support for loans to the manufacturing sector came from the fertilizer sector, which saw credit expansion of Rs 8.9 billion during FY12 compared to Rs 2.3 billion last year. As discussed earlier, fertilizer producers were unable to offload their stocks due to the availability of imported urea at subsidized rates. This increased the working capital needs of fertilizer companies.

Net Contraction in Trade Financing:

Despite increased trade volumes and modest growth in wholesale & retail services, trade loans saw a net contraction of 6.9 percent in FY12 compared to an expansion of 16.5 percent in the previous year.^{20,21} This merits an explanation.

Within trade financing, both concessional loans under the export finance scheme (EFS), and foreign currency loans, registered sharp reductions in FY12. Specifically, EFS loans outstanding fell by 11.4 percent, on a YoY basis, to Rs 185.7 billion by the end of FY12 (**Figure 5.12**). This strong contraction is largely because of a decline in textile exports,

Figure 5.12: EFS Loans - Cumulative Flows**Source:** State Bank of Pakistan

¹⁹ Cement sector earned US\$ 456 million from exports in FY12 compared to US\$ 446 million last year.

²⁰ Trade volumes (sum of exports and imports) grew by 5.7 percent in FY12 to US\$ 64.7 billion.

²¹ Wholesale & retail services saw a real growth of 3.6 percent in FY12 compared to 3.5 percent last year.

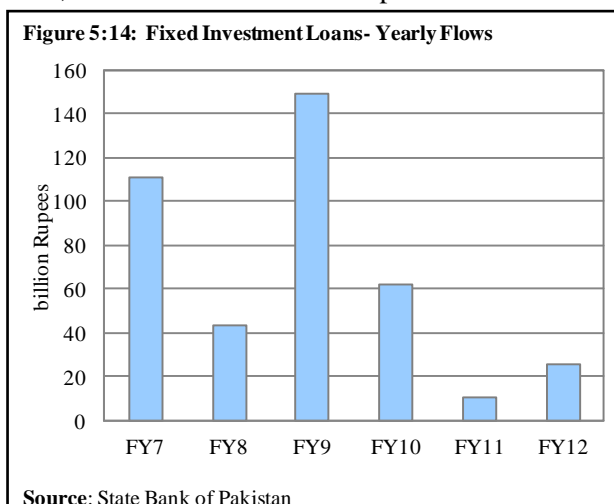
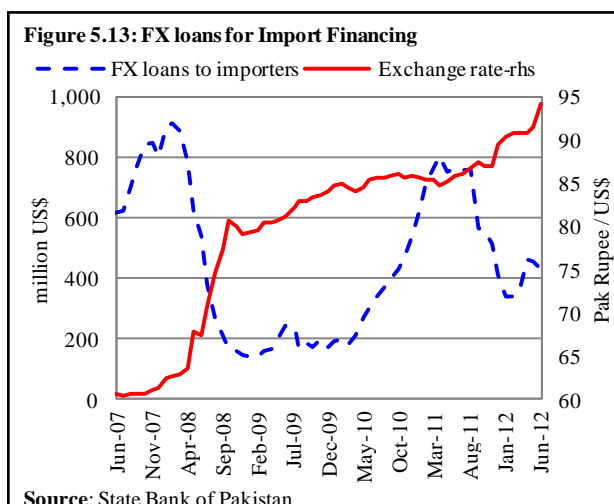
and stricter eligibility criteria for EFS loans.²²

To ensure the smooth repatriation of export proceeds, SBP revised the mechanism for EFS by imposing a maximum limit on overdue export proceeds. Specifically, overdue proceeds were not allowed to exceed 5 percent of last year's exports, if the borrower intended to continue availing EFS.²³ Exporters, who could not meet the revised criteria, were barred from availing EFS loans from 1st October 2011, up to the point that their overdue exports proceeds were within the prescribed limit.

In addition to EFS, foreign currency (FC) loans for trade financing also witnessed a net retirement of US\$ 423.3 million in FY12, compared to a net expansion of US\$ 778.4 million in FY11. This reversal was primarily driven by exchange rate movements during FY12, as the interest rate on these loans remained largely unchanged at historically low levels. In fact, the depreciation of the domestic currency increased the effective cost of borrowing for importers, while exporters enjoyed a natural hedge against exchange rate volatility (**Figure 5.13**).²⁴ The composition of FC loans also supports this argument, as the retirement of FC loans was concentrated mainly in import-related loans, which accounted for 80.0 percent of total retirement in FY12.

Modest Recovery in Fixed Investment Loans:

The demand for fixed investment loans has been low due to a number of factors, including the ones mentioned earlier. In this backdrop, a small increase in fixed investment loans during FY12 is a positive sign (**Figure 5.14**). The sectors responsible for this increase include consumer items, such as dairy products; beverages; road transport; and consumer durables. Fixed investment loans to the iron and steel industries also witnessed an increase, because of rising construction activity.



