

Inflation Monitor

June 2007



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Overview

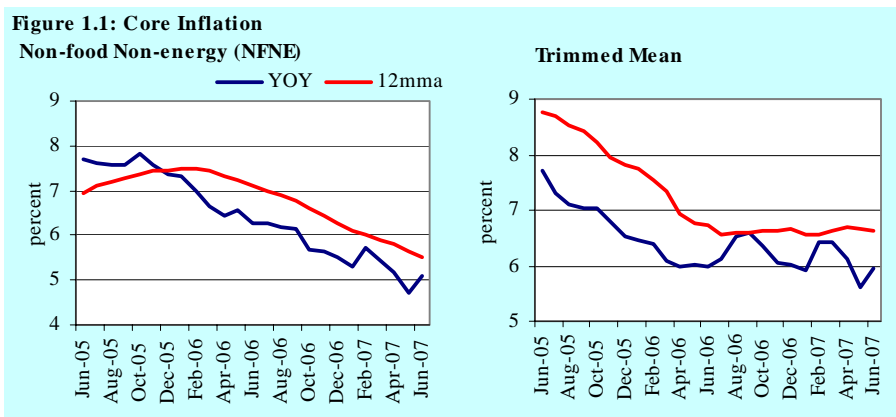
Headline CPI inflation on year-on-year (YoY) basis declined to 7 percent in June 2007 from 7.6 percent registered in the same month last year. In June 2007, food inflation rose significantly to 9.7 percent from 7.8 percent in the corresponding month of last year. This was mainly due to the rise in the prices of some key food items including vegetables, fruits, eggs, meat, different types of rice, etc., while for the same period non-food inflation declined to 5.1 percent from 7.5 percent in June 2006 (see **Table 1.1**).

	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
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
Jun-07	7.0	9.7	5.1	5.1	6.0	7.3	8.0

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

Similar to YoY CPI inflation, annual the FY07 average CPI inflation showed a marginal decline as compared to the same period last year (7.9 percent in FY06 to 7.8 percent FY07). Here too, annual FY07 food inflation depicted a rise (6.9 percent in FY06 to 10.3 percent FY07) and non-food inflation showed a decline (8.6 percent in FY06 to 6 percent FY07).

As with annual CPI, monthly CPI inflation declined to 0.2 percent, which was less than the five-year average of monthly increase in June 2007. Though, the extent of one-month decrease in food inflation was very low at -0.3 percent, it was nevertheless showed an improvement as compared to 1.2 percent inflation in June 2006 and the five-year monthly average food inflation of 0.2 percent. The monthly increase in non-food inflation was recorded at 0.6 percent as compared to 0.2 percent in June 2006, which was more than the five-year average (see **Table 1.2**).

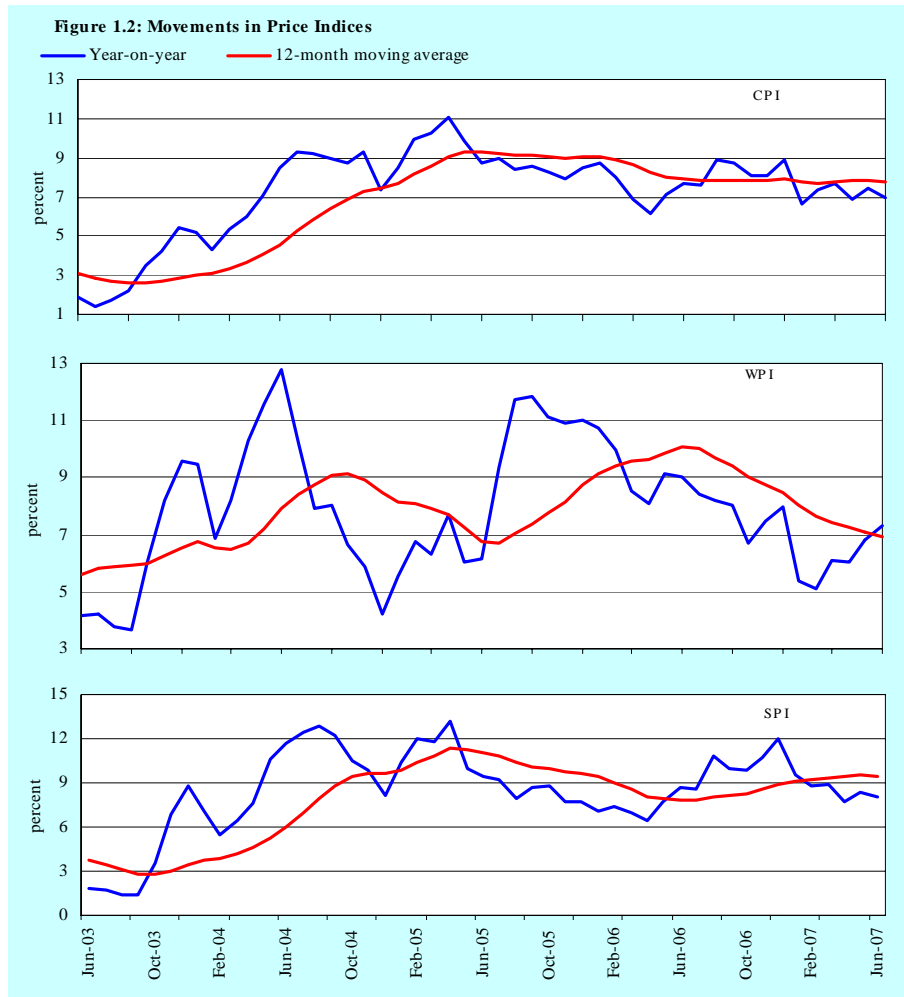


Core inflation based on NFNE (non-food non-energy) declined to 5.1 percent in June 2007 from 6.3 percent in June 2006 on YoY basis. Whereas, core inflation based on 20 percent trimmed-mean showed no change in June 2007 as compared to June 2006 remained at 6 percent (see **Figure 1.1**).

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, variability in core (trimmed-mean) inflation mirrors the volatility of the prices of a number of food items. Hence, in present circumstances, the persistent component of inflation is being

Table 1.2: Different Dimensions of Inflation (percent)

	June-05	June-06	June-07	5-year average
<i>Year-on-year (June over June)</i>				
Overall CPI	8.7	7.6	7.0	6.8
Food group	9.3	7.8	9.7	8.2
Non-food group	8.4	7.5	5.1	5.2
Core Inflation				
NFNE	7.7	6.3	5.1	5.4
Trimmed	7.7	6.0	6.0	6.7
<i>Period average (Jul-Jun over Jul-Jun)</i>				
Overall CPI	9.3	7.9	7.8	6.5
Food group	12.5	6.9	10.3	7.7
Non-food group	7.1	8.6	6.0	5.7
Core Inflation				
NFNE	7.0	7.1	5.5	5.2
Trimmed	8.8	6.7	6.6	6.6
<i>12-month moving average</i>				
Overall CPI	9.3	7.9	7.8	6.5
Food group	12.5	6.9	10.3	7.7
Non-food group	7.1	8.6	6.0	5.7
Core Inflation				
NFNE	7.0	7.1	5.5	5.2
Trimmed	8.8	6.7	6.6	6.6
<i>Monthly (June over May)</i>				
Overall CPI	0.1	0.6	0.2	0.4
Food group	-0.9	1.2	-0.3	0.2
Non-food group	0.8	0.2	0.6	0.5
Core Inflation				
NFNE	0.6	0.3	0.7	0.5
Trimmed	0.6	0.3	0.8	0.6



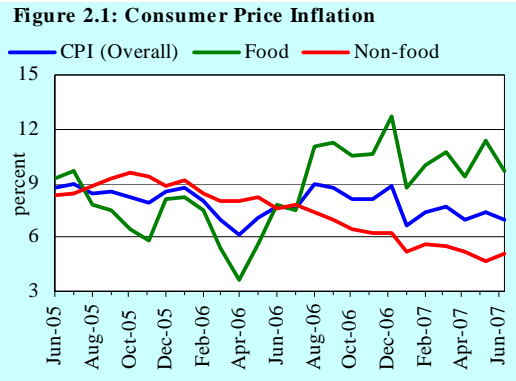
captured in a better way by the trimmed-mean definition of core inflation. The bottom line is that the declining trend in non-food inflation this year has so far been countered by the rising trend in food inflation, with the result that CPI inflation remained at a higher level than the target for FY07.

CPI inflation measured by 12-month moving average declined slightly to 7.8 percent in June 2007 from 7.9 percent a year earlier. While CPI food inflation showed an increase of 10.3 percent compared to 6.9 percent in the same month of last year, the non-food inflation trend rate declined to 6.0 percent in June 2007 from 8.6 percent in June 2006 (see **Table 1.2**).

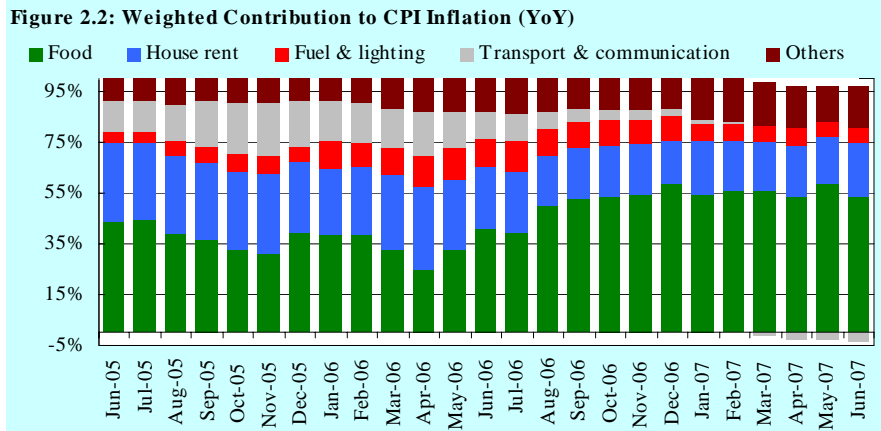
The Wholesale Price Index (WPI) inflation that remained on a rising trend during FY06, started to decline from the beginning of FY07. This decelerating trend has continued over the subsequent months of the current fiscal year (see **Figure 1.2**). WPI inflation declined to 7.3 percent in June 2007 on YoY basis from 9 percent in the corresponding month last year. This significant decline in WPI inflation was due to a sharp deceleration in non-food inflation during June 2007 compared to the corresponding month last year. Sensitive price indicator (SPI) decreased to 8 percent in June 2007 on YoY basis from 8.7 percent in the same month last year.

