

Inflation Monitor

April 2007



State Bank of Pakistan

Research Department

ISSN 1992-8327 (print)

ISSN 1992-8335 (online)

The analysis in this document is based on data provided by
Federal Bureau of Statistics, Pakistan.

http://www.sbp.org.pk/publications/Inflation_Monitor

© 2007 State Bank of Pakistan

Contents

1.	Overview	1
2.	Consumer Price Inflation	5
	2.1 Food Inflation	6
	2.2 Non-food Inflation	7
	2.3 City-wise Inflation	9
	2.4 Income Group-wise Inflation	10
	2.5 Services and Non-services Inflation	10
3.	Wholesale Price Inflation	12
4.	Global Commodity Prices	16
5.	Sensitive Price Indicator	20
6.	Wage Inflation in Construction Sector	22

Annexure A:	24
--------------------	-----------

Table A1: CPI Inflation (YoY) by Groups	
Table A2: Distribution of Price Changes of CPI Basket, April 2007 (YoY)	
Table A3: Top Ten Contributors to YoY CPI Inflation in April 2007	
Table A4: Distribution of YoY Price Changes - Selected CPI Items, April 2007	
Table A5: City-wise Inflation (YoY) by Income Groups, April 2007	
Table A6: Income Group-wise Inflation (YoY)	
Table A7: Distribution of Wholesale Price Changes (YoY), April 2007	
Table A8: SPI Item-wise Price Movements	
Table A9: Daily Labor Wages (Rs. Per day) – Average of 35 Cities	

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

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

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

Annexure B: Technical Notes	36
------------------------------------	-----------

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

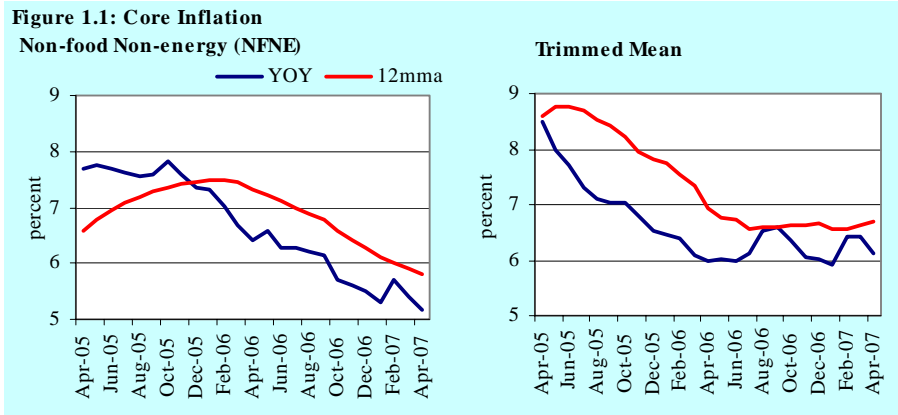
Headline CPI inflation increased to 6.9 percent in April 2007 on year-on-year (YoY) basis from 6.2 percent as registered in the same month last year. This higher CPI inflation was mainly attributed to the strong food inflation that muted the effect of declining non-food inflation. In April 2007 food inflation rose significantly to 9.4 percent from 3.6 percent in the corresponding month last year, mainly due to reversal of inflation from negative to positive in some key food items including vegetables, fruits, eggs, chicken etc., while non-food inflation declined to 5.2 percent from 8 percent of last year (see **Table 1.1**).

	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
Apr-06	6.2	3.6	8.0	6.4	6.0	8.1	6.4
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

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

In contrast to YoY CPI inflation, July-April FY07 average inflation showed a decline as compared to the same period last year. Nevertheless, July-April 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 0.3 percent, which is less than the five-year average of monthly increase in April 2007. The extent of one-month increase in food and non-food inflation was also less than the five-year March-April increase (see **Table 1.2**).



Core inflation based on NFNE (non-food non-energy) declined to 5.2 percent in April 2007 from 6.4 percent in April 2006 on YoY basis, whereas core inflation based on 20% trimmed-mean showed a marginal increase from 6.0 percent in April 2006 to 6.1 percent in April 2007.

The apparent difference in behavior of 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 (trim) inflation automatically includes a number of food items whose prices have been rising persistently. Hence, in present circumstances, the persistent component of inflation is being

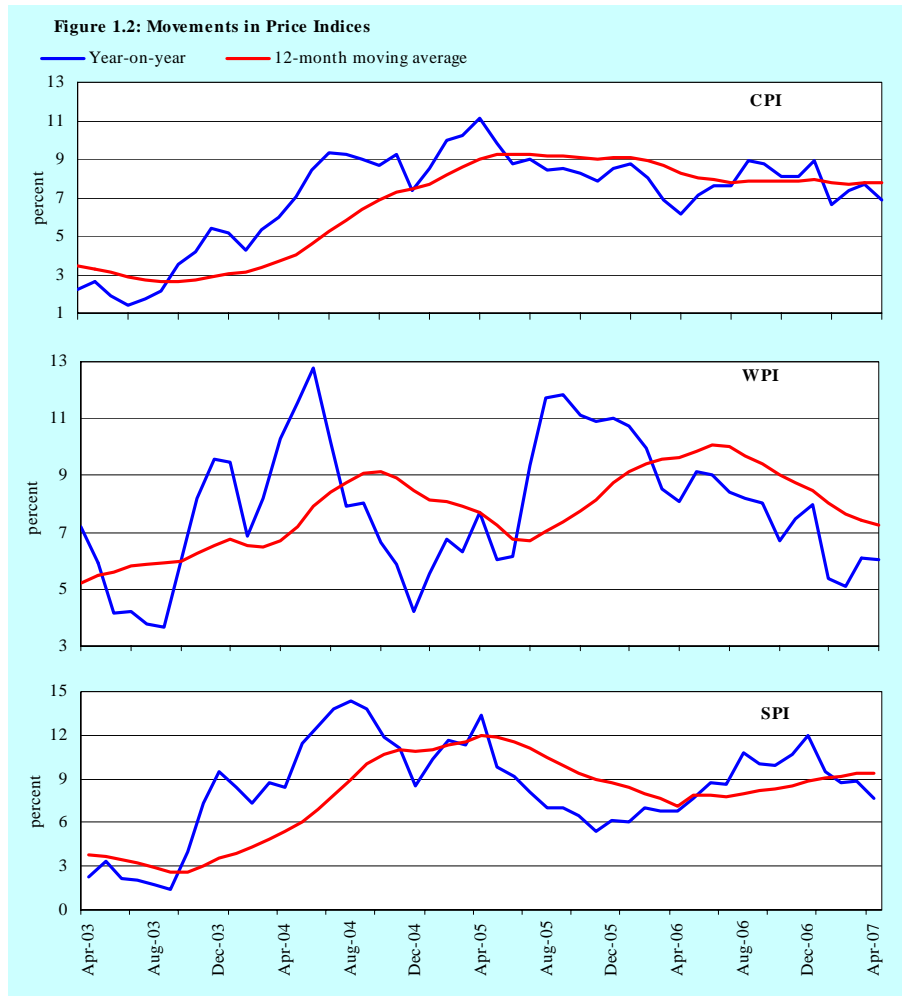
Table 1.2: Different Dimensions of Inflation (percent)

	Apr-05	Apr-06	Apr-07	5-year average
<i>Year-on-year (Apr over Apr)</i>				
Overall CPI	11.1	6.2	6.9	6.5
Food group	15.7	3.6	9.4	7.5
Non-food group	8.0	8.0	5.2	5.8
Core Inflation				
NFNE	7.7	6.4	5.2	5.4
Trimmed	8.5	6.0	6.1	6.6
<i>Period average (Jul-Apr over Jul-Apr)</i>				
Overall CPI	9.3	8.0	7.9	6.5
Food group	12.8	7.0	10.2	7.6
Non-food group	6.9	8.8	6.2	5.7
Core Inflation				
NFNE	6.8	7.3	5.7	5.1
Trimmed	8.8	6.8	6.7	6.5
<i>12-month moving average</i>				
Overall CPI	9.0	8.2	7.8	6.4
Food group	12.6	7.6	9.7	7.4
Non-food group	6.6	8.7	6.5	5.7
Core Inflation				
NFNE	6.6	7.3	5.8	5.7
Trimmed	8.6	6.9	6.7	6.4
<i>Monthly (Apr over Mar)</i>				
Overall CPI	1.7	1.0	0.3	0.9
Food group	3.2	1.5	0.3	1.5
Non-food group	0.7	0.7	0.3	0.5
Core Inflation				
NFNE	0.8	0.6	0.4	0.6
Trimmed	0.5	0.5	0.4	0.5

captured in a better way by the trim 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.

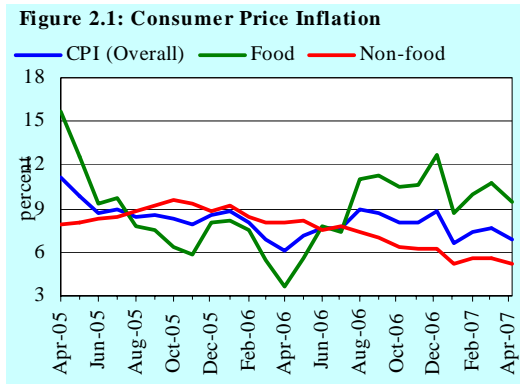
The trend of CPI inflation measured by 12 month moving average declined to 7.8 percent in April 2007 from 8.2 percent a year earlier. While trend of CPI food inflation showed an increase of 9.7 percent compared to 7.6 percent in the same month of last year, the non-food inflation trend rate declined to 6.5 percent in April 2007 from 8.7 percent in April 2006 (see **Table 1.2**).

The 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**). Wholesale price Index (WPI) inflation declined to 6.0 percent in April 2007 on YoY basis from 8.1 percent in the corresponding month last year. This significant decline in WPI inflation was due to a sharp deceleration in non-food inflation during April 2007 compared to the corresponding month last year. Sensitive price indicator (SPI) increased to 7.7 percent in April 2007 on YoY basis from 6.4 percent in same month of last year.



