3 Prices

3.1 Global Inflation Scenario

Inflationary pressures continued to weaken through 2009, both in developed and developing countries alike, as global demand remained stunted amid a sluggish recovery in major economies.[1] In many economies, inflation (YoY) has turned negative or close to zero (see **Table 3.1**). In this background, central banks have been proactively reviewing monetary policies to ensure that these remain supportive and respond to the current challenges. In particular, the US and the UK central banks, both of which have effectively reduced policy rate close to zero, were forced to resort to a policy of quantitative easing to stave off deflationary tendencies in their respective economies.

Table 3.1: CPI Inflation in Major Economies

	YoY Inflation		
	Aug-08	**Dec-08**	**Aug-09**
United States	5.4	0.1	-1.5
United Kingdom	4.7	3.0	1.6
Euro Area	3.8	1.6	-0.2
Japan	2.1	0.4	-2.2
China	4.9	1.2	-1.2
India	9.0	9.7	11.7
Malaysia	8.5	4.4	-2.4
Indonesia	11.8	11.1	2.8
Sri Lanka	24.9	14.4	0.9
Pakistan	25.3	23.3	10.7

Sources: Bloomberg, IMF, World Bank, OECD, The Economist, and central banks websites.

The impact of global recession was most evident in the significant reduction in international commodity prices; food and energy commodity prices, in particular, fell sharply from the peak levels seen in mid-2008. Consequently, according to the IMF commodity price index, by August 2009, international commodity prices were down by 40.6 percent from their peak levels. This has provided some relief to the commodity importing countries, which saw improving current account balances (see **Table 3.2**) and a decline in inflationary pressures.

Table 3.2: Current Account Balance in Various Countries

	as percent of GDP		
	2007	**2008**	**2009**
Bangladesh	1.1	0.9	0.9
India	-1.0	-2.8	-2.5
China	11.0	10.0	10.3
Pakistan	-4.8	-8.4	-5.9
Philippines	4.9	2.5	2.3
Maldives	-40.3	-55.6	-17.8
Sri Lanka	-4.3	-9.4	-2.7
Thailand	5.7	-0.1	0.6
Vietnam	-9.8	-9.4	-4.8

Source: IMF World Economic Outlook Database, April 2009

Note: Values in red indicate IMF staff estimates

In this context, the small resurgence in international commodity prices in H2-FY09 is a concern. IMF commodity price index since December 2008 has increased by 32.7 percent, with the food price index up by 15.5 percent and energy index up by 41.2 percent.

While commodity prices still remain well below peak levels, it is worrying to note that the recent commodity price hikes are not confined to a small set of items; they include commodities ranging from food to fuel and from metals to grains (see **Figure 3.1** and **Table 3.3**). This ongoing commodity price rally, from the start of 2009, can be attributed to a number of factors such as: (a) improved market sentiments in emerging economies including China, India and Indonesia; (b) revival of activities by non-commercial investors, mainly hedge funds, in commodity market; (c) supply constraints including production cuts by Organization of Petroleum Exporting Countries (OPEC); (d) commodity specific factors such as reduced plantations and unfavorable weather conditions; and (e) depreciation of US dollar[2] that encouraged investors to move into commodity markets.

[1] According to latest projections by IMF, the recovery is to remain sluggish and the global economic activity (world output) is expected to contract by 1.4 percent in 2009. World Economic Outlook Update, July 08, 2009.

[2] US dollar has depreciated significantly against a basket of six major currencies during the past six months (Source: Bloomberg).

The resurgence in crude oil prices is particularly significant. Oil prices[3] after reaching a historic high monthly average of US$ 132.5 per barrel in July 2008, declined to a monthly average of US$ 41.5 per barrel by December 2008. However, since then crude oil prices have again started rising and reached to a monthly average of US$ 71.6 per barrel during August 2009. A number of factors including the following caused the surge in oil prices: (a) investment in oil exploration halted at lower prices, which created risks of severe supply shortages in medium to long-run; (b) optimism about a moderate recession than anticipated earlier and gradual recovery in advanced economies;(c) short-term supply alignment through frequent production cuts by OPEC; (d) stock building in China; (e) investors' rising interest in oil market on the back of weak dollar; and (f) declining inventories in developed countries.

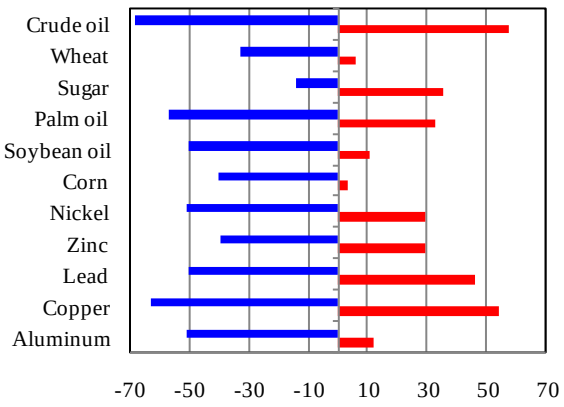
Table: 3.3 Major Price Indices

	percent change during		
	Jul-Dec 08	**Jan-Jun 09**	**FY09**
All commodities	-55.2	25.7	-42.0
Food	-32.9	12.5	-19.3
Metals	-45.0	22.3	-37.0
Fuel	-63.1	34.6	-48.7
Industrial inputs	-39.6	14.6	-32.8

Source: IMF

The developments over the last two years have also demonstrated that the impact of high energy prices could easily spillover into food prices as well, particularly given an increased focus on bio-fuels. This could compound the impact of an anticipated drop in global production of cereals in 2010 as farmers cut their planted acreage in response to low prices last autumn and in the face of higher cost for inputs such as fertilizers and pesticides (see **Box 3.1**).

Figure 3.1: Commodity Prices (percent change)



The broad-based rebound in the commodity prices is thus a potential risk to the near term growth prospects of relatively small open economies such as Pakistan.

Box 3.1: Underlying Dynamics of Global Food Inflation[4]

International commodity prices have, in general, depicted a rising trend during CY09, though remained lower than their peak levels reached during 2008. Food commodity prices rose in line with other commodity prices. The upward pressure in global food prices is alarming for developing countries in particular as according to Food and Agriculture Organization (FAO) of the United Nations, food represents about 10-20 percent of consumer spending in industrialized nations, but as much as 60-80 percent in developing countries, many of which are net-food-importers.