2. Consumer Price Inflation

In June 2007, CPI (YoY) inflation was recorded at 7 percent depicting a decline of 0.6 percentage points than that of the corresponding month last year. Whereas food inflation recorded an increase of 1.9 percentage points as compared to June 2006. Though non-food YoY inflation declined by 2.4 percentage points as compared to the same month last year, it was recorded at 5.1 percent in June 2007 (see **Figure 2.1**).



The contribution of the food group in overall inflation was 57.1 percent in June 2007 which is significantly higher than the 15 percentage points 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 24.3 percent during the corresponding month last year to 22.7 percent in June 2007 (see **Figure 2.2**).



2.1 Food Inflation

Food inflation (YoY) declined from 11.3 percent (YoY) in May 2007 to 9.7 percent (YoY) in June 2007. This significant decline is due to a decrease in prices of some vegetables, fruits and chicken, etc. On monthly basis, 40 items showed decline or no change out of 124 items, 58 items showed increase of 0 to 5 percent, 4 items showed 5 to 10 percent increase and 8 items showed above 10 percent increase.

Of the total 124 commodities included in the food group, 42 commodities including eggs, some fruits, cooking oil, different types of rice, chicken and some vegetables exhibited inflation (YoY) in the range of 10 to 80 percent in June 2007. The combined weight of commodities with double digit inflation was about 40 percent of the food group. Two commodities plum (also bukhara) (77 percent) and tomatoes (80 percent) showed significant decline in YoY inflation as compared to May 2007. These commodities crossed 100 percent inflation (YoY) in May 2007. On the other hand, inflation (YoY) of 18 commodities including key staples such as potatoes, green chilies, sugar, ginger, chicken, pulse moong, etc. 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 May 2007, during June 2007 there was an increase in the average price of food items like wheat flour, fresh milk, vegetable ghee and beef whereas prices of sugar, pulse gram, onion and chicken showed decline (see **Figure 2.4**).

Figure 2.3: CPI Food Inflation

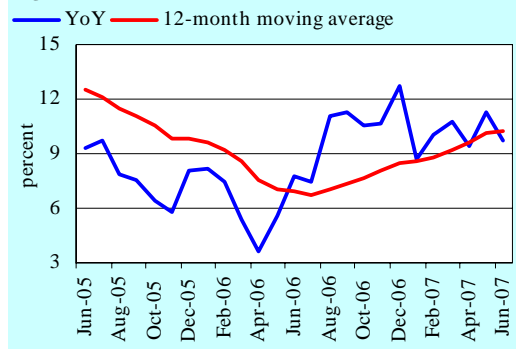
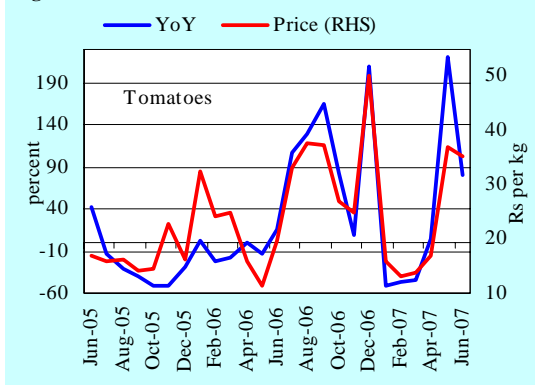
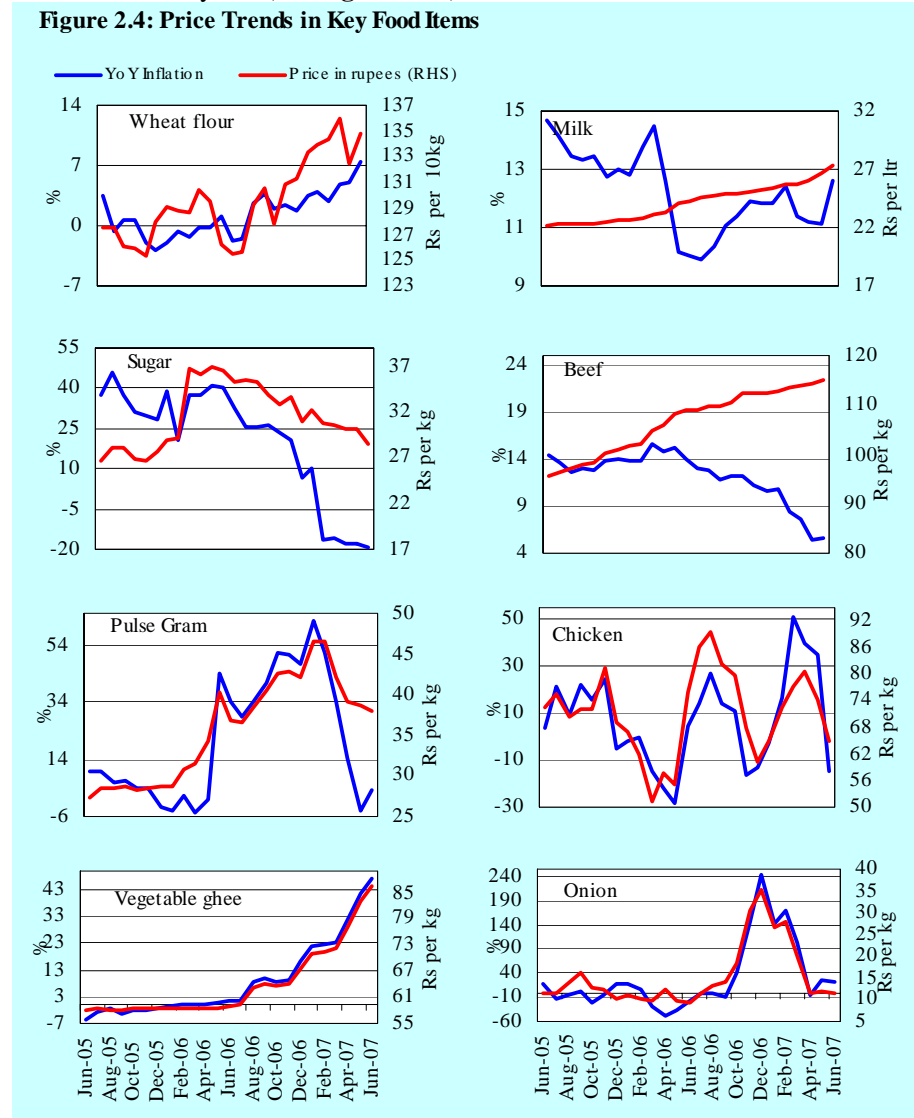


Figure 2.4a: Most volatile item CPI food



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

Figure 2.4: Price Trends in Key Food Items



In terms of percent contribution to overall inflation (YoY), vegetable ghee and fresh milk are the second and third highest contributors (house rent index of non-

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

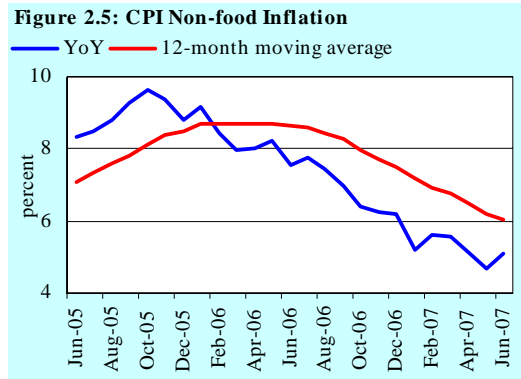
food group being the first), with 14 percent and 13 percent respective shares in overall CPI inflation (see **Table A3** in the annexure). The high contribution of vegetable ghee was due to continuous increase in its price after November 2006. On the other hand, high contribution of fresh milk was primarily due to its high weight (6.66 percent).

2.2 Non-food Inflation

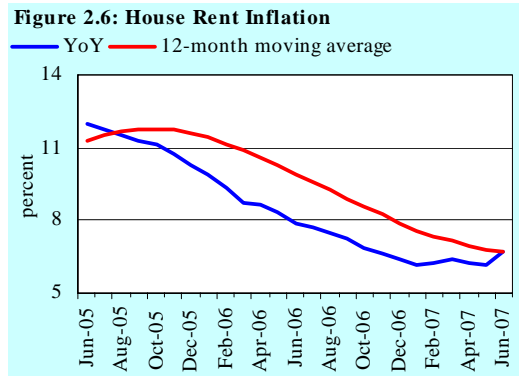
Non-food inflation increased from 4.7 percent in May 2007 to 5.1 percent in the month of June 2007 (see **Figure 2.5**).

This 0.4 percentage point increase in non-food inflation was primarily due to high inflation experienced by sub-groups including apparel, textile & footwear, house rent, fuel & lighting, education and cleaning, and laundry & personal appearance of non-

food group. Household furniture & equipment and medicare sub-groups showed decline, whereas two groups of non-food group including recreation & entertainment and transport & communication showed no change.



Inflation (YoY) in the apparel, textile & footwear sub-group was recorded at 7.25 percent in June 2007 depicting a rise of 0.21 percentage points as compared to the previous month. However, there was a rise of 3.6 percentage points as compared to the corresponding month 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 June 2006.



House rent index (HRI) was recorded at 6.73 percent in June 2007 as compared to 6.16 percent in the previous month. However, house rent index declined to 1.17

percentage points as compared to the corresponding month last year (see **Figure 2.6**).

The fuel & lighting sub-group witnessed an increase of 0.37 percentage points and was recorded at 6.07 percent in June 2007 as compared to 5.7 percent in May 2007. This increase was mainly due to the price of firewood whole which showed a rise of 1.28 percent in June 2007 as compared to May 2007. This group showed a significant decline of 5.67 percentage points as compared to the corresponding month last year.

Inflation in the household furniture & equipment sub-group decreased to 5.8 percent in June 2007 as compared to 6.2 percent in the preceding month. This decline was due to the mixed behavior of prices of commodities included in the sub-group. Inflation in transport & communication and recreation & entertainment sub-groups showed no change in June 2007 as compared to the preceding month.

Inflation (YoY) in the medicare sub-group showed a decline and was recorded at 9.9 percent in the month under review as compared to that of 10.2 percent growth in the previous month (see **Figure A1** in annexure).