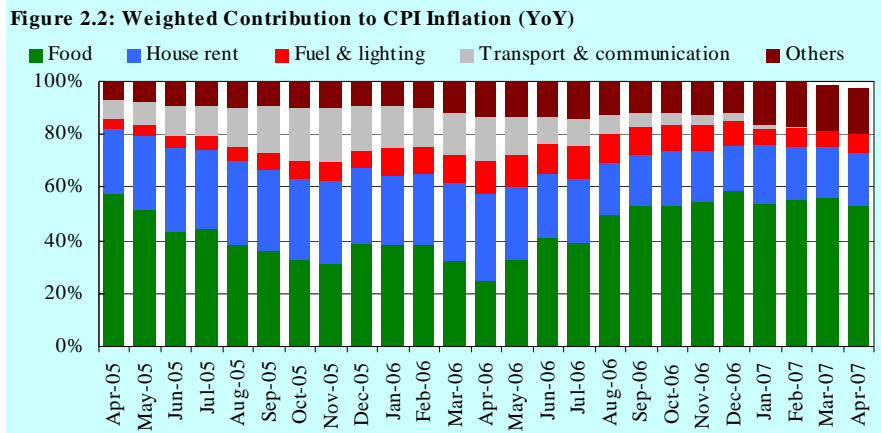
2. Consumer Price Inflation

In April 2007, CPI YoY inflation was recorded at 6.9 percent depicting a rise of 0.7 percentage points than that of the corresponding month last year. A decrease of 0.8 percentage points was recorded in April 2007 as compared to March 2007. The main contributing factor for the rise in overall CPI inflation is due to food inflation which was 5.8 percentage points more than that of the same month last year and a



decline of 1.3 percentage points as compared to the previous month. Non-food inflation declined and was recorded at 5.2 percent in April 2007 (see **Figure 2.1**).

The contribution of food group in overall inflation was 56.1 percent in April 2007 which is significantly higher than 24.9 percent contribution of food during the corresponding month last year. The contribution of house rent index (the single largest item of the CPI basket) declined from 32.1 percent during the



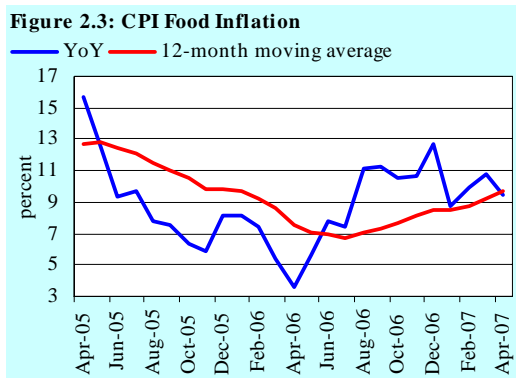
corresponding month last year to 21.2 percent (see **Figure 2.2**) in April 2007.

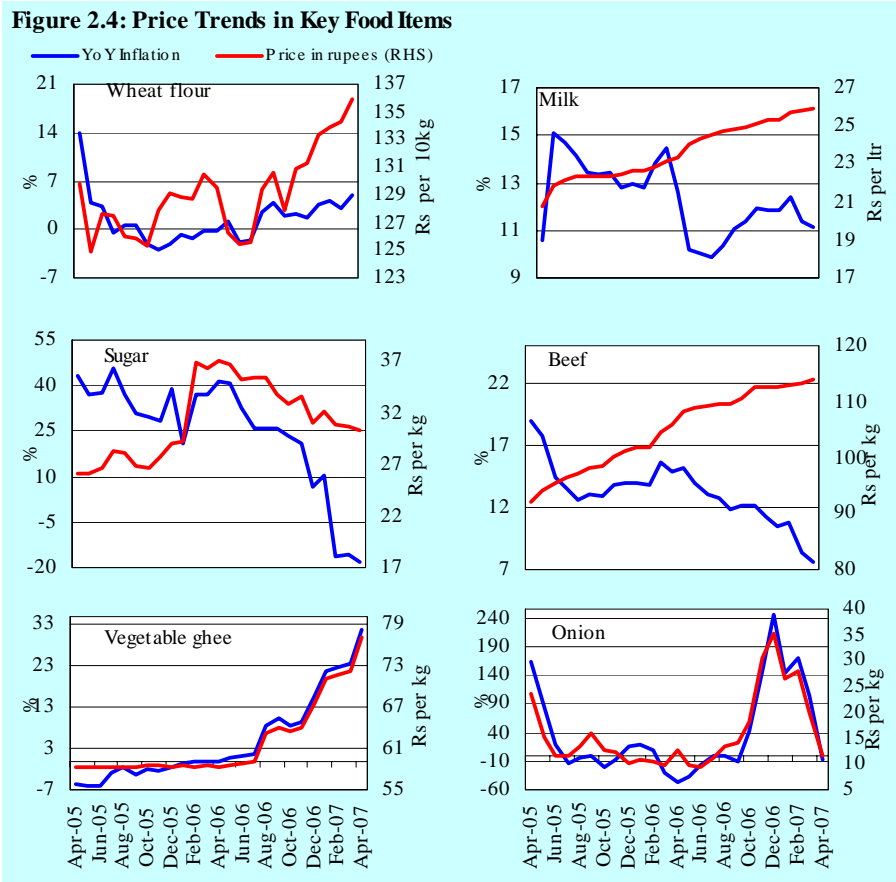
2.1 Food Inflation

Food inflation (YoY) decreased from 10.7 percent in March 2007 to 9.4 percent (YoY) in April 2007, driven mainly by a decrease in prices of onion, eggs, potatoes, green chilies etc. On monthly basis, out of 124 items 52 items showed decline or no change, 46 items showed increase of 0 to 5 percent, 5 items showed 5 to 10 percent increase and only 4 items showed above 10 percent increase out of which only one item kinnu showed 98 percent increase.

Of the total 124 commodities included in the food group, 47 commodities including eggs, some fruits, cooking oil, different types of rice, chicken and some vegetables exhibited inflation (YoY) in the range of 10 to 100 percent in April 2007. The combined weight of commodities with double digit inflation was about 42 percent of the food group. Only one commodity, kinnu (160 percent) of food group crossed 100 percent inflation (YoY). On the other hand inflation (YoY) of 15 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 March 2007, during April 2007 there was marginal increase in average price of food items like wheat flour, fresh milk and vegetable ghee and beef, whereas prices of sugar and onion showed decline, the price of beef remained same (see **Figure 2.4**). However, there was a significant decrease in the prices of green chillies by 31 percent, eggs by 28 percent and onion by 42 percent during the month of April 2007 as compared to the same month of last year.





In terms of percent contribution to overall inflation (YoY), fresh fruits and fresh milk are the second and third highest contributors (house rent index of non-food group being the first) with 13 percent and 11 percent share in overall CPI inflation (see **Table A3** in the annexure). The high contribution of fresh fruits was due to exceptionally high growth in its prices specifically kinnow, malta and kharboza, though its weight in the CPI basket was just 1.62 percent. On the other hand, high contribution of fresh milk was primarily due to its high weight (6.5 percent) while increase in its price was also higher than overall food inflation.

2.2 Non-food Inflation

Non-food inflation decreased from 5.5 percent in March 2007 to 5.2 percent in the month of April 2007 (see **Figure 2.5**). This marginal decline in non-inflation was primarily due to decrease in almost all the sub-groups of non-food group. These

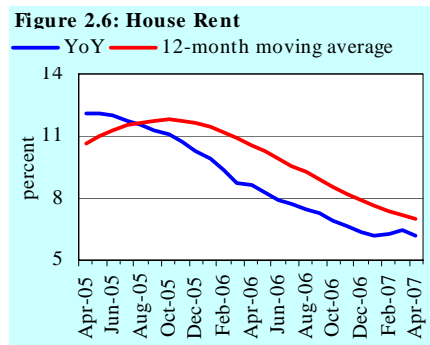
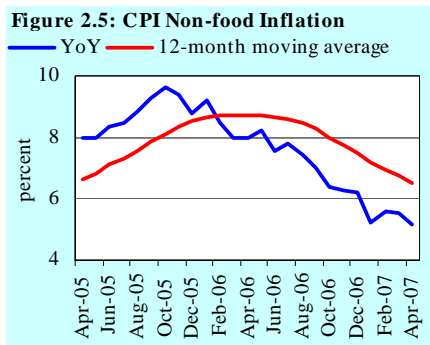
groups were house rent, fuel & lighting, household furniture & equipment, transport & communication, education, recreation & entertainment, education, cleaning and laundry & personal appearance and medicare groups of non-food group. On the other hand only one group apparel, textile & footwear recorded no change in YoY inflation during April 2007.

Fuel & lighting sub-group witnessed a price increase (YoY) of 6.95 percent in April 2007 as compared to 7.02 percent in March 2007. This marginal decline was due to the price of kerosene oil which showed no change in April 2007, although the price of CNG cylinder increased by 20 percent as compared to the corresponding month last year.

The inflation in transport & communication sub-group significantly decreased to -2.4 percent in April 2007 as compared to -1.4 percent in the preceding month. This change was due to significant reduction in outside city telephone charges.

Inflation (YoY) in apparel, textile & footwear sub-group was recorded at 7.3 percent in April 2007, being same in March 2007.

The house rent index (HRI) declined by 0.2 percentage points in the month of April 2007 and was recorded at 6.2 percent as compared to 6.4 percent as of March 2007 (see **Figure 2.6**).



Other indices of non-food group also exhibited decrease in inflation during the month which included medicare and cleaning, laundry & personal appearance. The medicare sub-group index registered decrease of 10.1 percent in the month under review as compared to that of 10.8 percent growth in the previous month (see **Figure A1** in annexure).

