

# **Inflation Monitor**

**April 2009**



**State Bank of Pakistan**

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## **Overview**

Headline CPI inflation (YoY), at 17.2 percent, for April 2009 fell back to the level seen in April 2008, after declining by 1.9 percentage points compared to the previous month. This decline in CPI inflation (YoY) was mainly due to a decrease of 2.7 percentage points in CPI food inflation during April 2009 compared to the preceding month and 8.5 percentage points compared to the same month last year. CPI non-food inflation also declined during the month under review compared to March 2009, but showed 6.1 percentage points increase compared to April 2008.

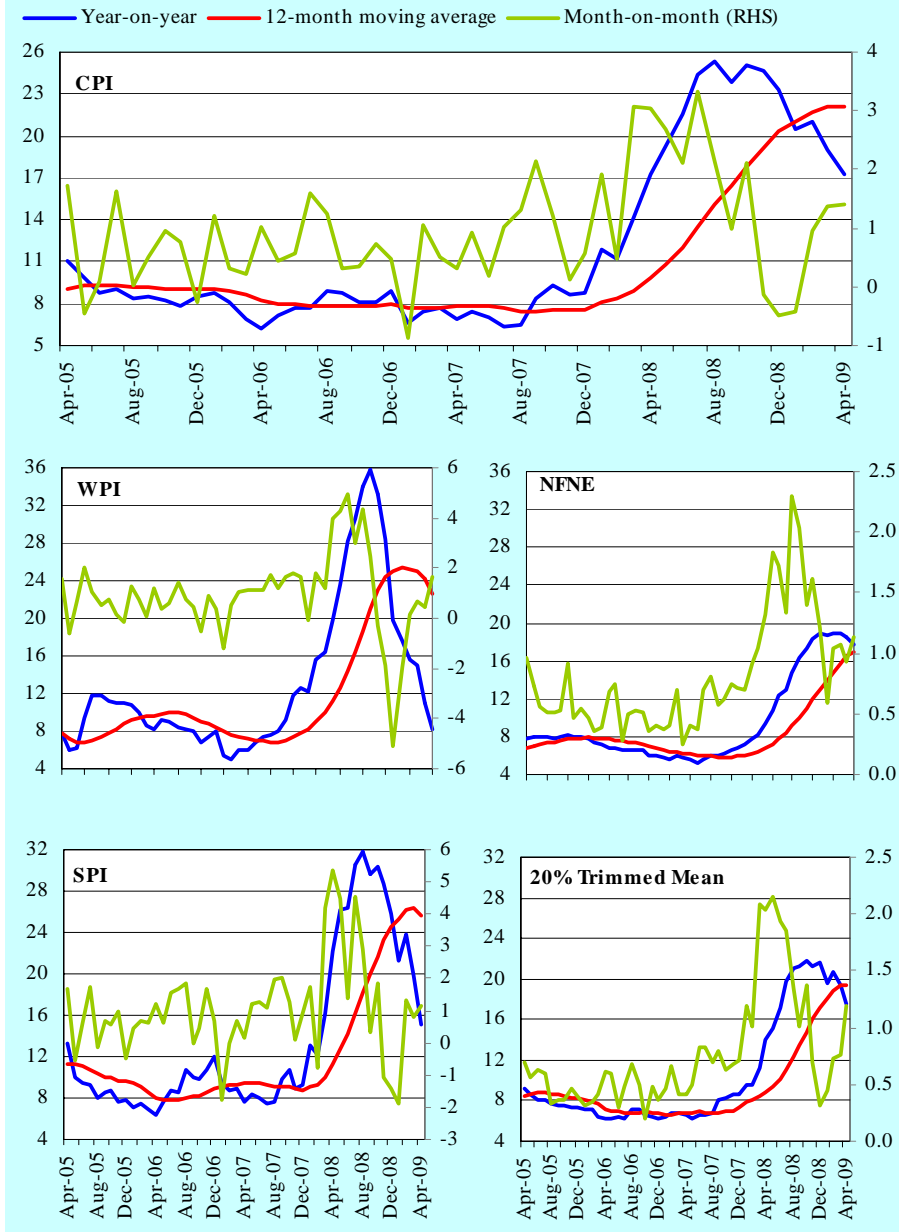
CPI inflation month-on-month (MoM) basis remained unchanged during April 2009 compared to March 2009. CPI inflation (MoM) registered 1.4 percent during the month under review (the highest level since November 2008). However, CPI inflation (MoM) compared to April 2008 showed a decline of 1.6 percentage points. While, CPI food inflation (MoM) was lower in April, 2009 compared to both, the same month last year and the preceding month, CPI non-food decelerated relative to the same month but witnessed a slight increase compared to March 2009 (see **Table 1.1**).

Easing inflationary pressures can also be seen in both measures of core inflation, non food non energy (NFNE) and 20% trimmed mean. Both measures of core inflation (YoY) recorded decline during April 2009 compared to the previous month, but were high compared to April 2008. NFNE inflation (YoY) was recorded at 17.7 percent during April 2009 compared to 18.5 percent in the previous month and 10.8 percent during April 2008. Similarly core inflation measured by 20% trimmed mean was also dropped to 17.6 percent during April 2009 compared to 19.3 percent in the preceding month and 14.1 percent in the same month last year.

Other measures of inflation, wholesale price index (WPI) and sensitive price indicator (SPI) also showed decline during April 2009 compared to both previous month and the same month last year. However decline in WPI inflation (YoY) was significant during April 2009 and was recorded at 8.3 percent (single digit after September 2007) compared to 11.1 percent in March 2009. Sensitive price indicator (SPI) inflation (YoY) declined during April 2009 and was recorded at 15.0 percent (YoY) compared to 19.8 percent during March 2009 (see **Figure 1.1**).

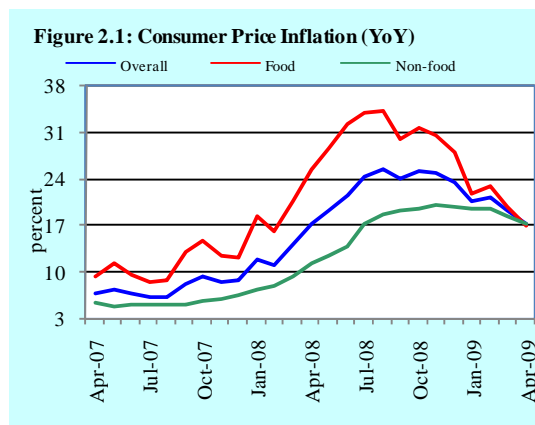
<b>Table 1.1: Different Dimensions of Inflation (percent)</b>					
	<b>Apr-08</b>	<b>Jun-08</b>	<b>Mar-09</b>	<b>Apr-09</b>	<b>5-year average#</b>
<b>Year-on-year (April over April)</b>					
<b>Overall CPI</b>	<b>17.2</b>	<b>21.5</b>	<b>19.1</b>	<b>17.2</b>	<b>9.5</b>
Food group	25.5	32.0	19.7	17.0	12.4
Non-food group	11.2	13.8	18.5	17.3	7.4
<b>WPI</b>	<b>23.5</b>	<b>30.6</b>	<b>11.1</b>	<b>8.3</b>	<b>11.1</b>
<b>SPI</b>	<b>22.3</b>	<b>26.3</b>	<b>19.8</b>	<b>15.0</b>	<b>11.4</b>
<b>Core Inflation</b>					
NFNE*	10.8	13.0	18.5	17.7	7.2
Trimmed	14.1	17.2	19.3	17.6	8.3
<b>Period average (July over April)</b>					
<b>Overall CPI</b>	<b>10.3</b>	<b>12.0</b>	<b>23.0</b>	<b>22.3</b>	<b>7.9</b>
Food group	15.0	17.6	27.8	26.6	10.0
Non-food group	6.8	7.9	19.2	19.0	6.4
<b>WPI</b>	<b>13.7</b>	<b>16.4</b>	<b>23.1</b>	<b>21.4</b>	<b>9.0</b>
<b>SPI</b>	<b>11.8</b>	<b>14.2</b>	<b>13.7</b>	<b>13.0</b>	<b>9.2</b>
<b>Core Inflation</b>					
NFNE*	7.5	8.4	17.9	17.8	6.3
Trimmed	9.2	10.2	20.4	19.9	7.1
<b>12-month moving average</b>					
<b>Overall CPI</b>	<b>9.8</b>	<b>12.0</b>	<b>22.1</b>	<b>22.0</b>	<b>7.7</b>
Food group	14.3	17.6	28.0	27.2	9.7
Non-food group	6.5	7.9	17.6	18.1	6.3
<b>WPI</b>	<b>12.6</b>	<b>16.4</b>	<b>24.1</b>	<b>22.7</b>	<b>8.8</b>
<b>SPI</b>	<b>11.2</b>	<b>14.2</b>	<b>26.3</b>	<b>25.6</b>	<b>8.9</b>
<b>Core Inflation</b>					
NFNE*	7.2	8.4	16.5	17.0	6.2
Trimmed	8.9	10.2	19.4	19.4	7.0
<b>Monthly</b>					
<b>Overall CPI</b>	<b>3.0</b>	<b>2.1</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>
Food group	4.3	2.5	2.2	2.0	2.1
Non-food group	2.0	1.8	0.7	0.9	0.9
<b>WPI</b>	<b>4.3</b>	<b>3.0</b>	<b>0.4</b>	<b>1.7</b>	<b>1.7</b>
<b>SPI</b>	<b>5.4</b>	<b>1.4</b>	<b>0.8</b>	<b>1.2</b>	<b>1.8</b>
<b>Core Inflation</b>					
NFNE*	1.8	1.3	0.9	1.1	0.9
Trimmed	2.0	1.9	0.8	1.2	0.9
* NFNE is Non-food non-energy inflation					
# Average for the month of April in the previous five years					

Figure 1.1: Movements in Price Indices (percent change)



## 2. Consumer Price Index

CPI inflation (YoY) dropped by 1.9 percentage points from the previous month's level to 17.2 percent during April 2009. This was the same as in April 2008. This shows the ease in inflationary pressures during April 2009. This decline was due to both, food inflation and non-food inflation, but the decline in food group's inflation was more pronounced. CPI food inflation (YoY) reached 17.0



percent during April 2009 compared to 19.7 percent in the previous month and 25.5 percent in the same month last year. During April 2009, non food inflation (YoY) also declined by 1.2 percentage points compared to the previous month but increased by 6.1 percentage points compared to the same month last year (see **Figure 2.1**).

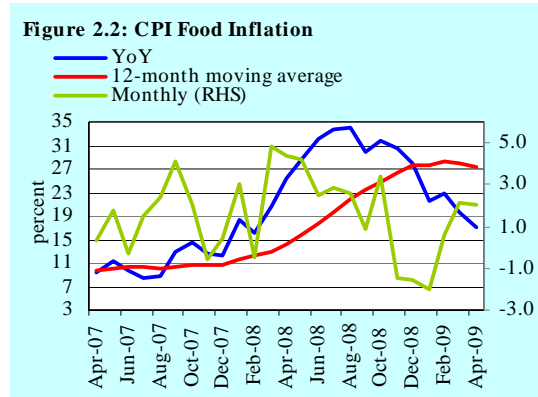
	percent					
	MoM			YoY		
	Apr-08	Mar-09	Apr-09	Apr-08	Mar-09	Apr-09
<b>Food</b>	<b>63.8</b>	<b>69.8</b>	<b>63.5</b>	<b>62.5</b>	<b>46.1</b>	<b>44.7</b>
<b>Non-food</b>	<b>36.2</b>	<b>30.2</b>	<b>36.5</b>	<b>37.5</b>	<b>53.9</b>	<b>55.3</b>
House rent	8.3	21.1	20.0	15.4	22.2	24.4
Fuel & lighting	0.0	-0.2	-0.2	3.8	10.3	11.0
Transport & communication	20.0	0.5	0.5	7.7	6.6	3.8
Others	7.9	8.7	16.1	10.6	14.8	16.1

Declining trend in the weighted contribution of food group to the overall CPI inflation (YoY) continued and it was 44.7 percent during April 2009 compared to 62.5 percent in the corresponding month last year and 46.1 percent during the previous month. Accordingly, the weighted contribution of non-food group in overall CPI inflation rose to 55.3 percent compared to 53.9 percent in the previous month and 37.5 percent during April 2008. Within non-food group, the *house rent index* (HRI) and *education* sub-groups witnessed an increase in their weighted contribution compared to the corresponding and previous months (see **Table 2.1**).



