

Inflation Monitor

May 2007



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Team

Dr. Mian Farooq Haq	mian.farooq@sbp.org.pk
Mr. Saghir Pervaiz Ghauri	saghir.pervaiz@sbp.org.pk
Mr. Muhammad Akmal	muhammad.akmal@sbp.org.pk
Ms. Bushra Shafique	bushra.shafique@sbp.org.pk
Mr. Muhammad Usman Abbasi	muhammad.usman3@sbp.org.pk

Overview

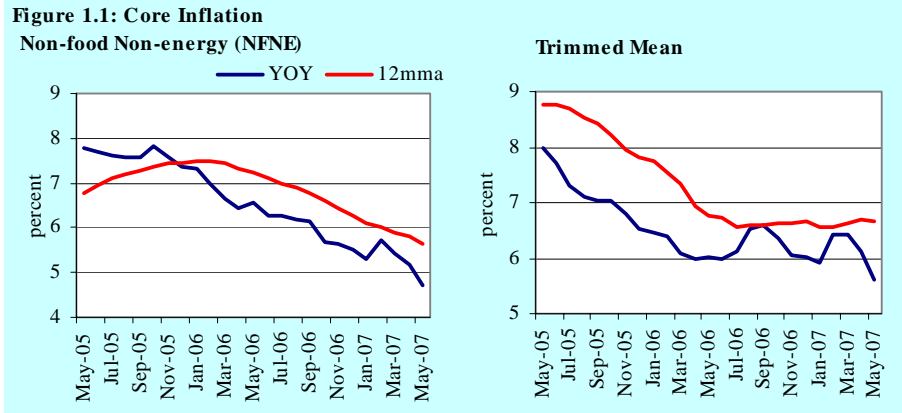
Headline CPI inflation increased to 7.4 percent in May 2007 on year-on-year (YoY) basis from 7.1 percent as registered in the same month last year. Similar to the situation in April 2007, higher CPI inflation was mainly attributed to the strong food inflation that muted the effect of declining non-food inflation. In May 2007 food inflation rose significantly to 11.3 percent from 5.6 percent in the corresponding month of last year. It was mainly due to the reversal of inflation from negative to positive rates in some key food items including vegetables, fruits, eggs, chicken, different types of rice etc., while non-food inflation declined to 4.7 percent from 8.2 percent of last year (see **Table 1.1**).

	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
May-06	7.1	5.6	8.2	6.6	6.0	9.1	7.7
Jun-06	7.6	7.8	7.5	6.3	6.0	9.0	8.7
Jul-06	7.6	7.4	7.8	6.3	6.1	8.4	8.6
Aug-06	8.9	11.1	7.4	6.2	6.5	8.2	10.8
Sep-06	8.7	11.3	7.0	6.2	6.6	8.0	10.0
Oct-06	8.1	10.5	6.4	5.7	6.4	6.7	9.9
Nov-06	8.1	10.6	6.3	5.6	6.1	7.5	10.7
Dec-06	8.9	12.7	6.2	5.5	6.0	8.0	12.0
Jan-07	6.6	8.7	5.2	5.3	5.9	5.4	9.5
Feb-07	7.4	10.0	5.6	5.7	6.4	5.1	8.8
Mar-07	7.7	10.7	5.5	5.4	6.4	6.1	8.9
Apr-07	6.9	9.4	5.2	5.2	6.1	6.0	7.7
May-07	7.4	11.3	4.7	4.7	5.6	6.8	8.3

* NFNE is Non-food non-energy inflation; **SPI for all income groups combined.

In contrast to YoY CPI inflation, July to May FY07 average CPI inflation showed a marginal decline as compared to the same period of last year. However, July-May FY07 food inflation depicted a rise and non-food inflation showed a fall similar to the pattern of YoY food and non-food inflation.

Monthly CPI inflation increased to 0.9 percent, which was more than the five-year average of monthly increase in May 2007. The extent of one-month increase in food inflation was very high at 1.8 percent compared to zero inflation in May 2006 and the five-year average monthly food inflation which was also zero. Had this monthly food inflation stayed at this average in May 2007, YoY food inflation would have been lower at 9.4 percent and CPI inflation at 6.4 percent compared to

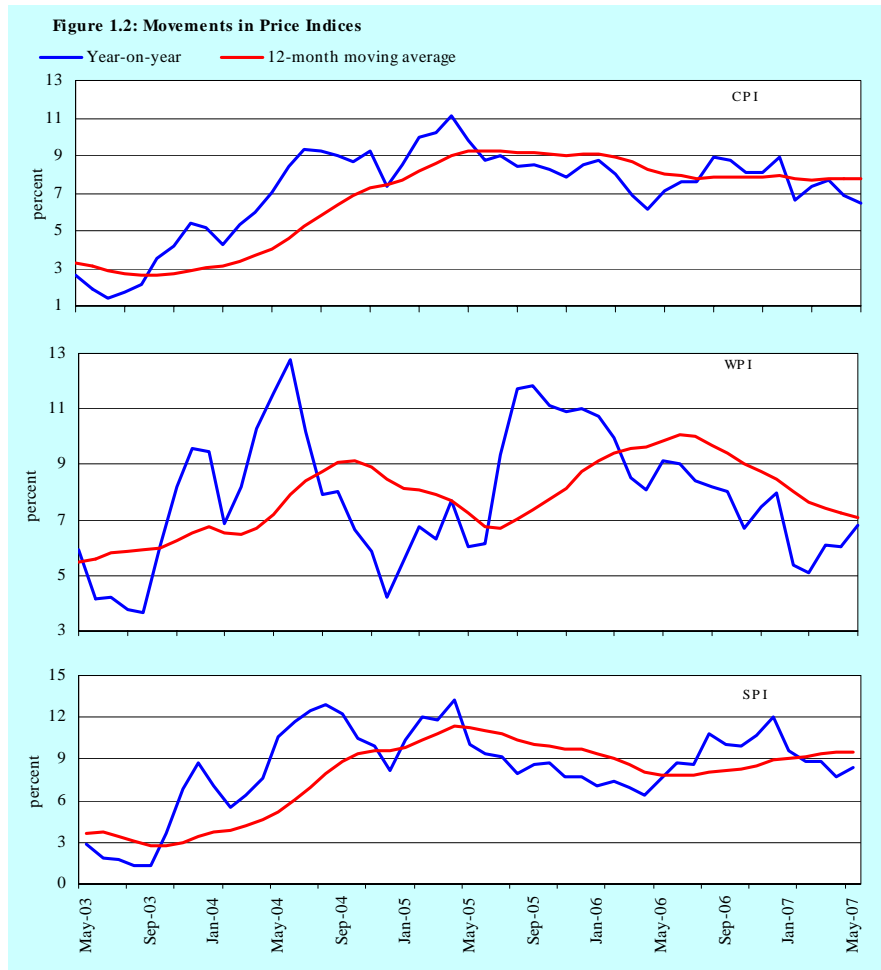


those actually observed. The monthly increase in non-food inflation was less than the five-year average (see **Table 1.2**).

Core inflation based on NFNE (non-food non-energy) declined to 4.7 percent in May 2007 from 6.6 percent in May 2006 on YoY basis. Similarly, core inflation based on 20 percent trimmed-mean also showed a decline from 6.0 percent in May 2006 to 5.6 percent in May 2007 (see **Figure 1.1**).

The apparent difference in the behavior of the two definitions of core inflation is simple to explain. Since food inflation has been persistently rising in contrast with non-food inflation, the exclusion of all food items necessarily produces a downward trend in core (NFNE) inflation. However, core (trimmed-mean) inflation

Table 1.2: Different Dimensions of Inflation (percent)				
	May-05	May-06	May-07	5-year average
<i>Year-on-year (May over May)</i>				
Overall CPI	9.8	7.1	7.4	6.7
Food group	12.5	5.6	11.3	7.7
Non-food group	8.0	8.2	4.7	6.0
Core Inflation				
NFNE	7.8	6.6	4.7	5.3
Trimmed	8.0	6.0	5.6	6.5
<i>Period average (Jul-May over Jul-May)</i>				
Overall CPI	9.3	7.9	7.8	6.5
Food group	1.8	6.8	10.3	7.7
Non-food group	7.0	8.7	6.1	5.7
Core Inflation				
NFNE	6.9	7.2	5.6	5.1
Trimmed	8.8	6.7	6.7	6.5
<i>12-month moving average</i>				
Overall CPI	9.3	8.0	7.8	6.5
Food group	12.8	7.0	10.1	7.6
Non-food group	6.8	8.7	6.2	5.7
Core Inflation				
NFNE	6.8	7.2	5.6	5.8
Trimmed	8.8	6.8	6.7	6.5
<i>Monthly (May over Apr)</i>				
Overall CPI	-0.4	0.5	0.9	0.3
Food group	-1.8	0.0	1.8	0.0
Non-food group	0.6	0.7	0.3	0.5
Core Inflation				
NFNE	0.7	0.4	0.4	0.5
Trimmed	0.5	0.3	0.4	0.5



automatically includes a number of food items whose prices have been rising persistently. Hence, in present circumstances, the persistent component of inflation is being captured in a better way by the trimmed-mean definition of core inflation. The bottom line is that the declining trend in non-food inflation this year has so far been counterbalanced by the rising trend in food inflation, with the result that CPI inflation remains at a higher level than the target for FY07.

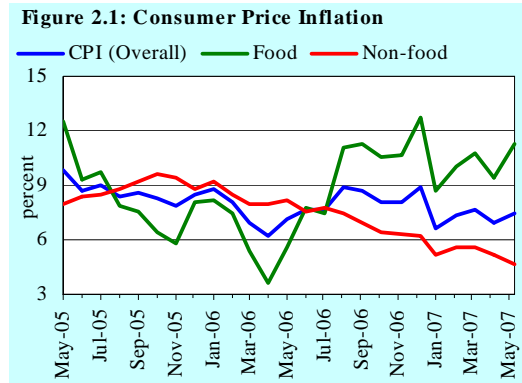
The trend of CPI inflation measured by 12-month moving average declined slightly to 7.8 percent in May 2007 from 8 percent a year earlier. While trend of CPI food inflation showed an increase of 10.1 percent compared to 7 percent in

the same month of last year, the non-food inflation trend rate declined to 6.2 percent in May 2007 from 8.7 percent in May 2006 (see **Table 1.2**).

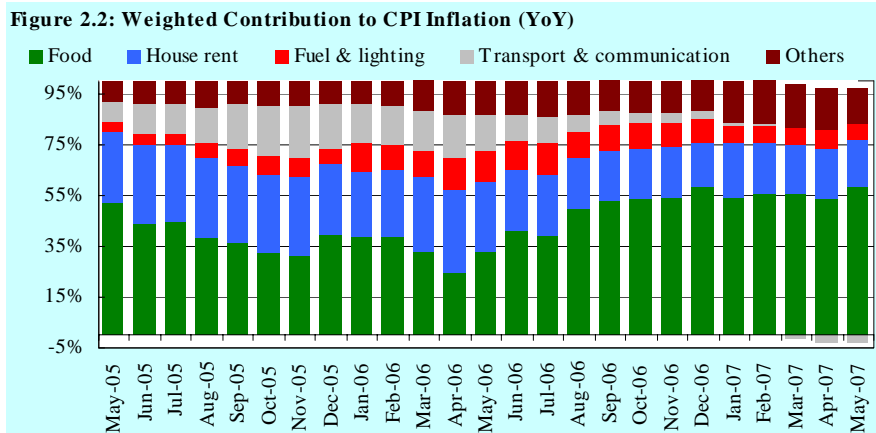
The Wholesale Price Index (WPI) inflation that remained on a rising trend during FY06, started to decline from the beginning of FY07. This decelerating trend has continued over the subsequent months of the current fiscal year (see **Figure 1.2**). WPI inflation declined to 6.8 percent in May 2007 on YoY basis from 9.1 percent in the corresponding month last year. This significant decline in WPI inflation was due to a sharp deceleration in non-food inflation during May 2007 compared to the corresponding month last year. Sensitive price indicator (SPI) increased to 8.3 percent in May 2007 on YoY basis from 7.7 percent in the same month last year. Increase in SPI was also because of rise in the prices of food items, since in SPI basket of 53 items 33 items are essential food items.

