

Inflation Monitor

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Overview

Headline consumer price index inflation, on year on year (YoY) basis, gained 3.9 percentage points to reach 11.3 percent in February 2008 over the same month last year. This significant increase was attributed to rising food and non-food groups inflation. A sharp upsurge was observed in the prices of essential food items including wheat, ghee, cooking oil, rice, vegetables and fruits etc. during February 2008. Apart from the food group, the *house rent index*, *transport & communication* and *cleaning & laundry* sub-groups witnessed higher YoY inflation in February 2008 compared to the same month last year. The rising inflation of these sub-groups of non-food group was due to soaring prices of crude oil and steel products in the international markets. Inflation measured by wholesale price index (WPI) and sensitive price indicator (SPI) witnessed a sharp rise in February 2008 over the same month last year (see **Table 1.1**).

	percent						
	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
Feb-07	7.4	10.0	5.6	6.0	6.8	5.1	8.8
Mar-07	7.7	10.7	5.5	5.9	6.7	6.1	8.9
Apr-07	6.9	9.4	5.2	5.6	6.6	6.0	7.7
May-07	7.4	11.3	4.7	5.2	6.2	6.8	8.3
Jun-07	7.0	9.7	5.1	5.7	6.5	7.3	8.0
Jul-07	6.4	8.5	4.9	6.0	6.6	7.6	7.5
Aug-07	6.5	8.6	4.9	6.0	6.7	8.0	7.6
Sep-07	8.4	13.0	5.0	6.1	8.0	9.3	9.8
Oct-07	9.3	14.7	5.4	6.5	8.3	11.8	10.7
Nov-07	8.7	12.5	5.9	6.9	8.6	12.6	9.0
Dec-07	8.8	12.2	6.3	7.2	8.7	12.2	9.2
Jan-08	11.9	18.2	7.3	7.8	9.6	15.5	13.1
Feb-08	11.3	16.0	7.8	8.1	9.6	16.4	12.3

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

Continued uptrend in CPI inflation pushed up the long run annualized trend of inflation, as measured by 12-month moving average (12-mma). The 12-mma CPI inflation rose to 8.4 percent during February 2008 compared to 7.7 percent in the same month last year. The upsurge in annualized CPI food inflation is more pronounced and has been recording double digit figures since May 2007. A continuously rising YoY CPI food inflation pushed up the 12-mma food inflation to 12.1 percent in February 2008, compared to 8.7 percent during the same period last year. On the other hand, 12-mma non-food inflation showed a decline of 1.2 percentage points (5.7 percent in February 2008 compared to 6.9 percent in February 2007).

Monthly inflation, i.e. percent change in price index in February 2008 over January 2008 shows that CPI increased only by 0.5 percent which is lower than its last five years average. Monthly food inflation showed a deflation of 0.5 percent in February 2008, primarily due to a relative ease in the prices of wheat & products, sugar & onion. Whereas non-food inflation increased sharply to 1.2 percent on MoM basis in the month under review which is not only higher than the non-food inflation recorded in January 2008 but also significantly higher than that its last five years average (see **Table 1.2**). This one month rise in non-food inflation is attributed to a rise in *fuel, lighting and lubricant* sub-group prices on account of record high crude oil prices in the international market.

Table 1.2: Different Dimensions of Inflation (percent)				
	Feb-06	Feb-07	Feb-08	5-year average
Year-on-year (Feb over Feb)				
Overall CPI	8.0	7.4	11.3	8.2
Food group	7.5	10.0	16.0	10.4
Non-food group	8.4	5.6	7.8	6.6
Core Inflation				
NFNE*	7.4	6.0	8.1	6.6
Trimmed	7.1	6.8	9.6	7.2
Period average (July-Feb over July-Feb)				
Overall CPI	8.4	8.0	8.9	0.0
Food group	7.6	10.3	13.0	0.0
Non-food group	9.0	6.5	5.9	0.0
Core Inflation				
NFNE*	7.9	6.1	6.8	6.2
Trimmed	7.6	6.7	8.3	6.9
12-month moving average				
Overall CPI	8.9	7.7	8.4	7.3
Food group	9.2	8.7	12.1	9.0
Non-food group	8.7	6.9	5.7	6.1
Core Inflation				
NFNE*	7.9	6.4	6.4	6.0
Trimmed	8.0	6.6	8.2	6.7
Monthly (Feb over Jan)				
Overall CPI	0.3	1.0	0.5	0.6
Food group	0.2	1.4	-0.5	0.5
Non-food group	0.4	0.8	1.2	0.6
Core Inflation				
NFNE*	0.4	0.7	1.0	0.6
Trimmed	0.4	0.7	1.0	0.6