Of the 250 non-food commodities included in the CPI basket, 25 commodities witnessed double digit inflation which include items like firewood, different units of electric charges, primary school fee (English medium) and doctor clinic fee, etc. There were 47 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 the city (34 percent) in June 2007 (see **Table A4** in the annexure).

2.3 City-wise Inflation

City-wise inflation data indicates that 24 cities out of 35 were found in the category of high inflation² 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 only Peshawar showed an increase in YoY inflation and was recorded

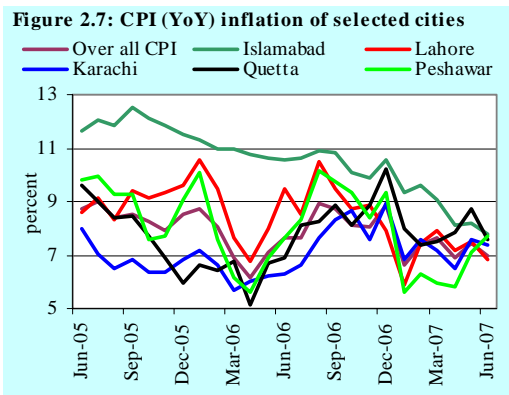


Table 2.1: City wise Inflation in CPI (YoY), June 2007

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Gujranwala	10.6	12.1	9.6	Lahore	6.9	10.5	4.2
Multan	10.2	14.0	7.5	Turbat	6.6	6.5	6.7
Mianwali	9.3	13.7	6.2	Rawalpindi	6.6	7.3	6.1
Shahdadpur	9.1	11.2	7.7	Loralai	6.5	6.5	6.5
Hyderabad	8.7	11.2	7.0	D.G. Khan	6.3	7.5	5.5
Nawabshah	8.6	10.3	7.5	Faisalabad	6.2	11.0	2.8
Bannu	8.6	8.6	8.5	Sargodha	6.0	9.1	3.8
Bahawalnagar	8.5	11.3	6.5	Okara	5.9	8.9	3.7
Mardan	8.2	10.4	6.7	Abbotabad	5.7	7.1	4.7
Vehari	8.2	9.7	7.1	D.I.Khan	4.9	7.7	3.0
Mirpur Khas	7.9	10.0	6.5	Sialkot	4.2	7.2	2.0
Jhang	7.9	11.1	5.7				
Islamabad	7.8	9.3	6.8				
Khuzdar	7.7	8.5	7.2				
Sukkur	7.7	8.8	6.9				
Peshawar	7.7	11.4	5.1				
Bahawalpur	7.7	11.0	5.2				
Attock	7.6	10.5	5.7				
Quetta	7.6	12.1	4.4				
Karachi	7.4	11.5	4.6				
Jhelum	7.3	7.7	7.1				
Larkana	7.2	9.4	5.6				
Kunri	7.2	9.2	5.7				
Samundari	7.1	9.8	5.3				

² High inflation refers to above average inflation, and low inflation refers to below average inflation

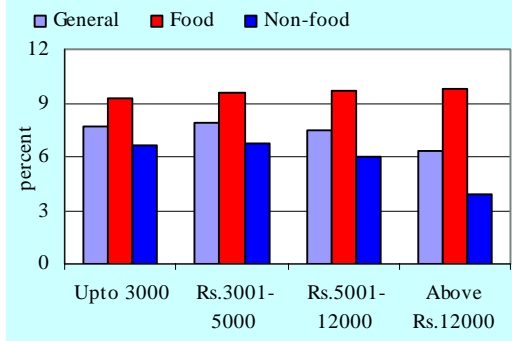
at 7.7 percent in June 2007. Whereas Islamabad, Lahore, Karachi and Quetta showed a decline in YoY inflation and were recorded (YoY) at 7.8, 6.9, 7.4 and 7.6 percent in June 2007 as compared to 8.2, 7.5, 7.6 and 8.7 percent in May 2007 respectively. Last month Islamabad, Quetta, Karachi and Lahore were among the higher inflation cities whereas in the current month Peshawar has also been added to the high inflation cities category. On the other hand Lahore has joined the category of low inflation cities. (see **Figure 2.7**).

Gujranwala maintained its position as the highest inflation city among all the 35 cities with CPI inflation (YoY) at 10.6 percent. Multan, Mianwali and Shahdadpur were in 2nd, 3rd and 4th positions among all the cities with CPI inflation (YoY) at 10.2, 9.3 and 9.1 percent respectively. During the month under review Sialkot was the lowest inflation city (see **Table 2.1**).

2.4 Income Group-wise Inflation

Inflation recorded for all income groups showed a decline in their CPI inflation (YoY) mainly due to a decline in food inflation while non-food inflation depicted a rising 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 June 07

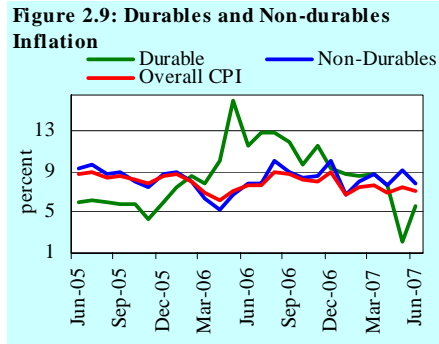
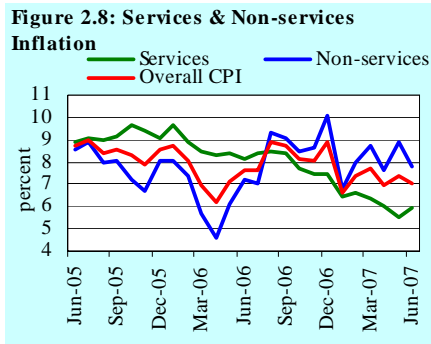


As in the previous month, the highest CPI inflation (YoY) was recorded for the income group of Rs. 3001-5000 followed by the lowest income group of up to Rs.3000 while the highest income group of above Rs.12000 experienced the lowest³ inflation. City-wise data shows that Sialkot was at the lowest level for all income groups. Multan and Gujranwala occupied the position of the highest level for income groups upto 3000 and Rs. 3001-5000 and Rs. 5001-12000 and above Rs. 12000 respectively (see **Table A5** in annexure A).

³ The highest food inflation was recorded for the highest income group.

2.5 Services and Non-services Inflation

Inflation in the services⁴ sector showed an increase whereas in the non-services sector a decline was recorded in June 2007. During the current month inflation (YoY) in services was recorded at 5.9 percent as compared to 5.5 percent in the previous month. Inflation of the non-services sector was 7.8 percent in June 2007 as compared to 8.9 percent in the previous month (see **Figure 2.8**).



Within the non-services sector, inflation in durable⁵ items increased and was recorded at 5.6 percent in June 2007 as compared to 2.1 percent in May 2007. This significant increase is due to the increase in prices of jewelry. Jewelry has the highest weight among durable items, the YoY inflation in jewelry was recorded at 8.82 percent in June 2007 as compared to -0.78 percent in May 2007. Whereas inflation in non-durable goods declined to 7.9 percent in June 2007 from 9.1 percent of May 2007 (see **Figure 2.9**).

⁴ The services group of the 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.

⁵ 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.

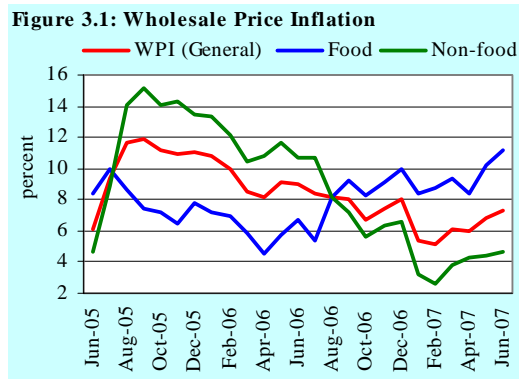
3. Wholesale Price Inflation

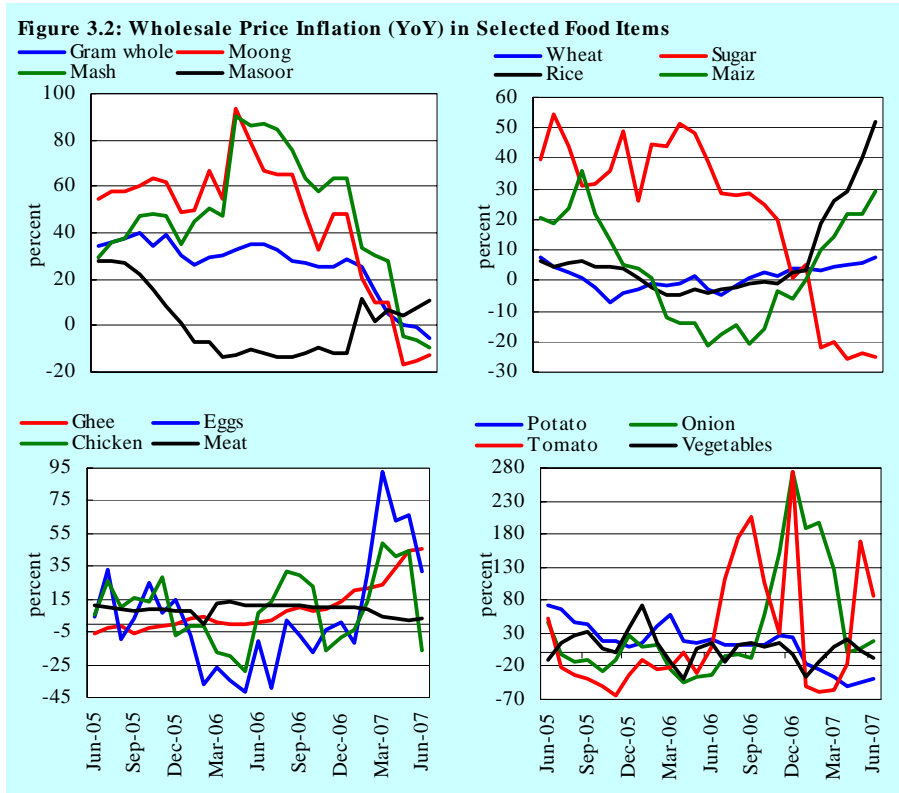
Unlike CPI inflation, WPI inflation (YoY) accelerated in June 2007 compared to the previous month and rose significantly to 7.3 percent from 6.8 percent. Both the food as well as non-food group contributed to the rise in WPI inflation. The rate of change in wholesale prices of food group increased further to 11.2 percent (YoY) in June 2007 which is the highest in the last 26 months.