2. Consumer Price Inflation

In May 2007, CPI (YoY) inflation was recorded at 7.4 percent depicting a rise of 0.3 percentage points than that of the corresponding month last year. The main contributing factor for the rise in overall CPI inflation is food inflation, which was 5.7 percentage points more than that of the same month of last year. Non-food YoY inflation decelerated for the third consecutive month and was recorded 4.7 percent inflation in May 2007 (see **Figure 2.1**).



The contribution of the food group in overall inflation was 62.6 percent in May 2007 which is significantly higher than the 30 percent contribution of food group during the corresponding month last year. The contribution of house rent index (the single largest item of the CPI basket) declined from 27.2 percent during the corresponding month last year to 19.6 percent in May 2007 (see **Figure 2.2**).



2.1 Food Inflation

Food inflation (YoY) increased from 9.4 percent (YoY) in April 2007 to 11.3 percent (YoY) in May 2007. This significant increase is due to the high prices of tomatoes, kinnu, aloo bukhara etc. On monthly basis, out of 124 items 49 items showed decline or no change, 50 items showed increase of 0 to 5 percent, 7 items showed 5 to 10 percent increase and only 4 items showed above 10 percent increase out of which only one item, tomatoes, showed 120 percent increase.

Of the total 124 commodities included in the food group, 39 commodities including eggs, some fruits, cooking oil, different types of rice, chicken and some vegetables exhibited inflation (YoY) in the range of 10 to 50 percent in May 2007. The combined weight of commodities with double digit inflation was about 41 percent of the food group. Three commodities, aloo bukhara

(120 percent), kinnu (132 percent) and tomatoes (222 percent), of the food group crossed 100 percent inflation (YoY). On the other hand, inflation (YoY) of 16 commodities like potatoes, green chilies, sugar, ginger, onion, pulse moong and peas either declined or remained same during the month. The rest of the items having a weight of 39 percent in the food group exhibited subdued or moderate inflation (see **Table A2** in Annexure A).

As compared to April 2007, during May 2007 there was an increase in the average price of food items like wheat flour, fresh milk, vegetable ghee, beef and onion, whereas prices of sugar, pulse gram and chicken showed decline, (see **Figure 2.4**). In food group the most important development was observed in the price of tomatoes that showed a steep YoY increase of more than 200 percent in May 2007. Among

Figure 2.3: CPI Food Inflation

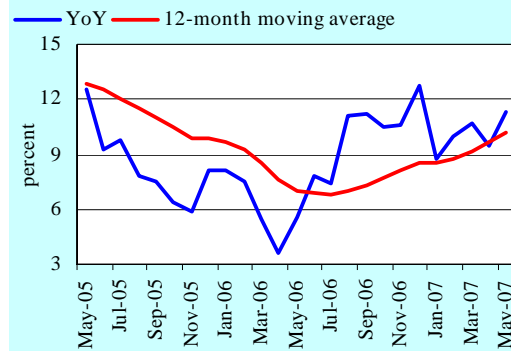
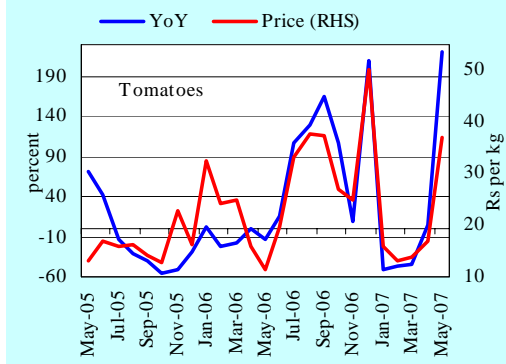
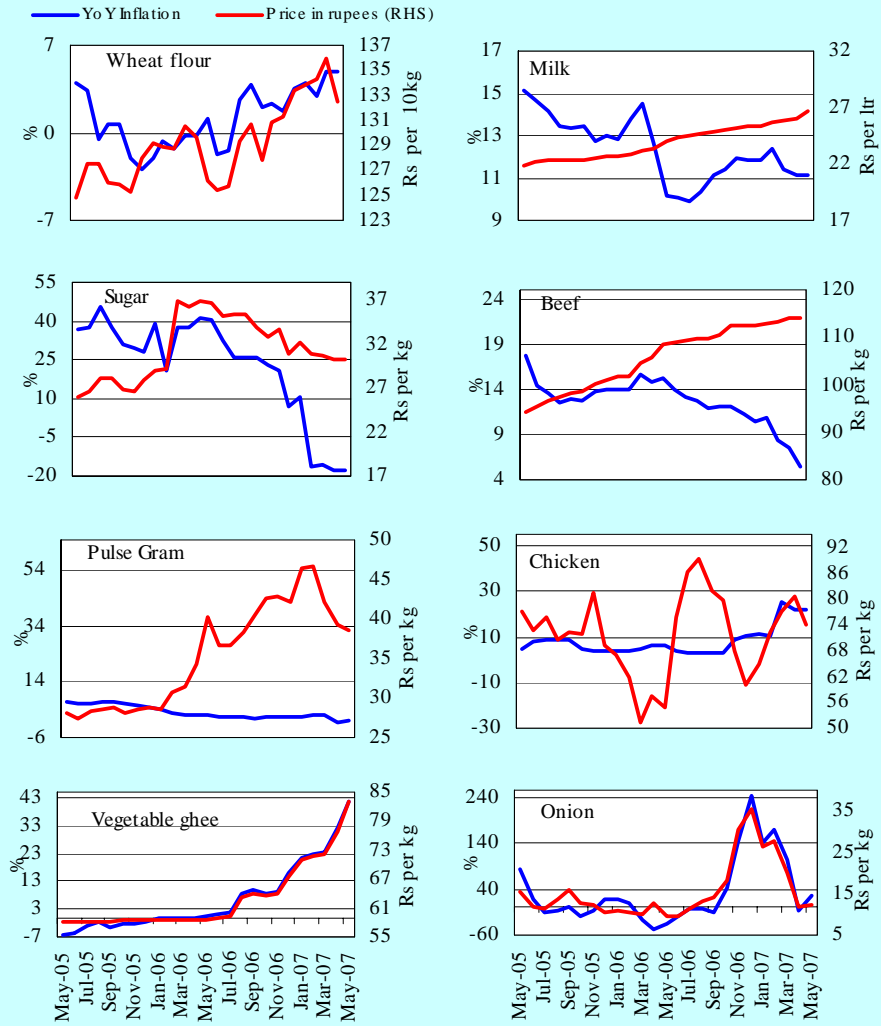


Figure 2.4a: Most volatile item CPI food



the selected food items, tomatoes were the most volatile¹ item over the last two years (see **Figure 2.4a**).

Figure 2.4: Price Trends in Key Food Items



¹ The volatility is measured by standard deviation over last two years.

In terms of percent contribution to overall inflation (YoY), fresh fruits and vegetable ghee are the second and third highest contributors (house rent index of non-food group being the first), with 13 percent and 12 percent respective shares in overall CPI inflation (see **Table A3** in the annexure). The high contribution of fresh fruits was due to exceptionally high growth in their prices, specifically aloo bukara, kinnu, and watermelon, though their weight in the CPI food basket was just 0.53 percent. On the other hand, high contribution of fresh milk was primarily due to its high weight (6.66 percent,) although increase in its price was marginally lower than overall food inflation.

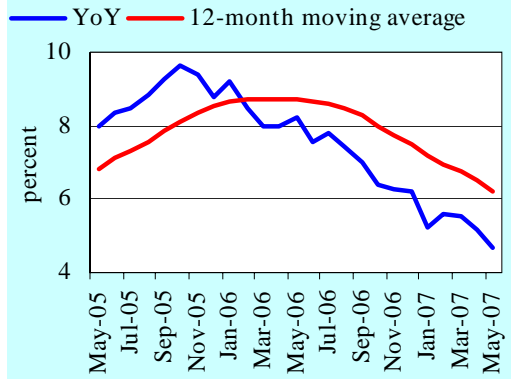
2.2 Non-food Inflation

Non-food inflation decreased from 5.2 percent in April 2007 to 4.7 percent in the month of May 2007 (see **Figure 2.5**).

This 0.5 percentage point decline in non-food inflation was primarily due to a decrease in all the sub-groups of non-food group except for recreation & entertainment and medicare.

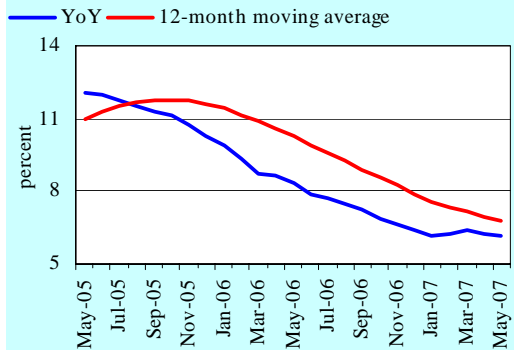
The sub-groups that showed decline in their inflation include apparel, textile & footwear, house rent, fuel & lighting, household furniture & equipment, transport & communication, education and cleaning and laundry & personal appearance.

Figure 2.5: CPI Non-food Inflation



Inflation (YoY) in the apparel, textile & footwear sub-group was recorded at 7 percent in May 2007 depicting a decline of 0.3 percentage points as compared to the previous month. However there was rise of 3.5 percentage points as compared to the corresponding month of last year . This significant increase in the sub-group is mainly due to an increase in the price of almost all types of footwear as compared to May 2006.

Figure 2.6: House Rent Inflation



The house rent index (HRI) marginally declined by 0.06 percentage points in May 2007 and was recorded at 6.16 percent as compared to 6.22 percent in the previous month. House rent index also declined to 2.15 percentage points as compared to the corresponding month of last year (see **Figure 2.6**).

The fuel & lighting sub-group witnessed a decline of 1.25 percentage points and was recorded at 5.70 percent in May 2007 as compared to 6.95 percent in April 2007. This decline was due to the price of CNG cylinder which showed a decline of 4.7 percent in May 2007 as compared to April 2007. This group showed a significant decline of 6.58 percentage points as compared to the corresponding month of last year.

Inflation in the household furniture & equipment sub-group decreased to 6.2 percent in May 2007 as compared to 7 percent in the preceding month. This change was due to a decline in the prices of sewing machines, refrigerators, etc.

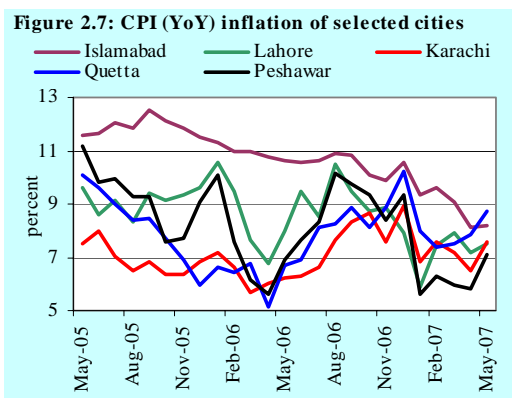
Inflation in the transport & communication sub-group showed a deflation of 3 percent in May 2007 as compared to 2.4 percent in the preceding month mainly on account of a significant reduction in telephone charges outside city.