Of the 250 non-food commodities included in the CPI basket, 28 commodities witnessed double digit inflation which included items like firewood, train fares economy, air fare economy class, primary school fee (English medium), gold tezabi, silver tezabi and doctor clinic fee, etc. There were 52 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 include petrol super, a number of durable goods like telephone charges, computers, compac CD rom, refrigerators, sewing machines, etc. A significant YoY deflation was recorded in outside city telephone charges (-33.9 percent) in April 2007 (see **Table A4** in the annexure).

2.3 City-wise Inflation

City wise inflation data indicates that 23 cities out of 35 were found in the category of high inflation cities and the inflation recorded for all cities depicted a

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

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Gujranwala	10.2	12.2	8.8	D.I.Khan	6.8	8.9	5.2
Multan	9.6	11.5	8.2	Karachi	6.5	8.8	5.0
Mianwali	9.6	13.1	7.2	Sukkur	6.4	6.5	6.3
Sargodha	9.0	14.3	5.4	Larkana	6.2	7.4	5.4
Vehari	9.0	9.2	8.8	Turbat	6.1	5.4	6.7
Jhang	8.9	13.2	6.1	Mardan	6.0	6.3	5.7
D.G. Khan	8.9	12.4	6.4	Peshawar	5.8	6.9	5.0
Bahawalnagar	8.7	11.6	6.6	Kunri	5.6	5.4	5.8
Bannu	8.6	6.0	10.5	Faisalabad	5.5	9.3	2.7
Islamabad	8.1	11.4	5.9	Sialkot	5.3	10.0	2.0
Bahawalpur	8.1	12.5	5.0	Abbotabad	5.2	6.1	4.6
Samundari	8.0	11.8	5.5	Loralai	4.3	3.6	4.8
Quetta	7.9	13.0	4.4				
Jhelum	7.8	9.4	6.8				
Nawabshah	7.8	8.6	7.3				
Attock	7.7	10.9	5.6				
Okara	7.7	10.8	5.6				
Hyderabad	7.6	9.0	6.6				
Khuzdar	7.6	7.8	7.4				
Rawalpindi	7.3	9.8	5.6				
Shahdadpur	7.2	7.1	7.3				
Lahore	7.2	10.6	4.7				
Mirpur Khas	7.0	8.1	6.2				

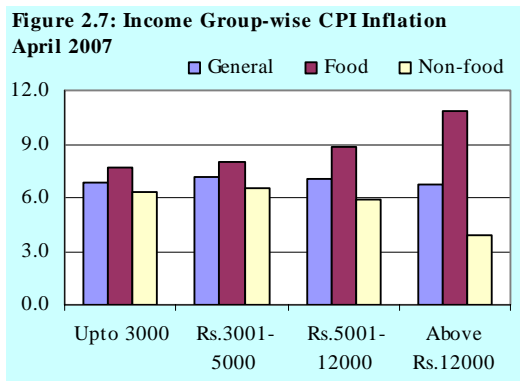
Note: High inflation refers to above average inflation, and low inflation refers to below average inflation

lower level of CPI inflation (YoY) as compared to their relative positions in the previous month in all three categories. Gujranwala and Loralai both maintained their positions of experiencing the highest and the lowest CPI inflation (YoY) respectively for the consecutive third month. Moreover the capital city, Islamabad, depicted a decline in its inflation trend from 9 percent to 8.1 percent maintaining its 10th rank among 35 cities, just like the previous month. Larkana and Kunri shifted to low inflation cities with CPI (YoY) inflation of 6.2 and 5.6 percent respectively. Quetta shifted back to the category of high inflation cities with CPI (YoY) inflation of 7.9 percent as for the last month contrary to its conventional trend the city was found in the category of low inflation cities.

2.4 Income Group-wise Inflation

The income group wise data reveals that the inflation recorded for all income groups showed a declining trend as compared to their respective inflation last month; though following its conventional trend all income groups except for the highest income group experienced CPI inflation higher than the overall CPI inflation. However, the

unconventional trend of the highest CPI inflation among various income groups continued and for the second month it was recorded for the income group of Rs. 3001-5000 instead of the lowest income group of upto Rs.3000. Moreover City wise data shows that Khuzdar maintained its position of being at the lowest level for all income groups but different cities occupied the position of the highest level for different income groups (see **Table A5** in annexure A).

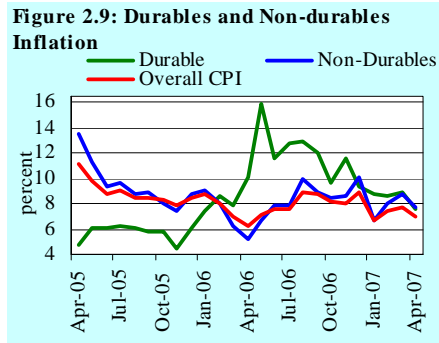
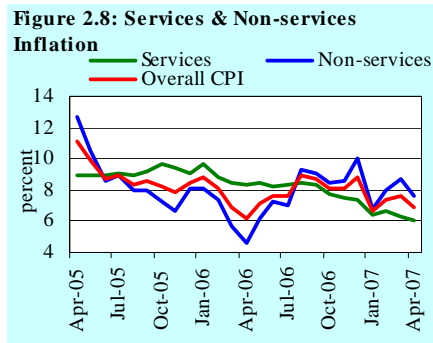


2.5 Services and Non-services Inflation

Inflation in the services¹ sector and non-services sector showed a decline in April 2007. During the current month inflation (YoY) in services was recorded at 6.0 percent as compared to 6.3 percent in the previous month and 8.3 percent in the corresponding month last year. The inflation of non-services sector was 7.6

¹ 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.

percent in April 2007 as compared to 8.7 percent in the previous month and 4.6



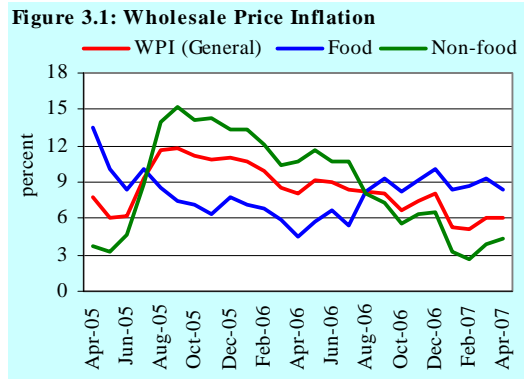
percent in the corresponding month last year (see **Figure 2.8**).

Within the non-services sector, inflation in durable² items decreased to 7.6 percent in April 2007 as compared to 8.8 percent in March 2007 (see **Figure 2.9**). The non-durable goods inflation also decreased to 7.7 percent in April 2007 from 8.7 percent of March 2007 and 5.2 percent during the corresponding month last year. The items that caused a decrease in non-durable inflation are almost the same that contributed to the decrease in overall CPI inflation, i.e. rice, pulse moong, sugar, potatoes, onion, eggs and fresh fruits etc.

² 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

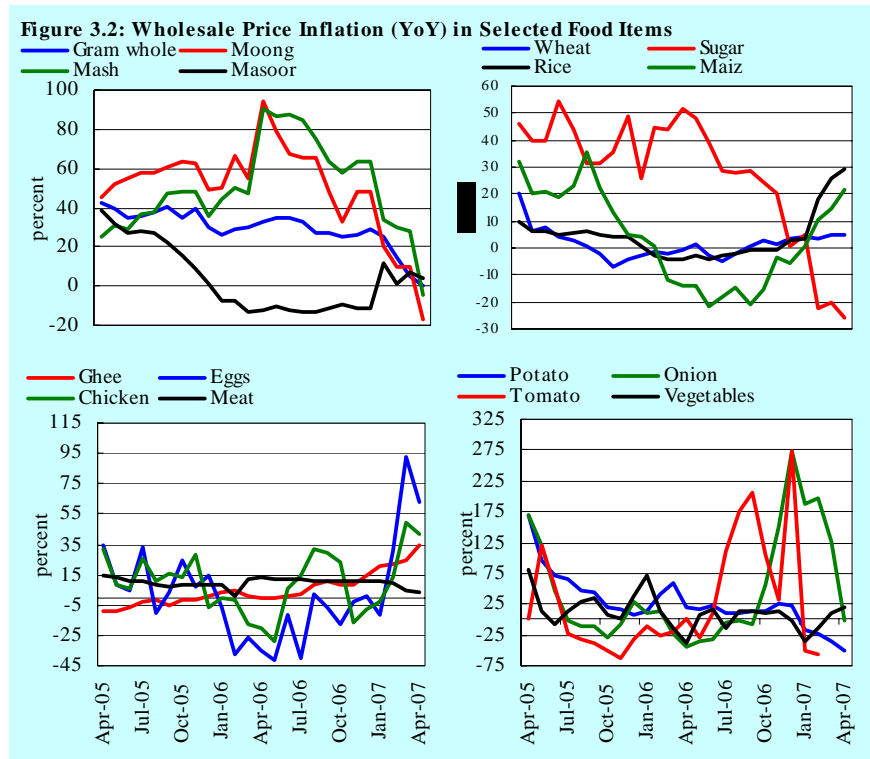
Average WPI inflation (YoY) decelerated significantly to 6.0 percent in April 2007 compared to 8.1 percent during the same month last year. WPI inflation also remained slightly lower than the preceding month. The considerable slowdown in WPI food inflation contributed in the overall WPI YoY deceleration that muted the upsurge in the non-food component of WPI inflation. The long-run trend of WPI inflation measured by 12-month moving average decelerated further in April 2007 on account of a generally continuing declining (YoY) growth in WPI since March 2006.



After witnessing acceleration for two consecutive months, the rate of change in the wholesale prices of the food group decelerated to 8.4 percent (YoY) in April 2007 from 9.3 percent in March 2007. Unlike the food group, the non-food group WPI inflation witnessed an (YoY) increase and stood at 4.3 percent as compared to 3.9 percent in March 2007 (see **Figure 3.1**). All sub groups of the non-food group in WPI showed higher (YoY) inflation in April 2007 as compared to the previous month except for building material and thus contributed in the acceleration of non-food inflation.