The non-food group WPI inflation also witnessed a (YoY) increase and stood at 4.6 percent as compared to 4.4 percent in May 2007 (see **Figure 3.1**). All sub-groups of the non-food group in WPI showed higher (YoY) inflation in June 2007 as compared to the previous month except for raw material and thus contributed in the acceleration of non-food inflation. However, the long-run trend of WPI inflation measured by 12-month moving average continued its decelerating trend throughout FY07.

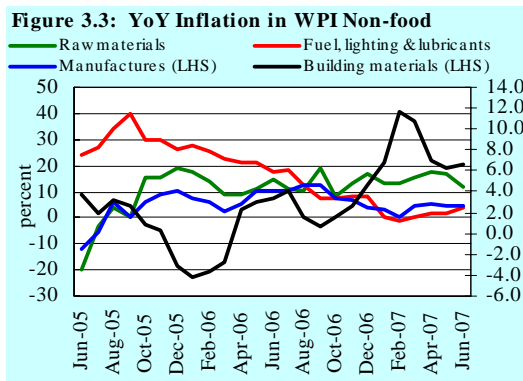
In the food group, wholesale price of tomatoes witnessed a sharp YoY rise of 87 percent in June 2007. The commodity wise break-up of WPI food inflation exhibits that tomatoes, rice, onion, vegetable ghee, fruits, eggs, etc. showed a significant increase of more than 10 percent in their prices due to short supply on account of heavy rains. Particularly the prices of tomatoes and rice registered a YoY increase of more than 50 percent during the month under review (see **Figure 3.2**).

A distribution of price change suggests that 16 out of 43 food items witnessed a rise of more than 10 percent in inflation during the month under review. While 7 items recorded moderate inflation of 5 to 10 percent, the other 5 items showed subdued inflation of up to 5 percent. The wholesale prices of the remaining 15 food items declined or remained stable. In case of non-food group, prices of 19 items revealed a positive change of up to 5 percent, 22 items showed a decrease or no change, 16 items demonstrated double digit rise of above 10 percent and the remaining 6 items displayed a moderate inflation, i.e. 5 to 10 percent (see **Table A7** in Annexure A).

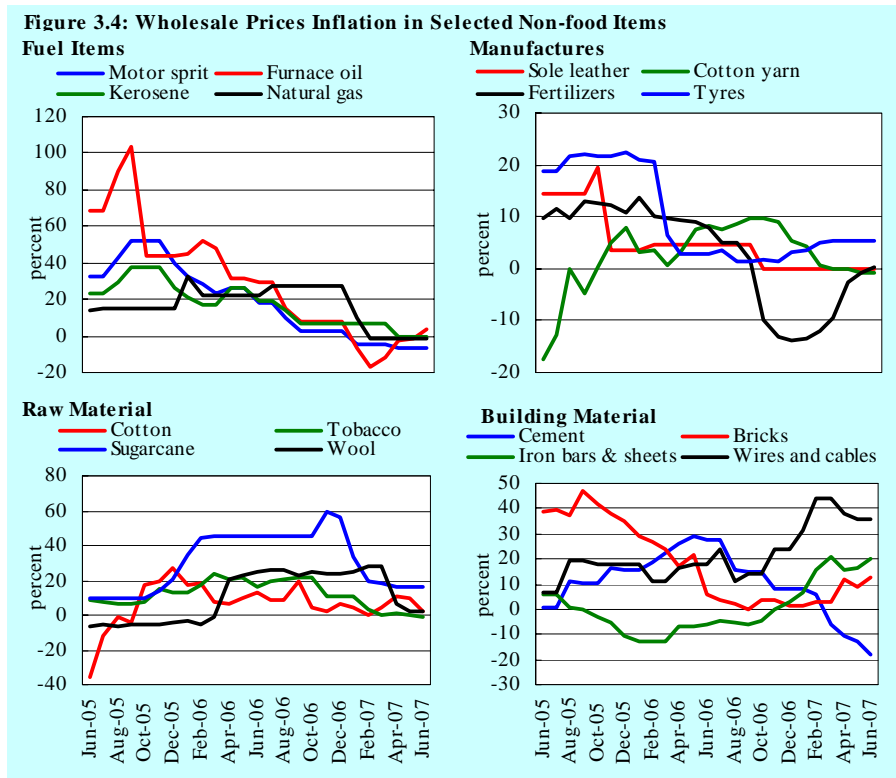




As discussed earlier, all sub-groups of the non-food group of WPI inflation showed higher YoY inflation except for raw materials in June 2007 (see **Figure 3.3**). The YoY inflation in the prices of *raw materials* was recorded at 11.7 percent in June 2007 as compared to 17.1 percent in June 2006 and 14.6 percent in May 2007, which is a significant decline in terms of both YoY and monthly basis. By analyzing the individual commodities belonging to the *raw material* sub group, it was observed that all items included in this subgroup showed a positive (YoY) growth except for tobacco. The wholesale price of pig iron, hides, sugar cane and cotton seed exhibited higher YoY inflation as compared to the



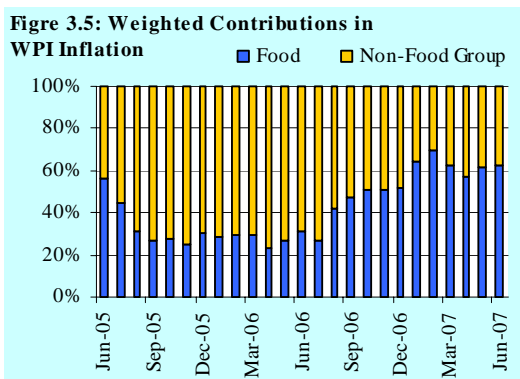
previous month inflation. On the other hand tobacco showed a decline of 1.2 percent in (YoY) inflation.



The *fuel, lightning & lubricants* sub-group continued to show higher YoY inflation for the fourth consecutive month in June 2007 mainly on account of strong growth in the wholesale prices of mobil oil. It is also important to note that 5 out of 11 items in this sub-group witnessed double digit YoY growth.

The *manufactures* sub-group depicted a slightly higher YoY inflation of 2.7 percent in June 2007 as compared to 2.6 percent YoY inflation recorded in the previous month. In this sub-group, chemicals and footwear showed double digit growth. The building material sub-group depicted a higher (YoY) growth of 6.7 percent in June 2007 as compared to the 6.3 percent of last month. This was mainly due to the strong growth in the wholesale prices of bricks, iron bars & sheets and, wires and cables that muted the significant YoY decline in cement prices in June 2007 (see **Figure 3.4**).

The weighted contribution of the food group in WPI inflation increased further in June 2007 recorded a contribution of above 60 percent in WPI inflation. This change in the contributions was the result of higher WPI food inflation in June 2007. The contribution of the non-food group declined to 37.2 percent in June 2007 from 38.1 percent in May 2007. The rise in the weighted contribution of food inflation in WPI is mainly because of a sharp growth in the prices of some key food staples (see **Figure 3.5**).



Within the non-food group, the contribution of its sub-groups showed mixed trends. The contribution in inflation of the *raw material* sub-group in non-food inflation significantly came down to 31.4 percent in June 2007 compared to 46.9 percent in May 2007. On the other hand, the contribution of *fuel, lighting & lubricant* inflation in non-food group inflation significantly increased to 34.9 percent in June 2007 compared to 18.9 percent in May 2007; however it is still low compared to 68.5 percent at the start of FY07 (see **Table 3.1**).

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

	Jul	Dec	May	Jun
Raw materials	12.9	30.5	46.9	31.4
Fuel, lighting & lubricants	68.5	49.9	18.9	34.9
Manufactures	15.1	13.7	22.0	21.4
Building materials	3.5	5.9	12.0	12.1

4. Global Commodity Prices

In June 2007, commodity prices in the international markets generally firmed up compared to the preceding month despite a decline in the prices of most of the metals' prices including nickel, zinc and aluminum. This higher growth in the international market was mainly driven by items under the energy and food groups. Energy prices represented by the IMF and the World Bank energy indices along with the crude oil and coal prices depicted a significant rise in June 2007. In the food group, prices of all major staple items including rice, wheat, sugar, palm and soybean oil also remained strong in the international market (see **Table 4.1**).

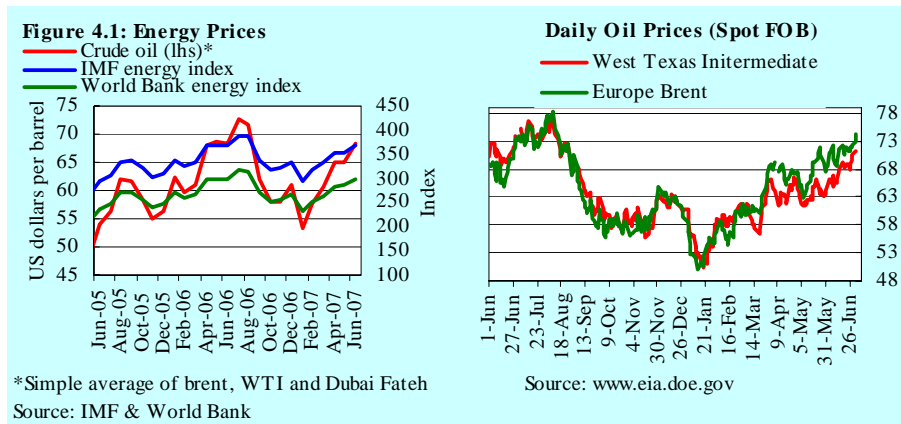
Table 4.1: International Commodity Prices/Indices							
	Jul 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07
Energy							
Crude Oil (US\$ per barrel)	72.5	53.4	57.6	60.6	65.1	65.1	68.2
IMF Energy Index	389.5	295.4	317.3	332.0	353.0	352.8	368.4
WB Energy Index	316.7	233.9	251.6	264.9	284.4	284.8	298.0
Coal	56.5	55.0	56.7	59.2	60.1	56.0	60.4
Food							
Rice	312.4	313.5	316.1	326.2	322.0	320.6	326.3
Wheat	202.4	196.1	200.0	199.1	198.3	195.7	223.0
Sugar	15.9	10.9	10.6	10.4	9.6	9.1	9.3
Palm Oil	404.0	550.8	553.8	566.4	645.4	740.6	748.4
Soybean Oil	586.8	635.6	664.9	679.5	714.1	756.1	782.9
Sunflower Oil	673.0	673.0	673.0	673.0	673.0	673.0	673.0
Non-Food Non-Energy							
Cotton Outlook 'A' Index	56.7	59.1	57.9	58.4	57.2	55.6	60.4
WB Steel Products Index	135.8	131.4	132.0	132.5	133.3	133.5	133.5
DAP	261.3	267.6	345.4	420.5	432.4	426.4	434.5
Urea	202.3	269.8	304.3	318.0	288.5	296.3	289.0

Note: Prices for all commodities are in US\$ per metric tonne except for crude oil.
Source: IMF and World Bank.