* NFNE is Non-food non-energy inflation

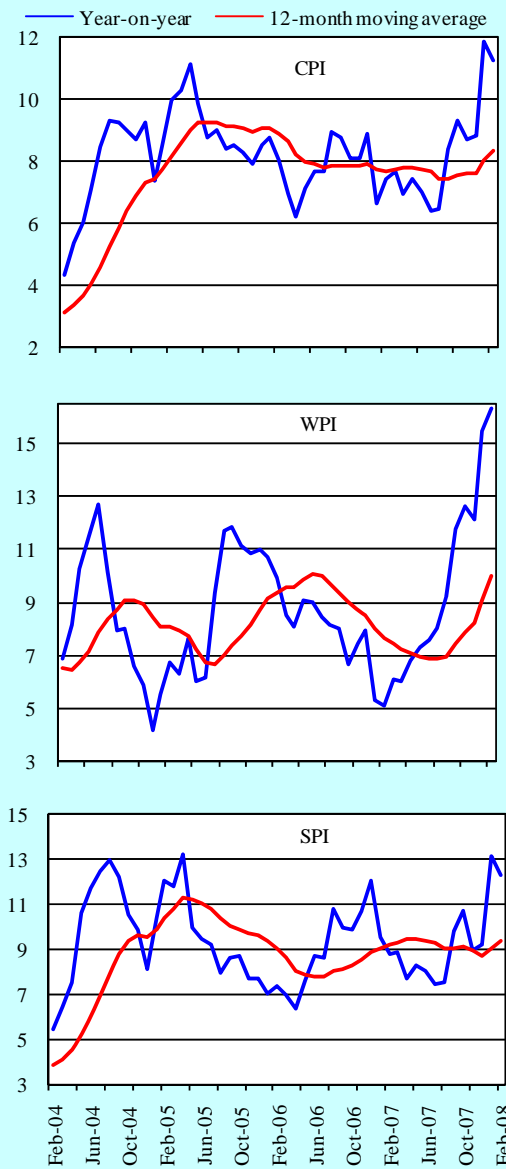
Like headline CPI inflation, both measures of the core inflation (non-food non-energy and 20 percent trimmed mean) continued to show uptrend since June 2007, reflecting a persistent rise in the prices of individual items. NFNE based core inflation (YoY) increased to 8.1 percent in February 2008 from 6.0 percent in February 2007. Similarly core inflation based on 20 percent trimmed-mean, YoY accelerated to 9.6 percent in February 2008 compared to 6.8 percent during the same month last year (see **Table 1.2**).

Like CPI inflation, the inflationary pressures remained strong in WPI in February 2008. WPI inflation continued its rising momentum during current fiscal year and reached at 16.4 percent in February 2008, substantially higher than the 5.1 percent level in the same month last year. This steep rise of 11.3 percentage points in WPI inflation (YoY) was due to high food and non-food groups inflation.

The WPI food inflation was recorded at 18.3 percent in February 2008, compared to 8.7 percent in February 2007. The non food group of WPI witnessed a YoY inflation of 15.0 percent in February 2008 – the highest level since October 2005 – compared to 2.6 percent during the same month last year. The item wise breakup of WPI basket exhibited that the wholesale prices of tomatoes, coke, furnace oil, fertilizers, eggs, rice, vegetable ghee, oil, maida, fresh milk, chemicals and cotton witnessed double digit YoY rise in February 2008.