A recent report[5] by FAO and Organization for Economic Cooperation and Development (OECD) forecasts that agricultural commodities' prices will rise 10-30 percent over the next 10 years compared with their average of 1997-2006. The report further states that agricultural commodity prices – even when taking into account inflation over the next 10 years – will not return to their low levels of the last decade, suggesting that food costs have moved to a higher level. Analysts believe that this shift can be attributed to long term factors, such as population growth, changes in dietary habits among the new middle class in emerging economies, and demand for grains and oilseeds for production of bio-fuels.

Going forward, analysts fear reduction in cereals production. The International Grain Council has already warned that global grains supplies are likely to fall in the 2009-10 season to 1,748 million tonnes, down from 1,792 million tonnes in 2008-09. According to US Department of Agriculture (USDA), US farmers would sow about 246 million acres during 2009, down 2.8 percent from last year's 253 million acres; this is the first acreage drop since 2005. Since US exports constitute

[3] Simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh; Source: IMF.
[4] Sources: www.ft.com, www.fao.org, www.economist.com.
[5] OECD-FAO Agricultural Outlook 2009-18, (2009).

half of the world's corn, a third of the world's soybeans, and a fifth of the world's wheat exports, changes in acreage and hence in output can have a significant impact on global food prices. Similarly in Argentina, farmers have planted less, mainly in protest against the government's decision to raise export taxes on major crops like wheat and corn. Moreover in Australia, the major exporter of sugar, production of the commodity is likely to be reduced for 2009-10 primarily due to switching to other crops.

Another important factor that can affect food prices is climatic change. Over the years, extreme weather conditions and water scarcity has greatly affected the production and hence prices of many important agricultural commodities. The Fourth Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC) estimates that climatic changes are likely to reduce yields and/or damage crops in the twenty-first century. The report further states that the most devastating effects of climate change will be felt by those with least resources to adapt, and poor countries would be the worst affected.

To cope with future food crisis and water scarcity, major economies including Saudi Arabia, Japan and South Korea have started to invest abroad by seeking fertile soil in developing countries to ensure supplies of key staples and reduce dependency on imports. This trend has been labeled by some as 'farmland grab', however others believe that by removing trade barriers, land utilization would be more effective, resulting in lower agriculture prices. In another development, the G8 countries have stated that they will announce a 'food security initiative', committing more than US$ 12 billion to agricultural development in developing countries over the next three years.

Although the present food price growth is not a crisis situation, there are underlying risks in the food markets that need to be considered seriously by policy makers to avoid crisis in future.

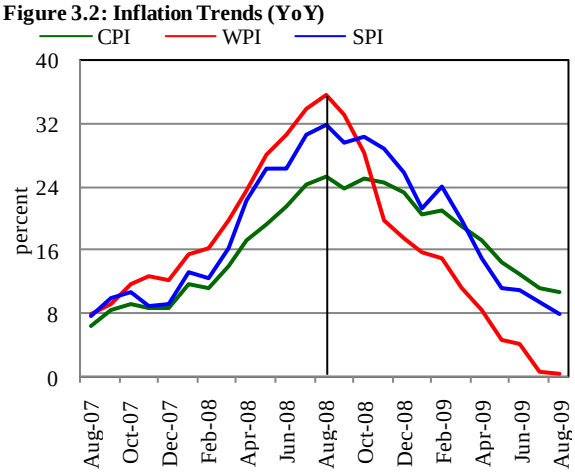
3.2 Domestic Scenario

Inflationary pressures in the domestic economy finally began easing in FY09, with all major price indices; CPI, WPI, and SPI depicting a steady declining trend after reaching peaks in August 2008 (see **Figure 3.2**).

Notwithstanding this, as the inflation levels through most of the year were high, the annual average inflation for the year was very high; for example, the annual average CPI inflation for FY09 was 20.8 percent, compared to 12.0 percent for the previous year. It is important to note that the annual average inflation measured by all price indices is the highest since FY76 (see **Table 3.4**). Annual CPI inflation for FY09 reached 20.8 percent, significantly higher than the annual target of 11 percent for the year.

The downturn in inflation can be attributed to: (a) the impact of declining international commodity prices; (b) weakness in domestic demand amid efforts at fiscal consolidation, constraints on the monetization of fiscal deficit, and the lagged impact of monetary tightening during most of the fiscal year, all of which (c) led to dampening inflationary expectations. As a result, by end of Q3-FY09 upward pressures from second round effects of high food inflation weakened and non-food inflation also started to decline.

Figure 3.2: Inflation Trends (YoY)



Although the disinflationary process was exhibited by all price indices, the downtrend in WPI was more pronounced as compared to CPI and SPI. This was mainly due to the fact that food inflation was primarily responsible for the deceleration in CPI and SPI, whereas downtrend in WPI was contributed by both food and non-food inflation.

The variation in the pace of decline in non-food inflation of WPI and CPI is due to the differing composition of the respective baskets. As shown in **Figure 3.3,** the fuel lighting sub-group of WPI, and transport group of CPI are moving in the same direction, however the decline is more significant in WPI as the prices of commodities such as furnace oil, motor spirit, mobile oil, etc., are directly linked to international prices. In contrast, the pass-through of international crude oil prices is not as strong for the CPI energy sub-index. The prices of products in the CPI energy sub-index are largely set by the government, and these were not adjusted downwards to the extent of the change in international prices. Transport fares, etc. also did not adjust downwards.