## 2.1 Food Inflation

Downward trend in food inflation (YoY) continued during April 2009. Food inflation was 17.0 percent during April 2009 (the lowest level since February 2008) compared to 19.6 percent in March 2009 and 25.5 percent during April 2008. Food inflation (MoM) also declined during the month under review compared with both previous month and the corresponding month last year (see **Figure 2.2**).



Six out of top ten contributions to CPI inflation were from food group during April 2009, including wheat flour, fresh milk, sugar, onions, meat and readymade food. Combined weighted contribution of these food items in the overall CPI food inflation was 31.6 percent (see **Table A3** in the annexure). Within the food group, just four items i.e. wheat flour, fresh milk, sugar and onions contributed 57.0 percent to the YoY food inflation.

A detailed analysis of price movement in CPI food basket revealed that out of 110 reported commodities, 76 commodities including sugar, coriander seed powder, and some pulses, etc. exhibited price changes (YoY) in the range of 10 to 90 percent during April 2009. Two commodities of food group witnessed more than 100 percent price change (YoY), including coffee (108.3 percent) and onions (170.7 percent). On the other hand, prices (YoY) of 13 commodities i.e. vegetable ghee, cooking oil, green chillies, etc. declined during the month under review (only one item-chocolate candy-showed no change). Remaining 20 items showed moderate price change (YoY) (see **Figure 2.4** and **Table A2** in **Annexure A**).

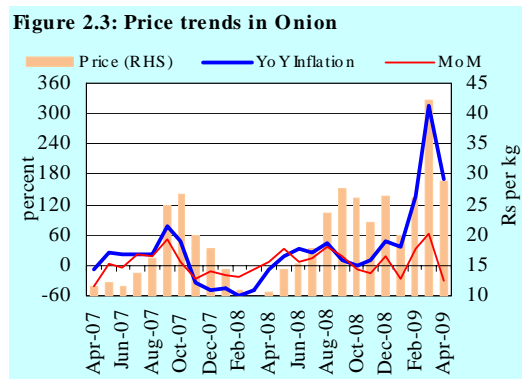
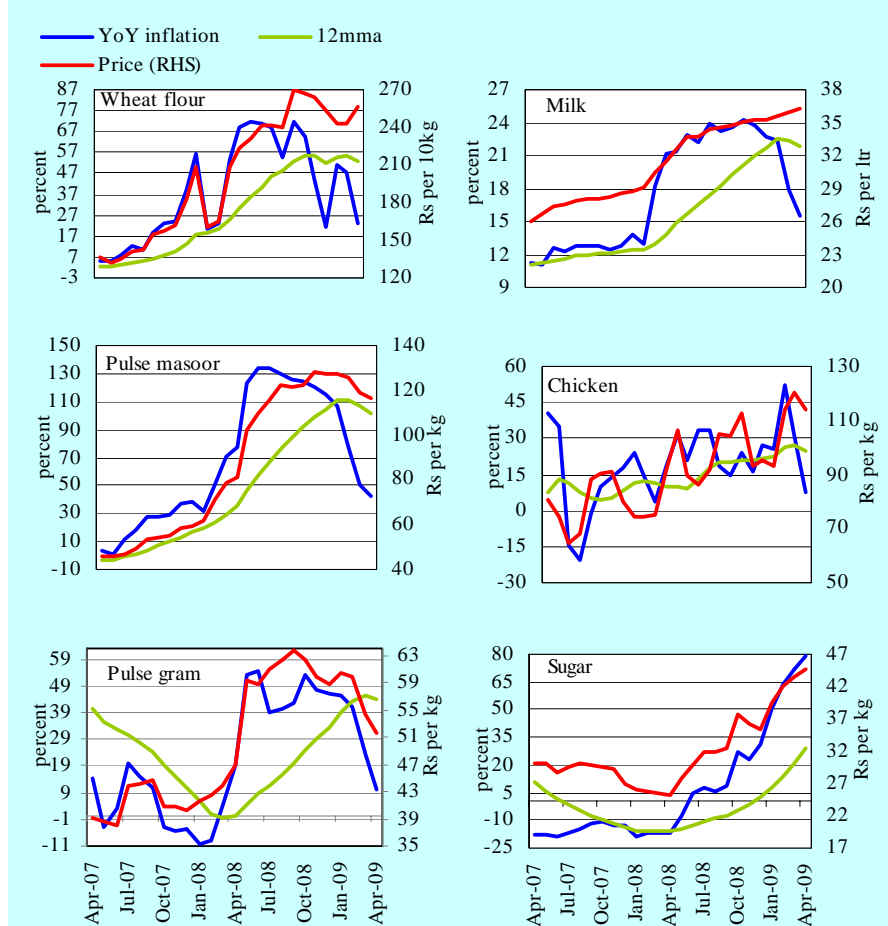
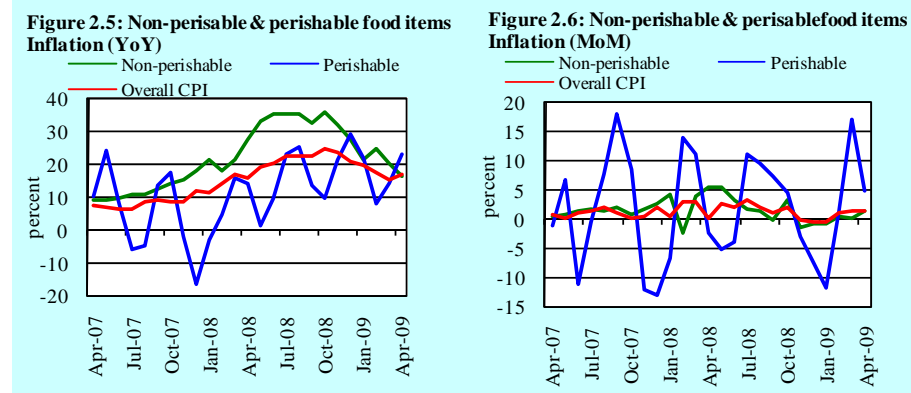


Figure 2.4: Price Trends in Key Food Items



During April 2009, food inflation on month-on-month (MoM) basis was 2.0 percent compared to 2.2 percent during March 2009, and 4.3 percent in April 2008. Commodity-wise analysis of CPI food basket on MoM basis showed that 6 items including carrot, peas, tomatoes, cauliflower, kinnu, and malta, recorded a double digit price change during April 2009, whereas prices of 26 items including chillies green, onion, cucumber, ginger, pulse gram, chicken, etc. declined. Opposite to the previous month, onions recorded decline in price (31.2 percent) on MoM basis during April 2009 (see **Figure 2.3**).

Further disaggregation (of 40 composite food items in the CPI basket) can be made on the basis of perishable<sup>1</sup> and non-perishable<sup>2</sup> commodities. Inflation (YoY) in the perishable group was 22.7 percent during April 2009 compared to 14.1 percent in same month last year and 14.1 percent during previous month. Prices of perishable group are often volatile and this was seen in the inflation (MoM) during April 2009, which reached 4.8 percent compared to (-) 2.5 percent



in April 2008 and 17.2 percent during March 2009. Inflation (YoY) in non-perishable group further declined from 27.3 percent during the month of April 2008 to 16.2 percent in April 2009. Inflation (MoM) in non-perishable group decreased from 5.4 percent in April 2008 to 1.6 percent in April 2009 (see **Fig 2.5 & 2.6**).

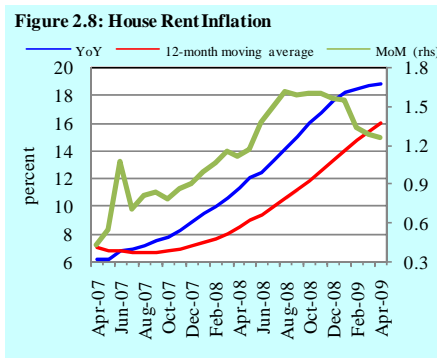
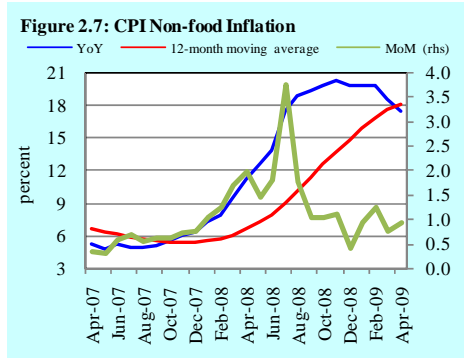
## 2.2 Non-food Inflation

Inflation (YoY) in CPI non-food group declined from 18.5 percent during March 2009 to 17.0 percent during April 2009; however it is still high compared to the corresponding month last year (see **Figure 2.7**). Similar to the previous month, inflation (YoY) in all sub-groups of non-food group showed decline during the month under review compared to the previous month, except *house rent index* and *education*. However increase in education sub-group was more significant.

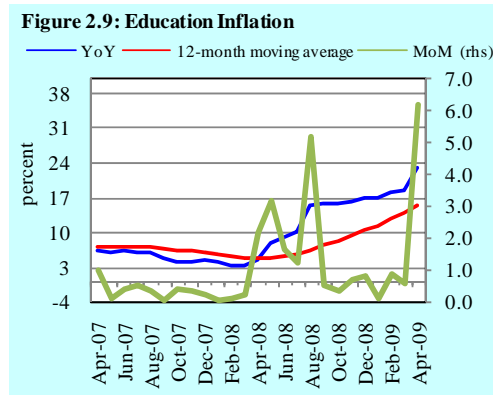
*House rent index* rose by 18.9 percent (YoY) during April 2009 compared to 18.7 percent in the preceding month and 11.4 percent in the corresponding month last year. On month-on-month basis inflation in this sub-group remained same during April 2009 compared to the previous month, but increased by 0.2 percentage points as compared to April 2008 (see **Figure 2.8**).

<sup>1</sup> Only five of these composite items, potatoes, onions, tomatoes, vegetables and fresh fruits, are included in perishable group with a total weight of 5.14 percent in overall CPI basket.

<sup>2</sup> The remaining 35 composite items, having weight of 35.0 percent, are in the non-perishable group



Inflation (YoY) in *education* sub-group was 23.0 percent during April 2009 compared to 18.4 percent in the previous month and 4.7 percent in the corresponding month last year. Inflation (MoM) in this sub-group also showed increase and was recorded at 6.2 percent during April 2009 compared to 0.5 percent in March 2009 and 2.2 percent during the corresponding month last year (see **Figure 2.9**).



Other indices of non-food group including *apparel, textile & footwear, fuel & lighting, household furniture & equipment, transport & communication, recreation & entertainment, cleaning, laundry & personal appearance, and medicare* recorded higher inflation (YoY) during April 2009 compared to the corresponding month last year, while showing a decline compared to the previous month (see **Figure A1** in Annexure).