The most noteworthy development was seen in the wholesale price of onion that showed a turnaround and witnessed YoY deflation in April 2007 after exhibiting three digit inflation during the last five months. Sugar and tomato continued declining trend in their wholesale prices. The prices of cooking oil remained strong following the persistent increase in international prices. A disaggregated analysis of WPI inflation shows that dry fruits, cooking oil, 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 50 percent items declined, remained stable or exhibited lower growth than that of WPI food inflation.

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 6 items recorded moderate inflation of 5 to 10 percent, other 11 items showed



subdued inflation of up to 5 percent. The wholesale prices of the remaining 11 food items declined or remained stable. In case of the non-food group, prices of 15 items revealed a positive change of up to 5 percent, 21 items showed decrease or no change, 16 items demonstrated double digit rise of above 10 percent and the remaining 10 items displayed moderate inflation, i.e. 5 to 10 percent (see **Table A7** in Annexure A).

Further classification of non-food group revealed that except building materials all subgroups, i.e. raw materials, fuel, lighting & lubricants, and manufactures accelerated during April 2007 compared to the preceding month (see

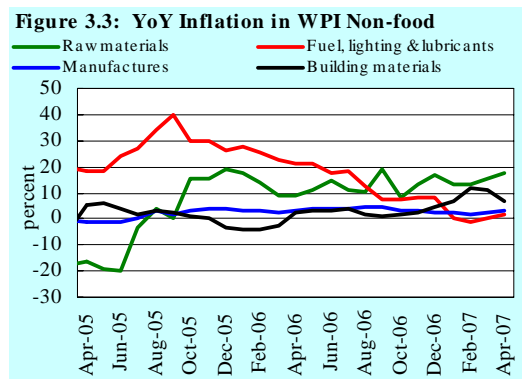
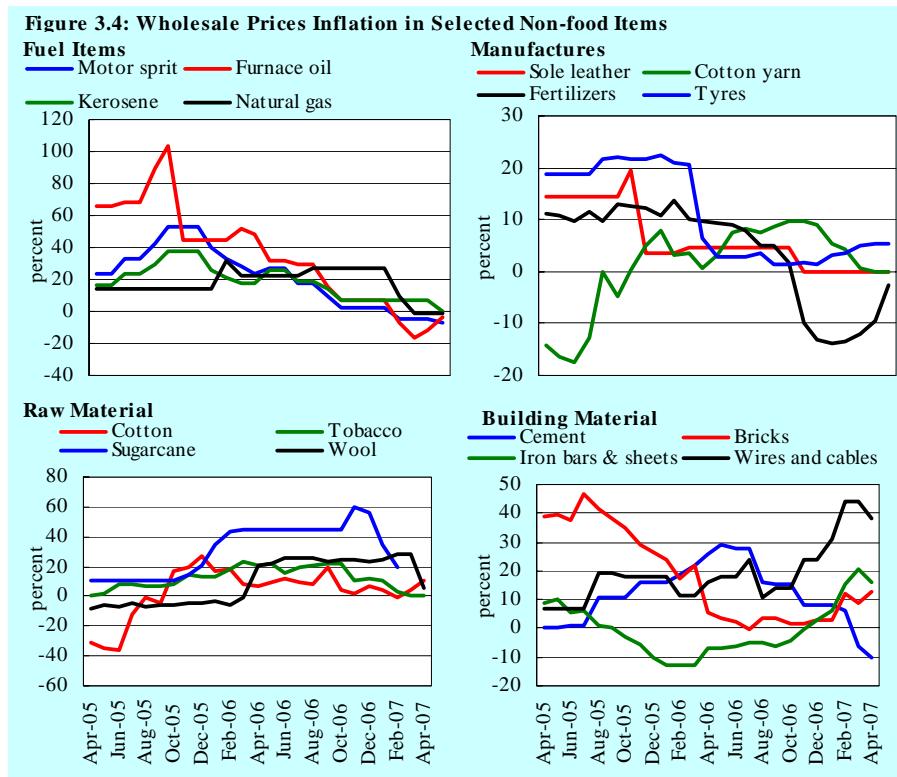


Figure 3.3). The *raw material* subgroup witnessed a YoY growth of 17.4 percent in April 2007 which is not only higher than the preceding month but also than that of the same month last year, mainly due to the rise in wholesale prices of cotton and pig iron. By analyzing the individual commodities amongst the raw material sub group, it was observed that all the items included in the raw material subgroup showed positive (YoY) growth.

In the non-food components of WPI inflation, *Fuel, lightning & lubricants* sub group witnessed a small YoY growth of 1.5 percent. This was mainly on account of double digit (YoY) growth of 18.2 percent in the prices of mobil oil during the month under study which is significantly higher than the growth in the preceding month as well as the growth in the same month last year.

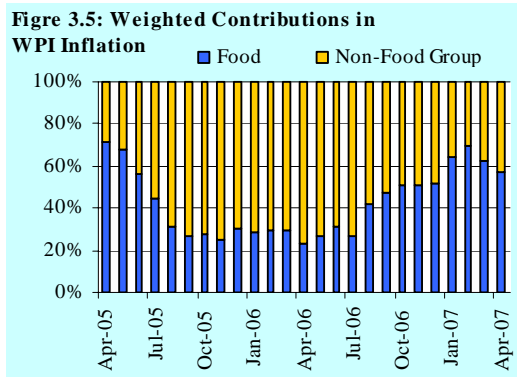
The wholesale prices of the *manufactures* sub-group registered a marginal growth of 2.8 percent in April 2007 as compared to 2.7 percent during the last month.



This was mainly due to the fact that around 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 sub-group further slowed down and depicted a lower (YoY) growth of 7.9 percent in April 2007 as compared to 10.8 percent growth in preceding month. This was mainly due to the wholesale prices of cement that showed a significant decline of 10.3 percent in April 2007. The decline in cement prices may be attributed to the slow down in construction activities due to shortage of workforce that is currently engaged in wheat harvesting in the country. All other major items in this sub group witnessed significant rise in their prices (see **Figure 3.4**).

The weighted contribution of food group in WPI inflation registered a further decrease in April 2007 for the third consecutive month while the weighted share of non-food group in the overall WPI inflation increased accordingly. This reversal in the contributions trend was the result of rising non-food WPI inflation. The contribution of non-food group increased to 42.5 percent in April 2007 from 37.3 percent in March 2007. The rise in weighted contribution of non-food inflation in WPI during April 2007 as compared to the previous month is mainly because of higher growth registered in fuel, lighting & lubricants and manufactures sub-groups (see **Figure 3.5**).



Within non-food group, the contributions of its sub-groups declined except for the *fuel, lighting & lubricant* subgroup whose share increased significantly to 14.3 percent in April 2007 compared to 2.9 percent in the previous month.

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

	Jul	Mar	Apr
Raw materials	12.9	48.3	47.8
Fuel, lighting & lubricants	68.5	2.9	14.3
Manufactures	15.1	25.8	24.1
Building materials	3.5	23.1	13.6

4. Global Commodity Prices

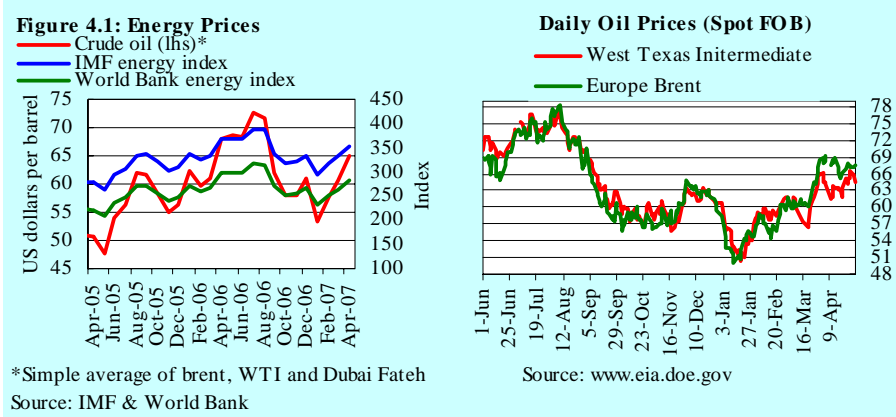
In general, food and energy group prices remained strong and moved up in April 2007 in the international market whereas the prices under the non-food non-energy group showed deceleration compared to the preceding month. In the energy group, crude oil prices continued to show increase for the third consecutive month.

According to some leading analysts the current rise in international crude oil price is mainly attributed to OPEC's production cut and tensions between UK and Iran in the Middle East (see **Table 4.1**). Food prices also registered an increase in the international market except for sugar and wheat prices. Wheat and sugar prices eased in April 2007 as new supplies are ready for arrival in the market. Urea prices declined sharply by 9.3 percent over the preceding month in the non-food non-energy group.

	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07
Energy								
Crude Oil (US\$ per barrel)	62.0	58.0	58.1	61.0	53.4	57.6	60.6	65.1
IMF Energy Index	336.2	317.3	320.2	333.3	295.4	317.3	332.0	352.9
WB Energy Index	271.5	253.1	254.1	266.6	233.9	251.6	264.9	284.4
Coal	50.7	47.2	49.3	53.3	55.0	56.7	59.2	60.1
Food								
Rice	312.9	309.6	300.6	309.3	313.5	316.1	326.2	322.0
Wheat	196.0	212.1	205.8	204.3	196.1	200.0	199.1	198.0
Sugar	12.3	11.5	11.7	11.7	10.9	10.6	10.4	9.6
Palm Oil	416.9	422.3	476.7	528.2	550.8	553.8	566.4	645.0
Soybean Oil	534.3	559.7	623.6	628.6	635.6	664.9	679.5	714.0
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	58.8	57.0	57.4	59.4	59.1	57.9	58.4	58.2
WB Steel Products Index	135.8	133.7	131.5	131.0	131.4	132.0	132.5	133.3
DAP	258.8	255.6	253.5	253.5	267.6	345.4	420.5	432.4
Urea	215.3	211.8	235.6	254.7	269.8	304.3	318.0	288.5

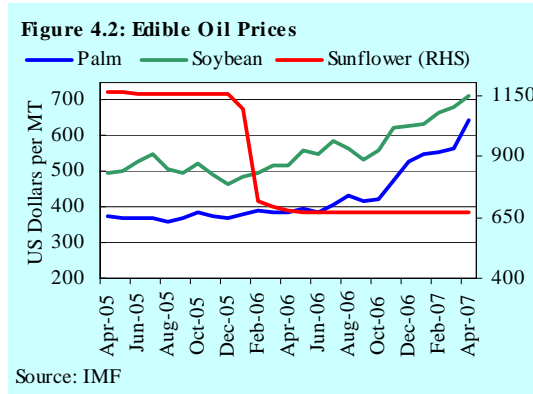
Note: Prices for all commodities are in US\$ per metric tonne except for crude oil.
Source: IMF & World Bank.