However other indices of the non-food group exhibited an increase in inflation during the month under review, which includes recreation & entertainment and medicare. Inflation (YoY) in the medicare sub-group was recorded at 10.2 percent in the month under review as compared to that of 10.1 percent growth in the previous month (see **Figure A1** in annexure).

Of the 250 non-food commodities included in the CPI basket, 20 commodities witnessed double digit inflation which includes items like firewood, air fare economy class, primary school fee (English medium) and doctor clinic fee, etc. There were 48 commodities that showed moderate inflation in the range of 5 to 10 percent; all other commodities witnessed either YoY deflation or inflation of less than 5 percent (see **Table A2** in the annexure). The commodities showing deflation included petrol super, a number of durable goods like telephone charges, computers, compaq CD rom, refrigerators, sewing machines, etc. A significant YoY deflation was recorded in telephone charges outside city (34 percent) in May 2007 (see **Table A4** in the annexure).

2.3 City-wise Inflation

City-wise inflation data indicates that 22 cities out of 35 were found in the category of high inflation cities. Inflation recorded for all cities depicted a higher level of CPI inflation (YoY) as compared to their relative positions in the previous month in all three categories i.e. general, food and non-food. Out of five selected cities, Islamabad and Lahore showed a decline in YoY



inflation and was recorded at 8.2 and 7.5 percent in May 2007 as compared to 10.6

Table 2.1: City wise Inflation in CPI (YoY), May 2007

	High inflation cities			Low inflation cities			
	General	Food	Non-food	General	Food	Non-food	
Gujranwala	10.4	12.8	8.7	Peshawar	7.1	11.0	4.4
Bannu	9.4	10.4	8.8	Samundari	7.1	11.3	4.2
Vehari	9.3	11.7	7.5	Shahdadpur	6.9	7.2	6.6
Multan	9.3	12.1	7.2	Bahawalnagar	6.7	8.9	5.1
Khuzdar	9.1	12.3	6.9	D.I.Khan	6.3	10.1	3.8
Mianwali	8.9	13.7	5.7	Sargodha	6.3	9.8	3.7
Hyderabad	8.9	12.1	6.6	Turbat	6.2	5.8	6.5
Quetta	8.7	15.5	4.1	Abbotabad	6.2	8.7	4.3
Nawabshah	8.7	10.8	7.3	Okara	6.1	8.5	4.5
Attock	8.6	14.0	5.1	Faisalabad	5.8	10.8	2.3
Jhang	8.2	11.9	5.7	Mardan	5.7	6.3	5.3
Bahawalpur	8.2	12.7	5.1	Sialkot	5.6	11.1	1.8
Islamabad	8.2	13.2	4.8	Loralai	5.1	5.3	5.0
Larkana	8.1	11.4	5.7				
Kunri	8.0	12.5	4.8				
Mirpur Khas	7.9	10.5	6.1				
Rawalpindi	7.8	12.0	5.0				
D.G. Khan	7.8	10.9	5.6				
Jhelum	7.8	9.5	6.6				
Karachi	7.6	11.8	4.7				
Lahore	7.5	12.8	3.8				
Sukkur	7.4	8.7	6.5				

Note: High inflation refers to above average inflation, and low inflation refers to below average inflation

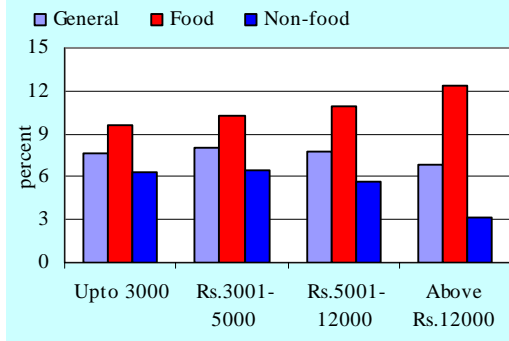
and 8 percent in May 2006. Whereas Karachi, Peshawar and Quetta showed an increase in CPI (YoY) inflation of 7.6, 8.7 and 7.1 percent in the month under review as compared to 6.2, 6.7 and 6.9 percent respectively in the corresponding month of last year. Last month Islamabad, Quetta and Lahore were among the higher inflation cities whereas in the current month Karachi has also been added to the high inflation cities category. Although Peshawar witnessed an increase in CPI (YoY) inflation, it remained in the lower inflation category (see **Figure 2.7**).

Gujranwala maintained its position as the highest inflation city among all the 35 cities with CPI inflation (YoY) at 10.4 percent. Bannu, Vehari and Multan were in 2nd, 3rd and 4th positions among all the cities with CPI inflation (YoY) at 9.4, 9.3 and 9.3 percent respectively. Loralai maintained its position as the lowest inflation city (see **Table 2.1**).

2.4 Income Group-wise Inflation

Inflation recorded for all income groups showed an increase in their CPI inflation (YoY) mainly due to a rise in food inflation while non-food inflation depicted a declining trend as compared to the inflation of last month. The data also revealed that CPI inflation (YoY) recorded for all income groups except for the highest income group was higher than the overall CPI (YoY) inflation (see **Figure 2.7a**).

Figure 2.7a: Income Group-wise CPI Inflation May 07

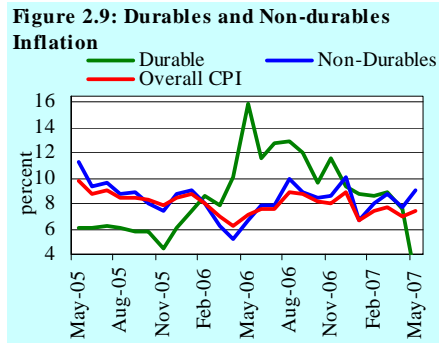
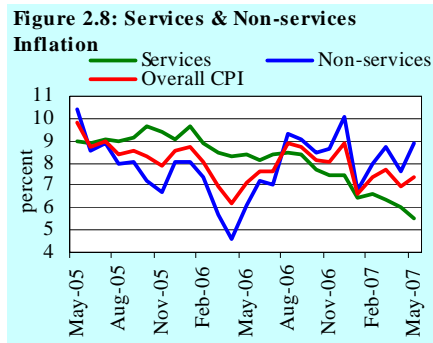


Just like the previous month, highest CPI inflation (YoY) was recorded for the income group of Rs. 3001-5000 followed by the lowest income group of up to Rs.3000 while the highest income group of above Rs.12000 experienced the lowest² inflation. City-wise data shows that Khuzdar maintained its position of being at the lowest level for all income groups for the third consecutive month. Gujranwala occupied the position of the highest level for all income groups (see **Table A5** in annexure A) except for the lowest income group where Quetta experienced the highest inflation.

² The highest food inflation was recorded for the highest income group.

2.5 Services and Non-services Inflation

Inflation in the services³ sector showed a decline whereas in the non-services sector a rise was recorded in May 2007. During the current month inflation (YoY) in services was recorded at 5.5 percent as compared to 6 percent in the previous month. Inflation of the non-services sector was 8.9 percent in May 2007 as compared to 7.6 percent in the previous month (see **Figure 2.8**).



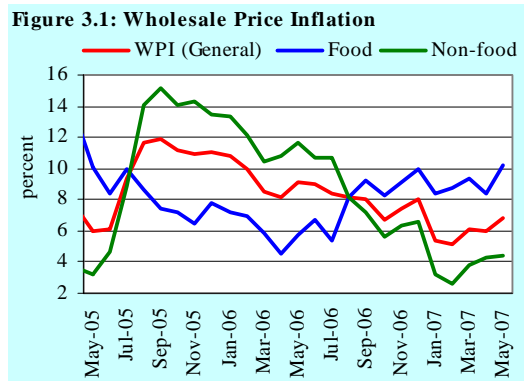
Within the non-services sector, inflation in durable⁴ items declined to 2.1 percent in May 2007 as compared to 7.6 percent in April 2007. This significant decline is due to the substantial decrease in prices of jewelry. Jewelry has the highest weight among durable items, the YoY inflation in jewelry was recorded at 44.2 percent in May 2006 to -0.78 percent in May 2007. Whereas inflation in non-durable goods increased to 9.1 percent in May 2007 from 7.7 percent of April 2007 (see **Figure 2.9**).

³ The services group of CPI basket includes items like house rent index, electricity charges, marriage hall, house hold servant, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges etc.

⁴ Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerator, air conditioners, vehicles, computer & allied products, watches and jewellery, etc.

3. Wholesale Price Inflation

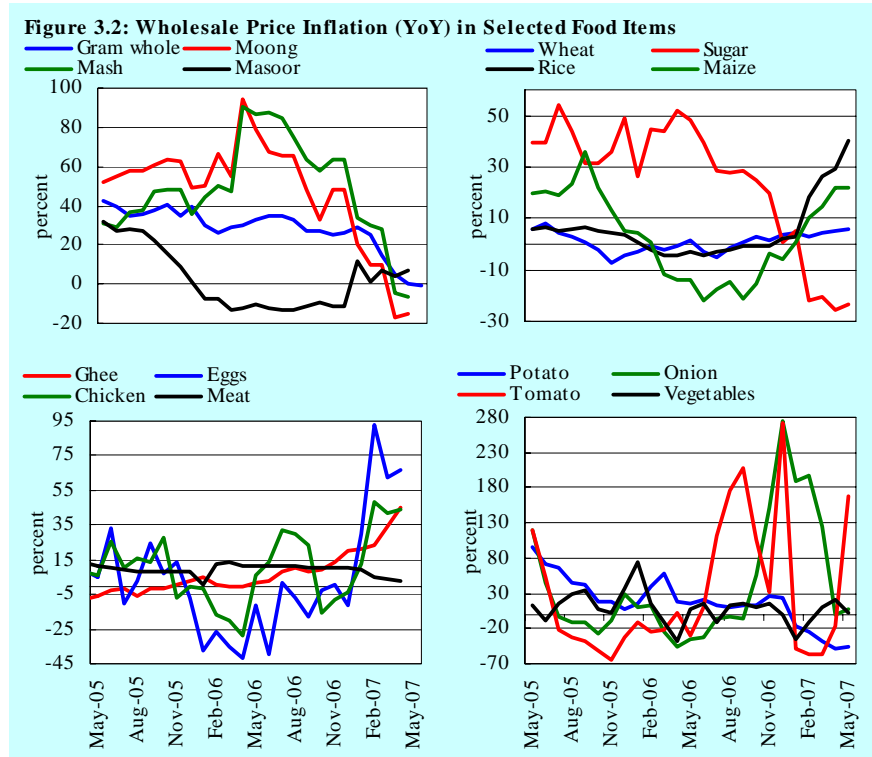
After witnessing single digit inflation since January 2007, WPI food prices depicted YoY growth of 10.3 percent which is not only significantly higher than the corresponding month last year but also than that of the preceding month. As a result, WPI inflation (YoY) accelerated to 6.8 percent in May 2007 as compared to 6.0 percent inflation during the preceding month. However, the long-run trend of WPI inflation measured by 12-month moving average decelerated further in May 2007.



WPI food inflation that exhibited single digit rise since January 2007 depicted YoY growth of 10.3 percent in May 2007. WPI food inflation remained 4.5 percentage points higher than that of the corresponding month last year. Moreover, WPI food inflation in May 2007 also remained 1.8 percent higher than that of the preceding month. The non-food group WPI inflation witnessed a slight (YoY) increase of 0.1 percent and stood at 4.4 percent in May 2007 as compared to 4.3 percent in April 2007 (see **Figure 3.1**). Only the fuel, lighting and lubricant sub group of WPI non-food group showed higher (YoY) inflation in May 2007 as compared to the previous month and thus contributed to the acceleration of non-food inflation.