Segregated analysis of 250 commodities included in CPI non-food basket revealed that prices of eight items declined, 22 showed no change in their prices, 19 showed price change between 0 to 5 percent, 37 moved between 5 to 10 percent and 164 commodities showed price change of more than 10 percent. The commodities which showed significant YoY price change included English Books for class IX and X (125.5 percent), UMS charges (102.9 percent), match box

(100.0 percent), train fare<sup>3</sup> (95.3 percent), etc. (see **Table A2 & A4** in the Annexure). On MoM basis, prices of 12 items showed decline, 135 items exhibit no change in their prices, 47 items recorded price change from 0 to 0.5 percent, price of 26 items ranged between 0.5 to 1.0 percent, remaining 30 items showed more than 1 percent change in their prices. However five commodities including philips bulbs (12.5 percent), Math Book class V (18.9 percent), Urdu Book class V (22.1 percent), English Books class IV or V (27.8 percent) and English Book class VI (31.9 percent) showed double digit price change.

### 2.3 City-wise Inflation

As overall inflation declined during April 2009, city-wise inflation (YoY) in major cities also declined compared to the previous month, but remained higher than inflation recorded in these

	Apr-08		Mar-09		Apr-09	
	MoM	YoY	MoM	YoY	MoM	YoY
<b>Over all CPI</b>	<b>3.0</b>	<b>17.2</b>	<b>1.4</b>	<b>19.1</b>	<b>1.4</b>	<b>17.2</b>
Islamabad	2.6	13.8	0.9	17.0	1.6	15.9
Lahore	3.7	15.4	1.3	17.5	2.1	15.6
Karachi	2.6	16.0	1.1	19.4	1.0	17.6
Quetta	4.2	17.5	1.2	22.5	0.9	18.6
Peshawar	3.2	18.9	1.3	20.7	1.0	18.2

cities during the same month last year (except in Peshawar). As in March 2009, inflation in Quetta, Peshawar and Karachi was above headline inflation during April 2009 (see **Table 2.1**). Inflation on MoM basis in three out of five major cities was lower than the average CPI inflation during April 2009. Inflation (MoM) in Islamabad and Lahore was higher than the overall CPI inflation (MoM).

The inflation data collected from 35 cities revealed that 22 cities were in the category of high inflation cities, while remaining 13 cities were categorized in low inflation cities during April 2009. The highest inflation (YoY) was recorded in Shahdadpur followed by Nawabshah. Whereas the lowest inflation (YoY) was recorded in Samundari (see **Table 2.2**). Inflation based on MoM indicates that the highest inflation (MoM) was in Mianwali (3.6 percent) and the lowest inflation was in Bannu (0.4 percent) during April 2009.

<sup>3</sup> A/C sleeper 101-500 km

**Table 2.2: City-wise Inflation in CPI (YoY) April 2009**

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Shahdadpur	23.4	26.4	21.1	Mianwali	17.1	16.0	18.0
Nawabshah	22.8	25.7	20.6	Jhang	16.7	15.3	17.8
Khuzdar	21.3	22.9	20.0	Vehari	16.5	15.0	17.6
Kunri	20.5	20.5	20.4	Loralai	16.4	16.2	16.5
Abbotabad	20.1	19.9	20.2	Jhelum	16.1	15.4	16.7
D.I.Khan	19.8	21.6	18.2	Multan	16.1	16.2	16.1
Mirpur Khas	19.8	18.4	20.9	Bahawalnagar	16.0	16.7	15.5
Okara	19.4	17.9	20.7	Islamabad	15.9	14.6	16.9
D.G. Khan	19.4	18.2	20.3	Lahore	15.6	15.0	16.2
Mardan	19.1	17.8	20.1	Faisalabad	13.4	9.0	17.3
Larkana	18.7	18.9	18.5	Bahawalpur	13.1	11.5	14.4
Quetta	18.6	20.2	17.3	Gujranwala	13.0	10.0	15.5
Sukkur	18.6	18.4	18.8	Samundari	12.9	9.0	16.2
Hyderabad	18.5	19.9	17.5				
Peshawar	18.2	17.7	18.7				
Attock	18.1	17.7	18.5				
Turbat	17.8	19.4	16.7				
Sargodha	17.7	18.7	16.8				
Sialkot	17.6	16.2	18.8				
Karachi	17.6	17.6	17.5				
Rawalpindi	17.2	16.1	18.0				
Bannu	17.2	17.7	16.8				

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

## 2.4 Income Group-wise Inflation

Income group- wise inflation (YoY) data indicates that all income groups, except the highest income group, experienced higher than average CPI inflation (YoY). Inflation on MoM basis for the two income groups (Rs 5001-12000 and above 12000) during April 2009 was leveled with the overall CPI inflation (MoM) (see **Table 2.3**).

	Table 2.3: Income Group-wise CPI Inflation															
	Upto 3000				Rs.3001-5000				Rs.5001-12000				Above Rs.12000			
	Apr-08		Apr-09		Apr-08		Apr-09		Apr-08		Apr-09		Apr-08		Apr-09	
	<i>Year-on-year (April over April)</i>															
General	20.2	17.7	19.9	17.8	18.1	18.0	15.7	16.2								
CPI Food	27.4	18.5	27.6	17.8	26.3	17.3	23.6	16.3								
CPI Non-food	15.1	17.0	14.5	17.8	12.2	18.6	9.7	16.0								
	<i>Month-on-Month (April over March)</i>															
General	3.0	1.6	3.1	1.5	3.1	1.4	3.0	1.4								
CPI Food	4.1	2.2	4.2	2.1	4.3	2.0	4.5	2.0								
CPI Non-food	2.2	1.0	2.2	1.0	2.1	1.0	1.7	0.8								

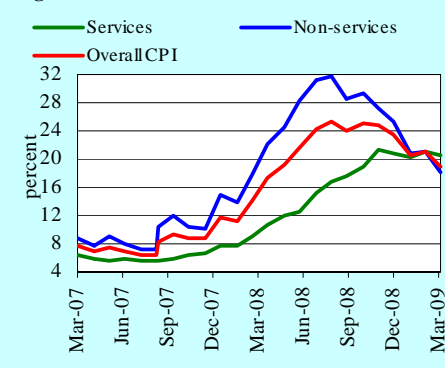
City and income group wise data, collected from 17 cities, showed that Quetta recorded the highest inflation for income groups upto Rs 3000 (22.1 percent) and Rs 5001 – 12000 (19.4 percent), Sukkur for income group Rs 3001 – 5000 (18.4 percent) and Larkana for income group above Rs 12000 (18.7 percent), whereas Gujranwala experienced the lowest inflation for the first three income groups and Bahawalpur for income group above Rs 12000 during April 2009 (see **Table A5** in Annexure A).

### 2.5 Services and Non-services Inflation

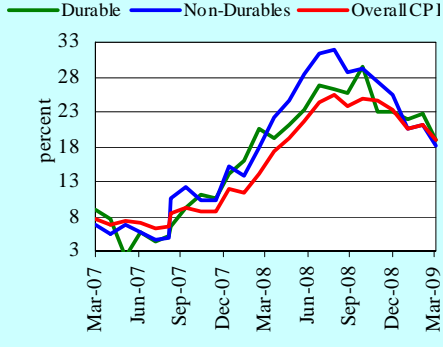
Inflation (YoY) in services<sup>4</sup> and non-services sectors showed decline during April 2009 compared to the preceding month, while it showed increase compared to the same month last year. Inflation (YoY) in services sector was 19.6 percent compared to 10.7 percent during the same month last year and 20.5 percent in the previous month. However inflation (MoM) showed increase during April 2009 (1.1 percent) compared to March 2009 (0.8 percent).

Inflation (YoY) in non-services sector also declined during April 2009 and was recorded at 15.5 percent compared to 22.2 percent in the corresponding month last year and 18.2 percent in March 2009. Inflation (MoM) in this sector also declined to 1.7 percent during April 2009 from 1.8 percent during March 2009 (see **Figure 2.9**).

**Figure 2.9: Services & Non-services Inflation**



**Figure 2.10: Durables and Non-durables Inflation**



<sup>4</sup> Services group of the CPI basket includes items like house rent index, electricity charges, marriage halls, household servants, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges, etc.

Further segregation of non-services group into durable<sup>5</sup> and non-durable sub-groups showed that inflation (YoY) of durable items was 18.6 percent during April 2009 compared to 19.0 percent in the same month last year and 18.9 percent in the previous month. On MoM basis, prices of durables witnessed a decline of 0.2 percent in April 2009, compared to no change during April 2008 and a rise of 1.3 percent in March 2009. On the other hand, inflation (YoY) for non-durable goods was 15.4 percent during the month under review compared to 22.3 percent in the same month last year and 18.0 percent in the previous month. Inflation (MoM) in this sub-sector was recorded at 1.7 percent during April 2009 compared to 1.8 percent in March 2009 (see **Figure 2.10**).

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<sup>5</sup> Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerators, air conditioners, vehicles, computer & allied products, watches and jewelry, etc.



### 3. Wholesale Price Index

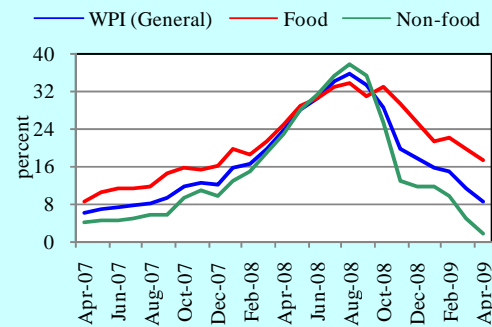
After reaching record high in August 2008, wholesale price index (WPI) inflation (YoY) continued to decline during April 2009, dropping to single digit for the first time since October 2007. WPI inflation (YoY) was 8.3 percent in April 2009 compared to 23.5 percent during the same month last year. This significant downtrend in WPI inflation was mainly due to the non-food

group of WPI. WPI non-food inflation (YoY) was recorded at 1.8 percent during April 2009 (the lowest level since August 2002) compared to 22.7 percent in the same month last year. On the other hand, despite showing deceleration compared to the previous month and the same month last year, WPI food group inflation still stayed high at 17.2 percent during April 2009 (see **Figure 3.1**).

Relatively stronger WPI food group inflation compared to the WPI non-food group has resulted in a disproportionate increase in food group's weighted contribution to overall WPI inflation reaching 87.7 percent in April 2009, compared to 43.9 percent during the same month last year (see **Figure 3.2**). Within WPI food groups the major items recorded substantial YoY

price increase during the month under review included onions, sugar, gur, tomatoes, condiments, wheat flour, pulse masoor, etc. Like previous month, the highest YoY growth was recorded by onions with 211.1 percent during April 2009. On the contrary, wholesale prices of eight food items, including vegetable ghee, bajra, cotton seed oil, mustard & rapeseed oil, pulse moong, etc. showed decline during the month under review (see **Table A7 & Figure 3.3**).