Oil prices in the international market remained strong in April 2007 and registered 7.4 percent rise over the preceding month. This highest crude oil price since August 2006 was the result of tensions between two major oil exporters Iran and UK, and six-year low stocks in the US market ahead of peak summer demand. However due to high base effect, crude oil prices showed a YoY decline of 4.3 percent in the month under review. The average monthly price of crude oil in the international market remained between the minimum range of US \$61.5 per barrel and the maximum range of US \$657.5 per barrel in April 2007. The volatility in



international crude oil prices declined as measured by standard deviation and the fluctuation around average price during the month of April 2007 was 1.3 as compared to 2.5 of the preceding month. In accordance with the international oil prices, the IMF and the World Bank energy indices for April 2007 exhibited an increase over the preceding month (see **Figure 4.1**).

The wholesale prices of palm and soybean oils in the international markets continued the rising trend that started in January 2006 due to a strong global demand and declining of exports from Malaysia. It is important to note that palm oil prices are at historically high levels and soybean prices crossed the \$700 per metric tonne mark after April 2004.



The (YoY) growth in palm oil and soybean oil prices was also the highest recorded at 66.9 and 37.7 percent respectively. Similarly monthly growth in edible oil prices (palm & soybean) registered a significant growth in April 2007. Whereas sunflower price remained stagnant at \$673 per MT since May 2006 (see **Figure 4.2**).

In case of major food items the prices of wheat and sugar again declined in April 2007 showing a monthly YoY deflation of 0.6 and 7.8 percent respectively. However wheat prices exhibited (YoY) growth of 9.6 percent. The average

monthly sugar prices continued to show YoY deflation in April 2007 for the seventh consecutive month (see **Figure 4.3**).

After declining in March 2007, average monthly gold price showed a moderate increase in April 2007 over the previous month while it increased significantly as compared to the same month last year. During

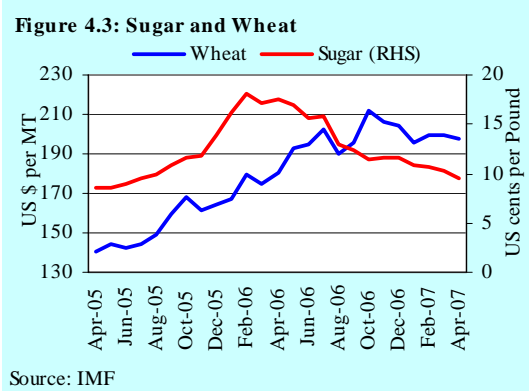
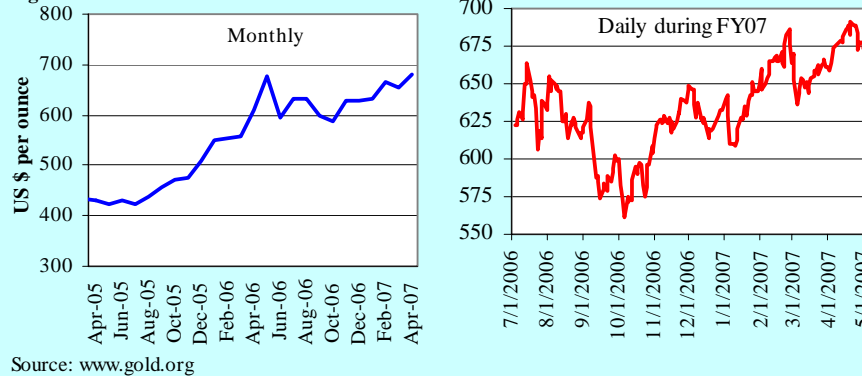
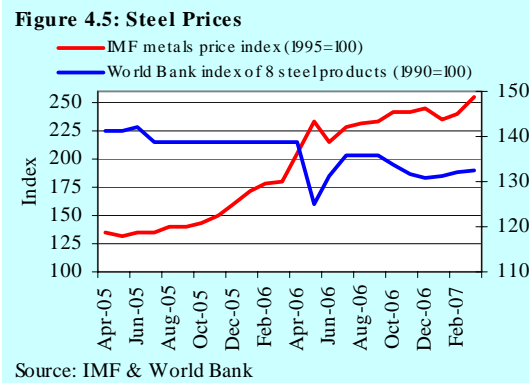


Figure 4.4: Gold Prices

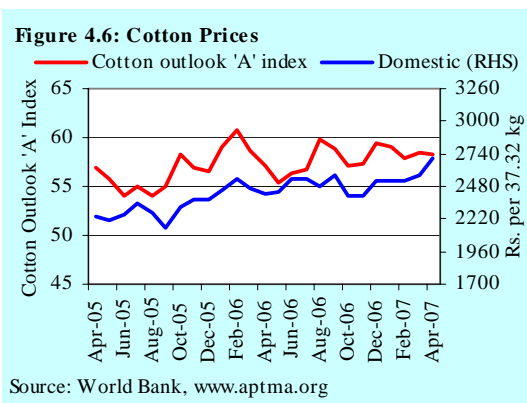


April 2007 daily gold price in the international market remained higher and fluctuated in a wider range between \$658 per ounce and \$691 per ounce. The variation in gold prices remained higher during the month showing a standard deviation (SD) of 8.8 around mean of US\$679.4 per ounce as compared to the SD of 8.5 around mean of US\$654.9 per ounce a month earlier (see **Figure 4.4**).

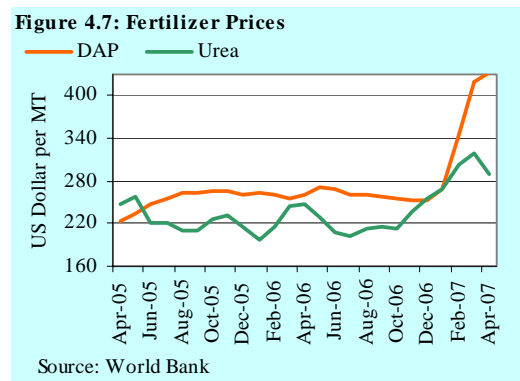


Metal prices surged on account of strong demand from China, numerous supply problems and low inventories of most metals.³ The prices of all major metals including nickel, copper, tin, lead, zinc etc., increased sharply in April 2007 as compared to the preceding month. This is reflected by the IMF metal price index that rose by 37.8 percent during April 2007 as compared to the corresponding month last year. The steel prices – measured by the World Bank Index of 8 steel products⁴ – declined by 3.8 percent (see **Figure 4.5**).

In the international markets, cotton prices – represented by cotton outlook 'A' index⁵ – remained stable and showed a slight increase of 1.8 percent in April 2007 as compared to the corresponding month last year. In the domestic cotton market, cotton prices continued to rise for the fifth consecutive month and showed a significant (YoY) increase of 11.6 percent in April 2007 as compared to 4.1 percent in March 2007 (see **Figure 4.6**).



Fertilizer prices in the international market registered a significant rise during the month of April 2007. The prices of DAP⁶ showed a steep YoY growth in the month under review. The (YoY) increase in DAP was recorded as high as 65.8 percent as compared to 16.4 percent in the same month last year due to an increase in



³ Source: World Bank Commodity Market Review.

⁴ The eight products are as follow: rebar (concrete reinforcing bars), merchant bars, wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet and galvanized iron sheet.

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

⁶ DAP: Diammonium Phosphate

demand stemming from projected increases in grain crop areas.⁷ On the other hand the price level of urea also increased but the rate of growth in price level was less on YoY basis; 16.16 in April 2007 as compared to 30.3 percent in March 2007 (see **Figure 4.7**).

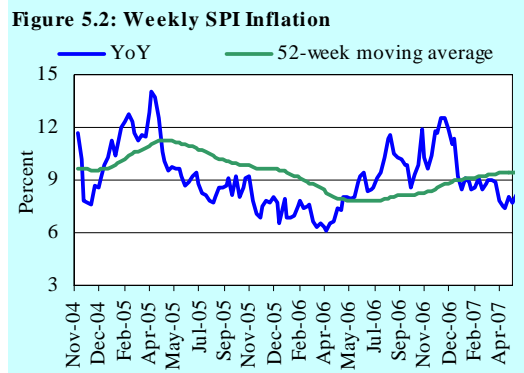
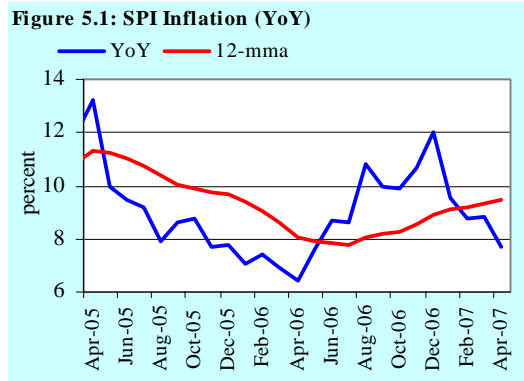
5. Sensitive Price Indicator

The inflation under sensitive price indicator (SPI) showed deceleration in April 2007 and recorded at 7.7 percent compared to the 8.9 percent in previous month. However, this inflation is still higher than 6.4 percent recorded in the same month last year. On the other hand the long run trend indicated by 12-month moving average showed a slight increase in the month under review: 9.4 percent as compared

to 9.3 percent in the previous month. This rise was mainly due to generally high SPI inflation recorded in the current fiscal year (see **Figure 5.1**).