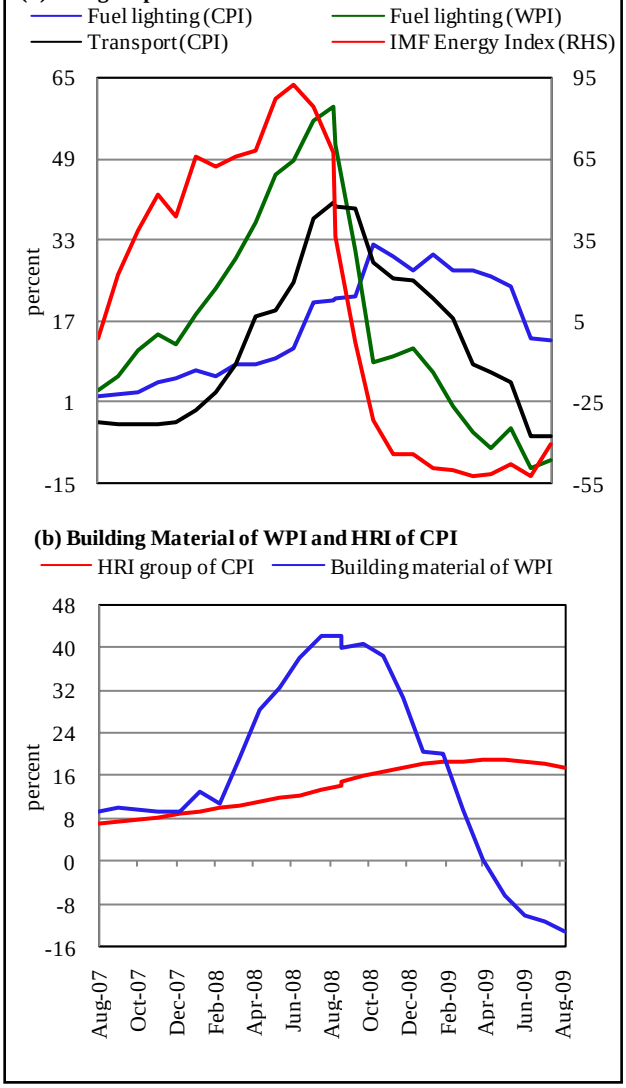
Table 3.4: Inflation Trends

percent

Period	GDP deflator	Annual average			YoY*		
		CPI	WPI	SPI	CPI	WPI	SPI
FY05	7.0	9.3	6.8	11.1	8.7	6.2	9.4
FY06	10.5	7.9	10.1	7.8	7.6	9.0	8.7
FY07	7.7	7.8	6.9	9.4	7.0	7.3	8.0
FY08	16.2	12.0	16.4	14.2	21.5	30.6	26.3
FY09	22.6	20.8	18.2	22.7	13.1	4.1	10.8

*June

Figure 3.3: Difference in Trends of CPI and WPI (YoY)



Moreover, about 40 percent of CPI non-food is constituted of house rent index (HRI), which is estimated by using 24-month geometric mean. Consequently, large component of the CPI basket is relatively less volatile. Furthermore, wages constitute 40 percent of HRI, and as these are often downwards sticky, ensuring that its contribution to the HRI changes relatively slowly when demand weakens. Whereas, in the WPI basket, the sub-group of building material, prices of commodities such as iron bars & sheets, wires and cables, timber, etc. are linked to international prices (see **Figure 3.3**). Therefore, as international prices of these tradable goods weakened, the drop in WPI non-food inflation was more pronounced as compared to the decline in CPI non-food inflation.

As an encouraging development in the later half of FY09 was that, the core inflation has also begun to ease, although it is still quite high (see **Figure 3.4**). While the central bank began to tighten monetary policy in April 2005, the impact on domestic prices had been muted by the internal commodity price shock as well as the continuing fiscal stimulus that supported excess aggregate demand. Thus SBP was forced to continue raising its policy rate.[6] Not surprisingly, as fiscal consolidation took hold with the introduction of a macro stabilization program, the effectiveness of monetary policy

[6]SBP raised its policy discount rate four times during 2008, for a cumulative increase of 500 basis points, taking the discount rate to 15 percent.

improved. The impact of this on prices and inflationary expectations was compounded by a concurrent drop in international commodity prices.

The weakening of inflationary pressures in the economy, together with evidence of a declining aggregate demand and evident narrowing of the twin deficits, allowed the central bank to finally initiate monetary easing. Thus, SBP reduced its policy discount rate twice in 2009 – by 100 bps each time–in April 2009 and August 2009.

The decline in all key inflation indicators during FY09 (and early months of FY10), has been much greater than the aggregate 200 bps reduction in the policy rate. This relatively conservative adjustment in the discount rate is in recognition of the evident risks to the current trend in domestic inflation.

However, it may be noted that despite some slowdown, core inflation remained high pointing towards persistence of inflationary pressures in the economy. Further, month-over-month (MoM) inflation also indicates that strong inflationary pressures are re-emerging (see **Figure 3.5**). In addition, risks of strengthening demand pressures resulting from fiscal stimulus announced in FY10 budget and subsequent possible pressures on external account, constrains central bank's ability to cut the policy rate more aggressively.

Figure 3.4: Trends in Core Inflation (YoY)

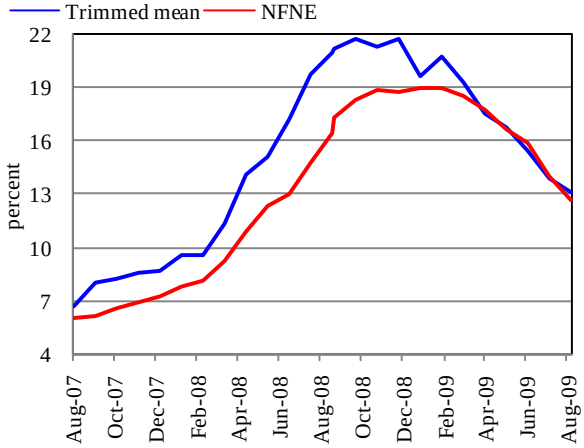
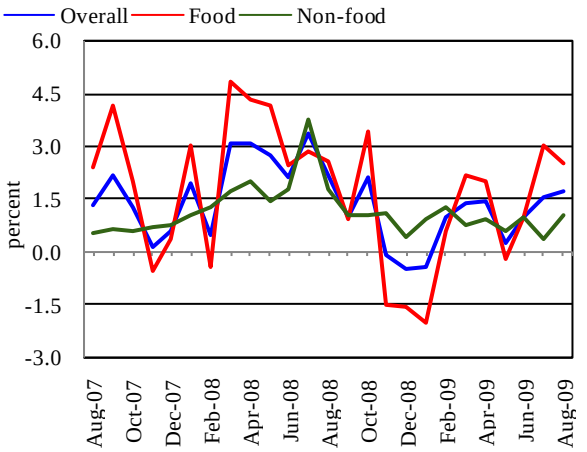


Figure 3.5: Consumer Price Inflation (MoM)



Another risk lies in the recent upward movement in international commodity prices, particularly crude and palm oil, as these may also strengthen domestic inflationary expectations. For example, the severe drought in India during the current cropping season may put upward pressures on international