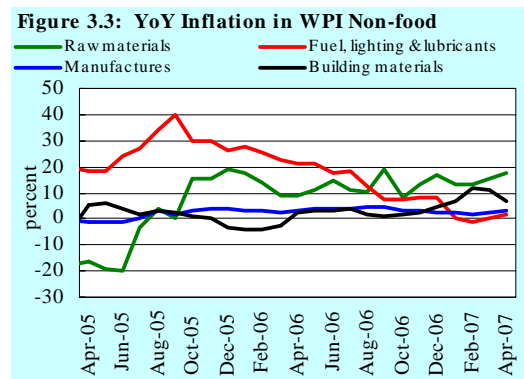
The most noteworthy development was witnessed in the wholesale price of tomatoes that exhibited 169 percent growth in May 2007 after showing a significant decline during the last four months. The wholesale prices of eggs and vegetable ghee also witnessed strong growth in May 2007. A disaggregated analysis of WPI inflation shows that dry fruits, vegetables, rice, chicken, eggs, etc., showed double digit increase of varying magnitudes in their prices (see **Figure 3.2**). The wholesale prices of more than 60 percent items declined, remained stable or exhibited lower growth than that of the average WPI inflation during the month under review.

A distribution of price change suggests that 15 out of 43 food items witnessed a rise of more than 10 percent in inflation during the month under review. While 9 items recorded moderate inflation of 5 to 10 percent, other 7 items showed

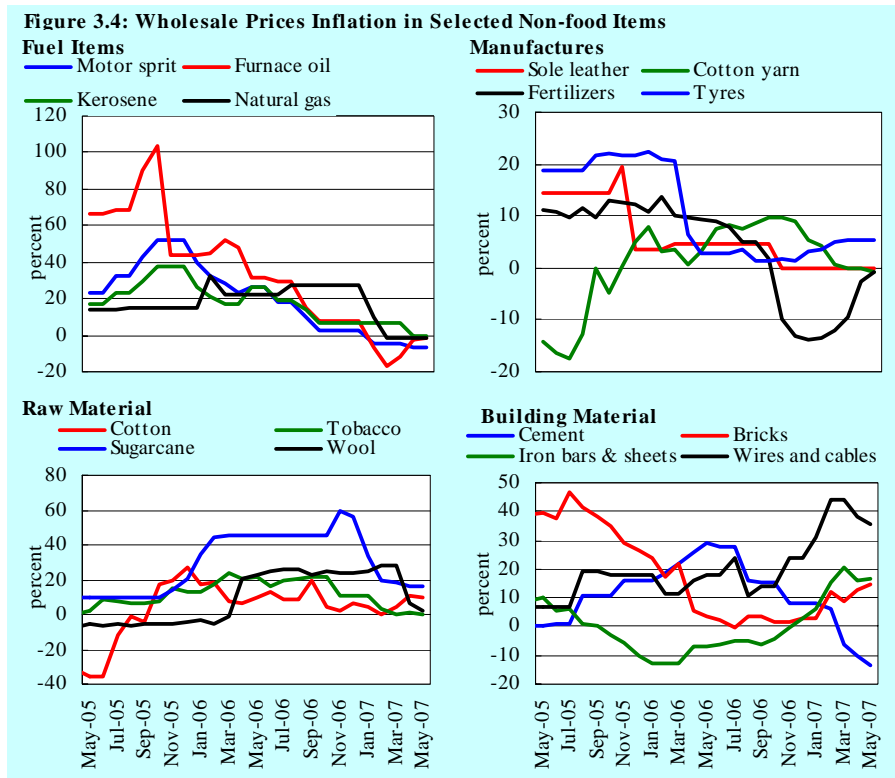


subdued inflation of up to 5 percent. The wholesale prices of the remaining 12 food items declined or remained stable. In case of the non-food group, prices of 14 items revealed a positive change of up to 5 percent, 24 items showed decrease or no change, 17 items demonstrated double digit rise of above 10 percent and the remaining 8 items displayed moderate inflation, i.e. 5 to 10 percent (see **Table A7** in Annexure A).

Further classification of the non-food group revealed that except fuel, lighting and lubricants, all other subgroups, i.e. raw materials, manufactures and building material accelerated during May 2007 compared to the preceding month (see **Figure 3.3**). The rate of increase in



raw materials was recorded at 17.1 percent on YoY basis: higher as compared to 11.3 of the previous month. By analyzing the individual commodities amongst the raw material subgroup, it was observed that all the items included in the *raw material* subgroup showed positive (YoY) growth except tobacco. The wholesale price of cotton, sugar cane, pig iron hides, rapeseeds and cotton seeds accelerated significantly and exhibited double digit YoY growth during the month under review.



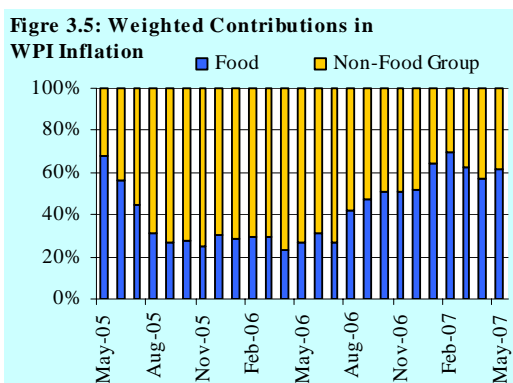
The *fuel, lightning & lubricants* subgroup witnessed a small YoY growth of 2.0 percent due to the base effect. This was mainly on account of double digit (YoY) growth of 20.6 percent in the prices of mobil oil during the month under study which is significantly higher than the growth in the preceding.

The pace of increase in the wholesale prices of the *manufactures* subgroup slowed down in May 2007 and recorded an inflation of 2.6 percent. This was mainly due to the fact that more than 60 percent items included in the group recorded positive

(YoY) growth with some of the items like chemicals and footwear showing double digit inflation.

The growth in *building material* subgroup further slowed down and depicted a lower (YoY) growth of 6.3 percent in May 2007 as compared to 7.0 percent last month. This was mainly due to the wholesale prices of cement that showed a significant decline of 13.2 percent during the month under study. All other major items in this subgroup witnessed a significant increase in their prices (see **Figure 3.4**).

The weighted contribution of the food group in WPI inflation started to increase in May 2007 after declining for the last two months and again recorded a contribution of above 60 percent in WPI inflation. The weighted share of the non-food group in overall WPI inflation declined accordingly. This change in the contributions was the result of increased WPI food inflation in May 2007. The contribution of the non-food group declined to 38.1 percent in May 2007 from 42.5 percent in April 2007. The rise in the weighted contribution of food inflation in WPI is mainly because of a sharp growth in some key food staples (see **Figure 3.5**).



Within the non-food group, the contributions of *fuel, lighting & lubricant* and *manufactures* subgroup increased whereas the percent shares of raw materials and building materials declined (see **Table 3.1**).

Table 3.1: Contribution of Sub-Indices to WPI Non-food inflation in FY 07 (percent)

	Jul	Apr	May
Raw materials	12.9	47.8	46.9
Fuel, lighting & lubricants	68.5	14.3	18.9
Manufactures	15.1	24.1	22.0
Building materials	3.5	13.6	12.0

4. Global Commodity Prices

Palm and Soybean oil prices remained strong in the international commodity market. The surge in these two edible oil prices was mainly led by lower supplies and smaller than expected production in Malaysia during May 2007⁵. The prices of metals in the international market also showed an upward movement, mainly on account of strong demand in China, critically low stocks and numerous supply

Table 4.1: International Commodity Prices/Indices

	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07
Energy								
Crude Oil (US\$ per barrel)	58.0	58.1	61.0	53.4	57.6	60.6	65.1	65.1
IMF Energy Index	317.3	320.2	333.3	295.4	317.3	332.0	353.0	352.9
WB Energy Index	253.1	254.1	266.6	233.9	251.6	264.9	284.4	284.8
Coal	47.2	49.3	53.3	55.0	56.7	59.2	60.1	59.6
Food								
Rice	309.6	300.6	309.3	313.5	316.1	326.2	322.0	320.6
Wheat	212.1	205.8	204.3	196.1	200.0	199.1	198.0	195.7
Sugar	11.5	11.7	11.7	10.9	10.6	10.4	9.6	9.1
Palm Oil	422.3	476.7	528.2	550.8	553.8	566.4	645.0	740.6
Soybean Oil	559.7	623.6	628.6	635.6	664.9	679.5	714.0	756.1
Sunflower Oil	673.0	673.0	673.0	673.0	673.0	673.0	673.0	673.0
Non-Food Non-Energy								
Cotton Outlook 'A' Index	57.0	57.4	59.4	59.1	57.9	58.4	57.2	55.6
WB Steel Products Index	133.7	131.5	131.0	131.4	132.0	132.5	133.3	133.5
DAP	255.6	253.5	253.5	267.6	345.4	420.5	432.4	426.4
Urea	211.8	235.6	254.7	269.8	304.3	318.0	288.5	296.3

Note: Prices for all commodities are in US\$ per metric tonne except for crude oil.

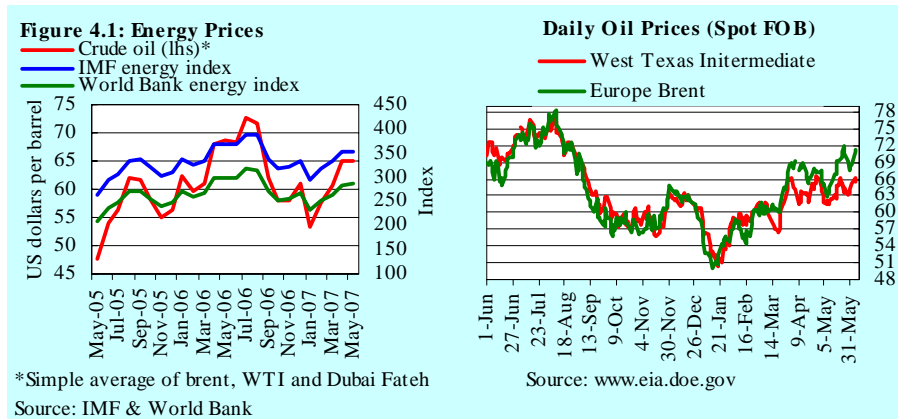
Source: IMF and World Bank.

disruptions, according to market sources. However, in May 2007 the prices of major food staples and the energy group came down⁶ in the international market. The slow-down in energy prices was mainly attributed to better oil stocks in the market (see **Table 4.1**).

During May 2007, oil prices remained stable and stood at the previous month's level of US\$65.1 per barrel. However, crude oil price showed a YoY decline of 5.1 percent in the month under review compared to the same month last year. The average monthly price of crude oil in the international market fluctuated between US \$62.1 per barrel and US \$68.1 per barrel.

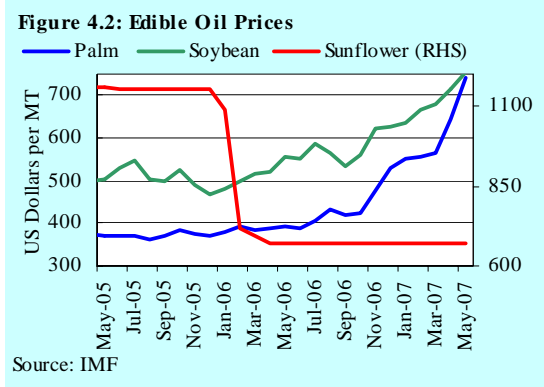
⁵ Source: World Bank Commodity Market Review, June 2007

⁶ Ibid.