The major items contributing to SPI inflation were rice, poultry items, vegetable ghee, liquid fuel and red chillies. 25 items in the SPI basket recorded YoY inflation more than the average level of 7.7 percent during April 2007 while the remaining 28 items recorded YoY inflation less than the average level with sugar, potatoes, tomatoes and petrol showing negative growth.

Compared with the prices of the previous month, almost 50 percent of the items included in the SPI basket witnessed decrease or no change in price level. On the other hand only one item (tomatoes) has shown double digit growth in inflation compared with the previous month (see **Table A8** in



⁷ Source: World Bank Commodity Market Review

Annexure A).

Weekly SPI witnessed relatively stable inflation and fluctuated between a narrow range of 7.4 percent to 8 percent in the month under review. Thus, after recording a slight decrease in the first three weeks of April, weekly YoY SPI inflation has shown a slight increase in the last week. The long run trend indicated by 52-week moving average has shown a slight increase in inflation since August 2006 (see **Figure 5.2**).

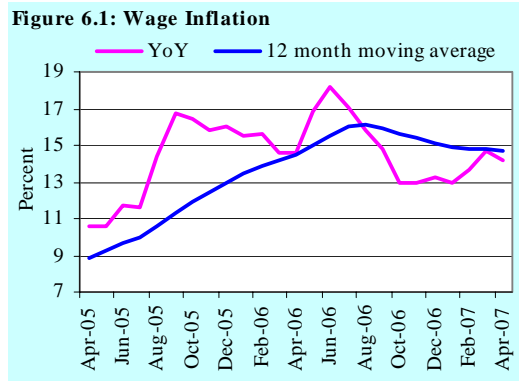
Like the previous month, the incidence of inflation was the highest in the lowest income group. On the other end, the least affected group was the highest income group with YoY inflation maintaining single digit growth for the fourth consecutive month in April 2007 (see **Table 5.1**). This is because 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 declined for all the income groups as compared to the previous 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	10.0	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	12.5	12.2	10.1	10.7
Dec-06	14.5	14.0	13.5	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	8.5	8.3	8.2	6.9	7.7

6. Wage Inflation in Construction Sector

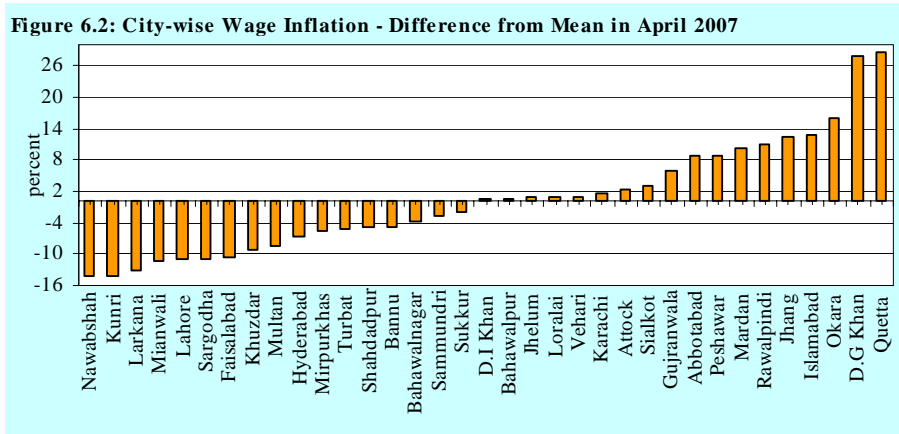
Nominal wages in the construction sector continued to show a double digit growth during FY07. After accelerating for two consecutive months, wage inflation of construction workers decelerated in April 2007. As a result of persistent downtrend in YoY wage inflation, the long run trend of real wages showed down trend and touched YoY real wage inflation of 7 percent in March



2007 (see **Figure 6.1**). Real wages also decelerated during most of the months of FY07; however, they showed lower growth of 6.46 percent in April 2007. This declining trend in real wages was the effect of persistently higher CPI inflation and declining trend in nominal wages during FY07 (see **Table 6.1**).

The acceleration in real wages in March 2007 was mainly on account of skilled workers that registered a comparatively higher (YoY) growth of 6.6 percent in their real wages during March 2007. Within the category of skilled workers, all types of workers i.e. carpenters, masons, plumbers and electricians showed increase in their real wages. On the other hand the real wage inflation of unskilled workers remained stable in March 2007 (see **Table 6.1**).

	Jul-06	Sep-06	Mar-07	Apr-07
Overall	9.38	6.03	6.94	6.46
Skilled:	9.19	5.87	6.59	6.07
Carpenter	7.39	4.54	6.92	6.02
Mason	10.80	6.44	7.53	8.30
Plumber	6.40	3.39	4.01	3.52
Electrician	12.17	9.11	7.89	6.44
Unskilled:	10.89	7.64	9.56	9.08
Laborer	10.89	7.64	9.56	9.08



The month wise average wages of all types of workers increased by 14.2 percent during April 2007 over the corresponding month of last year and remained within the range of Rs 221.9 rupees per day for Kunri and Rs 443.8 rupee per day for Islamabad (see **Table A9** in Annexure ‘A’). Figure 6.2 presents the picture of city wise deviation in wages from mean during the month of April 2007. Out of 35 cities, 18 recorded higher than average wage inflation and 17 cities witnessed lower than average inflation. The highest wage inflation was observed in Quetta followed by D.G Khan and Okara whereas Nawabshah, Kunri, Larkana etc., showed the lowest YoY changes in wages during the month under review.

Annexure A

Table A1: CPI Inflation (YoY) by Groups (percent)						
	Weights	Apr-03	Apr-04	Apr-05	Apr-06	Apr-07
I. Food Group	40.3	1.0	7.6	15.7	3.6	9.4
II. Non-Food Group	59.7	3.1	4.9	8.0	8.0	5.2
Apparel, textile, etc.	6.1	3.9	1.0	4.9	3.8	7.3
House rent	23.4	0.7	7.0	12.1	8.6	6.2
Fuel & lighting	7.3	4.9	3.1	5.0	10.7	7.0
Household furniture & equip.	3.3	3.4	5.2	5.1	4.9	7.0
Transport & com.	7.3	5.4	6.1	10.8	13.4	-2.4
Recreation & entertainment	0.8	0.8	-1.4	0.1	-0.2	-0.2
Education	3.5	5.2	3.6	3.9	6.6	6.6
Cleaning, laundry, etc.	5.9	5.5	4.9	2.3	3.5	4.5
Medicines	2.1	2.2	1.4	1.0	3.7	10.1
Headline	100	2.2	6.0	11.1	6.2	6.9

Table A2: Distribution of Price Changes of CPI Basket, April 2007 (YoY)						
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	9.4	110	15	18	30	47
II. Non-Food Group	5.2	250	63	107	52	28
Apparel, textile, etc.	7.3	42	2	22	14	4
House rent	6.2	1			1	
Fuel & lighting	7.0	15	4	4	1	6
Household furniture & equip.	7.0	44	2	21	19	2
Transport & com.	-2.4	43	17	13	5	8
Recreation & entertainment	-0.2	16	12	2	1	1
Education	6.6	24	6	12	3	3
Cleaning, laundry, etc.	4.5	36	2	24	7	3
Medicines	10.1	29	18	9	1	1
Overall	7.7	357	72	122	83	80

Note: Prices of 17 seasonal items were not reported during the month.

Table A3: Top Ten Contribution to YoY CPI Inflation in April 2007

Items	weights	YoY change		Weighted Contribution
		Apr-06	Apr-07	
A. Ranked by Weighted Contribution				
1 House Rent Index	23.43	8.64	6.22	21.14
2 Fresh Fruits	1.62	(13.48)	52.45	12.96
3 Milk Fresh	6.66	12.61	11.17	11.10
4 Vegetable Ghee	2.67	(0.28)	25.32	9.44
5 Electricity	4.37	-	10.07	5.13
6 Rice	1.34	0.79	28.36	5.07
7 Meat	2.70	13.72	7.79	4.51
8 Chicken Farm	0.92	(21.86)	40.14	4.32
9 Wheat Flour	5.11	(0.08)	4.45	3.30
10 Footwear	1.53	3.60	16.75	2.98
Total	50.34			79.95
B. Ranked by Percentage Change				
1 Fresh Fruits	1.62	(13.48)	52.45	12.96
2 Eggs	0.41	(32.04)	46.16	1.71
3 Chicken Farm	0.92	(21.86)	40.14	4.32
4 Air Fare	0.10	(9.43)	39.97	0.66
5 Rice	1.34	0.79	28.36	5.07
6 Mustard Oil	0.05	1.13	25.88	0.15
7 Vegetable Ghee	2.67	(0.28)	25.32	9.44
8 Besan	0.13	(2.44)	21.19	0.36
9 Doctor's Fee	1.00	6.83	18.81	2.40
10 Cooking Oil	0.69	(0.64)	18.21	1.72
Total	8.91			38.78
C. Ranked by Weights				
1 House Rent Index	23.43	8.64	6.22	21.14
2 Milk Fresh	6.66	12.61	11.17	11.10
3 Wheat Flour	5.11	(0.08)	4.45	3.30
4 Electricity	4.37	-	10.07	5.13
5 Bakery & Confectionary	2.98	3.66	2.30	0.85
6 Meat	2.70	13.72	7.79	4.51
7 Vegetable Ghee	2.67	(0.28)	25.32	9.44
8 Tuition Fees	2.36	6.72	7.89	2.65
9 Transport Fare/Charges	2.12	12.58	2.47	0.94
10 Natural Gas	2.05	22.25	3.45	1.52
Total	54.45			60.58

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 6.9 percent in April 2007.