**Figure 3.1: Wholesale Price Inflation (YoY)**



**Figure 3.2: Weighted Contributions in WPI**

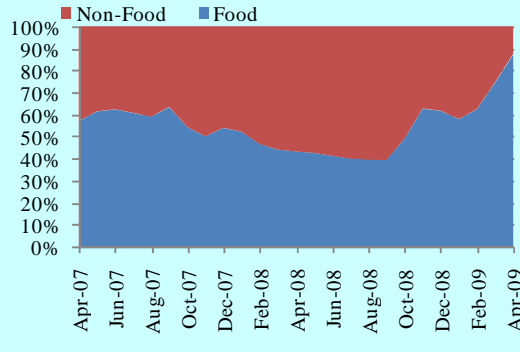


Figure 3.3: Changes in Wholesale Prices of Selected Food Items (April 2009)

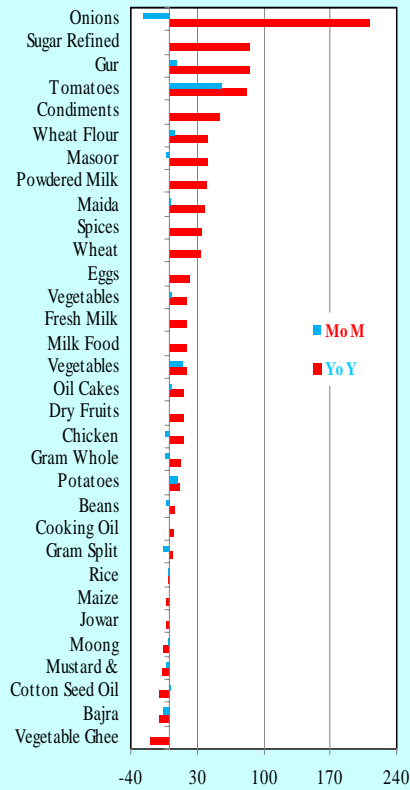
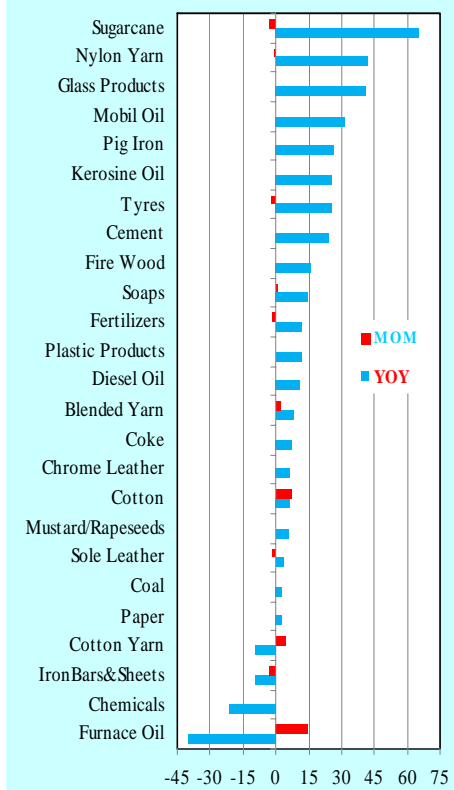
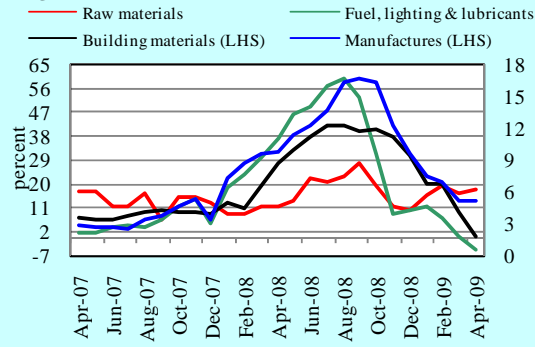


Figure 3.4: Changes in Wholesale Prices of Selected Non-food Items (April 2009)



A detailed analysis of items in the WPI non-food group revealed that items like sugarcane, and glass products registered more than 40 percent rise in prices (see **Table A7** and **Figure 3.4**). On the other hand, the prices of eight non-food items, including furnace oil, chemicals, and motor spirit, etc. either declined or showed no change during the month under review.

Figure 3.5: WPI Non-food Inflation - YoY

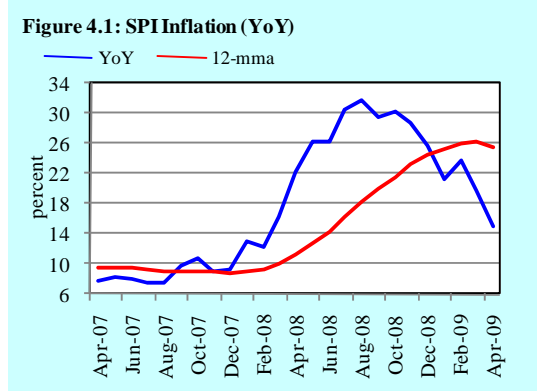


Among various sub-indices included in the WPI non-food group, all sub-indices, except *raw material* sub-index, recorded lower inflation (YoY) during April 2009 compared to the same month last year (see **Figure 3.5**). In particular the *fuel, lighting & lubricants* sub-group recorded negative YoY growth, for the first time since March 2007, and was recorded at (-) 4.7 percent during the month under review. Within the *fuel, lighting & lubricants* sub-group, items like furnace oil and motor spirit recorded negative price growth of 40 and 16.1 percent during the month under review.

A detailed analysis of YoY price changes of the items included in the sub-indices of WPI non-food group is presented in **Table A7**.

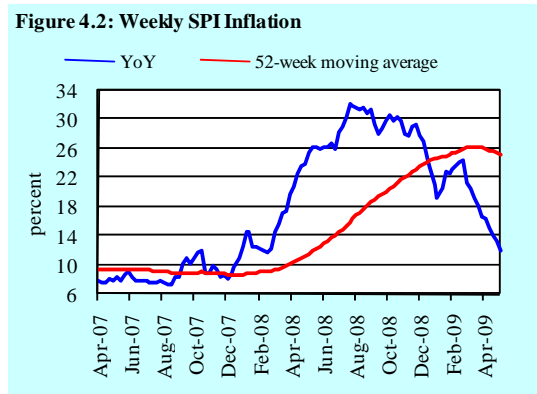
#### 4. Sensitive Price Indicator

The declining trend in sensitive price indicator (SPI) inflation on YoY basis continued during April 2009 dropping to 15.0 percent, as against 22.3 percent during the same month last year. It is imperative to note that the long run trend measured by 12 month moving average that was showing an upward trend since January 2008, peaked out during March 2009 and decelerated to 25.6 percent during April 2009 compared to 26.3 percent in March 2009 (see **Figure 4.1**).



A detailed analysis of the items included in the SPI basket shows items like onions (137.7 percent), sugar (77.2 percent), and gur (75.7 percent) showed significant YoY price increase during the month under review. On the other hand, 9 items recorded YoY decline in their prices, including red chillies, vegetable ghee, pulse moong, petrol, cooking oil and mustard oil, etc. (see **Table A8** in Annexure A).

SPI inflation on MoM basis registered an increase during April 2009 reaching 1.2 percent compared to 0.8 percent in the previous month, though remained lower compared to the same month last year. Major items recording high MoM inflation included potatoes, tomatoes, wheat flour and gur, etc. (see **Table A8** in Annexure A). On the contrary, items like onions, chicken and pulse gram, etc. recorded negative price growth on MoM basis during April 2009.



The declining trend in weekly SPI inflation (YoY) that started from the first week of March 2009 continued throughout April 2009, as it fluctuated within the range of 13.3 percent to 16.7 percent (see **Figure 4.2**).

**Table 4.2** shows SPI inflation (YoY) on income group-wise basis. It is evident that the incidence of inflation (YoY) remained the highest for the middle income group having monthly income of Rs 5000 to 12000 during the month under review (see **Table 4.2**).

<b>Table 4.2 : Income Group-wise SPI Inflation (YoY)</b>				
	percent			
	<b>Apr-08</b>	<b>Jun-08</b>	<b>Mar-09</b>	<b>Apr-09</b>
Up to Rs. 3000	24.9	30.0	20.1	15.8
Rs. 3001-5000	24.5	29.2	20.7	16.0
Rs. 5000-12000	22.8	27.0	21.5	17.2
Above Rs. 12000	19.9	23.5	19.3	15.1
<b>All income groups</b>	<b>22.3</b>	<b>26.3</b>	<b>19.8</b>	<b>15.0</b>

## 5 Global Commodity Prices

Prices of most of the commodities increased in international markets during the month on expectations that worst of recession is over.

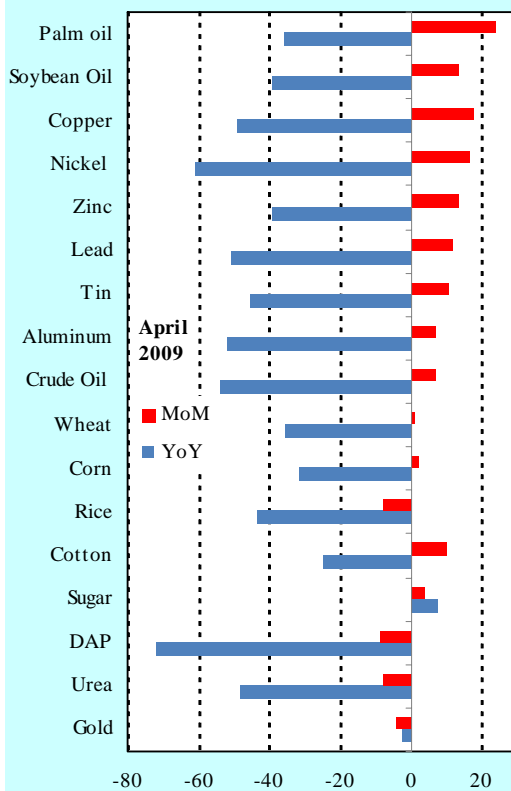
Industrial metal prices surged as economic optimism developed hopes of recovery in the auto industry<sup>6</sup>. Crude oil prices ended up higher due to increasing demand in the US before the upcoming driving season. Prices of cereals<sup>7</sup> moved up due to increased global production and declining demand for US grain<sup>8</sup>.

Edible oils rose during April 2009 due to the depleting stocks and declining plant acreage of soybean and palm oil worldwide. Increased demand from China also boosted edible oil prices.

Cotton prices hiked in the month as global production of cotton has decreased while the demand from China and India has increased tremendously<sup>9</sup>. Fertilizer prices decreased during the month on weak demand and abundant supplies. Sugar price increased as output in India, the biggest consumer of the sweetener, dropped (see **Figure 5.1**).

Looking at the detailed picture of these commodities, edible oil remained the top mover group as soybean reached at 13-month high and palm oil prices showed highest change on MoM basis since August 2001 (see **Figure 5.2**).