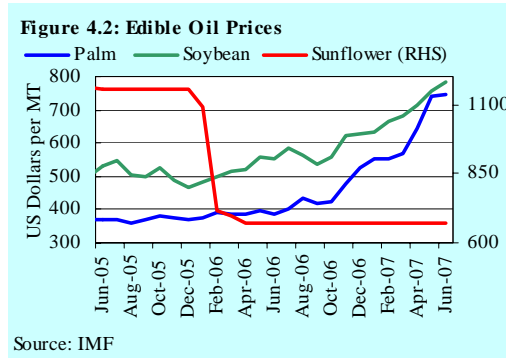
During June 2007, oil prices⁶ increased significantly and stood at US\$ 68.2 per barrel – the highest in ten months. This strong crude oil price was mainly due to the unrest in Nigeria (the major oil producer) and declining stocks in USA as discussed earlier. However on YoY basis, crude oil prices declined slightly by 0.1 percent. The average monthly price of crude oil in the international market remained between the minimum range of US\$ 66.9 per barrel and the maximum range of US\$ 71.3 per barrel. The volatility in international crude oil prices – measured by the standard deviation (SD) – remained lower during the month under review and was recorded at 1.4 as compared to 1.9 of the preceding month.

⁶ Crude Oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh, US\$ per barrel.

In accordance with the international oil prices, the IMF and the World Bank energy indices⁷ for June 2007 exhibited an increase over the preceding month (see **Figure 4.1**).



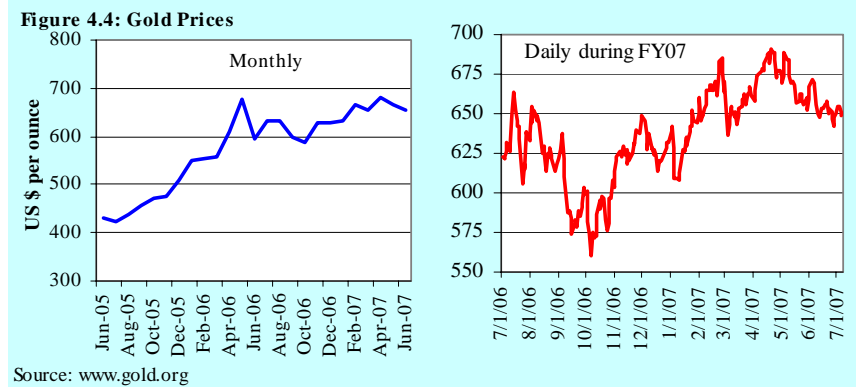
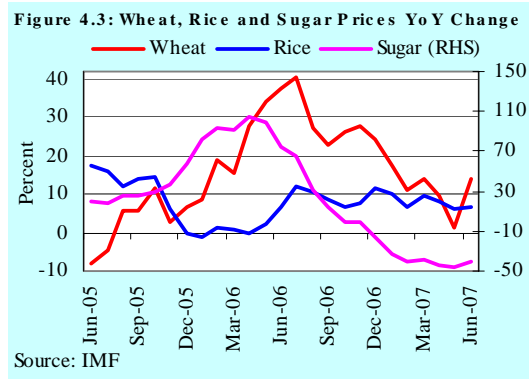
Like the previous months, the wholesale prices of palm oil in the international market showed a sharp rise in June 2007 as compared to the corresponding month last year. This was mainly because of a strong global demand for bio- diesel and slow production in Malaysia.⁸ The (YoY) growth in palm oil was recorded at 93.8 percent. On the other hand the (YoY) growth of soybean oil increased to 42.3 percent in the month under review (see **Figure 4.2**). The price of sunflower has remained constant since April 2006.



⁷ Average of West Texas Intermediate (WTI) and Europe Brent daily crude oil price

⁸ Source: World Bank Commodity Market Review July 10, 2007.

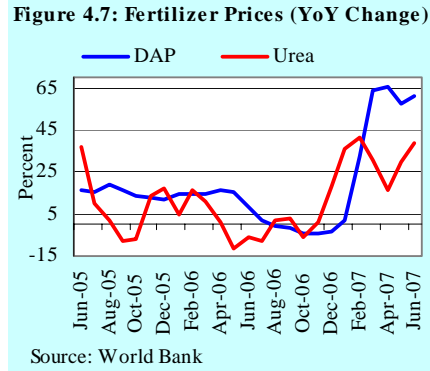
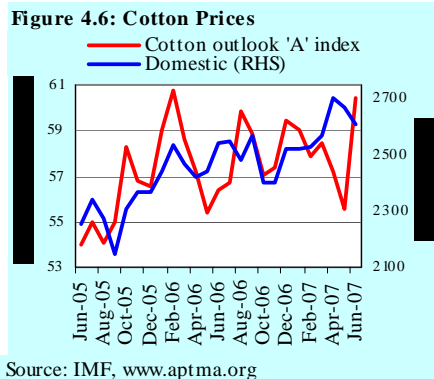
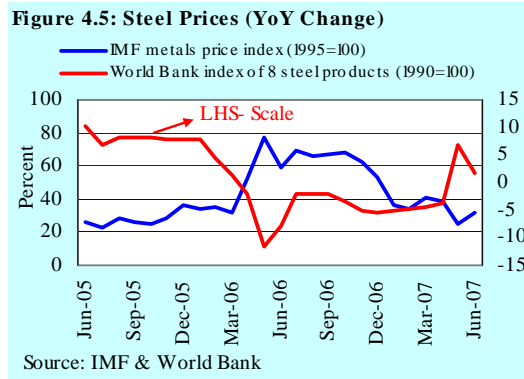
In June 2007, inflation in wheat prices on YoY basis was recorded at 14.3 percent and on monthly basis at 14 percent. This was mainly due to poor crop prospects in the EU and Black Sea region due to dry conditions.⁹ The price of rice in the international market continued to show strength and remained on historically high levels due to strong global demand. However, the average monthly sugar price increased slightly after continuously declining for the last eight months in June 2007 (see **Figure 4.3**).



The price of gold in the international market showed a YoY inflation of 10 percent, after recording a negative growth in the previous month. However average monthly gold price showed a decline of 1.7 percent over the previous month. During June 2007, daily gold price in the international market remained lower and fluctuated between a wider range of US\$ 642.1 per ounce and US\$ 671.5 per ounce. The variation in gold prices remained lower during the month showing a standard deviation (SD) of 8.7 around mean of US\$ 655.7 per ounce as compared to the SD of 10.2 around mean of US\$ 666 per ounce a month earlier (see **Figure 4.4**).

⁹ Source: World Bank Commodity Market Review July 10, 2007

Growth in zinc exhibited a significant rise of 11.7 percent in June 2007 as compared to the same month last year. The prices of major metals generally increased as compared to the previous month. The rising trend in metal prices is also reflected by the IMF metal price index which rose by 32 percent during June 2007 as compared to the corresponding month last year. However, the World Bank index of 8 steel products showed an increase of 1.8 percent in June 2007 which is lower as compared to 6.7 percent growth recorded in the previous month (see **Figure 4.5**).



In the international markets, cotton prices – represented by cotton outlook ‘A’ index¹⁰ - remained high in June 2007 and registered an increase of 7.1 percent over the corresponding month last year. Similarly cotton prices increased by 8.8 percent in June 2007 as compared to May 2007. However, domestic cotton prices exhibited a deceleration in growth and recorded YoY growth of 2.7 percent in June 2007 as compared to 9.3 percent YoY growth in May 2007 (see **Figure 4.6**).

Fertilizer prices in the international market registered a significant rise during June 2007. The prices of DAP¹¹ and urea showed a steep YoY growth in the month under review. The (YoY) increase in DAP was recorded as high as 61.4 percent as

¹⁰ Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, average of cheapest 5 of 15 styles traded in Northern Europe, c.i.f.

¹¹ DAP: Diammonium Phosphate

compared to 8.7 percent in the same month last year. The price level of urea also increased sharply and registered a YoY growth of 38.8 percent which is significantly higher as compared to negative YoY growth recorded in the same month last year (see **Figure 4.7**).