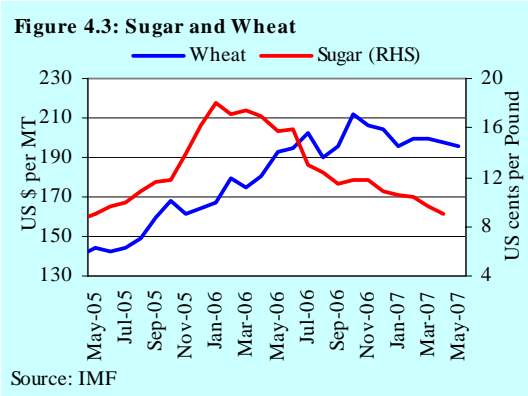
The volatility in international crude oil prices – measured by the standard deviation – increased considerably during the month and the fluctuation around mean price during the month of May 2007 was 1.9 as compared to 1.3 of the preceding month. The IMF energy index remained stable at the preceding month level whereas the World Bank energy index showed a slight rise in May 2007 over the previous month (see **Figure 4.1**).

The price of palm oil continued to show strong growth since July 2006, mainly because of lower supplies due to lower than expected production in Malaysia, strong global demand and weak exports from Malaysia.⁷ The (YoY) growth in palm oil prices was recorded at 47.7 percent - highest in the current fiscal year. Similarly soybean oil prices continued to exhibit rising trend for the seventh consecutive month and showed a YoY acceleration of 35.7 percent in May 2007. The strong growth in the price of soybean oil was the result of historically high price of its close substitute palm oil. (see **Figure 4.2**).

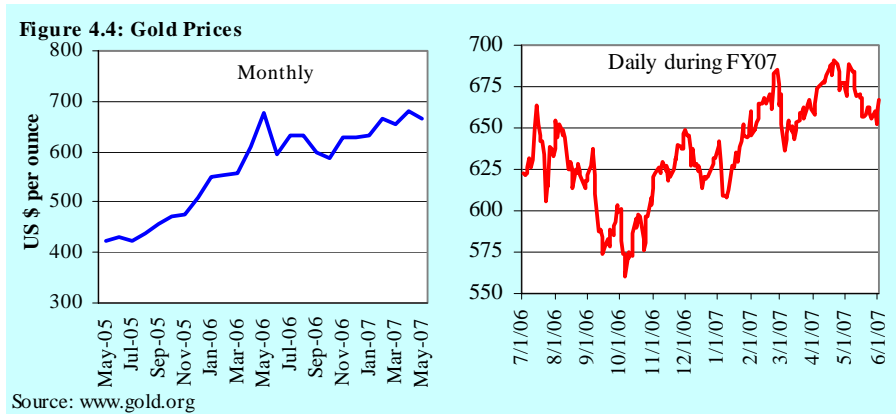


⁷ Source: World Bank Commodity Market Review, June 2007

Wheat prices declined for the third consecutive month in May 2007 showing a monthly deflation of 1.2 percent due to improving supply conditions on the arrival of new crop. The YoY growth in wheat prices increased and was recorded at 9.1 percent, slightly lower as compared to 9.6 percent of the previous month. Sugar prices declined sharply in May 2007 over the same month last year on account of expected record crops in

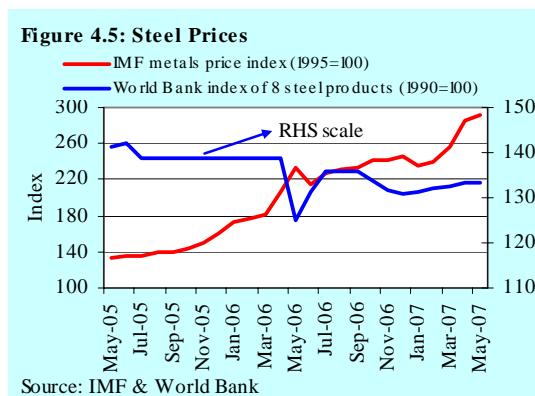


Brazil, India and Thailand, according to some leading analysts. The price of sugar also witnessed a significant decline compared to the preceding month (see **Figure 4.3**).

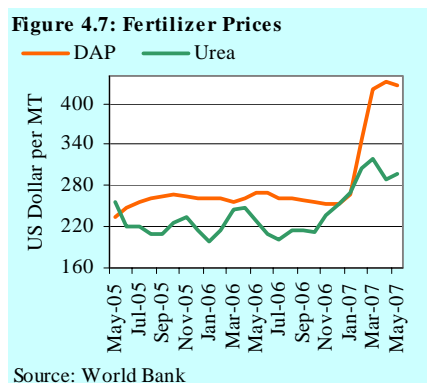
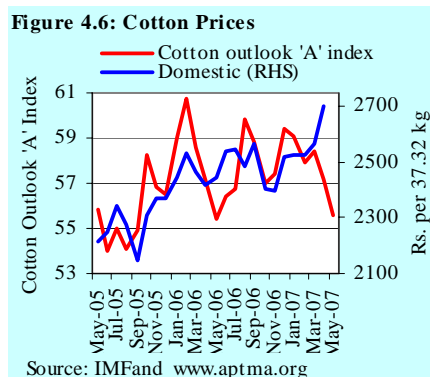


The price of gold in international market showed a YoY deflation of 1.3 percent, first time in the last six years during the month under study showing the impact of rising dollar and weaker oil prices during the current month. After witnessing a rise of 3.7 percent in April 2007, average monthly gold price showed a decline of 1.8 percent over the previous month. During May 2007, daily gold price in the international market remained lower and fluctuated in a wider range between \$652.6 per ounce and \$689 per ounce. The variation in gold prices remained higher during the month showing a standard deviation (SD) of 10.2 around mean of US\$666 per ounce as compared to the SD of 8.8 around mean of US\$679 per ounce a month earlier (see **Figure 4.4**).

In the metal group, zinc prices exhibited a significant rise of 7.7 percent in May 2007 as compared to the same month last year. The prices of aluminum, copper and silver declined in May 2007 compared to the preceding month whereas the prices of lead, nickel, and tin showed a rise of varying magnitudes. The rising trend in metal prices is also reflected by the IMF metal price index as well as by the World Bank steel price index. The IMF metal price index rose to 24.6 percent during May 2007 as compared to the corresponding month last year (see **Figure 4.5**).



In the international markets, cotton prices – represented by cotton outlook ‘A’ index⁸ –registered a slight increase of 0.3 percent in May 2007 over the corresponding month last year. However cotton prices declined by 2.8 percent in May 2007 than that of April 2007 (see **Figure 4.6**).



Fertilizer prices in the international market registered a significant rise during May 2007. The prices of DAP⁹ and urea showed a steep YoY growth in the month under review. The (YoY) increase in DAP was recorded as high as 57.5 percent as compared to 15.1 percent in the same month last year due to an increased demand

⁸ Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, average of cheapest 5 of 15 styles traded in Northern Europe, c.i.f.

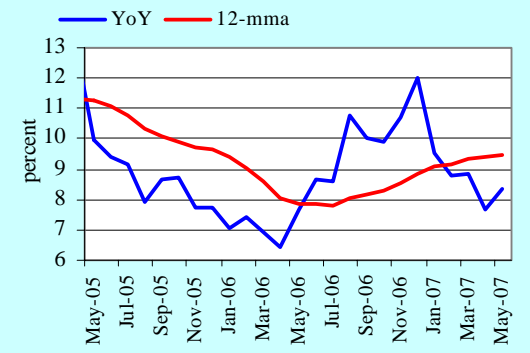
⁹ DAP: Diammonium Phosphate

stemming from projected increase in grain crop areas.¹⁰ The price level of urea also increased sharply and registered a rise of 30.1 percent compared to the same month last year (see **Figure 4.7**).

5. Sensitive Price Indicator

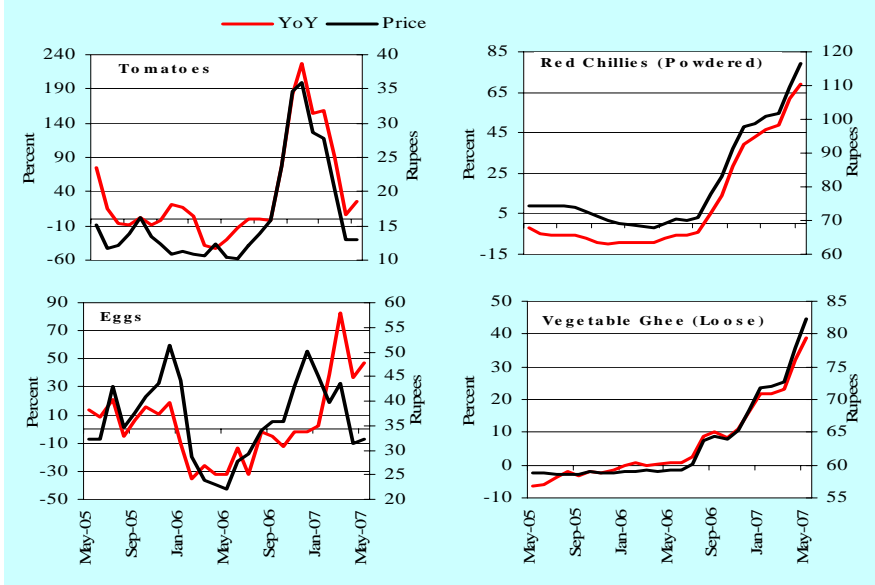
Sensitive price indicator (SPI) showed an increase in inflation and recorded 8.3 percent YoY growth in the month under review. This growth is higher in SPI inflation compared to 7.7 percent that was recorded in the previous month and the corresponding month last year. Similarly the long-run trend indicated by 12-month moving average showed a slight increase in the month under review: 9.5

Figure 5.1: SPI Inflation (YoY)



percent as compared to 9.4 percent in the previous month. This rise was mainly

Figure 5.2: SPI Inflation (YoY) in selected Items

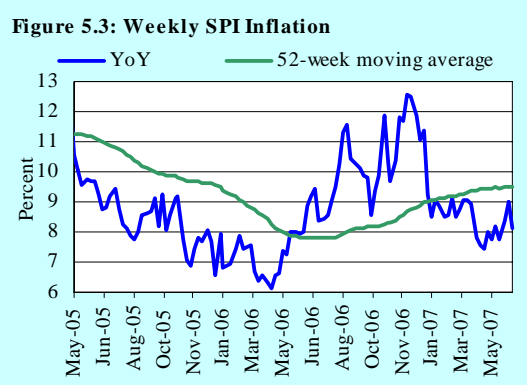


¹⁰ Source: World Bank Commodity Market Review

due to the generally high SPI inflation recorded in the current fiscal year (see **Figure 5.1**).

The major items contributing to SPI inflation were tomatoes, rice, poultry items, vegetable ghee, onions and red chilies (see **Figure 5.2**). 23 items in the SPI basket recorded higher YoY inflation than the average level of 8.3 percent during May 2007. The remaining 30 items recorded YoY inflation less than the average level with 10 items including sugar, potatoes, pulses, gur, tomatoes, garlic and petrol showing negative growth.

Compared with the prices of the previous month, around 47 percent items included in the SPI basket witnessed decrease or no change in the price level. On the other hand two items, i.e. potatoes and tomatoes showed double digit growth in inflation compared with the previous month (see **Table A8** in Annexure A).