**Figure 5.1: Percent Change in Price (US\$)**



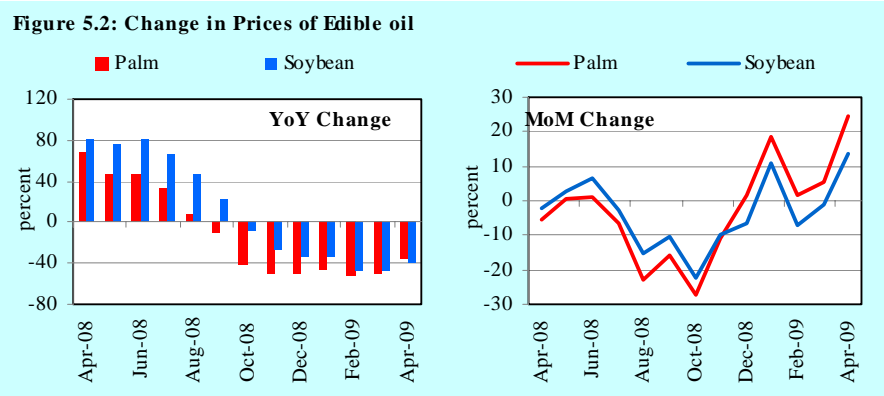
Source: IMF and World Bank

<sup>6</sup> www.bloomberg.com

<sup>7</sup> wheat, rice and corn

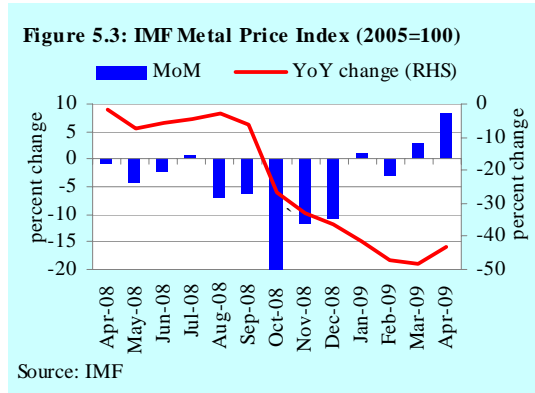
<sup>8</sup> www.ft.com

<sup>9</sup> www.bloomberg.com



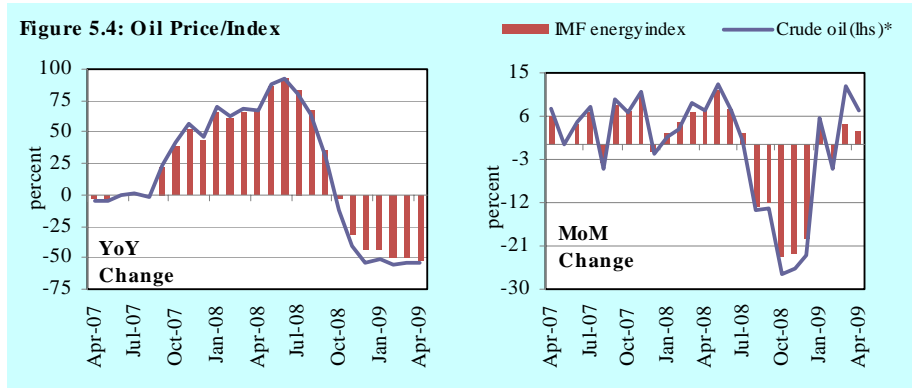
Soybean prices soared after the US Department of Agriculture (USDA) report showed that farmers intend to plant fewer acres of the oilseed than expected earlier. Report further revealed that global soybean stocks were at their lowest since 2004-05, with no foreseeable increase in coming months in inventories of the world’s largest producers, the United States, Brazil and Argentina. Moreover continuing problems in Argentina over export taxes and relatively low stock levels also provided a spur to soybean prices. Increased demand of the oilseed from China also boosted the prices.

Palm oil prices rose during the month mainly due to: (a) India, the largest vegetable oil buyer after China, more than tripled its palm oil purchases; and (b) increased palm oil exports in April 2009 that led to a further drop in its stocks according to independent surveyor Intertek.



After edible oils, prices of industrial metal group increased most in April 2009.

Industrial metals increased (see **Figure 5.3**) on the optimism that the worst of recession is over, hoping that the auto industry will regain its pace of production. Strong individual demand from China, and stimulus package by their government for stockpiling led the metals prices to rise.



As regards the energy group, prices continued to rise on MoM basis in the international markets for the second consecutive month, however their pace was weakened compared to the previous month. Crude oil prices rose by 7.1 percent in April 2009 while in March 2009 it increased by 12.4 percent on MoM basis (see **Figure 5.4**).

Crude oil trade had been influenced by (a) equity markets that are viewed as an indicator of future economic strength and the potential for higher oil demand, and (b) fluctuations in the dollar price as dollar dropped against the euro which provided commodity markets strength. Moreover Organization for Petroleum Exporting Countries' (OPEC) crude oil supply cuts showing effects in the market.

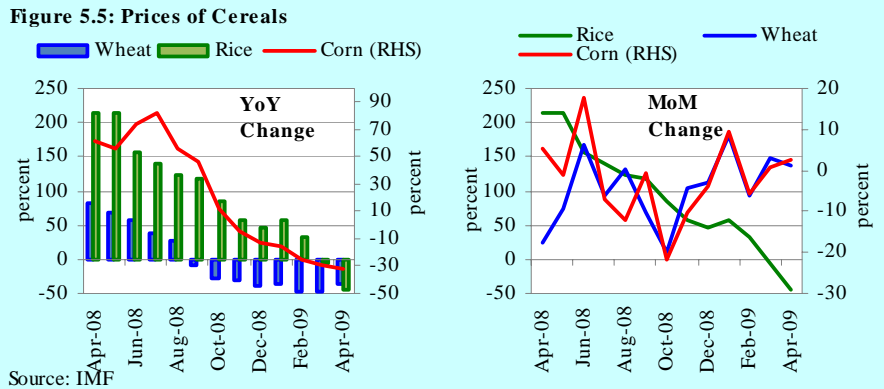
In case of Cereals, the prices of wheat and corn moved up in the international markets during April 2009 on MoM basis. A number of factors contributed towards the current rise in wheat prices including (a) strong demand (b) expected wheat production shortfall worldwide<sup>10</sup>.

Corn prices rose by 2.5 percent on MoM basis in April 2009 as increasing energy prices in the world boosted the demand for ethanol. Demand for corn used in livestock feed have also increased sharply in the US whereas bad whether and some other problems has reduced corn planting by 1.2 percent in US from a year ago. However rice prices moved downward as Vietnam eased restrictions on rice exports<sup>11</sup> (see **Figure 5.5**).

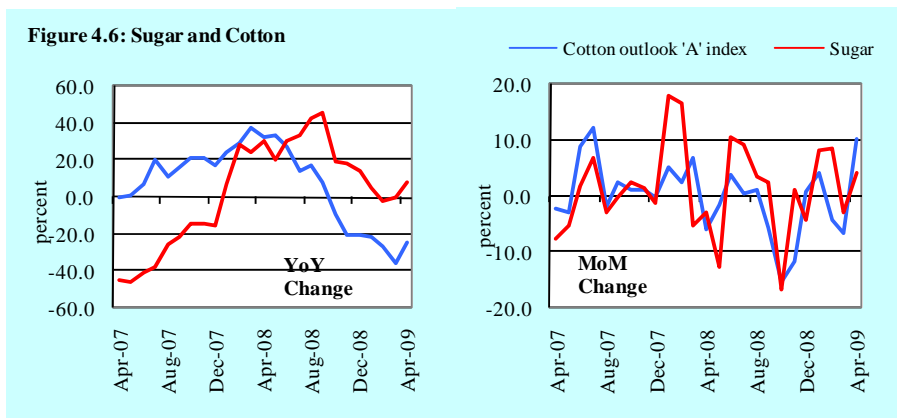
<sup>10</sup> Bad weather conditions in US and Australia to affect wheat production. Smaller wheat crop in Argentina due to export restrictions and drought.

<sup>11</sup> Earlier in February the Vietnam Food Association banned rice exports.





Cotton prices rose by 10.2 percent in April 2009 on MoM basis (see **Figure 5.6**) due to heavy demand from India and China, two largest consumers and producers of cotton. Support to cotton prices was also provided by the USDA report that showing an increase in US cotton exports<sup>12</sup>.

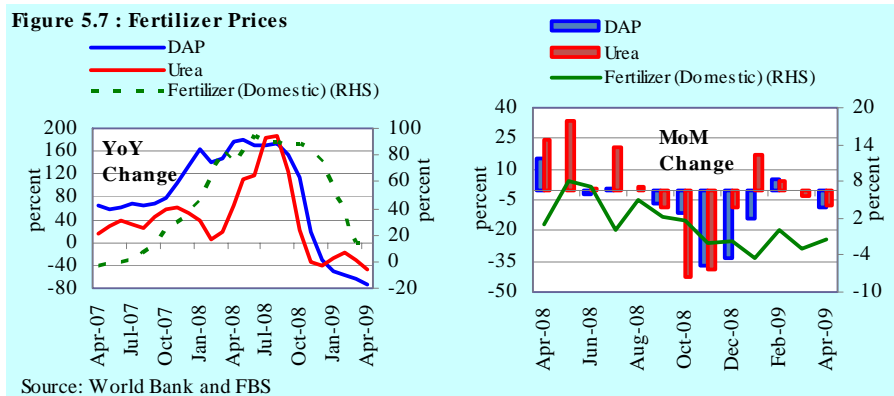


Sugar prices rose due to strong demand from India, the largest sweetener consumer as India's domestic production has decreased drastically due to higher alternative crop prices causing a large number of cane growers to switch to other crops like paddy and wheat. India's cane area fell by 16 percent in 2008/09 as

<sup>12</sup> US is the largest exporter of cotton.

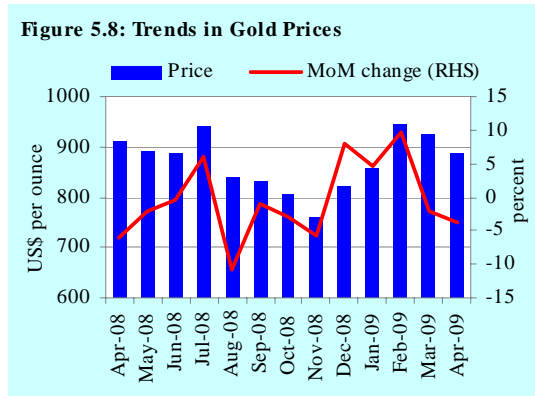
compared to the previous year<sup>13</sup>. Following this, India scrapped the import duty on raw and white varieties of the sweetener to meet its shortage.

Moreover Pakistan issued a tender to import 50,000 tons of sugar in April 2009. Further, the government has announced that the country has to import 0.4 million tons of more sugar to meet the domestic demand<sup>14</sup>.



Fertilizer prices decreased drastically in April 2009 on weak demand amid plentiful supplies (see **Figure 5.7**). The supplies of fertilizers are increasing in the international market because despite weak demand manufacturers are continuously producing more fertilizers on the back of lower natural gas prices and lower super phosphoric acid costs.

Gold prices decreased by 3.8 percent in April 2009 on MoM basis (see **Figure 5.8**). Gold fell below \$900 with stock market rallies worldwide eroding the gold's demand as an alternative investment. Meanwhile the news about the recovery of US economy and expectations that stimulus packages implemented in various countries will put the world economy back on recovery track are reducing the metal's appeal as a safe haven.