Table 3.5: YoY Change (%) in Import Unit Value

	FY03		FY04		FY05		FY06		FY07		FY08		FY09	
	US$	Rs.	US$	Rs.	US$	Rs.	US$	Rs.	US$	Rs.	US$	Rs.	US$	Rs.
Milk and cream	-22.5	-26.0	8.9	7.3	3.3	6.5	-1.0	-0.2	7.3	8.7	9.5	12.7	8.2	35.5
Tea	1.4	-3.5	3.9	2.3	-0.4	2.7	4.7	5.7	10.1	11.5	5.6	9.1	12.0	39.9
Spices	-17.5	-21.3	-13.5	-14.7	35.0	38.9	-15.4	-14.5	-3.5	-2.3	1.5	5.9	1.7	26.0
Soybean oil	55.5	45.3	-1.7	-2.6	31.6	36.2	-8.9	-8.3	23.5	25.2	14.2	17.4	2.8	31.3
Palm oil	36.1	30.2	7.5	5.9	-4.1	-1.2	0.0	0.9	13.5	15.0	75.8	82.9	-14.5	6.3
Sugar	15.2	6.0	-8.9	-10.0	14.7	18.5	21.6	22.5	10.7	11.6	-9.5	-7.4	11.7	44.7
Pulses	-0.7	-4.6	-2.3	-4.3	17.5	21.1	13.5	14.5	22.5	24.1	28.2	33.1	1.1	26.0
Petroleum products	17.8	12.2	28.7	26.8	24.9	28.9	46.7	48.0	-8.4	-7.3	41.4	47.5	-15.5	4.1
Petroleum crude	16.7	10.8	11.2	9.4	21.8	25.5	59.4	60.8	1.2	2.5	40.5	46.3	-17.8	0.7
Fertilizer	28.1	21.5	14.1	12.1	19.3	23.1	14.4	15.0	4.9	6.3	47.4	50.7	9.9	37.0
Iron and steel	24.8	18.5	10.6	9.0	17.5	21.1	9.6	10.5	9.4	10.9	5.0	9.0	13.4	41.8

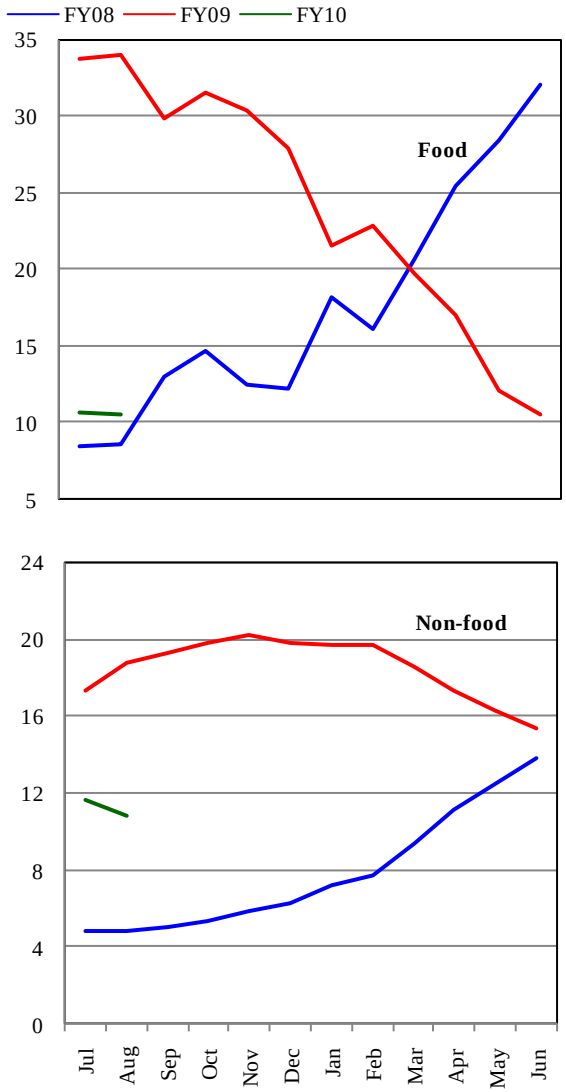
prices of a number of commodities –international sugar prices have already risen substantially, which has also impacted domestic prices despite sufficient domestic availability.

A third risk is the imported inflation if the domestic currency weakens. Contrary to general perception, data on import unit values shows that while pace of the increase reduced, prices of most of the Pakistan's import commodities continued to rise except in the case of a few significant commodities such as palm oil, POL, and crude oil. But even here, the benefit of fall in the prices in dollar terms was offset by the substantial depreciation of the rupee (see **Table 3.5**).

Given that international commodity prices have again started to show strength since CY09, any further depreciation of rupee will put additional upward pressure on domestic prices. The risks emanating from external account imbalances are exacerbated by the likelihood of a small recovery in import growth in FY10, as well as concerns of Pakistan's ability to fund even smaller external deficits in the aftermath of the international financial crisis.

Finally, the weak fiscal position is also a concern. The need to increase spending on priority areas such as infrastructure development and post-conflict rehabilitation, together with the risk of slippages on revenue targets, raise risks to macroeconomic stability. Moreover, a limited fiscal space would constrain the government's ability to absorb any commodity price shock.

Figure 3.6: CPI Inflation (YoY) in percent



Indeed, SBP forecasts based on current trends and expectations suggest that the 9.5 percent annual FY10 inflation target may be exceeded by a small margin.

3.3 Consumer Price Index (CPI)

The sustained rise in CPI inflation seen in FY08 took a downturn in FY09, particularly in H2-FY09 as YoY inflation fell from its peak level of 25.3 percent in August 2008 to 10.7 percent during August 2009. Although this downtrend in CPI inflation was contributed by both food and non-food groups of CPI, the contribution of CPI food group was more pronounced.

CPI food group inflation witnessed a consistent downtrend in FY09 compared to a consistent uptrend during FY08. On the other hand, non-food inflation was persistent during H1-FY09 due to strong second-round effects, as well as, persistent inflationary expectations amidst volatility in rupee parity and continued monetization of fiscal deficit during most of the year (see **Figure 3.6**). With volatility in exchange rate reduced significantly and monetization of fiscal deficit restricted, inflationary

expectations weakened, and non-food inflation also started to decline in H2-FY09. Thus weighted contribution of food inflation in overall CPI inflation that remained more than 50 percent throughout FY08 witnessed a gradual fall in FY09 and fell below 40 percent by end of FY09. Within the sub-groups of CPI non-food group, contribution of HRI to overall inflation remained significantly high throughout FY09.