Weekly SPI witnessed mixed trends in YoY inflation during May 2007 and fluctuated between the range of 7.7 percent to 9 percent in the month under review. Thus, after recording weekly YoY

Table 5.1 : Income Group-wise SPI Inflation (YoY)
percent

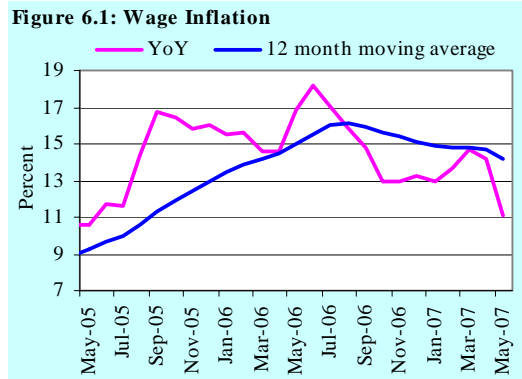
	Up to Rs. 3000	Rs. 3001-5000	Rs. 5000-12000	Above Rs. 12000	All income groups
Jul-06	8.9	8.6	8.8	9.9	8.6
Aug-06	11.0	10.7	11.1	12.0	10.8
Sep-06	11.2	10.8	10.8	10.6	10.0
Oct-06	11.8	11.3	11.2	9.8	9.9
Nov-06	13.4	12.7	12.2	10.1	10.7
Dec-06	14.5	14.0	13.6	11.2	12.0
Jan-07	12.1	11.3	10.7	8.5	9.5
Feb-07	10.6	10.0	9.7	7.8	8.8
Mar-07	9.7	9.5	9.4	8.0	8.9
Apr-07	8.3	8.3	8.2	6.9	7.7
May-07	9.1	9.3	9.0	7.0	8.3

SPI inflation around the 8 percent mark, inflation rose to 9 percent by the end of the month. The long-run trend indicated by 52-week moving average has shown a slight increase in inflation since August 2006 (see **Figure 5.3**).

Like the previous month, the incidence of inflation was the highest in the lowest income group. On the other end, the least affected group was the highest income group with YoY inflation maintaining single digit growth for the fifth consecutive month in May 2007 (see **Table 5.1**). This is because most of the items showing high inflation are from the food group and thus are more significant for the lowest income group as compared to other income groups. However, income group-wise SPI inflation reveals that inflation has increased for all the income groups as compared to the previous month.

6. Wage Inflation in Construction Sector

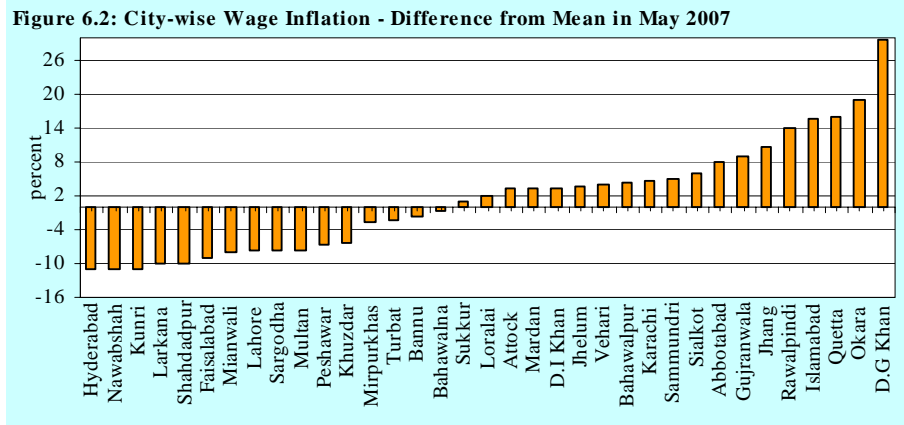
Wage inflation further decelerated in May 2007 and reached 22 months low value. The wage inflation was recorded at 11.1 percent in May 2007 compared to 14.2 percent in the preceding month. This significant deceleration was the result of slowing down of nominal wages of all types of workers i.e. skilled and unskilled. Particularly the wage inflation of electricians sharply declined to 5.2 percent: lower by 8.9 percentage points than preceding month. The long run trend of nominal wage inflation measured by 12-month moving average also came down due to generally declining nominal wage inflation during the last



	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
Overall	14.8	13.0	13.0	13.3	12.9	13.7	14.6	14.2	11.1
Skilled:	14.6	12.6	12.5	12.9	12.5	13.3	14.3	13.8	10.5
Carpenter	13.3	11.8	11.9	12.1	12.4	12.8	14.6	13.7	12.8
Mason	15.2	12.6	12.5	12.6	12.1	13.9	15.2	16.0	14.2
Plumber	12.1	10.7	10.8	11.7	10.6	11.3	11.7	11.2	9.8
Electrician	17.8	15.1	14.8	15.0	14.9	15.1	15.6	14.1	5.2
Unskilled:	16.4	16.2	16.6	16.8	16.3	17.1	17.3	16.8	14.9
Laborer	16.4	16.2	16.6	16.8	16.3	17.1	17.3	16.8	14.9

12 months (see **Figure 6.1** and **Table 6.1**).

The month wise average wages of all types of workers increased by 11.1 percent during May 2007 over the corresponding month of last year and remained within the range of Rs 221.90 per day and Rs 443.80v per day. **Figure 6.2** presents the picture of city wise deviation in wages from mean during the month of May 2007. Out of 35 cities, 19 recorded higher than average wage inflation and 16 cities witnessed lower than average inflation. The highest wage inflation was observed in D.G Khan followed by Okara and Quetta whereas Hyderabad, Nawabshah, Kunri, Larkana etc., showed the lowest YoY changes in wages during the month under review.



Annexure A

	Weights	May-03	May-04	May-05	May-06	May-07
I. Food Group	40.3	2.6	10.0	12.5	5.6	11.3
II. Non-Food Group	59.7	2.6	5.1	8.0	8.2	4.7
Apparel, textile, etc.	6.1	4.3	0.7	5.3	3.5	7.0
House rent	23.4	0.9	7.6	12.0	8.3	6.2
Fuel & lighting	7.3	5.7	1.7	4.6	12.3	5.7
Household furniture & equip.	3.3	3.2	5.0	5.5	5.6	6.2
Transport & com.	7.3	1.0	8.1	11.1	13.0	-3.0
Recreation & entertainment	0.8	0.5	-1.1	-0.1	-0.2	0.1
Education	3.5	5.1	2.7	4.0	7.2	6.0
Cleaning, laundry, etc.	5.9	4.9	4.6	2.6	4.9	3.3
Medicines	2.1	0.4	1.7	0.8	3.9	10.2
Headline	100	2.6	7.0	9.8	7.1	7.4

Groups	% Changes	Total Number of Items	No. of Items in each Inflation Range			
			Decrease or no change (0 % or less)	Subdued increase (0 to 5%)	Moderate increase (5 to 10%)	Double digit increase (over 10%)
I. Food Group	11.3	110	16	24	28	42
II. Non-Food Group	4.7	250	71	112	47	20
Apparel, textile, etc.	7.0	42	2	21	15	4
House rent	6.2	1		1		
Fuel & lighting	5.7	15	5	4	1	5
Household furniture & equip.	6.2	44	2	27	15	
Transport & com.	-3.0	43	23	11	5	4
Recreation & entertainment	0.1	16	11	2	1	2
Education	6.0	24	6	13	2	3
Cleaning, laundry, etc.	3.3	36	4	23	8	1
Medicines	10.2	29	18	10		1
Overall	7.4	360	87	136	75	62

Note: Prices of 14 seasonal items were not reported during the month.

Table A3: Top Ten Contribution to YoY CPI Inflation in May 2007					
Items	weights	YoY change		Weighted Contribution	
		May-06	May-07		
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	8.31	6.16	19.63
2	Fresh Fruits	1.62	(11.48)	51.62	12.38
3	Vegetable Ghee	2.67	0.11	33.79	11.75
4	Milk Fresh	6.66	10.18	11.14	10.63
5	Tomatoes	0.50	(12.29)	222.00	7.48
6	Rice	1.34	0.57	37.31	6.22
7	Electricity	4.37	-	10.07	4.78
8	Chicken Farm	0.92	(28.64)	34.88	3.34
9	Meat	2.70	14.48	5.94	3.28
10	Wheat Flour	5.11	1.11	4.64	3.13
Total		49.30			82.61
B. Ranked by Percentage Change					
1	Tomatoes	0.50	(12.29)	222.00	7.48
2	Fresh Fruits	1.62	(11.48)	51.62	12.38
3	Rice	1.34	0.57	37.31	6.22
4	Chicken Farm	0.92	(28.64)	34.88	3.34
5	Eggs	0.41	(31.75)	33.94	1.16
6	Vegetable Ghee	2.67	0.11	33.79	11.75
7	Mustard Oil	0.05	2.25	25.46	0.14
8	Cooking Oil	0.69	(0.67)	25.35	2.23
9	Onions	0.64	(36.90)	24.61	1.50
10	Doctor's Fee	1.00	7.17	19.22	2.30
Total		9.81			48.49
C. Ranked by Weights					
1	House Rent Index	23.43	8.31	6.16	19.63
2	Milk Fresh	6.66	10.18	11.14	10.63
3	Wheat Flour	5.11	1.11	4.64	3.13
4	Electricity	4.37	-	10.07	4.78
5	Bakery & Confectionary	2.98	3.81	2.02	0.70
6	Meat	2.70	14.48	5.94	3.28
7	Vegetable Ghee	2.67	0.11	33.79	11.75
8	Tution Fees	2.36	7.39	7.21	2.27
9	Transport Fare/Charges	2.12	9.96	1.95	0.70
10	Natural Gas	2.05	26.78	0.54	0.23
Total		54.45			57.09
Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 7.4 percent in May 2007.					

Table A4: Distribution of Price Changes - Selected CPI Items, May 2007

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Sugar Refined	Wheat Flour Bag		Milk Fresh (Unboiled)
	Potatoes, Tea	Wheat Flour	Beef With Bone	Vegetable Ghee (Loose)
	Brookbond	Fine/Superior.	Av.Qlty., Mutton	Vegetable Ghee Tin
	Supreme 250Gm.	Tea Loose Kenya	Av.Qlty., Tea Prepared (Ordinary), Bread Plain	Tomatoes
	Pulse Gram	Wheat	Medium Size, Bananas	Cooking Oil (Dalda)
	Pulse Moong	Tea Lipton Yellow	Cigarettes Gold Leaf	Kinnu, Aloo Bukhara
	Pulse Mash	Label 200G	20'S	
Apparel & Textile	Gents Shoes			Nylon Jogger 27 Size
	Paul Bata	Lawn Av.Qlty.	Tailoring Shirt	2-5, Child Shoe
	Ladies Sandal	Long Cloth Av.Qlty.	Tailoring Suit Female	Power Lite Bata
	Bata	Shirting Av.Qlty.	Tailoring Coat-Pant Suit	Gents Spoung Chappal Bata
House Rent Index			House rent index	
Fuel & Lighting	Gas Cylinder Stand. Size	Gas Chrages10.1157		Electric Charges
	Kerosene Oil	- 13.4876Mmb, Upto		Above 1000 Units,
	Match Box Small	3.3719Mmb, 6.7438	Bulb Philips 100-Watts	301 - 1000 Units,
		- 0.1157Mmb		101 - 300 Units
H/hold Furniture	Refr. Dawlence	Quilt (Lihaf) 3 Kg.	Household Servant	
	10 Cft. D.Doo	Cotton, Tea Set Pak.	Female P/T	
	Sewing Machine(Singer)	Chinaware 21 Pc	Washing Machine	
		Bedsheet Single Bed	Singer, Suitcase Rexin	
		Sup.Qlty	(24"X16"X6")	
Transport & Comm.	Petrol Super	Car Service Charges		Taxi 4 Seater Fare
	Tel Charges Out	Auto Rickshaw Fares		Air Fare Economy
	Side City & Local Call	Minibus Fare		Class., Aerogram For
	Plateform Ticket	Min.With In Cit	Cng Filling Charges	Saudi Arabia
	Bus Fare Min	Tyre Cycle Specify	Tyre Motor Cycle	
	(Within City)	Brand Nam	Without Tub	
Recreation	Tv.Licence			
	Feedomestic Daily "Jang"	Cinema A/C. Highest Class		Dry Cell 1.5 Volt(Local)
	Video Game Sega 16 Byte	Radio With C.Player National	Cinema Non-A/C High Class	Weekly "Akhbar-E-Jahan"
Education	Govt. College Fee Ist. Year	Exercise.Book Lined 80/100 P		School Fee Primary
	Govt. College Fee 4Th. Year	Paper Foolscape (27"X17")	School Fee 2Nd-Ry	Eng.Med.
	English Book Class Ix Or X	Maths Book Calss V (T.B.B)	Eng.Med.	Eng. Book Ist.Yr
			Ball Pen (Local)	Complete Se
Cleaning & Laundry	Gold Tezabi 24 Ct, Blade 7-O-Clock Stain. 5'S	Haircut Charges For Men, Washing Soap Nyl(135-160Gms)	Toilet Soap Lux 95 Grams	Govt. University Fee Msc.
	Hair-Colour Begin (6 Gms)	Shampoo Plain Medora 200 Ml.	Dry Cleaning Suit Coat Pant	
	Silver Tezabi 24 Ct	Surf (Medium) 160 Grm	Artificial Jewellery Set	
			Shaving Cream Touch-Me/Adm.	Robin Blue (35 Grams)
Medicare	Renitec Tab. 5 Mg., Betnesol	Amoxil Capsole 250 Mg.S		
	Eye Drops	Thermometer China		
	Hydryllin Syrup 120 Ml.	Ventolin Tab. 2Mg.		Doctor (Mbbs) Clinic Fee