<sup>13</sup> Indian Sugar Mills Association

<sup>14</sup> www.reuters.com

## Annexure A

	Weights	MoM change			YoY change		
		Apr-08	Mar-09	Apr-09	Apr-08	Mar-09	Apr-09
<b>I. Food Group</b>	<b>40.3</b>	<b>4.3</b>	<b>2.2</b>	<b>2.0</b>	<b>25.5</b>	<b>19.7</b>	<b>17.0</b>
<b>II. Non-Food Group</b>	<b>59.7</b>	<b>2.0</b>	<b>0.7</b>	<b>0.9</b>	<b>11.2</b>	<b>18.5</b>	<b>17.3</b>
Apparel, textile, etc.	6.1	1.9	0.3	0.7	8.4	13.6	12.3
House rent	23.4	1.1	1.3	1.3	11.4	18.7	18.9
Fuel & lighting	7.3	0.0	0.0	0.0	8.6	26.7	26.7
Household furniture & equipment	3.3	1.7	0.6	0.3	8.4	14.2	12.6
Transport & communication	7.3	8.6	0.1	0.1	17.9	17.8	8.6
Recreation & entertainment	0.8	0.1	0.0	0.1	1.0	13.9	13.9
Education	3.5	2.2	0.5	6.2	4.7	18.4	23.0
Cleaning, laundry, etc.	5.9	0.3	1.3	0.0	15.8	16.4	16.0
Medicare	2.1	0.8	0.1	0.1	7.4	14.2	13.4
<b>Headline</b>	<b>100</b>	<b>3.0</b>	<b>1.4</b>	<b>1.4</b>	<b>17.2</b>	<b>19.1</b>	<b>17.2</b>

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%)	
	Apr-08	Apr-09	Apr-09	Apr-08	Apr-09	Apr-08	Apr-09	Apr-08	Apr-09	Apr-08	Apr-09
<b>I. Food Group</b>	<b>25.5</b>	<b>17.0</b>	<b>110</b>	<b>12</b>	<b>14</b>	<b>9</b>	<b>6</b>	<b>12</b>	<b>14</b>	<b>77</b>	<b>76</b>
<b>II. Non-Food Group</b>	<b>11.2</b>	<b>17.3</b>	<b>250</b>	<b>64</b>	<b>30</b>	<b>42</b>	<b>18</b>	<b>67</b>	<b>37</b>	<b>77</b>	<b>164</b>
Apparel, textile, etc.	8.4	12.3	42	4	1	10		20	14	8	26
House rent	11.4	18.9	1					1			1
Fuel & lighting	8.6	26.7	15	2	3			9	1	4	11
Household furniture & equipt	8.4	12.6	44	0		6	1	15	10	23	33
Transport & communication	17.9	8.6	43	19	5		1	3	1	21	36
Recreation & entertainment	1.0	13.9	16	9	2	4	6	1	2	2	6
Education	4.7	23.0	24	9	3	8	3	3	0	4	18
Cleaning, laundry, etc.	15.8	16.0	36	3	3	7	3	15	6	11	24
Medicines	7.4	13.4	29	18	13	7	4		3	4	9
<b>Overall</b>	<b>17.2</b>	<b>17.2</b>	<b>360</b>								

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

<b>Table A3: Top Ten Contribution to YoY CPI Inflation in April 2009</b>					
<b>Items</b>	<b>Weights</b>	<b>YoY change</b>		<b>Weighted Contribution</b>	
		<b>Mar-08</b>	<b>Mar-09</b>		
<b>A. Ranked by Weighted Contribution</b>					
1	House Rent Index	23.43	11.35	18.86	24.39
2	Wheat Flour	5.11	54.07	25.77	9.9
3	Milk Fresh	6.66	20.97	15.63	6.72
4	Electricity	4.37	6.44	25.58	4.91
5	Sugar	1.95	-17.14	78.78	4.82
6	Natural Gas	2.05	6.76	27.79	4.34
7	Onions	0.65	-8.07	170.74	4.04
8	Meat	2.70	6.54	17.26	3.69
9	Transport Fare/Charges	2.12	19.56	23.09	3.48
10	Readymade Food	1.68	20.69	22.14	2.39
<b>Total</b>		<b>50.72</b>			<b>68.70</b>
<b>B. Ranked by Percentage Change</b>					
1	Onions	0.65	-8.07	170.74	4.04
2	Match Box	0.13	0.00	100.00	0.45
3	Sugar	1.95	-17.14	78.78	4.82
4	Gur	0.07	-19.96	75.93	0.21
5	Tomatoes	0.51	56.85	62.40	1.71
6	Condiments	0.34	40.17	49.03	0.93
7	Train Fare	0.15	0.00	48.96	0.44
8	Text Books	0.69	0.56	44.76	1.36
9	Pulse Masoor	0.22	77.86	42.73	0.73
10	Tea	1.26	2.65	36.15	1.85
<b>Total</b>		<b>5.96</b>			<b>16.55</b>
<b>C. Ranked by Weights</b>					
1	House Rent Index	23.43	11.35	18.86	24.39
2	Milk Fresh	6.66	20.97	15.63	6.72
3	Wheat Flour	5.11	54.07	25.77	9.90
4	Electricity	4.37	6.44	25.58	4.91
5	Bakery & Confectionary	2.98	9.65	12.07	1.61
6	Meat	2.70	6.54	17.26	3.69
7	Vegetable Ghee	2.67	59.90	-16.46	-3.95
8	Tution Fees	2.36	4.84	17.34	2.12
9	Transport Fare/Charges	2.12	19.56	23.09	3.48
10	Natural Gas	2.05	6.76	27.79	4.34
<b>Total</b>		<b>54.45</b>			<b>57.21</b>
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 17.2 percent in April 2009.					

Table A4: Distribution of Price Changes (YoY)- Selected CPI Items, April 2009

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Vegetable Ghee (Loose)		Chicken Farm Broiler (Live), Potatoes	Milk Fresh (Unboiled)
	Vegetable Ghee Tin		Rice Basmati Broken	Wheat Flour Bag
	Chowkelate Candy (Small Size)	Toffee (Hilal)	Av.Qlty	Sugar Refined
	Cooking Oil (Dalda), Apple, Pulse Moong (Washed), Chillies Green	Bananas	Rice Basmati 385/386	Beef With Bone
	Garlic, Ginger	Cold Drink (Standard Siz)	Kinnu	Av.Qlty., Wheat Flour Fine/Superior.
		Biscuits-Packed	Pulse Mash (Washed)	Mutton Av.Qlty.
		Fruit Juice Tetra Pack	Rice Irri-6 (Sindh/Punjab)	Onion, Tea Loose
		Cardamom Large	Squash-Mitchelles	Kenya Av.Qlty 250G
Apparel & Textile		Loose Av.Qlty	Rooh Afza	Corriander Seed
	Gents Sandal Bata	Gents Shoe, Art 1109 Service	Lawn Av.Qlty. School Uni, Kameez, Shal. Girl, Tailoring Coat-Pant Suit	Powd.Nationa
House Rent Index				House Rent Index
Fuel & Lighting		--		Elect. Charges Above 1000 Units, Elect. Charges 301 - 1000 Units, Tube Light Philips 40 Watts
	Kerosene Oil Firewood Whole Match Box Small		Bulb Philips 100-Watts	Elect. Charges upto 50 Units
Household Furniture & Equipment			Household Servant Female P/T, Blanket (90" X 54"), Tea-Set S.Steel 3 Pcs. M.Siz	Quilt (Lihaf) 3 Kg. Cotton, Tea Set Pak. Chinaware 21 Pc Bedsheet Single Bed Sup.Qlty
		Carpet Plain Av. Qlty		
Transport & Communication.	Petrol Super Car Tax For 800cc To 1300cc, Plateform Ticket			A/C Bus Fare Outside City, High Speed Diesel HSD, Train Fare 1st Slp. > 500 Km, U.M.S. Reg Charges Min.
	Postal Envelope Domestic	Telephone Charges Local Call	Tel Charges Out Side City	
Recreation & Entertainment	Tv. Licence, Fee domestic	Video Game Sega 16 Byte, Cinema A/C.	T.V. 20" Colored With R/Cont, Cinema Non-A/C High Class	Daily "Jang"
	Weekly "Akhbar-E-Jahan"	Highest Class, Radio With C.Player National		Daily "Nawa-e-Waqt" Daily "Dawn"
Education	Com. C.D. (TDK /Imation), Govt. College Fee Ist. Year, Govt. College Fee 4Th. Year	Govt. Engg. Coll. Fee 1 Year, Comp. With Printer & Speaker Govt. University Fee Msc.		School Fee 2nd-year Eng. Med., School Fee Primary Eng. Med. English Book Class ix or x
	Toothpaste Mcleans 70 gm	Talc Powder Vice	Beauty Porl Hair Styl Charge, Hair-Colour Begin (6 Gms), Tissu Paper Perfumed 100 Pcs, Wrist Watch Ladies Citizen	Haircut Charges For Men, Washing Soap, Toilet Soap Lux 95 grams, Shampoo Plain Medora 200 ML.
Cleaning & Laundry	Toothpowder Dentonic 90 Grm Silver Tezabi 24 ct	Roay.B.Cat, Lipstick S.Miss/Medora, Toilet Paper Roll (R.Petel)		
		Daonil Tab. 5 Mg.		
Medicare	Dettol (Medium)	Sepran Tablets	O.R.S. (Nimcol)	Doctor (MBBS) Clinic Fee, Cotton Bandage 2" - 4", Gripe-Water
	Jouhar Joshanda Ventolin Tab. 2Mg.	Panadol Tab. Extra/Plain	Galxos-D (450 Grms) Brufen Tabs 200-Mg.	Woodwards

**Table A5: City-wise Inflation by Income Groups, April 2009**

		Upto Rs:3000						Rs 3001-5000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	2.7	16.5	4.7	18.0	1.1	15.3	2.5	16.1	4.0	15.8	1.3	16.3
2	Faisalaead	1.7	13.1	2.6	10.1	0.9	15.8	1.6	13.4	2.4	9.8	0.9	16.3
3	Rawalpindi	1.7	17.3	2.4	18.0	1.1	16.7	1.9	17.3	2.8	16.6	1.2	17.8
4	Multan	1.9	16.3	3.0	17.2	1.1	15.6	2.0	16.3	3.1	16.7	1.2	16.1
5	Gujranwala	2.2	11.9	3.4	10.0	1.3	13.4	2.5	12.5	3.3	9.9	1.9	14.7
6	Islamaead	1.3	16.0	1.9	15.5	0.9	16.4	1.6	15.6	2.6	14.8	0.9	16.2
7	Sargodha	2.2	17.6	3.0	19.9	1.5	15.7	1.6	18.1	2.0	20.3	1.2	16.4
8	Sialkot	2.2	16.3	3.1	16.3	1.5	16.2	2.7	17.3	4.2	16.4	1.5	18.0
9	Bahawalpur	2.9	12.1	4.7	11.8	1.5	12.2	2.5	13.1	4.0	12.3	1.4	13.7
10	Karafhi	0.8	17.3	0.8	17.5	0.8	17.2	1.1	18.0	1.3	18.4	0.9	17.8
11	Hyderaead	1.9	18.5	2.9	20.7	1.1	16.7	1.6	18.1	2.5	19.9	1.0	16.7
12	Sukkur	1.1	18.9	1.2	20.1	1.1	17.9	1.1	18.4	1.3	19.5	1.0	17.6
13	Larkana	0.4	18.9	0.0	20.8	0.7	17.3	0.5	18.2	0.3	18.9	0.7	17.7
14	Peshawar	1.0	18.0	1.4	19.2	0.7	17.0	1.3	18.2	1.8	18.3	0.8	18.1
15	Bannu	1.8	16.5	2.6	17.6	1.2	15.7	1.9	17.0	2.9	17.7	1.1	16.5
16	Quetta	0.4	22.1	0.4	26.4	0.4	18.6	0.8	18.1	1.0	20.0	0.6	16.5
17	Khuafdar	1.4	16.5	2.4	17.6	0.5	15.6	1.6	17.1	3.1	17.7	0.4	16.6
		Rs 5001-12000						above Rs 12000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	2.2	16.3	3.4	15.2	1.2	17.2	1.9	14.9	2.9	14.6	1.0	15.2
2	Faisalaead	1.4	13.7	2.1	9.2	0.9	17.6	1.1	13.2	1.5	8.7	0.7	17.2
3	Rawalpindi	1.9	18.1	2.5	16.3	1.5	19.5	1.8	16.4	2.0	15.8	1.6	16.8
4	Multan	1.7	16.8	2.6	16.4	1.0	17.1	1.2	15.1	1.7	15.4	0.8	14.9
5	Gujranwala	2.7	13.4	3.5	10.1	2.2	16.0	3.0	12.8	3.8	10.0	2.4	15.0
6	Islamaead	1.7	17.3	2.2	14.9	1.4	19.1	1.6	15.6	1.9	14.5	1.3	16.5
7	Sargodha	1.3	18.6	1.5	19.5	1.2	17.9	0.8	15.4	0.6	15.8	0.9	15.0
8	Sialkot	2.7	17.9	4.1	16.2	1.5	19.4	2.5	17.4	4.2	16.2	1.0	18.4
9	Bahawalpur	2.2	13.7	3.4	11.8	1.2	15.2	1.6	12.6	2.7	10.2	0.7	14.8
10	Karafhi	1.1	18.5	1.4	18.3	0.9	18.6	0.8	16.7	1.0	16.7	0.7	16.6
11	Hyderaead	1.6	18.9	2.4	20.1	0.9	18.0	1.1	17.7	1.7	19.3	0.6	16.4
12	Sukkur	1.2	18.8	1.4	18.5	1.1	19.1	1.2	18.0	1.6	17.0	1.0	18.7
13	Larkana	0.3	18.8	0.0	18.9	0.6	18.7	0.8	18.7	0.8	18.9	0.7	18.6
14	Peshawar	1.1	19.0	1.6	17.9	0.8	19.9	0.9	17.4	1.1	17.1	0.7	17.7
15	Bannu	1.9	17.1	3.1	17.6	0.9	16.7	2.3	17.5	4.0	17.7	1.0	17.3
16	Quetta	0.8	19.4	1.1	20.6	0.6	18.5	1.0	17.7	1.4	19.8	0.6	16.0
17	Khuafdar	1.6	17.6	3.5	18.3	0.1	16.9	2.0	18.1	4.5	19.4	0.0	17.0