5. Sensitive Price Indicator

The YoY inflation under sensitive price indicator (SPI) declined and was recorded at 8 percent, which is lower than 8.3 percent inflation recorded in the previous month. This 8 percent YoY inflation is also lower than the 8.7 percent inflation recorded in the corresponding month last year. Similarly the long-run trend

Figure 5.1: SPI Inflation (YoY)

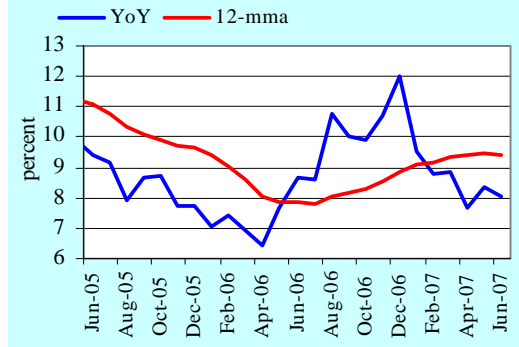
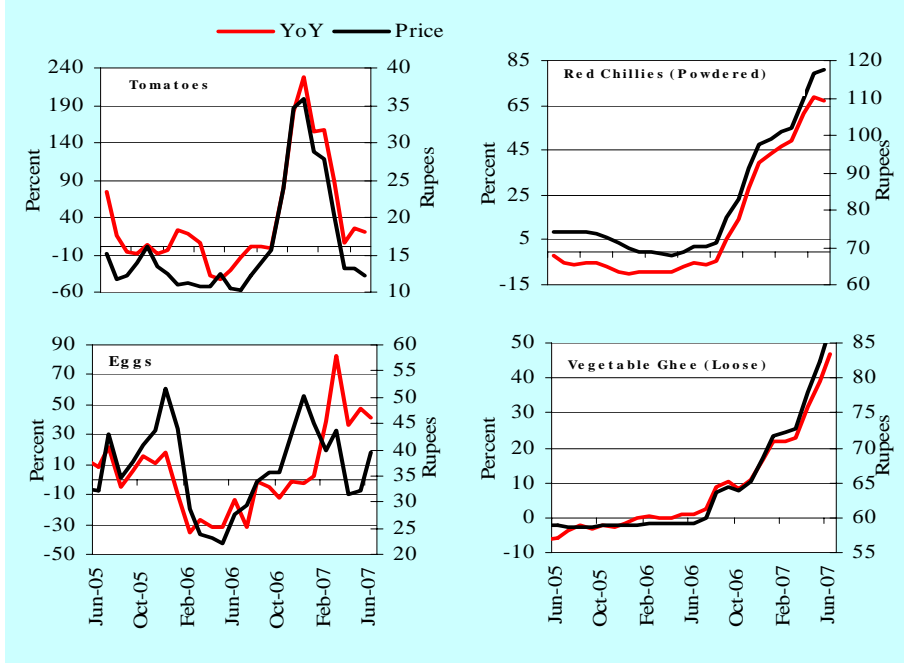


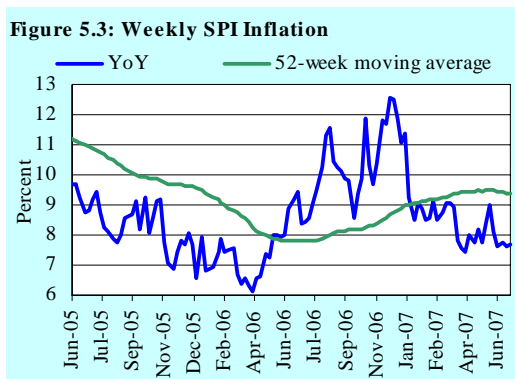
Figure 5.2: SPI Inflation (YoY) in selected Items



indicated by the 12-month moving average showed a slight decline in the month under review: 9.4 percent as compared to 9.5 percent in the previous month (see **Figure 5.1**).

The major items contributing to SPI inflation were tomatoes, rice, eggs, vegetable ghee and red chilies (see **Figure 5.2**). 22 items in the SPI basket recorded YoY inflation more than the average level of 8 percent during June 2007. The remaining 31 items recorded YoY inflation less than the average level, with 10 items including sugar, potatoes, pulses, gur, garlic and petrol showing negative growth.

Compared to the prices of the previous month, almost 40 percent items included in the SPI basket witnessed decrease or no change in their price level. On the other hand three items viz. potatoes, rice basmati and eggs showed double digit growth in inflation compared with the previous month (see **Table A8** in Annexure A).



Weekly SPI generally showed a declining trend in inflation during the month

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
Jun-07	9.7	9.6	8.9	6.2	8.0

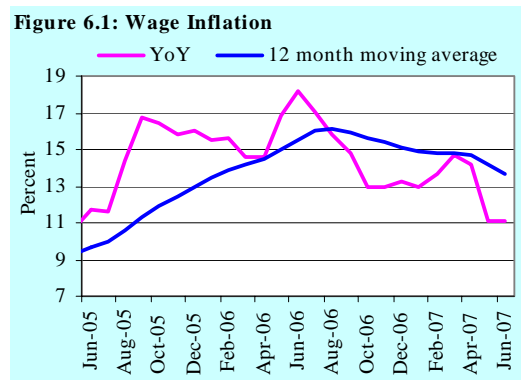
under review and fluctuated between the narrow range of 7.6 percent and 8.1 percent. Thus, after recording 9 percent weekly YoY SPI inflation in the last week of May 2007, inflation came down to 7.7 percent by the end of the month under review. After continuously increasing since August 2006, the long-run trend

indicated by the 52-week moving average also showed a slight decrease in inflation in the month under review (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 sixth consecutive month in June 2007 (see **Table 5.1**). This is because most of the items showing high inflation are from the food group and are thus more significant for the lowest income group as compared to other income groups. Moreover, as compared to the previous month, income group-wise SPI inflation reveals that inflation has increased for the lowest two income groups and inflation has decreased for the highest two groups.

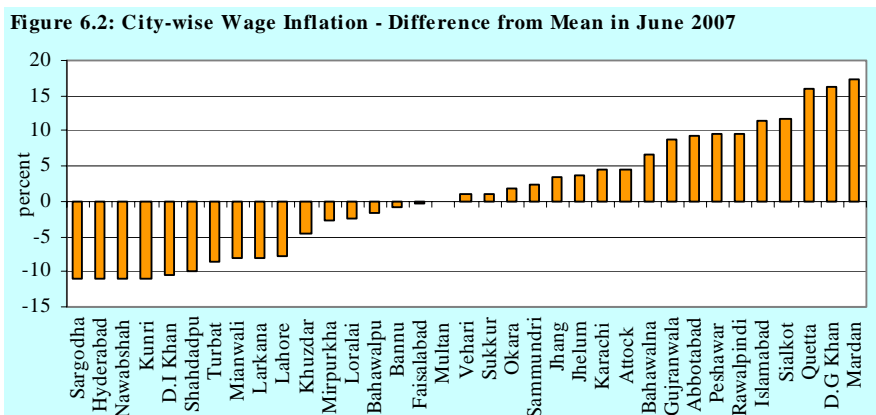
6. Wage Inflation in the Construction Sector

Wage inflation remained stable at 11.1 percent on YoY basis in June 2006 after continuously decreasing since March 2007. This inflation is lower as compared to 18.2 percent YoY inflation recorded during the same month last year. The YoY wage inflation of skilled workers declined in June 2007 as compared to the previous month due to YoY decline in inflation of all kinds of skilled workers except plumber. On the other hand YoY wage inflation of unskilled workers showed an increase of 15.6 percent on YoY basis, higher than the 14.9 percent inflation recorded in the previous month. The long-run trend of nominal wage inflation measured by the 12-month moving average also came down due to generally declining nominal wage inflation during the last 12 months (see **Figure 6.1** and **Table 6.1**).



	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07
Overall	14.8	13.0	13.0	13.3	12.9	13.7	14.6	14.2	11.1	11.1
Skilled:	14.6	12.6	12.5	12.9	12.5	13.3	14.3	13.8	10.5	10.4
Carpenter	13.3	11.8	11.9	12.1	12.4	12.8	14.6	13.7	12.8	11.9
Mason	15.2	12.6	12.5	12.6	12.1	13.9	15.2	16.0	14.2	13.5
Plumber	12.1	10.7	10.8	11.7	10.6	11.3	11.7	11.2	9.8	10.9
Electrician	17.8	15.1	14.8	15.0	14.9	15.1	15.6	14.1	5.2	5.3
Unskilled:	16.4	16.2	16.6	16.8	16.3	17.1	17.3	16.8	14.9	15.6
Laborer	16.4	16.2	16.6	16.8	16.3	17.1	17.3	16.8	14.9	15.6

The month-wise average wages of all types of workers increased by 11.1 percent during June 2007 over the corresponding month of last year and remained within the range of Rs 221.9 and Rs 443.8 per day (see **Table A9** in Annexure 'A'). Figure 6.2 presents the picture of city-wise deviation in wages from mean during the month of June 2007. Out of 35 cities, 18 cities recorded higher than average wage inflation and the remaining 17 cities witnessed lower than average inflation. The highest wage inflation was observed in Mardan followed by D.G Khan and Quetta whereas Sargodha, Hyderabad, Nawabshah, Kunri etc., showed the lowest YoY changes in wages during the month under review.



Annexure A

	Weights	Jun-03	Jun-04	Jun-05	Jun-06	Jun-07
I. Food Group	40.3	0.9	13.4	9.3	7.8	9.7
II. Non-Food Group	59.7	2.6	5.3	8.4	7.5	5.1
Apparel, textile, etc.	6.1	4.3	1.0	5.1	3.6	7.2
House rent	23.4	1.2	8.2	12.0	7.9	6.7
Fuel & lighting	7.3	4.7	1.8	4.6	11.7	6.1
Household furniture & equip.	3.3	3.1	5.4	5.3	6.0	5.8
Transport & com.	7.3	2.0	7.4	13.6	10.4	-3.1
Recreation & entertainment	0.8	0.4	-1.0	-0.1	-0.1	0.1
Education	3.5	4.9	2.4	4.5	6.6	6.4
Cleaning, laundry, etc.	5.9	4.3	4.3	2.8	3.7	4.7
Medicines	2.1	-0.8	1.8	0.8	4.4	9.9
Headline	100	1.9	8.5	8.7	7.6	7.0

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	9.7	110	18	21	29	42
II. Non-Food Group	5.1	250	71	107	47	25
Apparel, textile, etc.	7.2	42	2	22	14	4
House rent	6.7	1			1	
Fuel & lighting	6.1	15	5	4	1	5
Household furniture & equip.	5.8	44	1	28	14	1
Transport & com.	-3.1	43	23	12	4	4
Recreation & entertainment	0.1	16	11	2	1	2
Education	6.4	24	7	11	1	5
Cleaning, laundry, etc.	4.7	36	2	20	11	3
Medicines	9.9	29	20	8		1
Overall	7.0	360	89	128	76	67

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

Table A3: Top Ten Contribution to YoY CPI Inflation in June 2007					
Items	weights	YoY change		Weighted Contribution	
		June-06	June-07		
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	7.90	6.73	22.68
2	Fresh Fruits	2.67	0.38	38.24	14.02
3	Vegetable Ghee	6.66	9.98	12.72	12.90
4	Milk Fresh	1.34	0.56	48.54	8.52
5	Tomatoes	1.62	(1.51)	24.21	5.74
6	Rice	4.37	-	10.07	5.03
7	Electricity	0.50	15.19	80.03	4.82
8	Chicken Farm	5.11	(1.03)	6.76	4.77
9	Meat	2.70	13.62	6.29	3.67
10	Wheat Flour	1.53	2.48	17.95	3.13
Total		49.92			85.27
B. Ranked by Percentage Change					
1	Tomatoes	0.50	15.19	80.03	4.82
2	Fresh Fruits	1.34	0.56	48.54	8.52
3	Rice	2.67	0.38	38.24	14.02
4	Chicken Farm	0.05	2.44	28.65	0.17
5	Eggs	0.69	(0.67)	27.54	2.54
6	Vegetable Ghee	0.41	(8.65)	25.79	1.22
7	Mustard Oil	1.62	(1.51)	24.21	5.74
8	Cooking Oil	0.11	5.31	22.41	0.34
9	Onions	0.64	(18.36)	20.07	1.26
10	Doctor's Fee	0.60	1.52	19.06	1.27
Total		8.61			39.90
C. Ranked by Weights					
1	House Rent Index	23.43	7.90	6.73	22.68
2	Milk Fresh	6.66	9.98	12.72	12.90
3	Wheat Flour	5.11	(1.03)	6.76	4.77
4	Electricity	4.37	-	10.07	5.03
5	Bakery & Confectionary	2.98	4.01	1.82	0.66
6	Meat	2.70	13.62	6.29	3.67
7	Vegetable Ghee	2.67	0.38	38.24	14.02
8	Tution Fees	2.36	7.21	7.96	2.64
9	Transport Fare/Charges	2.12	9.99	1.91	0.72
10	Natural Gas	2.05	25.82	1.30	0.57
Total		54.45			67.65
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 percent in June 2007.					