Table A4: Distribution of Price Changes - Selected CPI Items, April 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	Beef With Bone Av.Qlty.	Milk Fresh (Unboiled)
	Onion	Wheat Flour Fine/Superior.	Mutton Av.Qlty.	Vegetable Ghee (Loose)
	Pulse Moong (Washed)	Tea Prepared (Ordinary)	Tea Loose Kenya Av.Qlty 250G	Eggs Farm
	Potatoes	Bread Tandoori St. Size	Wheat	Chicken Farm Broiler (Live)
	Peas	Biscuits-Packed	Curd	Cooking Oil (Dalda)
	Chillies Green		Tomatoes	Rice Basmati Broken Av.Qlty
				Pulse Gram
Apparel & Textile	Gents Shoes Paul Bata	Lawn Av.Qlty. Long Cloth Av.Qlty.	Tailoring Suit Female Tailoring Shirt	Nylon Jogger 27 Size 2.5, Child Shoe Power
	Ladies Sandal Bata	Shirting Av.Qlty.	Tailoring Coat-Pant Suit	Lite Bata, Gents Sponge Chappal Bata
House Rent Index		House rent index		
Fuel & Lighting	Tube Light Philips 40 Watts	Gas Chrg 10.1157 - 13.4876Mmb		Elect.Charges Above 1000 Uni
	Kerosene Oil	Gas Chrg Upto 3.3719 Mmbtu, Gas		Elect.Charges 301 - 1000 Uni
	Match Box Small	Chrg 6.7438 - 10.1157Mmb		Gas Cylinder Stand. Size
H/hold Furniture	Sewing Machine(Singer)	Quilt (Lihaf) 3 Kg. Cotton, Tea Set Pak.	Bedsheet Single Bed Sup.Qlty, Ceiling Fan 48" Super Qlty	Household.Servant Female P/T
	Refg. Dawlence 10 Cft. D.Doo	Chinaware 21 Pc, Blanket (90" X 54")	Washing Machine Singer	Pedestal Fan 22" Super Qlty
Transport & Comm.	Tel Charges Out Side City	Car Service Charges	Tyre Car With Tube General	Train Fare Eco. > 500 Km., Taxi 4 Seater Fare
	Petrol Super	Auto Rickshaw Fares	Cng Filling Charges	Air Fare Economy Class.
	Internet Charges	Minibus Fare	Suzuki Fare Min.With In City	Aerogram For Saudi Arabia
	Train Fare A/C Slp. 1-100Km.	Min.With In Cit		
Recreation	T.V. 20" Colored With R/Cont			
	Video Game Sega 16 Byte Vid. Cassette Blk. Tdk/Sony	Cinema A/C. Highest Class	Cinema Non-A/C High Class	Dry Cell 1.5 Volt(Local)
Education	Com. C.D. (Tdk/Imation)	Exercise.Book Lined 80/100		School Fee Primary Eng.Med.
	English Book Class V1	Paper Foolscape (27"X17")	Ball Pen (Local) Maths Book Calss V	Eng. Book Ist.Yr Complete Se
	English Book Class Ix Or X	Urdu Book Class Ix/X(T.B.B)	School Fee 2Nd-Ry Eng.Med.	Govt. University Fee Msc.
Cleaning & Laundry	Haircut Charges For Blade 7-O-Clock	Men, Washing Soap Nyl(135-160Gms)	Dry Cleaning Suit Coat Pant, Artificial Jewellery Set, Shaving Cream	Gold Tezabi 24 Ct Robin Blue (35 Grams)
	Stain. 5'S Hair-Colour Begin (6 Gms)	Toilet Soap Lux 95 Grams	Touch-Me/Adm.	Silver Tezabi 24 Ct
Medicare		Amoxil Capsule 250 Mg.S		
	Septran Tablets	Thermometer China		Doctor (Mbbs) Clinic Fee
	Daonil Tab. 5 Mg. Entox Tab.	Ventolin Tab. 2Mg.	Galxos-D (450 Grms)	

Table A5: City-wise Inflation (YoY) by Income Groups, April 2007							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	7.9	11.6	5.3	7.5	10.0	5.9
2	Faisalabad	5.7	8.8	3.6	5.9	7.7	4.7
3	Rawalpindi	7.2	8.4	6.4	7.7	9.2	6.8
4	Multan	9.3	9.2	9.3	9.5	10.2	9.0
5	Gujranwala	8.4	10.5	6.9	9.7	11.0	8.8
6	Islamabad	8.5	10.0	7.5	8.9	10.9	7.6
7	Sargodha	9.5	14.5	6.1	9.2	13.7	6.2
8	Sialkot	6.0	9.5	3.6	5.6	8.0	3.9
9	Bahawalpur	7.8	9.6	6.6	8.3	10.6	6.8
10	Karachi	5.5	6.4	5.0	6.3	7.5	5.4
11	Hyderabad	7.9	8.6	7.5	7.9	9.1	7.2
12	Sukkur	6.9	6.8	6.9	6.7	6.6	6.8
13	Larkana	5.8	6.6	5.3	5.5	5.6	5.5
14	Peshawar	6.4	6.6	6.3	6.0	5.2	6.5
15	Bannu	6.5	3.4	8.5	7.9	4.1	10.5
16	Quetta	7.7	9.8	6.3	7.6	10.8	5.5
17	Khuzdar	2.6	0.9	3.7	4.2	3.0	5.1
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	7.2	10.1	5.2	7.0	11.2	4.2
2	Faisalabad	5.8	8.4	4.0	5.2	10.5	1.6
3	Rawalpindi	7.5	9.3	6.3	7.2	10.5	4.9
4	Multan	9.4	11.2	8.2	9.9	13.1	7.8
5	Gujranwala	10.2	12.1	9.0	10.7	13.9	8.6
6	Islamabad	8.5	10.6	7.0	8.1	11.6	5.7
7	Sargodha	9.3	13.7	6.3	8.4	16.1	3.2
8	Sialkot	5.6	9.2	3.1	5.2	10.8	1.4
9	Bahawalpur	8.6	12.6	5.8	7.5	15.0	2.4
10	Karachi	6.5	8.2	5.3	6.6	9.7	4.5
11	Hyderabad	7.6	8.6	6.9	7.4	10.1	5.6
12	Sukkur	6.4	6.5	6.3	6.1	6.4	5.8
13	Larkana	6.2	7.1	5.5	6.9	9.9	4.9
14	Peshawar	5.8	6.0	5.7	5.8	8.5	3.9
15	Bannu	8.7	5.2	11.1	9.2	9.0	9.4
16	Quetta	7.6	11.8	4.8	8.2	14.9	3.6
17	Khuzdar	5.4	5.0	5.7	5.6	6.4	5.2

Table A6 : Income Group-wise Inflation (YoY)								percent
	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07
<u>Up to Rs. 3000</u>								
General	9.4	8.8	9.3	10.1	7.6	7.9	7.8	6.9
Food	11.5	11.0	12.2	14.1	9.4	9.6	9.1	7.7
Non-food	8.0	7.3	7.2	7.4	6.3	6.7	6.8	6.3
<u>Rs. 3001-5000</u>								
General	9.3	8.7	9.0	10.0	7.3	7.8	7.9	7.2
Food	11.3	10.8	11.7	13.7	9.0	9.4	9.3	8.0
Non-food	7.9	7.3	7.1	7.4	6.1	6.7	6.9	6.5
<u>Rs. 5000-12000</u>								
General	9.0	8.4	8.4	9.3	6.9	7.5	7.8	7.1
Food	11.2	10.6	10.9	13.0	8.7	9.6	10.1	8.8
Non-food	7.5	6.8	6.6	6.8	5.6	6.0	6.2	5.9
<u>Above Rs. 12000</u>								
General	8.3	7.7	7.4	8.1	6.3	7.2	7.5	6.7
Food	11.3	10.3	9.7	11.9	8.7	10.7	12.2	10.8
Non-food	6.3	5.8	5.8	5.5	4.6	4.7	4.3	3.9
<u>All income groups</u>								
General	8.7	8.1	8.1	8.9	6.6	7.4	7.7	6.9
Food	11.3	10.5	10.6	12.7	8.7	10.0	10.7	9.4
Non-food	7.0	6.4	6.3	6.2	5.2	5.6	5.5	5.2

Table A7: Distribution of Price Change (YoY)--WPI Items: April 2007

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

S.No	Items	Unit	Price Apr -07	Percentage change over	
				Apr -06	Mar-07
1	Wheat	Kg.	12.2	6.2	-2.4
2	Wheat flour a.qlt.	Kg.	14.0	6.2	0.1
3	Rice basmati. broken	Kg.	26.1	28.9	2.6
4	Rice irri-6	Kg.	19.4	20.3	1.6
5	Masur pulse washed	Kg.	46.1	3.6	-0.6
6	Moong pulse washed	Kg.	55.2	-8.2	-2.1
7	Mash pulse washed	Kg.	71.8	4.9	-0.5
8	Gram pulse washed	Kg.	38.7	10.0	-8.0
9	Beef	Kg.	120.0	5.8	0.9
10	Mutton	Kg.	228.2	6.7	1.0
11	Egg hen (farm)	Doz.	31.5	36.6	-27.9
12	Bread plain m.s.	Each	15.5	7.2	0.0
13	Sugar	Kg.	30.3	-17.7	-1.2
14	Gur	Kg.	35.8	-3.4	-1.6
15	Milk fresh	Litr	27.4	12.5	1.5
16	Milk powdered Nido	400g	134.8	21.8	2.2
17	Curd	Kg.	31.8	9.9	1.0
18	Veg.ghee tin	2.5k	240.0	17.9	4.0
19	Veg.ghee loose	Kg.	77.9	31.9	7.0
20	Mustard oil	Kg.	83.6	24.9	1.3
21	Cooking oil	2.5l	241.3	18.1	4.4
22	Potatoes	Kg.	11.0	-43.9	-6.5
23	Onions	Kg.	13.1	5.9	-35.5
24	Tomatoes	Kg.	16.9	-4.0	27.1
25	Bananas	Doz.	33.8	17.8	-1.0
26	Salt powdered	Kg.	4.7	15.6	0.0
27	Red chilies (powd)	Kg.	109.8	61.5	7.9
28	Garlic	Kg.	64.3	4.4	-3.6
29	Tea packet	250g	70.0	8.2	0.0
30	Tea (prepared)	Cup	6.4	6.3	0.0