A comparison of the trends in CPI and CPI-ex HRI shows that inflation in former remained lower than the latter in H1-FY09. However, the persistence shown by HRI during H2-FY09, even as food prices fell sharply, meant that overall CPI inflation surpassed CPI inflation without HRI (see **Figure 3.7**). This implies that HRI inflation that was pushing down overall inflation has now started to bolster overall CPI.

In terms of distribution of (YoY) price changes in the CPI basket, it can be seen that although the number of items showing double digit inflation is still high, items showing more than 30 percent inflation have shown a consistent downtrend during FY09 (see **Table 3.6**). This implies that the decline in CPI inflation is reflecting a broad-based deceleration in price increase.

Figure 3.7: CPI Inflation (YoY)

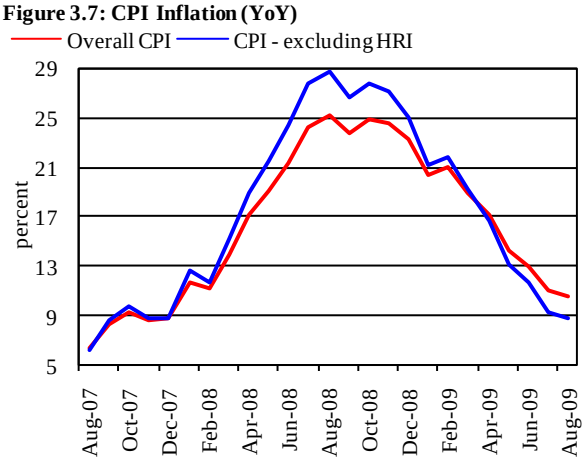


Figure 3.8: Services and Non-services Inflation (YoY)

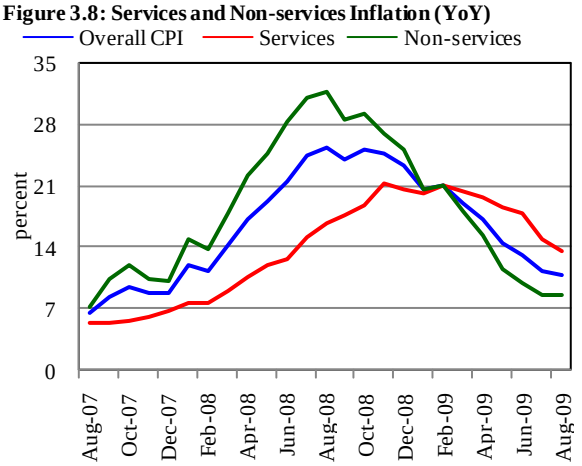


Table 3.6: Distribution of CPI Price Changes (YoY)

percent of items

	Above 50 %	Between 30-50 %	Between 10-30 %	Between 5-10 %	Below 5 %
Aug-08	11.3	12.1	44.1	14.9	17.6
Sep-08	11.6	12.4	43.9	14.4	17.7
Oct-08	12.9	13.2	44.4	14.2	15.3
Nov-08	11.8	14.9	45.2	12.9	15.2
Dec-08	8.3	18.3	46.4	11.4	15.6
Jan-09	7.5	15.9	49.3	11.1	16.2
Feb-09	6.7	15.9	46.9	11.7	18.7
Mar-09	5.9	12.9	49.3	12.3	19.6
Apr-09	6.4	8.9	51.4	14.2	19.2
May-09	6.1	8.3	46.7	16.4	22.5
Jun-09	5.3	8.1	43.9	20.8	21.9
Jul-09	3.3	6.1	36.8	22.2	31.6
Aug-09	2.2	5.0	34.2	23.1	35.5

An analysis of services and non-services inflation shows that during H1-FY09 non-services inflation remained stronger compared to both services and overall CPI inflation. However, during H2-FY09 both overall CPI and non-services inflation witnessed a sharp downtrend, though, the downtrend in

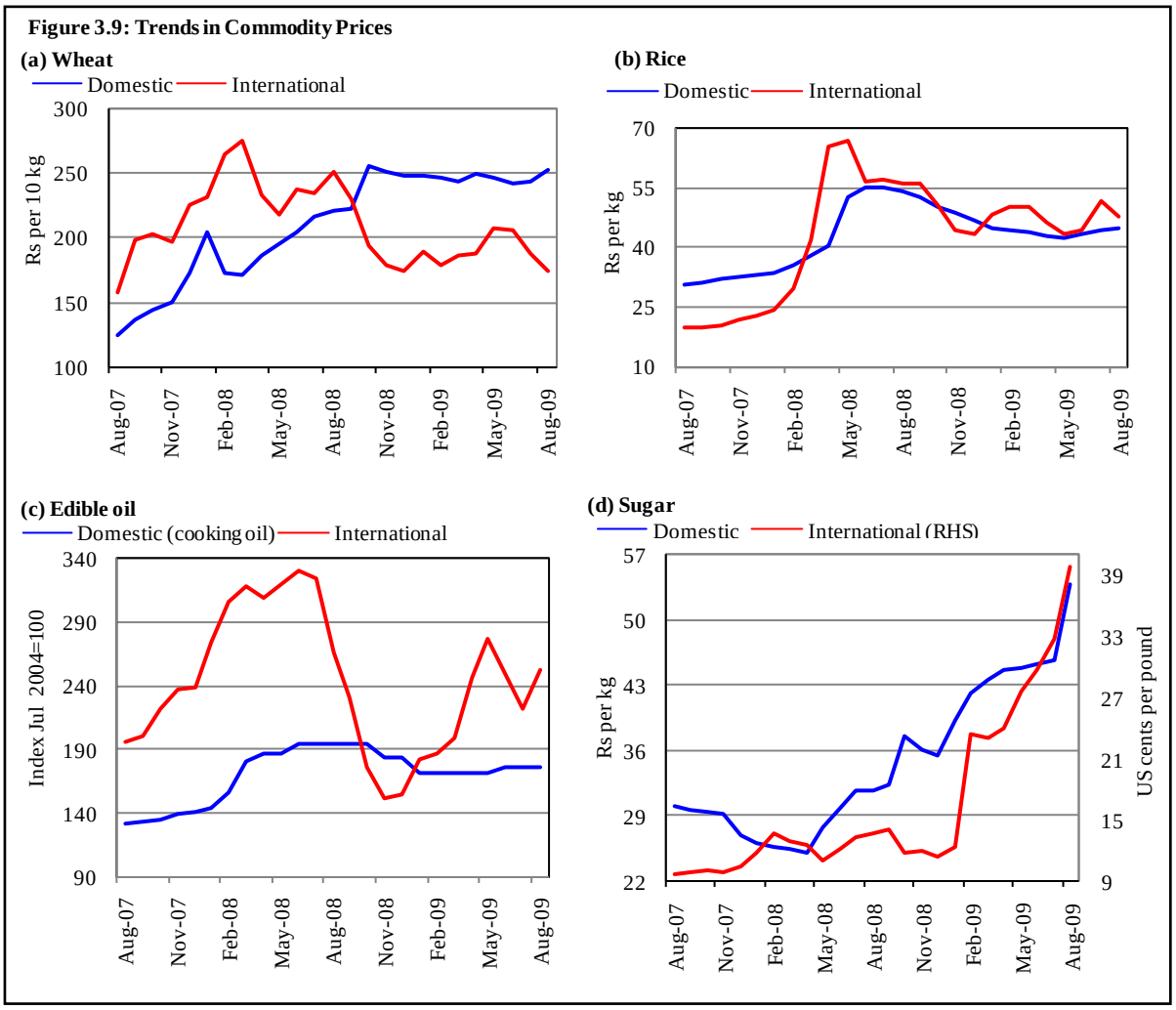
services group was relatively muted (see **Figure 3.8**). This persistence in services group inflation was mainly due to an impact of HRI and higher electricity and gas charges over the year. On the other hand, downtrend in non-services inflation reflects the impact of falling food inflation.