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

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Sugar Refined			
	Chicken Farm Broiler (Live)	Wheat Flour Fine/Superior.	Wheat Flour Bag Beef With Bone Av.Qlty.	Milk Fresh (Unboiled) Vegetable Ghee (Loose)
	Potatoes	Tea Loose Kenya		Cooking Oil (Dalda)
	Pulse Moong (Washed)	Av.Qlty 250G	Mutton Av.Qlty.	Tomatoes
	Chillies Green	Pulse Gram	Wheat	Eggs Farm
	Lady Finger	Bananas	Fish-Rahu Medium Size	Apple
		Biscuits-Packed	Cigarettes Capstan 10'S	Rice Basmati 385/386
Apparel & Textile		Lawn Av.Qlty.	Tailoring Shirt	Nylon Jogger 27 Size 2-
	Gents Shoes Paul Bata	Long Cloth Av.Qlty.	Tailoring Awami-Suit (Male)	5, Child Shoe Power
	Ladies Sandal Bata	Shirting Av.Qlty.	Tailoring Suit Female	Lite Bata, Gents Spoung Chappal Bata
House Rent Index			House rent index	
Fuel & Lighting	Kerosene Oil	Gas Chrg10.1157 - 13.4876Mmb		Elect. Charges Above 1000 Units, Elect.
	Match Box Small	Gas Charges Upto 3.3719 Mmbtu, Gas Cylinder Stand. Size	Bulb Philips 100-Watts	Charges 301 - 1000 Units, Elect. Charges 101 - 300 Units
	Tube Light Philips 40 Watts			
H/hold Furniture		Quilt (Lihaf) 3 Kg. Cotton, Tea Set Pak. Chinaware 21 Pc	Household Servant Female P/T	
	Sewing Machine(Singer)	Bedsheet Single Bed Sup.Qlty	Washing Machine Singer, Pedestal Fan 22" Super Qlty	Airconditioner 1.5 Ton Pel
Transport & Comm.		Car Service Charges Tyre Car With Tube General	Cng Filling Charges Bicycle With Tyres & Tubes	Taxi 4 Seater Fare Air Fare Economy Class.
	Petrol Super, Tel Charges Out Side City	Auto Rickshaw Fares Minibus Fare	Motor Cycle Service Charges Tyre Cycle Specify Brand Nam	Aerogram For Saudi Arabia Tyre Motor Cycle Without Tub
	Telephone Charges, Local Call, Bus Fare Outside City	Min.With In Cit		
Recreation & Entertainment	Tv.Licence, Feedomestic	Radio With C.Player National		Dry Cell 1.5 Volt(Local)
	Daily "Jang", Video Game Sega 16 Byte	Cinema A/C. Highest Class	Cinema Non-A/C High Class	Weekly "Akhbar-E-Jahan"
Education	Govt. College Fee Ist. Year, Govt. College Fee 4Th. Year, Urdu Book Ist. Year/Inter	Exercise.Book Lined 80/100 P, Paper Foolscape (27"X17") Maths Book Ist. Year (T.B.B)	School Fee 2Nd-Ry Eng.Med.	School Fee Primary Eng.Med. Eng. Book Ist.Yr Complete Se Ball Pen (Local)
		Haircut Charges For Men, Shampoo Plain Medora 200 Ml. Surf (Medium) 160 Grm, Washing Powder 1000 Grm	Washing Soap Nyl(135-160Gms), Toilet Soap Lux 95 Grams, Toilet Soap Lifebouy 140 Grm Dry Cleaning Suit Coat Pant	Toothpowder Dentonic 90 Grm Silver Tezabi 24 Ct Robin Blue (35 Grams)
Cleaning & Laundry	Blade 7-O-Clock Stain. 5'S, Hair-Colour Begin (6 Gms)			
Medicare	Renitec Tab. 5 Mg. Betnesol Eye Drops	Amoxil Capsule 250 Mg.S		
	Hydryllin Syrup 120 Ml.	Thermometer China Jouhar Joshanda		Doctor (Mbbs) Clinic Fee

Table A5: City-wise CPI Inflation (YoY) by Income Groups, June 2007							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	8.1	11.9	5.6	8.1	11.3	6.0
2	Faisalabad	6.8	11.0	4.0	7.7	10.8	5.6
3	Rawalpindi	6.8	7.1	6.6	7.2	7.7	6.9
4	Multan	10.7	13.2	9.0	11.0	14.1	8.8
5	Gujranwala	9.5	12.4	7.6	10.6	12.2	9.6
6	Islamabad	9.1	10.8	7.9	9.1	10.4	8.3
7	Sargodha	7.4	10.8	5.1	7.1	10.0	5.1
8	Sialkot	5.0	7.5	3.3	5.4	7.7	3.8
9	Bahawalpur	8.5	10.9	6.8	8.8	11.6	7.0
10	Karachi	8.0	10.9	6.1	8.7	12.3	6.3
11	Hyderabad	8.9	10.6	7.7	9.0	10.9	7.7
12	Sukkur	8.9	10.9	7.6	8.2	9.0	7.6
13	Larkana	7.3	9.6	5.7	7.2	8.8	6.2
14	Peshawar	8.5	10.4	7.2	8.9	10.6	7.7
15	Bannu	6.6	5.3	7.4	8.5	7.3	9.3
16	Quetta	9.1	12.1	7.2	8.1	11.5	5.9
17	Khuzdar	5.7	4.7	6.4	7.1	6.1	7.8
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	7.4	10.8	5.2	6.1	10.1	3.4
2	Faisalabad	7.1	10.9	4.4	5.3	11.0	1.4
3	Rawalpindi	6.9	7.3	6.5	6.3	7.3	5.6
4	Multan	10.3	14.3	7.7	9.7	13.5	7.1
5	Gujranwala	10.8	12.3	9.8	10.5	11.5	9.7
6	Islamabad	8.5	9.6	7.7	7.7	9.2	6.6
7	Sargodha	6.3	9.0	4.5	4.8	8.9	2.0
8	Sialkot	4.8	7.5	2.9	3.7	6.9	1.5
9	Bahawalpur	8.2	11.4	6.0	6.1	10.1	3.4
10	Karachi	8.2	11.9	5.8	6.5	10.8	3.6
11	Hyderabad	8.9	11.1	7.4	8.2	11.7	5.8
12	Sukkur	7.7	8.7	7.0	7.3	8.6	6.4
13	Larkana	7.4	9.5	5.9	6.6	9.6	4.6
14	Peshawar	8.1	11.1	6.1	7.0	12.0	3.6
15	Bannu	8.9	8.6	9.2	8.1	9.7	7.0
16	Quetta	7.7	11.8	5.0	7.3	12.7	3.6
17	Khuzdar	7.7	7.5	7.9	7.0	7.7	6.5

Table A6 : Income Group-wise CPI Inflation (YoY)								percent
	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07
<u>Up to Rs. 3000</u>								
General	9.3	10.1	7.6	7.9	7.8	6.9	7.7	7.7
Food	12.2	14.1	9.4	9.6	9.1	7.7	9.6	9.3
Non-food	7.2	7.4	6.3	6.7	6.8	6.3	6.3	6.6
<u>Rs. 3001-5000</u>								
General	9.0	10.0	7.3	7.8	7.9	7.2	8.0	7.9
Food	11.7	13.7	9.0	9.4	9.3	8.0	10.2	9.6
Non-food	7.1	7.4	6.1	6.7	6.9	6.5	6.5	6.8
<u>Rs. 5000-12000</u>								
General	8.4	9.3	6.9	7.5	7.8	7.1	7.8	7.5
Food	10.9	13.0	8.7	9.6	10.1	8.8	10.9	9.7
Non-food	6.6	6.8	5.6	6.0	6.2	5.9	5.7	5.9
<u>Above Rs. 12000</u>								
General	7.4	8.1	6.3	7.2	7.5	6.7	6.9	6.3
Food	9.7	11.9	8.7	10.7	12.2	10.8	12.3	9.8
Non-food	5.8	5.5	4.6	4.7	4.3	3.9	3.1	3.9
<u>All income groups</u>								
General	8.1	8.9	6.6	7.4	7.7	6.9	7.4	7.0
Food	10.6	12.7	8.7	10.0	10.7	9.4	11.3	9.7
Non-food	6.3	6.2	5.2	5.6	5.5	5.2	4.7	5.1