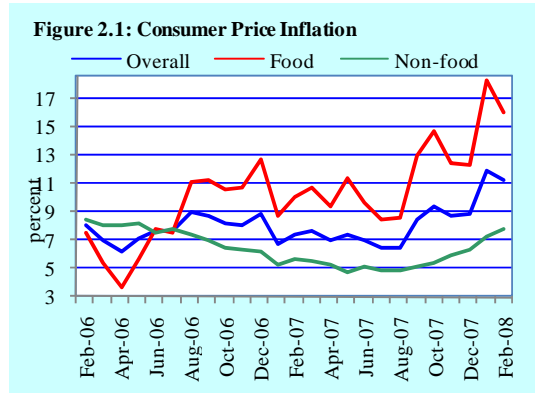
The Sensitive Price Indicator (SPI) too, exhibited YoY acceleration in February 2008 and was recorded at 12.3 percent compared to 8.8 percent in the corresponding month last year (see **Figure 1.1**).

Figure 1.1: Movements in Price Indices (percent change)

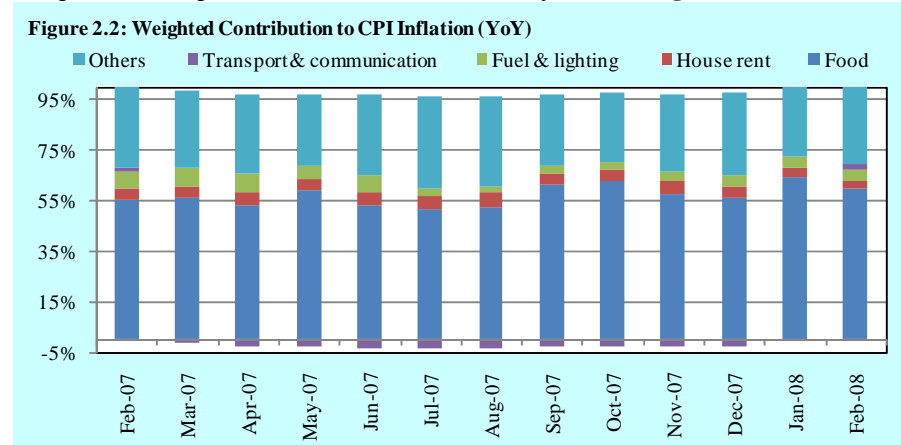


2. Consumer Price Inflation

After significant increase in January 2008, CPI inflation (YoY) was recorded at 11.3 percent during February 2008 as compared to 7.4 percent in the corresponding month last year. Food inflation (YoY) was recorded at 16.0 percent in February 2008 compared to 10.0 percent in February 2007, while non-food inflation (YoY) was recorded at 7.8 percent for the month under review compared to 5.6 percent in the same month last year (see **Figure 2.1**).



compared to 5.6 percent in the same month last year (see **Figure 2.1**).

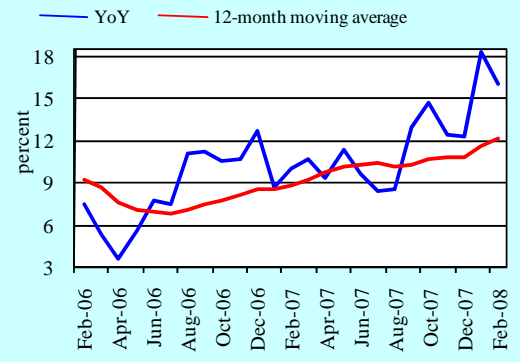


The contribution of food inflation in overall inflation decreased to 59.9 percent in February 2008, from 64.4 percent contribution during January 2008. The contribution of non-food group in overall inflation increased to 40.1 percent in February 2008 from 35.6 percent in January 2008. This was mainly on account of an increase in the weighted contributions of some of sub-groups of non-food group. A significant increase was recorded in the *house rent and transport & communication* sub-groups' weighted contribution to the overall CPI inflation. The contribution of house rent index (the largest item of the CPI basket) increased to 20.7 percent in February 2008 from 18.7 percent in January 2008 (see **Figure 2.2**).