3.3.1 CPI Food Inflation

After witnessing strong inflation throughout FY08, CPI food inflation started easing from Q2-FY09 and dropped to 10.6 percent (YoY) during August 2009 from a peak level of 34.1 percent in August 2008. This downtrend was mainly supported by better supply management amid record harvests of rice, wheat and maize, as well as, falling international commodity prices of wheat and rice.

Initially, domestic supply of wheat was boosted by aggressive imports of the grain and decline in illegal cross border movement as incentive for such activity reduced due to higher domestic wheat prices than international prices (see **Figure 3.9**). Moreover, country achieved a bumper wheat crop of 23.3 million tonnes during FY09 following aggressive cultivation by farmers as government announced wheat support price of Rs 950 per 40 kg. Consequently domestic wheat prices have remained stable in the recent months.

Figure 3.9: Trends in Commodity Prices

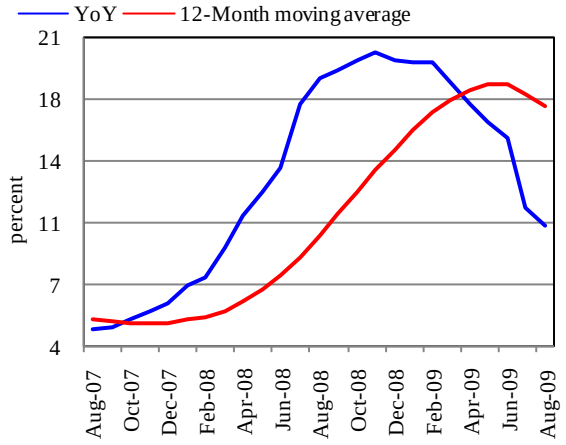


Domestic rice also witnessed a bumper harvest of 7.0 million tonnes in FY09. Consequently domestic rice prices witnessed a gradual downtrend throughout FY09. However going forward, country's rice production is expected to fall short of 6.0 million tonnes target in FY10 due to lower area under

cultivation and delayed monsoon. However, rice prices are largely determined by trends in international prices, as despite some shortfall, domestic consumption is substantially lower than the production.

On the other hand, total sugar production remained at 3.2 million tonnes during FY09 against last year's record production of 4.35 million tonnes resulting in an uptrend in sugar prices. The government has allowed import of 200,000 tonnes of sugar to improve domestic supply. However even if the local demand is met through imports, the price of the sweetener is still expected to remain high in near future given that global sugar prices have witnessed significant uptrend and are likely to remain strong due to supply shortages.

Figure 3.10: CPI Non-food Inflation



In case of edible oil, domestic prices have witnessed a gradual downtrend since Q2-FY09. However, domestic prices started to inch up again as a result of a rise in international prices of palm oil. Similarly global tea prices have also witnessed an uptrend in the recent months due to adverse weather in major tea producing countries, which may put pressures on domestic tea prices.

3.3.2 CPI Non-Food Inflation

The uptrend witnessed in CPI non-food inflation throughout FY08 continued in H1-FY09 as on YoY basis inflation in the group reached to its peak level of 20.2 percent in November 2008 (see **Figure 3.10**). However, since then CPI non-food inflation has witnessed a downtrend but the rate of deceleration is not as pronounced as in the case of CPI food inflation.

The persistence in non-food group of CPI in the later part of FY09 was mainly due to HRI that has maintained an uptrend throughout FY09. Given the high weight of HRI in non-food group of CPI (39.3 percent), the downtrend in non-food group inflation has remained subdued.

Among other sub-indices of CPI non-food group, the highest variability was witnessed in the *transport & communication* sub-index as after hovering around 40 percent on YoY basis during Q1-FY09, inflation in the sub-index decelerated to single digit in the last quarter of FY09. The downtrend of CPI non-food group in H2-FY09 reflects the impact of downward adjustment in domestic fuel prices in response to the decline in international fuel prices. It is important to note that although *fuel & lighting* sub-index also decelerated in H2-FY09, the rate

Table 3.7: City-wise Inflation (YoY) of Selected Cities

percent

	Jun-08	Aug-08	Jun-09	Aug-09
Overall CPI	**21.5**	**25.3**	**13.1**	**10.7**
Islamabad	17.7	21.3	12.9	9.6
Lahore	18.0	21.9	12.9	10.3
Karachi	21.1	24.8	11.6	8.9
Quetta	25.3	28.6	11.7	9.5
Peshawar	22.3	27.0	12.8	10.5

Table 3.8: WPI Inflation

percent

	YoY- June		Annual average	
	FY08	FY09	FY08	FY09
WPI general	30.6	4.1	16.4	18.2
Food	30.2	10.2	19.0	23.2
Non-food	31.0	-0.3	14.6	14.4
Raw material	22.1	11.9	12.8	17.8
Fuel, lighting & lubricants	48.6	-4.0	21.3	16.0
Manufacture	12.2	3.2	7.0	9.6
Building material	38.2	-10.1	16.6	20.2

of deceleration was not as pronounced as in the case of *transport & communication* sub-index mainly because of upward adjustment of electricity and gas charges during the year. On the other hand, *education* sub-group of CPI accelerated during most of FY09 and started to decline from May 2009 onwards.