<b>Table A6 : Income Group-wise Inflation</b>							percent
	<b>MoM</b>			<b>YoY</b>			
	<b>Apr-08</b>	<b>Mar-09</b>	<b>Apr-09</b>	<b>Apr-08</b>	<b>Mar-09</b>	<b>Apr-09</b>	
<u>Up to Rs. 3000</u>							
General	3.0	1.5	1.6	20.2	19.4	17.7	
Food	4.1	2.1	2.2	27.4	20.7	18.5	
Non-food	2.2	1.1	1.0	15.1	18.4	17.0	
<u>Rs. 3001-5000</u>							
General	3.1	1.5	1.5	19.9	19.6	17.8	
Food	4.2	2.1	2.1	27.6	20.2	17.8	
Non-food	2.2	1.0	1.0	14.5	19.2	17.8	
<u>Rs. 5000-12000</u>							
General	3.1	1.4	1.4	18.1	19.9	18.0	
Food	4.3	2.1	2.0	26.3	20.0	17.3	
Non-food	2.1	0.9	1.0	12.2	19.9	18.6	
<u>Above Rs. 12000</u>							
General	3.0	1.3	1.4	15.7	18.0	16.2	
Food	4.5	2.2	2.0	23.6	19.2	16.3	
Non-food	1.7	0.5	0.8	9.7	17.1	16.0	
<u>All income groups</u>							
General	3.0	1.4	1.4	17.2	19.1	17.2	
Food	4.3	2.2	2.0	25.5	19.7	17.0	
Non-food	2.0	0.7	0.9	11.2	18.5	17.3	

**Table A7: Distribution of Price Change (YoY) - WPI Items: April 2009**

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



Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Price Apr 09	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	24.9	36.0	2.5
2	Wheat flour average qlt.	Kg.	26.6	27.9	8.6
3	Rice basmti.broken	Kg.	42.4	-0.8	-2.3
4	Rice irri-6	Kg.	35.2	2.4	-2.1
5	Masur pulse washed	Kg.	115.2	35.6	-3.2
6	Moong pulse washed	Kg.	45.8	-13.7	-1.8
7	Mash pulse washed	Kg.	79.7	9.9	5.3
8	Gram pulse washed	Kg.	50.4	2.2	-4.6
9	Beef	Kg.	151.3	20.8	3.0
10	Mutton	Kg.	275.0	13.6	2.7
11	Egg hen (farm)	Doz.	57.7	12.4	-2.3
12	Bread plain	Each	25.5	29.8	1.2
13	Sugar	Kg.	44.5	77.2	1.9
14	Gur	Kg.	50.2	75.7	8.0
15	Milk fresh	Litr	37.4	16.9	1.7
16	Milk powdered nido	400g	170.0	17.2	0.0
17	Curd	Kg.	44.1	17.4	1.7
18	Veg.ghee tin	2.5k	327.2	-12.3	0.2
19	Veg.ghee loose	Kg.	101.2	-19.3	3.7
20	Mustard oil	Kg.	134.0	-5.3	-3.5
21	Cooking oil	2.5l	351.3	-8.3	0.0
22	Potatoes	Kg.	13.2	5.2	9.8
23	Onions	Kg.	27.8	137.7	-30.2
24	Tomatoes	Kg.	31.8	5.8	11.7
25	Bananas	Doz.	39.5	8.6	2.4
26	Salt powdered	Kg.	6.4	19.6	0.8
27	Red chillies(powd)	Kg.	130.0	-30.7	-1.6
28	Garlic	Kg.	37.4	-3.8	-6.2
29	Tea packet	250g	100.0	38.9	0.0
30	Tea (prepared)	Cup	8.7	19.3	0.0
31	Cooked beef plate	Each	41.9	19.3	1.4
32	Cooked dal plate	Each	26.4	18.6	1.5
33	Cigarettes k-2	10's	9.5	13.9	0.3
34	Coarse latha	Mtr.	44.8	9.9	-0.9
35	Lawn (avg.+s.qlty)	Mtr.	92.9	5.3	3.1
36	Voil printed	Mtr.	47.2	11.2	2.3
37	Shirting	Mtr.	79.5	9.3	0.2
38	Sandel gents bata	Pair	499.0	0.0	0.0
39	Sandel ladies bata	Pair	379.0	26.8	0.0
40	Chappal spng. Bata	Pair	129.0	18.3	0.0
41	Kerosene	Litr	63.5	30.3	0.3
42	Firewood	40kg	273.0	16.1	0.5
43	Elec. Bulb 60-wats	Each	16.5	27.4	6.7
44	Match box	Each	1.0	0.0	0.0
45	Washing soap	Cake	12.6	15.5	0.1
46	Bath soap lifebuoy	Cake	22.0	15.9	0.0
47	Chicken (farm)	Kg.	110.8	8.7	-7.5
48	Gas chrg. All clb. Comb	D.mmbt	292.1	22.0	0.0
49	L.P.G.(cylinder 11kg.)	Each	762.6	25.3	-0.8
50	Elec.chrg.all slabs comb	Bd. Unit	6.8	22.9	0.4
51	Petrol	Litr	58.3	-9.2	0.0
52	Diesel	Litr	57.7	26.9	0.0
53	Telephone local	Call	2.4	4.8	0.0
<b>Maximum</b>				<b>137.7</b>	<b>11.7</b>
<b>Median</b>				<b>15.5</b>	<b>0.1</b>
<b>Minimum</b>				<b>-30.7</b>	<b>-30.2</b>

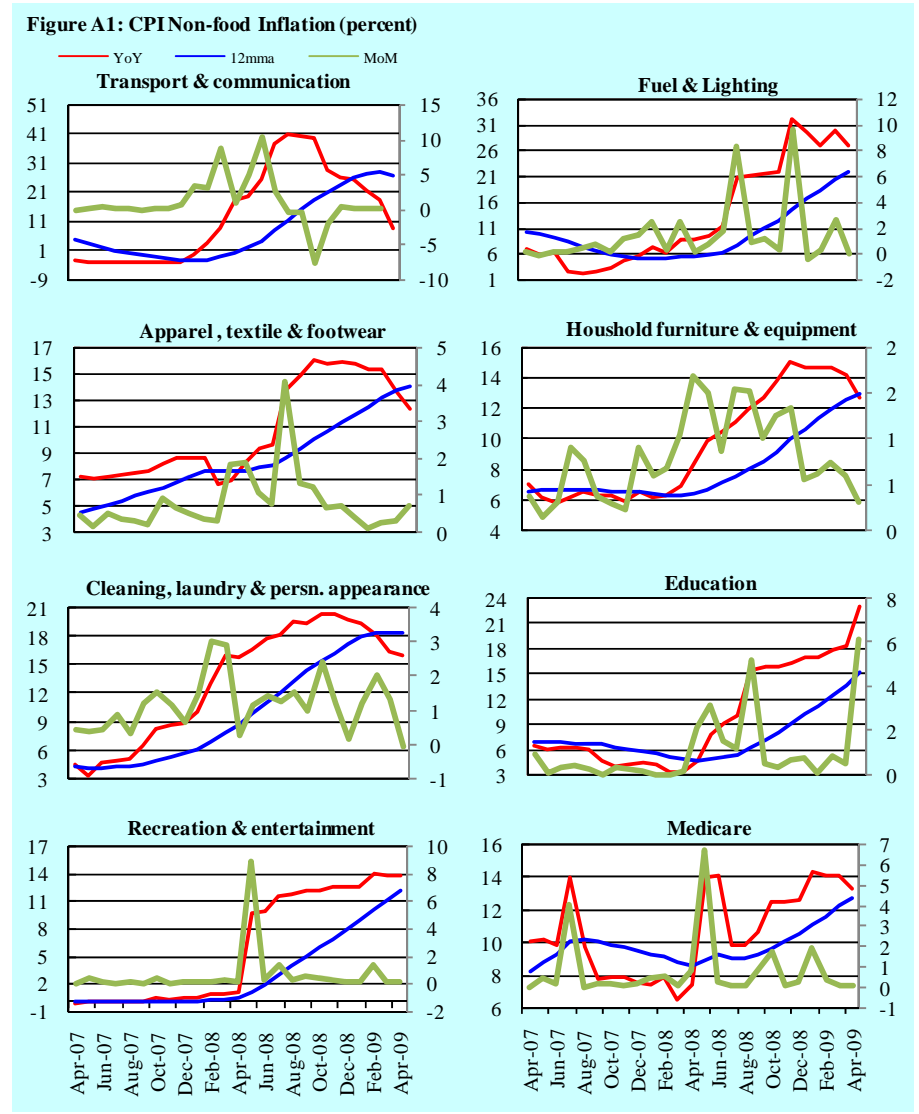
Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item and Specification	Weights	Index		
		Apr-08	Mar-09	Apr-09
<b>GENERAL</b>	<b>100.0008</b>	<b>158.50</b>	<b>194.53</b>	<b>197.28</b>
<b>FOOD &amp; BEVERAGES.</b>	<b>40.3414</b>	<b>172.16</b>	<b>216.13</b>	<b>220.46</b>
1 WHEAT	0.4830	201.66	281.84	289.48
2 WHEAT FLOUR	5.1122	174.40	259.35	273.53
3 MAIDA	0.1059	198.21	264.02	272.52
4 BESAN	0.1320	150.83	199.39	192.80
5 RICE	1.3369	222.68	279.14	276.26
6 PULSE MASOOR	0.2214	196.43	328.50	320.60
7 PULSE MOONG	0.2230	171.43	157.85	155.11
8 PULSE MASH	0.2017	155.43	166.39	170.45
9 PULSE GRAM	0.4272	146.30	186.99	177.55
10 GRAM WHOLE	0.1491	136.89	179.61	174.38
11 MUSTARD OIL	0.0456	232.46	248.90	245.61
12 COOKING OIL	0.6858	200.38	220.31	220.22
13 VEGETABLE GHEE	2.6672	231.04	215.55	217.77
14 SUGAR	1.9467	93.56	158.73	162.73
15 GUR	0.0735	119.18	178.64	192.93
16 TEA	1.2559	112.22	160.35	160.44
17 MILK FRESH	6.6615	172.65	213.66	216.06
18 MILK POWDER	0.1105	175.38	204.52	204.80
19 MILK PRODUCTS	0.5607	156.64	196.93	200.09
20 HONEY	0.0358	133.24	187.99	187.71
21 CEREALS	0.0878	164.69	229.27	231.21
22 JAM,TOMATO,PICKLES & VINEGAR	0.2472	140.37	165.53	168.97
23 BEVERAGES	0.7286	142.34	163.15	166.25
24 CONDIMENTS	0.3392	161.62	241.57	241.77
25 SPICES	0.6008	167.34	210.22	211.17
26 DRY FRUIT	0.2760	243.91	311.88	315.76
27 BAKERY & CONFECTIONARY	2.9837	127.53	143.89	144.55
28 CIGARETTES	0.9527	158.57	185.95	187.41
29 BETEL LEAVES & NUTS	0.1851	148.51	171.75	171.10
30 READYMADE FOOD	1.6833	180.69	223.16	226.64
31 SWEETMEAT & NIMCO	0.3846	182.53	226.13	229.62
32 FISH	0.2703	153.87	184.05	186.24
33 MEAT	2.6981	225.30	263.43	269.04
34 CHICKEN FARM	0.9158	142.28	228.66	217.23
35 EGGS	0.4119	219.28	222.38	227.34
36 POTATOES	0.6032	121.31	128.09	138.63
37 ONIONS	0.6463	108.79	415.40	285.98
38 TOMATOES	0.5059	224.12	167.20	253.21
39 VEGETABLES	1.7695	200.44	186.76	218.01
40 FRESH FRUITS	1.6158	167.95	222.57	242.57
<b>APPAREL, TEXTILE &amp; FOOTWEAR.</b>	<b>6.0977</b>	<b>133.42</b>	<b>154.41</b>	<b>155.53</b>
41 COTTON CLOTH	1.6197	136.38	156.92	158.02
42 SILK,LINEN,WOOLEN/CLOTH	0.5766	135.52	152.77	153.87
43 TAILORING CHARGES	0.8636	137.40	161.95	162.23
44 HOSIERY	0.1528	143.72	165.31	167.41
45 READYMADE GARMENTS	1.2038	127.55	141.44	142.23
46 WOOLEN READYMADE GARMENTS	0.1485	155.82	177.91	177.71
47 FOOTWEAR	1.5327	128.66	154.95	156.84
<b>HOUSE RENT.</b>	<b>23.4298</b>	<b>156.25</b>	<b>187.57</b>	<b>189.92</b>
48 HOUSE RENT INDEX (Combined)	23.4298	156.25	187.57	189.92