2.1 Food Inflation

Food inflation (YoY) decreased from 18.2 percent in January 2008 to 16.0 percent (YoY) in February 2008. Food inflation has exhibited double digit rise since September 2007. This double digit inflation has been mainly due to a sharp increase in the prices of some key food staples like wheat, vegetable ghee, cooking oil, rice, some vegetables etc.

Figure 2.3: CPI Food Inflation



A detailed analysis of the CPI food basket shows that out of the total 124 commodities under the food group, 68 commodities including chillies green, vegetable ghee, mustard oil, rice, eggs, wheat, chilli powder and milk fresh etc. exhibited double digit YoY inflation in the range of 10 to 80 percent in February 2008. A significant increase of 191.0 percent was recorded in the prices of tomatoes during February 2008. The combined weight of food commodities with double digit inflation was 61.0 percent of the food group. On the other hand, YoY inflation of 20 commodities including key staples such as onion, potatoes, sugar, basen, pulse gram, pulse moong etc. either declined or remained unchanged during the month under review. The rest of the commodities, having an aggregate weight of about 14.9 percent in the food group, recorded subdued or moderate inflation (see **Table A2** in Annexure A).

On month over month (MoM) basis, an increase was witnessed in the average prices of food commodities such as peas, tomatoes, green chillies, vegetable ghee and some fruits during February 2008 compared to January 2008. Price of onion, maida, wheat, sugar, etc. declined (see **Figure 2.4**).