Going forward, an expected decline in HRI, mainly due to a significant decline in metal and other construction material prices, and absence of second round effects will likely to keep CPI non-food inflation on a declining trend, at least in the first half of FY10.

3.4 Incidence of Inflation

Income group-wise inflation for FY09 showed mixed trends. During H1-FY09 the incidence of inflation generally remained high for lower income groups. However since H2-FY09, the highest incidence of inflation has shifted to the middle income groups. This shift in trend is mainly due to ease in food inflation which generally has a greater impact for lower income groups as compared to higher income groups.

It can further be seen from the income group-wise inflation data that the highest income group with earnings above Rs 12000 registered lower inflation as compared to overall CPI inflation throughout FY09 (see **Figure 3.11**).

City-wise inflation data for major cities reveals that the overall CPI inflation (YoY) remained higher than inflation in Islamabad and Lahore throughout FY09 (see **Table 3.7**). Remaining three major cities (Quetta, Karachi and Peshawar) generally recorded higher YoY inflation than overall CPI inflation. However, since May 2009 all major cities have recorded lower inflation than overall CPI inflation. City-wise inflation data further reveals that inflation in small cities generally remained higher compared to big cities throughout FY09.

Figure 3.11: Income Group-wise Inflation (YoY)

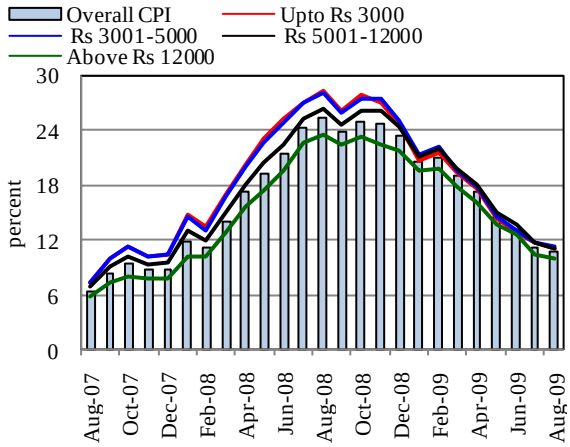


Figure 3.12: Wholesale Price Inflation (YoY)

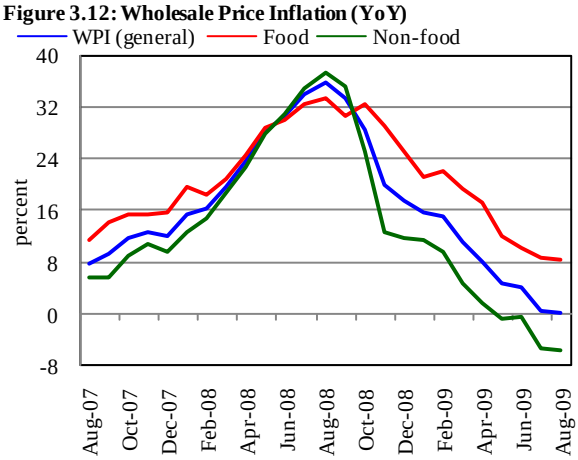
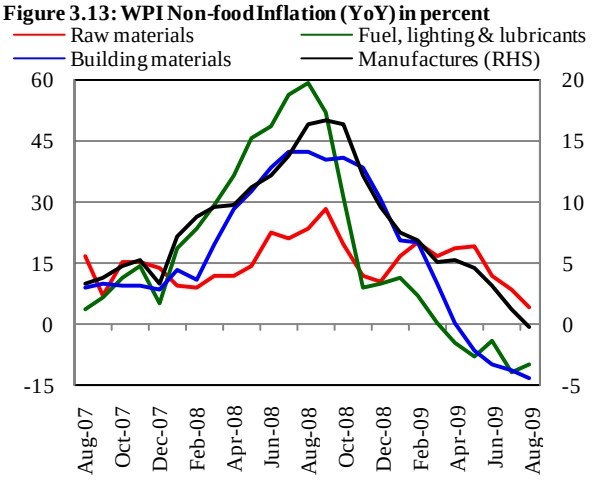


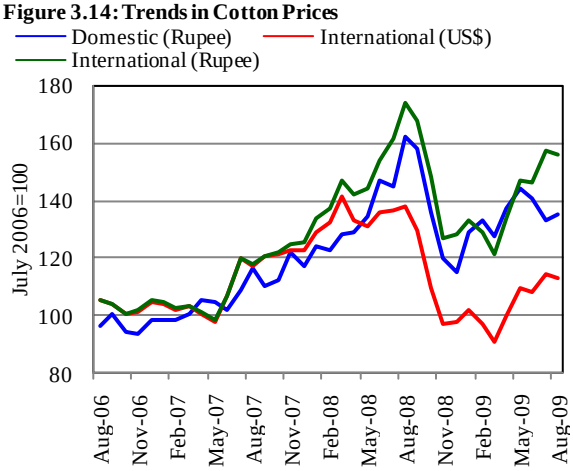
Figure 3.13: WPI Non-food Inflation (YoY) in percent



3.5 Wholesale Price Index (WPI)

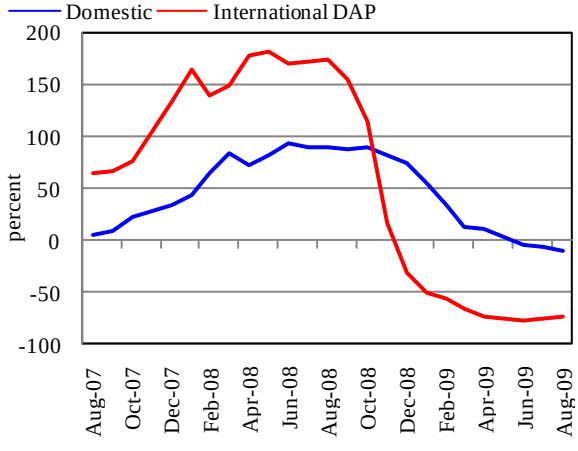
Inflation measured by wholesale price index (WPI) declined significantly since September 2008. WPI registered the highest YoY inflation of 35.7 percent in August 2008, declined to 0.3 percent during August 2009. Although both food and non-food groups of WPI contributed to this decline, the decline in non-food group inflation was more pronounced. After recording more than 30 percent YoY inflation during Q1-FY09, WPI non-food inflation registered negative growth during Q4-FY09 (see **Figure 3.12**). Food group of WPI also declined during FY09 although it still remained in double digits.