continued

S.No	Items	Unit	Price	Percentage change over	
			Apr -07	Apr -06	Mar-07
31	Cooked beef plate	Each	30.3	13.6	0.2
32	Cooked dal plate	Each	18.1	10.9	0.2
33	Cigarettes k-2	10's	8.0	12.8	0.0
34	Coarse latha	Mtr.	35.4	2.6	1.3
35	Lawn (avg.+s.qlty)	Mtr.	81.2	3.9	4.1
36	Voil printed	Mtr.	38.3	3.7	2.1
37	Shirting	Mtr.	65.5	4.1	0.1
38	Sandal gents Bata	Pair	499.0	25.1	8.7
39	Sandal ladies Bata	Pair	299.0	0.0	0.0
40	Chappal spng. Bata	Pair	99.0	11.2	4.2
41	Kerosene	Litr	39.1	7.0	0.0
42	Firewood	40kg	200.7	11.7	0.5
43	Elec. Bulb 60-wats	Each	12.0	5.9	-0.9
44	Match box	Each	0.8	22.6	0.0
45	Washing soap	Cake	8.1	4.1	0.5
46	Bath soap lifebuoy	Cake	14.5	3.8	3.0
47	Chicken (farm)	Kg.	79.8	43.1	3.4
48	Gas chrg. All clb. Comb	D.mmbt	224.7	1.3	-3.3
49	L.p.g.(cylinder 11kg.)	Each	587.7	36.6	0.5
50	Elec.chrg.all slabs com	Bd. Unit	5.1	9.9	1.8
51	Petrol	Litr	53.8	-4.6	0.0
52	Diesel	Litr	37.9	1.5	0.0
53	Telephone local	Call	2.3	0.0	0.0
Max:				61.5	27.1
Median				7.0	0.1
Min:				-43.9	-35.5

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						
Apr-06	290.9	313.9	159.4	291.0	274.3	265.9
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

Source: Federal Bureau of Statistics

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

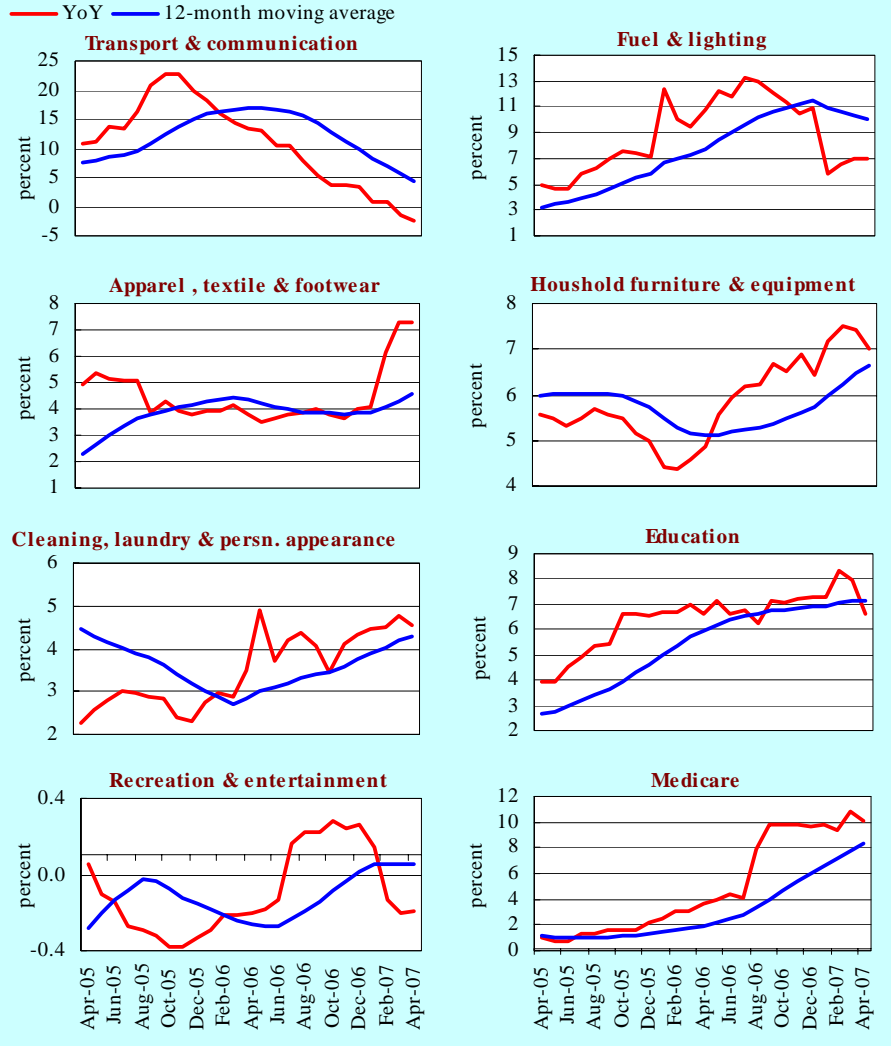


Figure A2: Frequency Distribution of Price Changes of CPI Items, April 2007

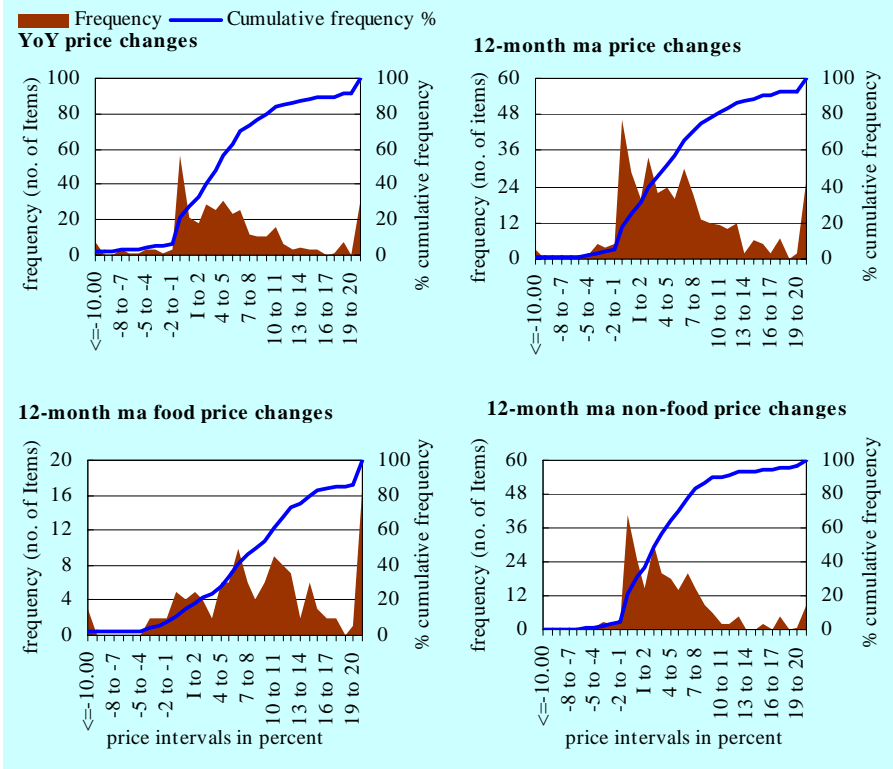
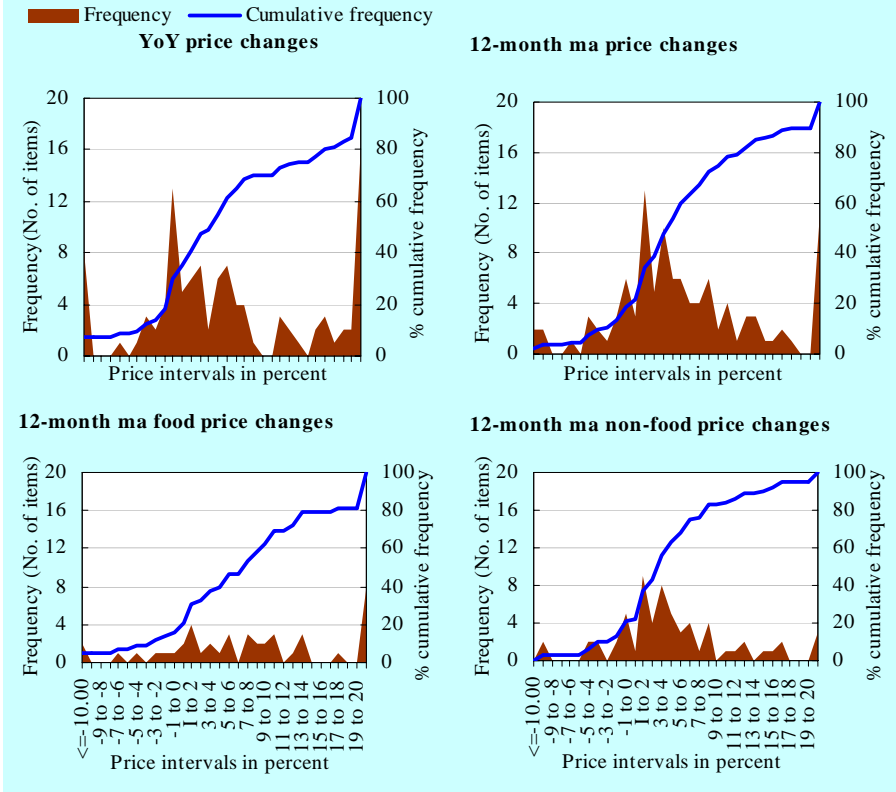


Figure A3: Frequency Distribution of Price Changes of WPI Items, April 2007



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, list of which is given in Table A3.
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