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

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

S.No	Items	Unit	Price June -07	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	11.9	6.7	1.8
2	Wheat flour a.qlt.	Kg.	14.0	9.2	1.5
3	Rice basmati. broken	Kg.	30.4	50.5	10.2
4	Rice irri-6	Kg.	21.9	36.0	9.8
5	Masur pulse washed	Kg.	47.5	11.8	1.4
6	Moong pulse washed	Kg.	56.2	-5.0	0.7
7	Mash pulse washed	Kg.	71.7	1.3	-0.6
8	Gram pulse washed	Kg.	37.8	2.1	-1.0
9	Beef	Kg.	120.6	5.4	0.1
10	Mutton	Kg.	230.6	5.8	0.6
11	Egg hen (farm)	Doz.	39.4	41.9	22.1
12	Bread plain m.s.	Each	15.5	7.3	0.3
13	Sugar	Kg.	28.4	-18.7	-4.9
14	Gur	Kg.	34.8	-15.4	-1.3
15	Milk fresh	Litr	28.7	12.6	1.3
16	Milk powdered Nido	400g	135.4	22.0	-0.1
17	Curd	Kg.	33.6	11.2	1.7
18	Veg.ghee tin	2.5k	258.8	27.1	5.8
19	Veg.ghee loose	Kg.	87.0	46.9	5.7
20	Mustard oil	Kg.	86.4	27.8	3.1
21	Cooking oil	2.5l	258.8	26.6	5.3
22	Potatoes	Kg.	15.1	-29.2	23.7
23	Onions	Kg.	12.2	20.3	-6.4
24	Tomatoes	Kg.	31.1	42.2	-0.2
25	Bananas	Doz.	35.2	2.6	1.1
26	Salt powdered	Kg.	4.7	7.1	-1.3
27	Red chilies (powd)	Kg.	117.6	67.1	1.0
28	Garlic	Kg.	52.3	-10.4	-5.8
29	Tea packet	250g	65.0	-0.4	-0.1
30	Tea (prepared)	Cup	6.5	7.4	-0.5

continued

S.No	Items	Unit	Price June -07	Percentage change	
				YoY	Monthly
31	Cooked beef plate	Each	30.7	10.1	1.3
32	Cooked dal plate	Each	18.5	10.2	1.9
33	Cigarettes k-2	10's	8.2	6.9	2.8
34	Coarse latha	Mtr.	35.6	1.5	0.0
35	Lawn (avg.+s.qlty)	Mtr.	83.8	4.2	0.7
36	Voil printed	Mtr.	38.9	1.8	0.8
37	Shirting	Mtr.	66.0	3.7	0.1
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	200.9	10.6	0.6
43	Elec. Bulb 60-wats	Each	12.0	6.3	0.2
44	Match box	Each	0.8	23.4	3.9
45	Washing soap	Cake	8.5	7.9	2.7
46	Bath soap lifebuoy	Cake	15.0	7.6	0.3
47	Chicken (farm)	Kg.	65.8	-11.4	-6.7
48	Gas chrg. All clb. Comb	D.mmbt	224.7	1.3	0.0
49	L.p.g.(cylinder 11kg.)	Each	545.3	-5.0	-5.8
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:				67.1	23.7
Median				7.1	0.3
Min:				-29.2	-6.7

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
FY07	319.9	350.2	180.3	315.7	308.1	294.8
Monthly averages						
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
June-07	334.9	374.0	191.5	330.2	318.2	309.7

Source: Federal Bureau of Statistics

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

— YoY — 12-month moving average

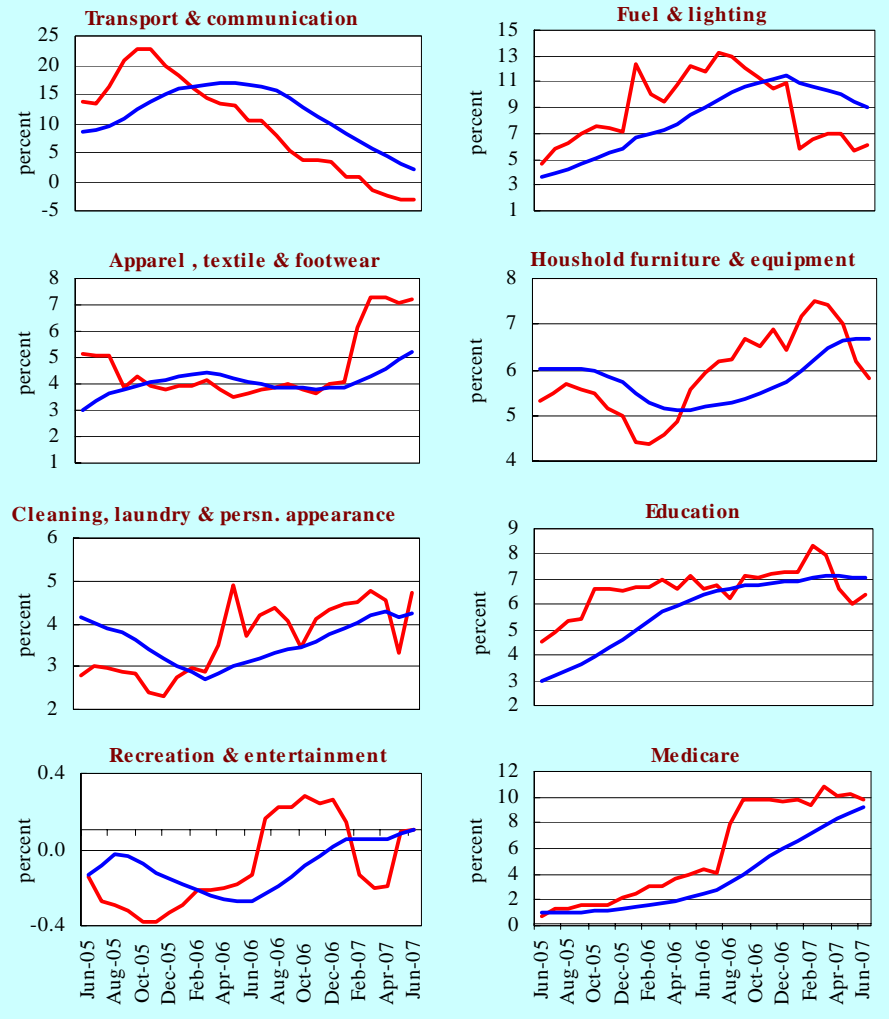


Figure A2: Frequency Distribution of Price Changes of CPI Items, June 2007

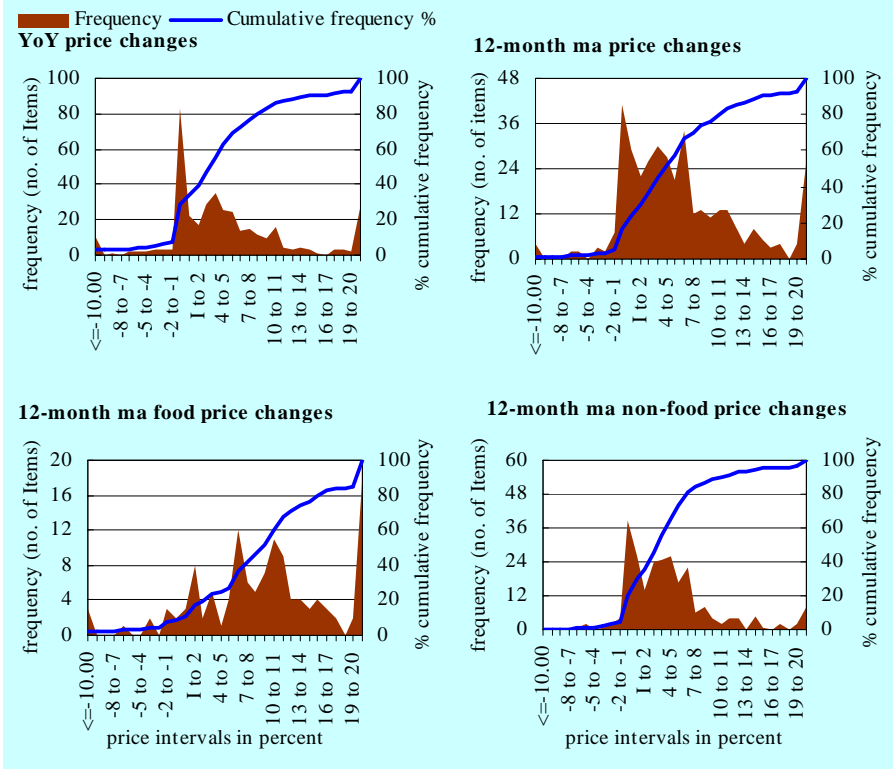
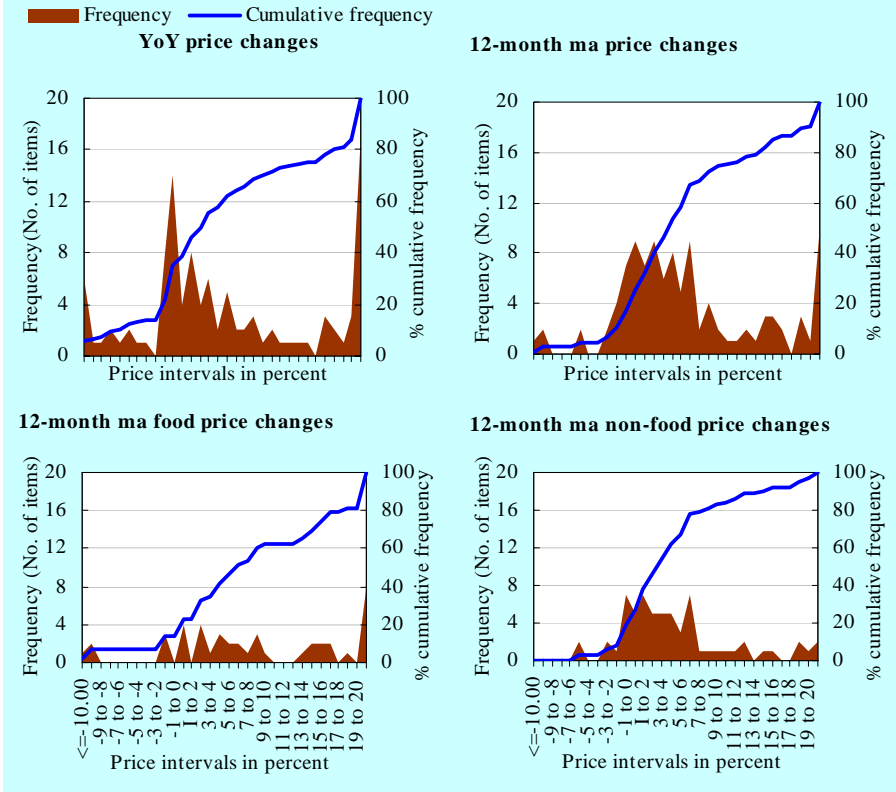


Figure A3: Frequency Distribution of Price Changes of WPI Items, June 2007



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