Figure 2.4: Price Trends in Key Food Items

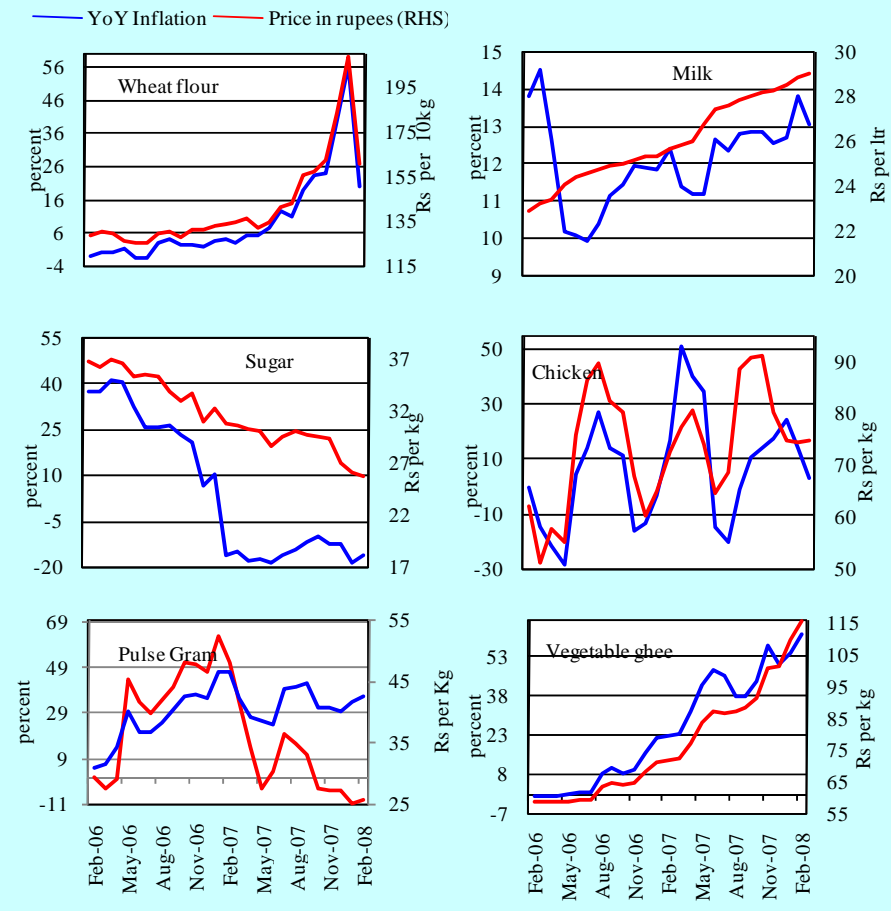


Table A3 shows top ten items contributing in overall inflation during February 2008, 8 out of top 10 items were from the food group. These items include wheat flour, vegetable ghee, fresh milk, rice, wheat, readymade food, meat and spices. Combined contribution of these food items remained 58.9 percent in the overall inflation during February 2008 (see **Table A3** in the Annexure). Moreover, within food groups, vegetable ghee, wheat flour, milk fresh, rice and vegetables contributed about 76.4 percent of the food inflation during February 2008.

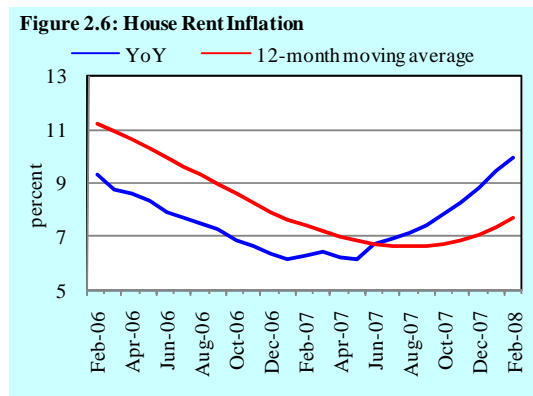
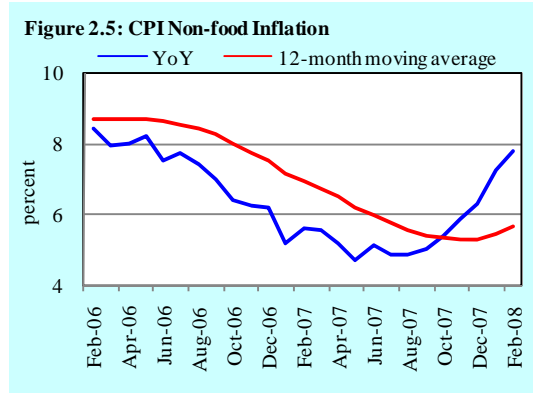
2.2 Non-food Inflation

Acceleration in non-food inflation (YoY) continued for the sixth consecutive month and was recorded at 7.8 percent in February 2008 as compared to 5.6 percent during the same month last year (see **Figure 2.5**). This upward movement in non-food inflation was mainly contributed by an increase in *house rent index, transport & communication* sub-group inflation during February 2008.

Rising trend in *house rent index* sub-group has continued since June 2007 and recorded 10.0 percent (YoY) inflation in February 2008 compared to 6.3 percent in the same month last year. Rising prices of bricks, iron bars & sheets, pipe fittings and timber have been putting an upward pressure on HRI inflation (see **Figure 2.6**).

Transport & communication sub-group witnessed a significant increase and was recorded at 3.0 percent in February 2008 compare to 0.9 percent in the corresponding month last year. The rise in this sub-group is mainly due to rise in the prices of CNG, petrol, high speed diesel.

Group wise analysis of non-food group shows that inflation (YoY) in the *apparel, textile & footwear* sub-group was recorded at 6.7 percent in February 2008, 1.9 percentage points lower than the inflation recorded in the previous month, while 0.5 percentage points higher than the inflation recorded in the same month last year. An acceleration in YoY inflation under this sub-group was mainly attributed to rise in the prices of some footwear, linear and tailoring changes during the month.



The *fuel & lighting* sub-group inflation witnessed a decline and was recorded at 6.2 percent in February 2008 compared to 6.5 percent in January 2008. The *cleaning, laundry & personal appearance* sub-group continued its uptrend for the 9th consecutive month and further accelerated to 13.0 percent in February 2008 compared to 4.5 percent during the corresponding month last year. The YoY inflation in the *medicare* sub-group showed an upward trend and was recorded at 7.9 percent during February 2008, which is higher than 7.5 percent during January 2008 (see **Figure A1** in Annexure).