²² Textile exports decreased by 2.8 percent in FY12, against a strong growth of 28.9 percent last year. Massive fall in cotton prices, both at international and domestic levels, also contributed to exports decline.

²³ Exporters were allowed to meet the revised criteria by end-September 2011.

²⁴ Pak Rupee depreciated against US\$ by 9.1 percent in FY12 compared to less than one percent in the previous year.

5.4 Inflation

Average CPI inflation for FY12 was 11.0 percent, which is lower than the 13.7 percent posted in FY11 (**Figure 5.15**). The number is also lower than the government's target of 12 percent and at the lower end of SBP's forecast of 11-12 percent. Better domestic crop production, a gradual decline in global commodity prices during FY12, and the base-effect, contributed to this decline.

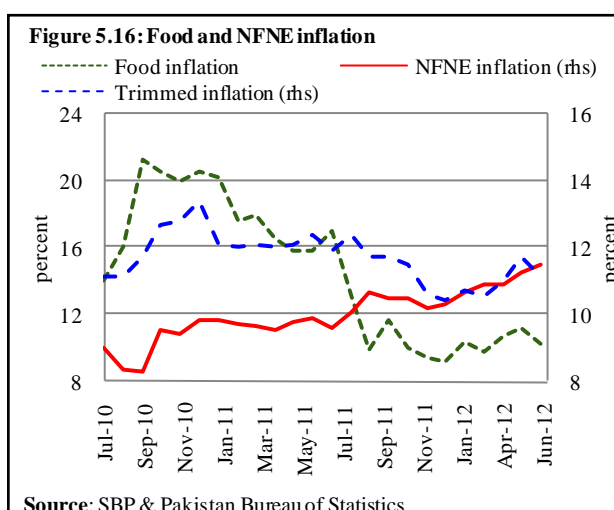
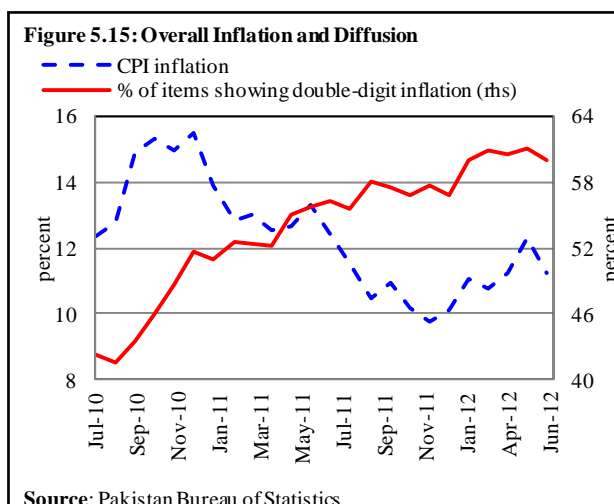
This meant that food prices stabilized to a large extent in FY12.²⁵ However, core inflation, as measured by non-food non-energy (NFNE) inflation, gradually increased over the year (**Figure 5.16**). Simultaneously, the number of items showing double-digit increases also increased.

The persistence in core inflation reflects the extent to which inflationary expectations have become ingrained in the economy. Such expectations may be a function of government borrowing, but may also be linked with changes in retail fuel prices. In our view, the direct impact of the exchange rate on inflation is substantial. The Rupee depreciated by 9.1 percent this year against the US Dollar, and we believe this has also contributed to the pickup in core inflation.

The role of expectations

The problem with expectations is they are self-fulfilling. If households expect a certain rate of inflation in the future, they will negotiate a higher wage from firms, which in turn, will face an increase in their costs of production that is likely to be passed on to consumers in the form of higher prices. Firms may also anticipate an increase in costs and overall prices, and preemptively raise their own prices. Prices are revised very frequently – almost every quarter – in the Pakistani economy.²⁶ This means that the impact of any adjustments in inflationary expectations is very swift.

SBP's Research Department has, in collaboration with the Institute of Business Administration, launched a bi-monthly consumer confidence survey that uses a stratified random sample of over 1,600 households. The survey measures inflation expectations both qualitatively (i.e., whether inflation is expected to remain the same, increase or decrease) and quantitatively. It also measures households' perceptions about the current state of the economy relative to the past, and their expectations about the future state of the economy. Finally, it gathers information about households' expected future behavior and will provide a sound proxy for consumer demand. These results are then translated into a consumer confidence index.



²⁵ Volatility has been measured by using the 12-month standard deviation of month-on-month changes in food prices.

²⁶ Choudhary, Ali, Saima Naeem, Abdul Faheem, Nadeem Hanif, Farooq Pasha (2011). "Formal Sector Price Discoveries: Preliminary Results from a Developing Country." *SBP Working Paper Series* No. 42.