Figure 3.14: Trends in Cotton Prices



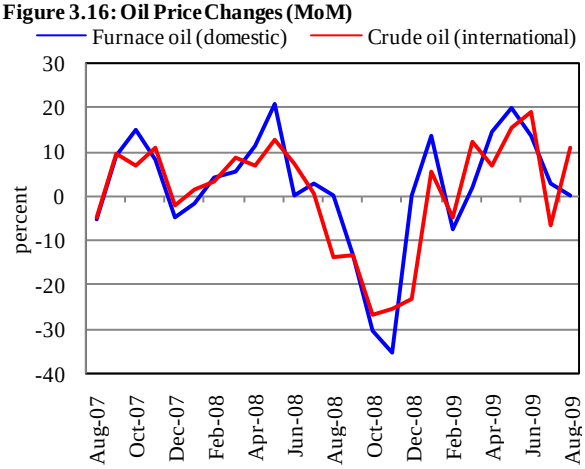
Within the sub-indices of WPI non-food group, all sub-indices witnessed downturn in inflation during the year. Specifically, inflation (YoY) in *fuel lighting & lubricants* and *building material* sub-groups registered steep decline and registered negative growth during later part of the year after recording significantly high (more than 40 percent) growth during the initial months of FY09. This sharp downturn reflects the impact of significant drop in prices of oil and metal in the international markets (see **Figure 3.13 & Table 3.8**).

Figure 3.15: Fertilizer Price Changes (YoY)



An item-wise analysis of some important items of WPI basket revealed that the decline in WPI non-food inflation would have been even stronger, if Pak rupee had not depreciated sharply during FY09. For example, international cotton prices dropped to a three year low in November 2008 in response of easing demand for textiles in advanced economies amid global recession. Prices recovered somewhat in the subsequent months, however remained below the levels seen during FY08. Following trends in international prices, domestic cotton prices also saw a sharp decline in December 2008. However, domestic prices remained relatively higher in FY09 compared to FY08, as most of the gains of international prices in dollar terms were offset by depreciation of rupee (see **Figure 3.14).** It is interesting to note that the cotton prices resurged again in recent months. It is mainly a reflection of signs of recovery in major economies as well as concerns over prospects of FY10 fiber crop in India due to yield losses amid lower monsoon rains.

Figure 3.16: Oil Price Changes (MoM)



Fertilizer prices declined sharply through most of FY09 as a result of decline in energy prices and gloomy prospects for fertilizer demand which may be attributed to droughts in Argentina, Australia, and dry monsoon season in India. Both international and domestic fertilizer prices have been stabilizing in recent months, however, there are risks that these prices may resurge again given rising commodity prices including energy, sugar, rice, palm oil and cotton (see **Figure 3.15**). In particular, domestic demand during winter cropping season (rabi) may be strong due to significantly higher wheat prices in the country.

Similarly, furnace oil prices in domestic market declined sharply during Aug-Nov 2008, but started to inch up again since then (see **Figure 3.16**). Unlike, administered prices of petrol and diesel in the domestic market, furnace oil prices are market based; therefore, the changes in furnace oil prices are more volatile than prices of other fuels. Since furnace oil prices are determined on the basis of movement in international crude oil prices, recent retreat in crude oil prices is likely to translate in furnace oil prices in months ahead.

3.5 Sensitive Price Indicator (SPI)

On average, weekly SPI inflation (YoY) declined significantly from 26.3 percent in the last week of FY08 to 10.8 percent by the last week of FY09. However, average inflation measured by 52 week moving average, remained higher during FY09 compared to FY08 (see **Figure 3.17**). Similarly, annualized SPI inflation measured by 12 month moving average showed acceleration in FY09 compared to FY08 (see **Figure 3.18**).

Figure 3.17: Weekly SPI Inflation (percent)

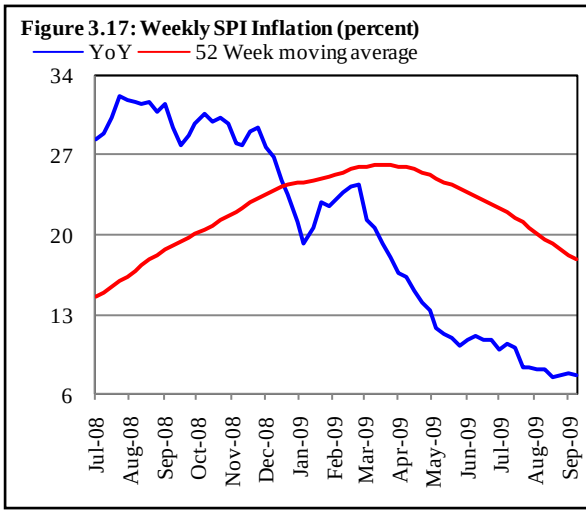
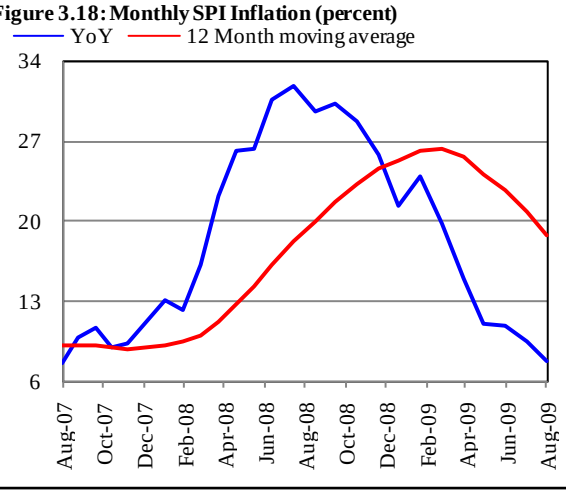


Figure 3.18: Monthly SPI Inflation (percent)



Following the trend of both CPI and WPI, SPI inflation (YoY) also declined during August 2009 compared to the corresponding month last year. Major commodities contributing to the decline in SPI inflation (YoY) during August 2009 were red chilies, rice, petrol, tomatoes, vegetable ghee, pulse gram, mustard oil, etc.