Table A5: City-wise Inflation (YoY) by Income Groups, May 2007							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	8.5	13.4	5.2	8.5	12.7	5.6
2	Faisalabad	6.2	10.5	3.3	6.6	9.7	4.5
3	Rawalpindi	8.2	10.8	6.5	8.9	12.2	6.7
4	Multan	8.9	9.9	8.2	9.5	11.4	8.2
5	Gujranwala	8.9	11.6	7.1	10.2	12.1	8.9
6	Islamabad	9.1	11.6	7.4	9.7	12.9	7.5
7	Sargodha	7.1	10.4	4.8	6.7	9.5	4.8
8	Sialkot	6.5	10.5	3.8	6.3	9.8	4.0
9	Bahawalpur	8.3	10.5	6.9	8.9	11.7	7.0
10	Karachi	7.4	9.7	5.9	8.4	11.7	6.2
11	Hyderabad	8.8	10.8	7.5	9.3	12.0	7.5
12	Sukkur	8.0	9.2	7.1	7.8	8.8	7.2
13	Larkana	8.1	11.3	5.9	8.5	11.3	6.6
14	Peshawar	7.8	9.9	6.3	8.0	9.7	6.9
15	Bannu	7.5	6.8	7.9	9.4	9.0	9.7
16	Quetta	11.5	17.2	7.6	9.9	15.6	6.0
17	Khuzdar	4.1	3.0	4.8	5.3	4.6	5.7
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	7.9	12.7	4.7	7.0	12.9	3.0
2	Faisalabad	6.4	10.3	3.8	5.2	11.6	0.9
3	Rawalpindi	8.3	11.8	5.9	7.3	12.2	4.1
4	Multan	9.3	12.2	7.3	9.2	12.8	6.8
5	Gujranwala	10.6	12.9	9.0	10.5	13.5	8.5
6	Islamabad	9.0	12.7	6.6	8.0	13.3	4.4
7	Sargodha	6.4	9.4	4.5	5.6	10.9	1.9
8	Sialkot	6.2	10.8	3.1	5.2	11.4	1.0
9	Bahawalpur	8.7	12.9	5.9	7.2	13.9	2.6
10	Karachi	8.3	12.0	5.8	6.9	11.6	3.7
11	Hyderabad	9.0	11.9	7.1	8.3	12.8	5.2
12	Sukkur	7.4	8.6	6.6	7.1	9.0	5.8
13	Larkana	8.2	11.4	6.1	7.3	11.3	4.7
14	Peshawar	7.3	10.3	5.4	6.7	12.2	2.9
15	Bannu	9.9	10.6	9.5	9.3	12.3	7.3
16	Quetta	9.0	15.4	4.7	8.2	15.7	3.2
17	Khuzdar	6.1	6.3	5.9	4.6	5.3	4.1

Table A6 : Income Group-wise Inflation (YoY)								percent
	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
<u>Up to Rs. 3000</u>								
General	8.8	9.3	10.1	7.6	7.9	7.8	6.9	7.7
Food	11.0	12.2	14.1	9.4	9.6	9.1	7.7	9.6
Non-food	7.3	7.2	7.4	6.3	6.7	6.8	6.3	6.3
<u>Rs. 3001-5000</u>								
General	8.7	9.0	10.0	7.3	7.8	7.9	7.2	8.0
Food	10.8	11.7	13.7	9.0	9.4	9.3	8.0	10.2
Non-food	7.3	7.1	7.4	6.1	6.7	6.9	6.5	6.5
<u>Rs. 5000-12000</u>								
General	8.4	8.4	9.3	6.9	7.5	7.8	7.1	7.8
Food	10.6	10.9	13.0	8.7	9.6	10.1	8.8	10.9
Non-food	6.8	6.6	6.8	5.6	6.0	6.2	5.9	5.7
<u>Above Rs. 12000</u>								
General	7.7	7.4	8.1	6.3	7.2	7.5	6.7	6.9
Food	10.3	9.7	11.9	8.7	10.7	12.2	10.8	12.3
Non-food	5.8	5.8	5.5	4.6	4.7	4.3	3.9	3.1
<u>All income groups</u>								
General	8.1	8.1	8.9	6.6	7.4	7.7	6.9	7.4
Food	10.5	10.6	12.7	8.7	10.0	10.7	9.4	11.3
Non-food	6.4	6.3	6.2	5.2	5.6	5.5	5.2	4.7

Table A7: Distribution of Price Change (YoY)--WPI Items: May 2007				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Potatoes			Vegetables
	Sugar Refined			Prepared/Preserved
	Gur			Dry Fruits, Fruits
	Moong			Prepared/Preserved
	Bajra		Wheat Flour	Cooking Oil
	Gram Split		Wheat	Fresh Fruits, Maize
	Mash	Fish	Milk Food	Oil Cakes, Beans
	Jowar	Beverages	Powdered Milk	Mustard &
	Besan	Mineral Water	Masoor	Rapeseed Oil
	Gram Whole	Condiments	Salt	Cotton Seed Oil
	Tea	Maida	Onions	Rice, Chicken
	Sugar	Meat	Spices	Vegetable Ghee
	Confectionary	Vegetables	Fresh Milk	Eggs, Tomatoes
Raw material				Cotton
				Sugar Cane
				Hides
		Wool		Mustard/Rapeseeds
	Tobacco	Skins		Cotton Seeds
				Pig Iron
Fuel & lighting	Motor Sprit			Fire Wood, Coke
	Furnace Oil			Electricity Ind.
	Diesel Oil			Supply Tariff-B
	Natural Gas			Mobil Oil
	Coal			Elec. Agriculture
	Kerosine Oil			Tariff-D
Manufactures	Woolen Textiles	Cosmetics		
	Blended Yarn	Ready Made		
	Mattresses	Garments		
	Transports	Other Electrical		
	Fertilizers	Goods		
	Cotton Yarn	Dying Materials		
	Paper	Tubes		
	Drugs &	Plastic Products		
	Medicines	Utensils		
	Sole Leather	Silk & Reyon	Tyres	
	Chrome Leather	Textiles	Machinery	
	Glass Products	Cotton Textiles	Soaps	
	Audio-Visual	Nylon Yarn	Jute Manufactures	
	Instruments	Pesticides &	Hosiery	Chemicals
Matches	Insecticides	Cigarettes	Foot Wear	
Building material	Cement			
	Sanitary Wares			Timber
	Cement Blocks			Bricks
	Paints &		Tiles	Iron Bars & Sheets
	Varnishes	Pipe Fittings	Glass Sheets	Wires And Cables

Table A8: SPI Item-wise Price Movements for the month of May 2007

S.No	Items	Unit	Price May -07	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	11.7	4.8	-4.1
2	Wheat flour a.qlt.	Kg.	13.8	6.7	-1.5
3	Rice basmati. broken	Kg.	27.6	36.5	5.7
4	Rice irri-6	Kg.	19.9	23.7	2.8
5	Masur pulse washed	Kg.	46.8	2.7	1.5
6	Moong pulse washed	Kg.	55.8	-11.2	1.0
7	Mash pulse washed	Kg.	72.1	-1.9	0.5
8	Gram pulse washed	Kg.	38.2	-5.6	-1.4
9	Beef	Kg.	120.4	5.6	0.3
10	Mutton	Kg.	229.1	5.7	0.4
11	Egg hen (farm)	Doz.	32.3	47.1	2.6
12	Bread plain m.s.	Each	15.5	6.9	0.0
13	Sugar	Kg.	29.9	-17.8	-1.3
14	Gur	Kg.	35.2	-11.4	-1.6
15	Milk fresh	Litr	28.3	13.2	3.4
16	Milk powdered Nido	400g	135.6	22.1	0.6
17	Curd	Kg.	33.0	11.4	3.8
18	Veg.ghee tin	2.5k	244.7	20.2	2.0
19	Veg.ghee loose	Kg.	82.3	38.9	5.7
20	Mustard oil	Kg.	83.8	24.9	0.3
21	Cooking oil	2.5l	245.8	20.3	1.9
22	Potatoes	Kg.	12.2	-37.2	11.4
23	Onions	Kg.	13.1	24.7	-0.1
24	Tomatoes	Kg.	31.2	137.3	84.8
25	Bananas	Doz.	34.9	4.6	3.2
26	Salt powdered	Kg.	4.7	9.5	0.0
27	Red chilies (powd)	Kg.	116.4	68.8	6.0
28	Garlic	Kg.	55.5	-11.9	-13.7
29	Tea packet	250g	65.1	-0.3	-7.1
30	Tea (prepared)	Cup	6.6	8.1	2.3

continued

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S.No	Items	Unit	Price May -07	Percentage change	
				YoY	Monthly
31	Cooked beef plate	Each	30.3	10.7	0.1
32	Cooked dal plate	Each	18.1	8.6	0.3
33	Cigarettes k-2	10's	8.0	12.8	0.0
34	Coarse latha	Mtr.	35.6	2.0	0.3
35	Lawn (avg.+s.qlty)	Mtr.	83.2	3.9	2.5
36	Voil printed	Mtr.	38.6	2.2	0.9
37	Shirting	Mtr.	65.9	3.9	0.7
38	Sandal gents Bata	Pair	499.0	25.1	0.0
39	Sandal ladies Bata	Pair	299.0	0.0	0.0
40	Chappal spng. Bata	Pair	99.0	11.2	0.0
41	Kerosene	Litr	39.1	0.0	0.0
42	Firewood	40kg	199.8	10.0	-0.5
43	Elec. Bulb 60-wats	Each	12.0	6.0	0.0
44	Match box	Each	0.8	20.6	0.0
45	Washing soap	Cake	8.3	5.2	1.6
46	Bath soap lifebuoy	Cake	15.0	7.3	3.4
47	Chicken (farm)	Kg.	70.6	31.5	-11.6
48	Gas chrg. All clb. Comb	D.mmbt	224.7	1.3	0.0
49	L.p.g.(cylinder 11kg.)	Each	578.8	5.6	-1.5
50	Elec.chrg.all slabs com	Bd. Unit	5.1	9.9	0.0
51	Petrol	Litr	53.8	-6.9	0.0
52	Diesel	Litr	37.9	-2.6	0.0
53	Telephone local	Call	2.3	0.0	0.0
Max:				137.3	84.8
Median				6.7	0.3
Min:				-37.2	-13.7