Inflation in *household furniture & equipment* sub-group showed deceleration in February 2008 and was recorded at 6.3 percent as compared to 7.5 percent in the month last year.

Inflation in *recreation & entertainment* sub-group showed a slight increase and was recorded at 0.7 percent in February 2008 compared to the 0.5 percent in January 2008. YoY inflation in the *education* sub-group declined and was recorded at 3.4 percent in February 2008 compared to that of 8.3 percent during the corresponding month last year.

Item-wise disaggregated analysis of non-food group's inflation exhibits that out of the 250 non-food commodities included in the CPI basket, 34 commodities witnessed double digit inflation. That includes items such as child shoe, gold and silver tezabi, gas cylinder, kerosene oil and doctors clinic fee, etc. There were 76 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 that showed deflation or no change included Urdu and English books, telephone charges, a number of durable goods like computer CD rom, sewing machine etc (see **Table A4** in the Annexure).

2.3 City-wise Inflation

Following the trend of overall CPI inflation (YoY), city-wise inflation data reveal that inflationary pressures remained strong in all major cities during February 2008. While, a relative ease seen in Karachi, Quetta and Peshawar in February 2008 compared to January 2008, inflation was further strengthened in Islamabad and Lahore in this period. The city-wise inflation of provincial capitals Karachi, Quetta and Peshawar was recorded at 9.8, 11.1 and 11.4 percent in February 2008 as compared to 10.7, 12.3, and 12.2 percent in the corresponding month last year.

	Over all CPI	Islamabad	Lahore	Karachi	Quetta	Peshawar
Feb-07	7.4	9.6	7.4	7.5	7.4	6.3
Mar-07	7.7	9.0	7.9	7.2	7.5	5.9
Apr-07	6.9	8.1	7.2	6.5	7.9	5.8
May-07	7.4	8.2	7.5	7.6	8.7	7.1
Jun-07	7.0	7.8	6.9	7.4	7.6	7.7
Jul-07	6.4	7.3	6.1	6.9	6.4	5.9
Aug-07	6.5	7.8	6.5	7.7	7.1	5.7
Sep-07	8.4	7.6	7.9	8.1	7.8	8.6
Oct-07	9.3	8.6	7.8	10.0	10.1	9.5
Nov-07	8.7	8.0	7.0	8.7	9.8	9.8
Dec-07	8.8	7.7	7.5	8.1	9.0	9.2
Jan-08	11.9	9.1	10.1	10.7	12.3	12.2
Feb-08	11.3	9.8	10.4	9.8	11.1	11.4

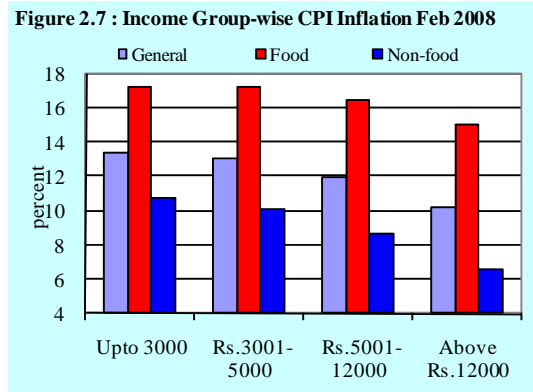
The inflation data of 35 cities exhibited that 24 cities inflation was above average and below national average in the remaining 11 cities. **Table 2.2** exhibited that the highest level of YoY inflation was recorded in Jhang (15.6 percent) followed by Bahawalnagar (15.2 percent) and Bannu (14.9 percent) during February 2008. On the other hand, the lowest YoY inflation was recorded in Okara (9.5 percent) during the month under review (see **Table 2.2**).