(continued)

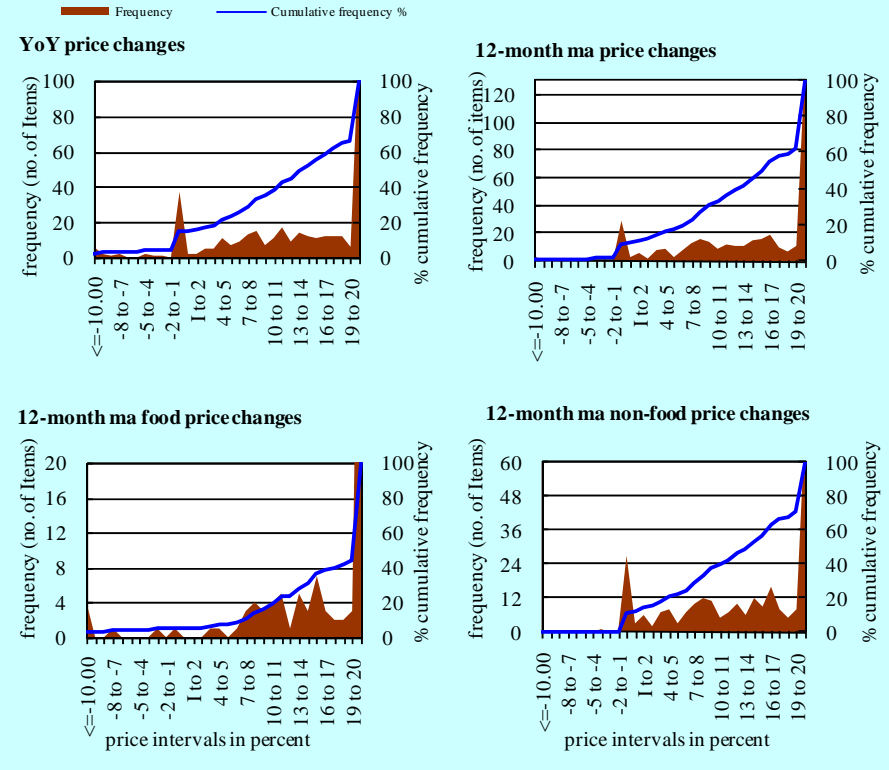
(continued)

Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities

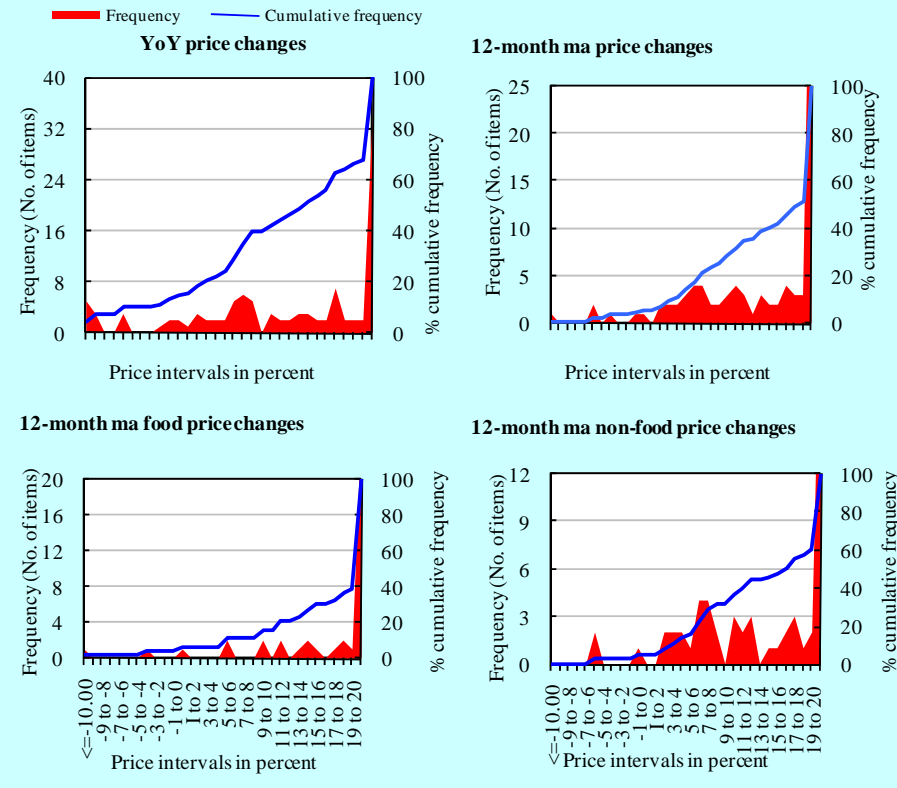
Item and Specification	Weights	Index		
		Apr-08	Mar-09	Apr-09
<b>FUEL AND LIGHTING.</b>	<b>7.2912</b>	<b>160.45</b>	<b>208.15</b>	<b>208.09</b>
49 KEROSENE	0.1366	276.35	389.17	388.21
50 FIREWOOD	0.4778	250.96	306.61	307.35
51 MATCH BOX	0.1301	100.00	200.00	200.00
52 BULB & TUBE	0.1311	93.52	111.44	118.54
53 ELECTRICITY	4.3698	119.53	159.77	159.77
54 NATURAL GAS	2.0458	227.12	283.12	282.35
<b>H.HOLD.FURNITURE &amp; EQUIPMENT ETC.</b>	<b>3.2862</b>	<b>141.41</b>	<b>163.16</b>	<b>163.68</b>
55 UTENSILS	0.3690	127.62	149.57	150.79
56 PLASTIC PRODUCTS	0.1055	150.33	191.66	192.51
57 SUITCASE	0.0470	131.28	157.02	157.23
58 HOUSE HOLD EQUIPMENTS	0.0953	126.13	149.00	149.84
59 FURNITURE (Ready Made)	0.3054	144.20	174.46	175.18
60 FURNISHING	0.6362	136.94	155.44	155.97
61 ELECT.IRON FANS & WASHING MACHINE	0.1889	128.11	165.06	165.59
62 SEWING MACHINE,CLOCK AND NEEDLES	0.1270	120.24	141.57	141.81
63 REFRIGERATOR & AIRCONDITIONER	0.1756	102.62	129.44	130.24
64 MARRIAGE HALL	0.0445	158.65	188.76	190.34
65 HOUSE HOLD SERVANT	1.1918	157.63	173.45	173.60
<b>TRANSPORT &amp; COMMUNICATION.</b>	<b>7.3222</b>	<b>153.15</b>	<b>186.23</b>	<b>186.43</b>
66 PETROL	1.7253	192.05	189.71	189.71
67 DIESEL	0.2070	260.92	362.66	362.66
68 CNG. FILLING CHARGES	0.1649	153.67	205.46	205.46
69 SERVICE CHARGES	0.3835	138.49	165.53	166.96
70 VEHICLES	0.2596	102.73	134.55	136.09
71 TYRE & TUBE	0.2831	129.67	158.81	159.73
72 TRANSPORT FARE/CHARGES	2.1236	176.01	252.45	252.54
73 TRAIN FARE	0.1514	170.01	253.24	253.24
74 AIR FARE	0.0983	280.47	342.93	342.93
75 COMMUNICATION	1.9255	86.82	91.34	91.36
<b>RECREATION &amp; ENTERTAINMENT.</b>	<b>0.8259</b>	<b>106.34</b>	<b>121.30</b>	<b>121.37</b>
76 RECREATION	0.3399	101.91	131.89	131.89
77 ENTERTAINMENT	0.4860	109.44	113.89	114.01
<b>EDUCATION.</b>	<b>3.4548</b>	<b>139.60</b>	<b>165.58</b>	<b>175.79</b>
78 TUTION FEES	2.3629	145.58	165.76	175.49
79 STATIONERY	0.3500	131.43	172.91	173.54
80 TEXT BOOKS	0.6894	127.69	167.42	184.93
81 COMPUTER & ALLIED PRODUCTS	0.0525	81.52	84.38	84.38
<b>CLEANING LAUNDRY &amp; PER.APPEARANCE.</b>	<b>5.8788</b>	<b>141.52</b>	<b>169.61</b>	<b>169.58</b>
82 WASHING SOAP & DETERGENT	1.5535	128.48	163.07	163.58
83 TOILET SOAP	0.7436	161.07	186.50	186.50
84 TOOTH PASTE	0.4036	108.92	113.55	113.80
85 SHAVING ARTICLES	0.3480	121.35	148.07	148.71
86 COSMETICS	1.4272	128.86	154.37	154.53
87 WATCHES	0.0552	128.62	138.95	138.95
88 JEWELLERY	0.3936	259.38	326.83	322.97
89 LAUNDRY CHARGES	0.2207	152.65	179.11	179.16
90 HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	135.87	152.13	152.13
<b>MEDICARE.</b>	<b>2.0728</b>	<b>131.34</b>	<b>150.09</b>	<b>150.28</b>
91 DRUGS & MEDICARES	1.0752	108.19	118.04	118.04
92 DOCTOR'S FEE	0.9976	156.29	184.63	185.03



**Figure A2: Frequency Distribution of Price Changes of CPI Items, April 2009**



**Figure A3: Frequency Distribution of Price Changes of WPI Items, April 2009**



## 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 price indices 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 changes in price indices 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  $i^{\text{th}}$  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  $i^{\text{th}}$  item

$\pi_{it}$  : Inflation of  $i^{\text{th}}$  item

$\pi_t$  : Overall inflation