Table A9: Daily Labor Wages (Rs. per day)--Average of 35 Cities						
	Carpenter	Mason	Laborer	Plumber	Electrician	Average
Annual Averages						
FY03	218	225.4	107.7	219.8	216.4	197.4
FY04	224.5	237.4	114.5	225	221.9	204.6
FY05	245.8	261.4	129.5	245.5	240.3	224.5
FY06	283.2	306.0	154.7	283.2	270.1	259.4
Monthly averages						
May-06	293.4	319.9	163.6	292.7	297.7	273.5
Jun-06	299.2	329.4	165.6	297.8	302.0	278.8
Jul-06	303.9	332.7	168.9	301.7	302.0	281.8
Aug-06	306.0	334.5	170.4	305.7	303.6	284.0
Sep-06	312.4	338.2	173.7	310.1	303.7	287.6
Oct-06	313.9	340.3	176.9	310.4	303.7	289.0
Nov-06	315.0	342.2	178.4	311.8	304.8	290.4
Dec-06	318.1	347.6	180.7	315.5	306.9	293.8
Jan-07	320.2	349.0	181.5	316.3	307.9	295.0
Feb-07	324.1	354.7	182.9	319.8	308.3	298.0
Mar-07	328.4	359.7	184.9	321.5	311.7	301.2
Apr-07	330.8	364.1	186.2	323.6	313.2	303.6
May-07	331.1	365.3	188.0	321.3	313.2	303.8

Source: Federal Bureau of Statistics

Figure A1: CPI Non-food Sub-indexes' Inflation

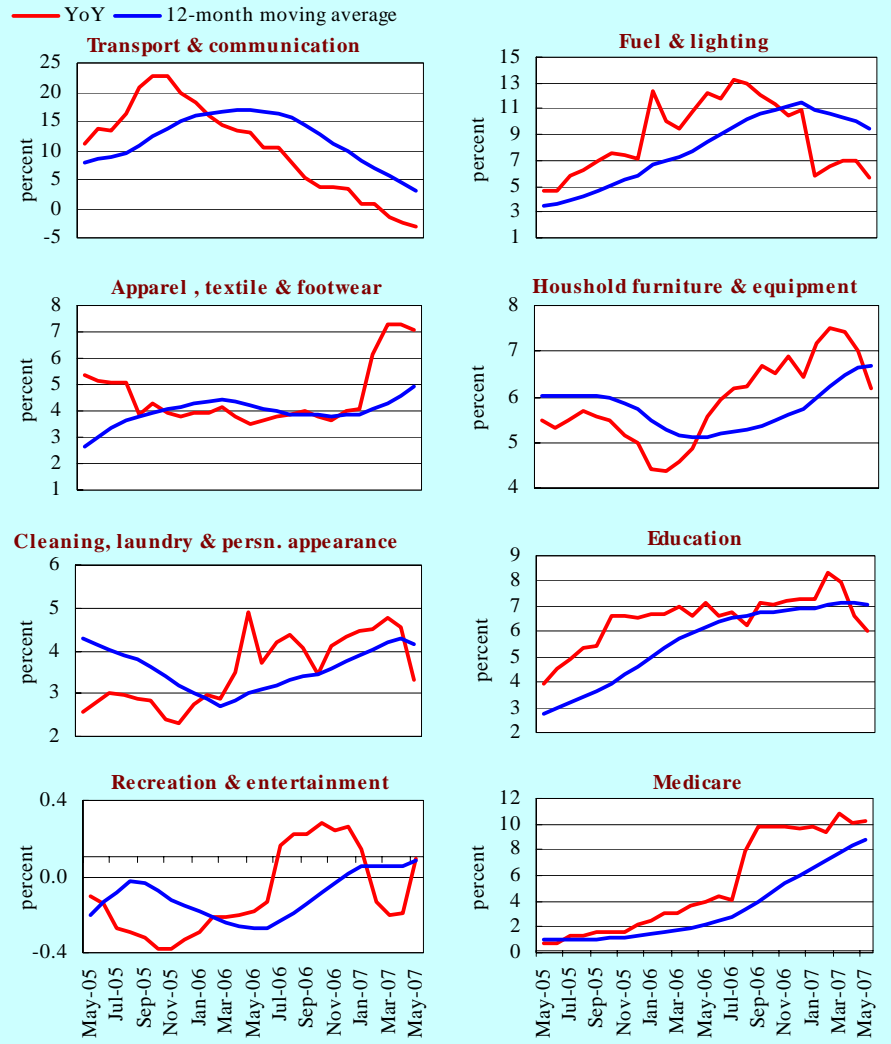


Figure A2: Frequency Distribution of Price Changes of CPI Items, May 2007

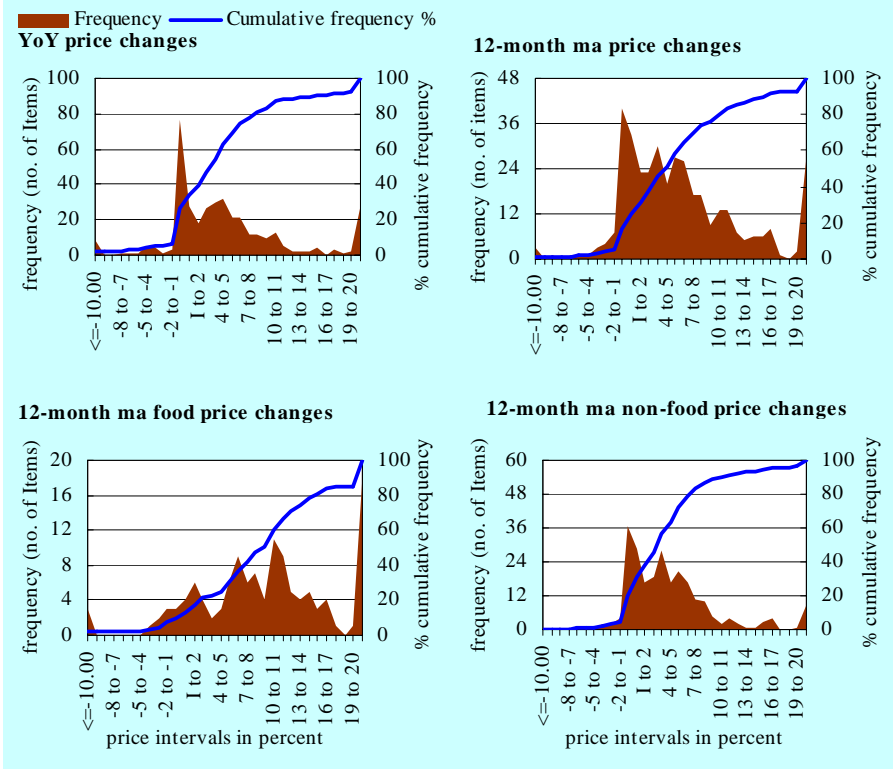
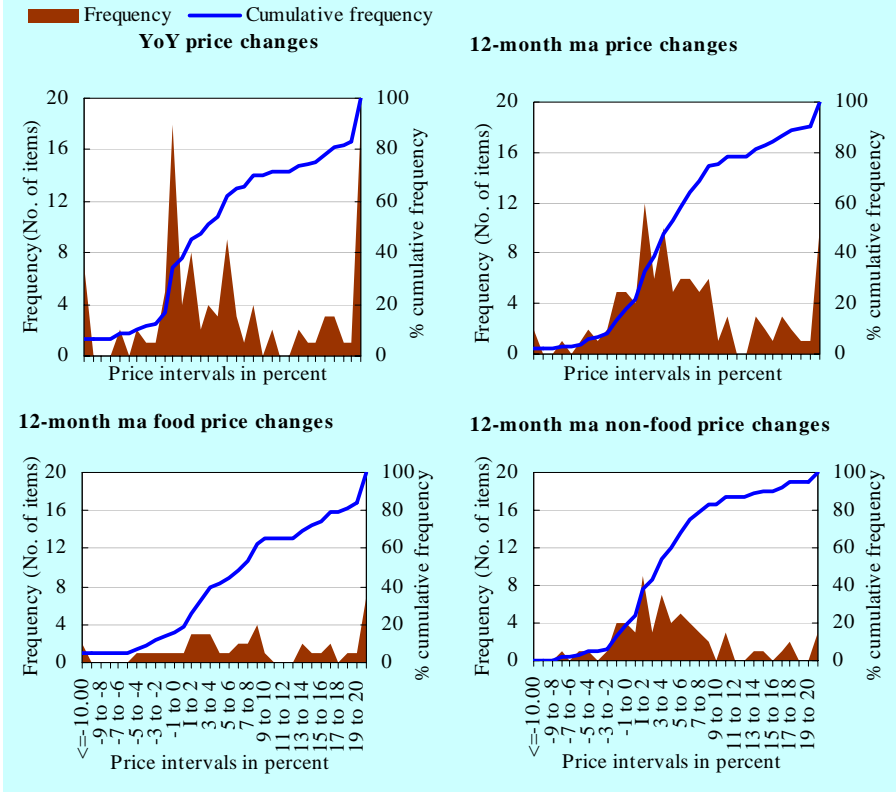


Figure A3: Frequency Distribution of Price Changes of WPI Items, May 2007



Annexure B

Technical Notes

1. All the three measures of inflation, viz. CPI, WPI and SPI are computed by the following Laspeyres Index formula:

$$I_t = \sum_j w_0^j \left(\frac{P_t^j}{P_0^j} \right)$$

where I_t is price index, w_0^j is weight of commodity j in the overall basket, P_t^j is price of commodity j in period t and P_0^j is its price in the base year.

2. Base year for all the indices is the year 2000-01.
3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities.
4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

$$\pi_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

5. Period average inflation is the percent change of the average index during the period from July to the given month of a fiscal year over the average index during the corresponding period of the last year. It is computed as follows:

$$\bar{\pi}_t = \left(\frac{\sum_{i=0}^{t-v} I_{t-i}}{\sum_{i=0}^{t-12-v} I_{t-12-i}} - 1 \right) \times 100$$

where v is the serial number of the month of July of current fiscal year in a given time series.

6. Monthly inflation is the percent change of an index in a given month over the index in the preceding month. It is computed as follows:

$$\pi_t = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

7. 12-month moving average inflation (Long-run trend inflation) is the percent change of 12-month moving average of a price index; it is computed as follows:

$$\tilde{\pi}_t = \left(\frac{\sum_{i=0}^{11} I_{t-i}}{\sum_{i=0}^{11} I_{t-12-i}} - 1 \right) \times 100$$

8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods:

a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.

b) 20% trimmed-mean inflation; it is computed through the following steps:

- i. All CPI items are arranged in ascending order according to YoY/12-month moving average/monthly/period average changes in their prices in a given month.
- ii. 20 percent of the items showing extreme changes are excluded with 10 percent of the items at the top of the list (corresponding to cumulative weight of 90% or more) and 10 percent of the items at the bottom of the list (corresponding to cumulative weight of 10 percent or less).
- iii. The weighted mean of the price changes of the rest of the items is core inflation.

9. Weighted contribution of different items (or sub-groups) to total inflation is worked out as below:

Let the overall index (I_t) is the weighted average of price indexes of individual items or sub-groups (I_{it}), i.e.

$$I_t = \sum_i w_i \cdot I_{it}$$

The weighted contribution of a single item (or a sub-group) to overall inflation is defined as below:

$$C_{it} = \alpha_{it-12} \cdot w_i \cdot \left(\frac{\pi_{it}}{\pi_t} \right)$$

Where C_{it} : Contribution of i^{th} item to the overall inflation

$$\alpha_{it-12} = \frac{I_{it-12}}{I_{t-12}}; \text{ i.e. ratio of item's index to overall index in}$$

the reference month

w_i : Weights of i^{th} item

π_{it} : Inflation of i^{th} item

π_t : Overall inflation