Table 2.1: City wise Inflation in CPI (YoY), February 2008							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Jhang	15.6	22.0	11.0	Abbotabad	11.2	15.3	8.0
Bahawalnagar	15.2	16.7	14.2	Quetta	11.1	14.6	8.7
Bannu	14.9	17.8	12.8	Sargodha	10.9	13.9	8.6
Nawabshah	14.9	19.7	11.6	Faisalabad	10.8	17.5	5.9
Shahdadpur	14.5	18.9	11.5	Lahore	10.4	17.2	5.4
Hyderabad	14.4	18.9	11.1	Sialkot	10.4	15.4	6.6
Sukkur	14.0	19.6	10.1	Bahawalpur	10.3	16.1	6.0
Vehari	13.7	18.6	10.1	Karachi	9.8	14.2	6.8
Gujranwala	13.7	18.8	9.9	Islamabad	9.8	14.1	6.8
Samundari	13.5	18.2	10.1	Rawalpindi	9.7	13.1	7.4
D.G. Khan	13.4	17.7	10.1	Okara	9.5	12.4	7.3
Khuzdar	13.1	15.5	11.3				
Loralai	13.0	13.6	12.5				
Larkana	12.3	17.1	8.6				
Mianwali	11.8	14.5	9.9				
Mardan	11.8	15.0	9.6				
Attock	11.8	16.7	8.4				
D.I.Khan	11.7	15.6	9.0				
Turbat	11.7	12.7	11.0				
Kunri	11.6	16.1	8.4				
Multan	11.4	18.3	6.5				
Peshawar	11.4	17.3	7.2				
Mirpur Khas	11.4	14.4	9.2				
Jhelum	11.3	14.8	8.8				

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 decelerated in all categories in February 2008 as compared to January 2008. However following the trend of previous month, the inflation in three categories out of four was higher than the overall CPI inflation. The only category that experienced lower inflation than the overall CPI inflation was the income group of above Rs. 12000 (see **Figure 2.7**).

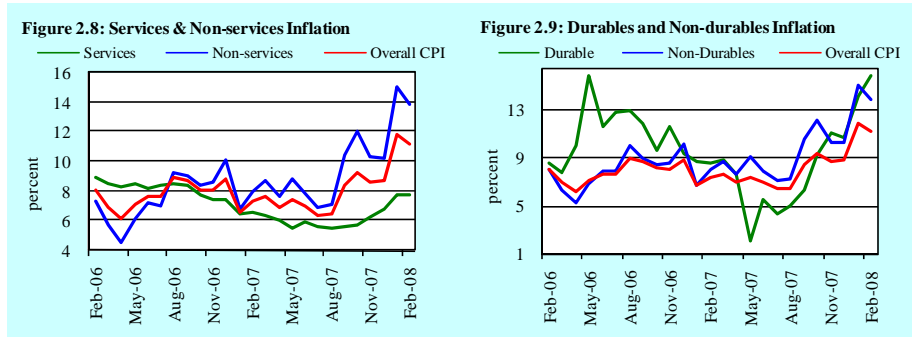


The highest YoY CPI inflation was recorded for the income group of upto Rs. 3000 that recorded double digit inflation for the fourth consecutive month (13.4 percent), followed by income group of Rs. 3001 to 5000 (13.0 percent) and income group Rs. 5001 to 12000 (12.0 percent) while the highest income group of above Rs. 12000 experienced the lowest inflation in all categories (10.1 percent). City-wise data of income groups exhibit that the lowest YoY inflation was recorded in Rawalpindi for three out of four income groups, while Bahawalpur recorded the lowest inflation for the income group of above Rs. 12000 per month earnings. The highest YoY inflation was recorded in Bannu for first three income groups. Hyderabad and Sukkur recorded the highest inflation in income group above Rs. 12,000 per month earnings (see **Table A5** in annexure A).

2.5 Services and Non-services Inflation

Inflation in services¹ sector showed an increase in February 2008 compared to the same month last year. Services sector witnessed 7.8 percent inflation during February 2008 compared to 6.6 percent during the same month last year. Following the trend of services sector, inflation in the non-services sector moved up and was recorded at 13.9 percent during February 2008 as compared to 8.0 percent in February 2007 (see **Figure 2.8**).