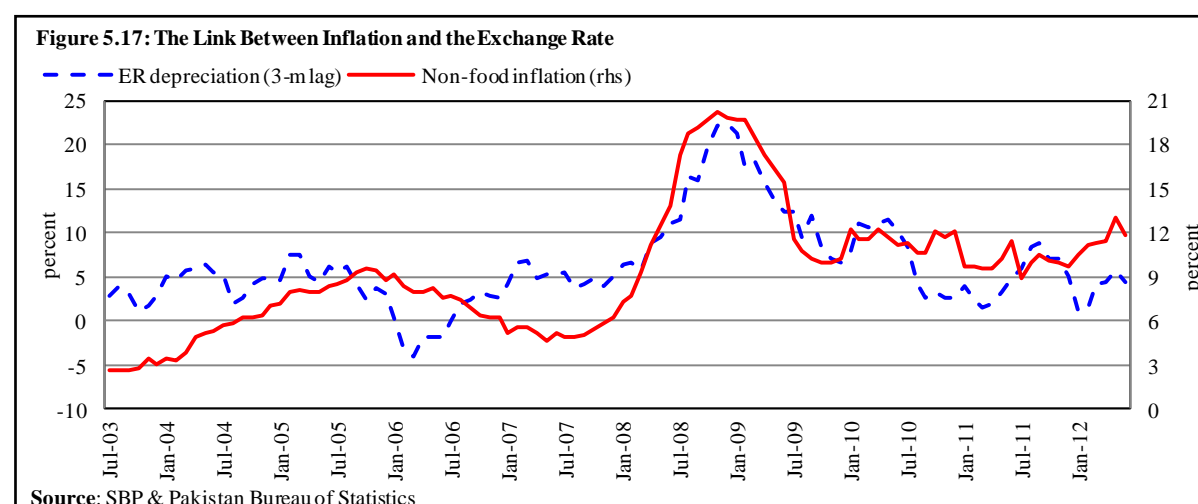
With the first survey conducted in January 2012, the indices developed need to stabilize before any concrete conclusion may be drawn from them. Nevertheless, very preliminary results in May 2012 suggested that slightly more than half of households – 58.3 percent to be exact – expect prices to rise significantly over the next six months. That proportion has not changed significantly since the survey first started and reflects the extent to which inflation expectations are ingrained in the economy. Households' expectations regarding the quantum of the increase in prices is less meaningful at this moment, since the survey panel will compare its own responses to actual inflation, and calibrate its future expectations accordingly.

The surveys also indicate that households were less optimistic about future economic conditions in May, as compared to January, but considered their current economic state better off than it was in January. We would like to stress once more that these results are preliminary and tentative, and we expect the index to stabilize after several iterations. Nevertheless, the consumer confidence surveys are vital in conducting forward-looking monetary policy, and have started to serve as a vital rudder in our decisions and overall analysis of the economy.

The role of the exchange rate

The depreciation of the Rupee has implications for core inflation. Specifically, correlation between the depreciation in the exchange rate and the movements in non-food inflation, has strengthened since the balance of payments problem in 2008 (**Figure 5.17**).

While it may be tempting to conclude that a large part of domestic price pressures comes from imported inflation, the precise link between exchange rate depreciation and inflation is likely to be more nuanced. It remains a fact though, that the depreciation of the Rupee does *directly* impact the domestic price of oil & POL products, major crops and other inputs in agri-based industries. Second-round effects of the depreciation, as producers pass on the increases in cost, are likely to be significant. According to a survey, manufacturers listed raw material, energy and the exchange rate as three of the four most important factors in their price determination.²⁷ Combine this with the fact that prices are revised roughly every quarter, and it is unsurprising to note that there has been a strong correlation between non-food inflation and lagged exchange rate depreciation since 2008.



International food prices and persistence are the greatest risks to inflation in FY13

Global grain prices surged in July 2012 due to droughts in the US and parts of Europe, and lower than average rainfall in India. While corn production has been primarily affected, wheat prices have risen

²⁷ The other factor is their competitors' price level.

as well since it is a substitute for corn in the production of animal feed. Domestic retail prices of wheat have started inching up following the Rs 150 per 40 kg increase in support price, announced in November 2012. Fortunately, global rice prices are expected to remain suppressed on the back of a large rice crop from Thailand.

On the energy front, keeping in line with our measured view on the global recovery, we expect oil prices to remain stable, if not recede. This should dampen headline inflation directly, and, more importantly, ease pressures on the balance of payments, the exchange rate, and consequently, core inflation.

A greater concern, however, is the *persistence* in core inflation and expectations, which has yet to subside. Food and energy prices are extremely volatile and any unexpected increases in either may only serve to reinforce such expectations. Therefore, the consumer confidence and inflation expectations survey is expected to play an important role in our policy decisions and calibrating our future projections. Given our current conditions, however, SBP's inflation projections for FY12 are in the 8-9 percent range.