¹ Services group of the CPI basket includes items like house rent index, electricity charges, marriage hall, household servant, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges etc.



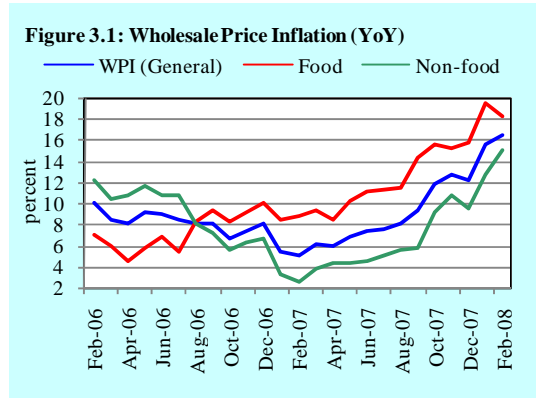
Disaggregation of the non-services sector data reveals that YoY inflation in durable² and non-durable goods accelerated in February 2008 compared to the same month last year. YoY inflation in the durable goods was recorded at 15.9 percent in February 2008 compared to 8.5 percent for the same month last year mainly due to a rise in the prices of jewelry and furniture. The non-durable goods' inflation was recorded at 13.9 percent in February 2008 compared to 8.0 percent in the same month last year, the main contributors in this rise were higher prices of petrol, diesel, kerosene oil, some vegetable like tomatoes etc. (see **Figure 2.9**).

² 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.

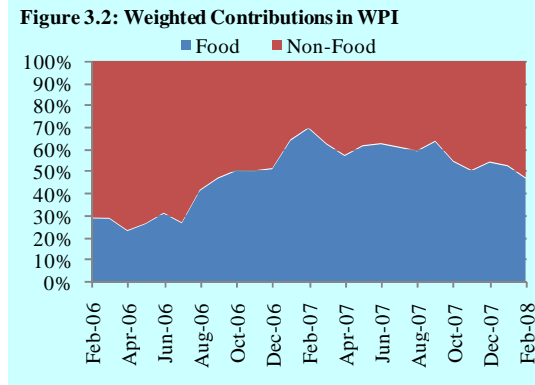
3. Wholesale Price Index

Inflation (YoY) measured by wholesale price index continued its rising momentum during the current fiscal year and reached 16.4 percent in February 2008 – the highest level since February 1995 – compared to 5.1 percent recorded for the same month last year. This steep rise in WPI inflation (YoY) was attributed to both food as well as non-food components.

It is pertinent to mention that this rise in WPI inflation is no more a short run phenomenon as measured by 12 mma since September 2007. Rising in non-food inflation (YoY) has been playing a vital role in increasing WPI inflation since October 2007 (see **Figure 3.1**).



Despite a continuous double digit rise in WPI food inflation, its weighted contribution in overall WPI inflation has seen a declining trend since October 2007. The food group contribution came down to 47.3 percent in February 2008, compared to 62.8 percent in June 2007. The share of non-food group weighted contribution surpassed food group's contribution in overall



WPI inflation for the first time since October 2006, and rose to 52.7 percent in February 2008 compared to 30.1 percent in the same month last year (see **Figure 3.2**). Within non-food group of WPI, the *fuel, lighting & lubricant* sub-group showed a significant rise in its contribution whereas the remaining subgroups witnessed a fall.

The weighted contribution of *fuel, lighting & lubricant* sub-group increased to 64 percent in February 2008, compared to 34.9 percent in June 2007 due to continuously rising international crude oil prices (see **Table 3.1**).

Table 3.1: Contribution of Sub-Indices to WPI Non-food Inflation

	Feb 07	Jun 07	Jan 08	Feb 08
Raw materials	62.3	31.4	10.0	8.1
Fuel, lighting & lubricants	-22	34.9	60.4	64
Manufactures	22.9	21.4	20.9	21.9
Building materials	36.5	12.1	8.7	6.4

Disaggregation analysis of WPI basket reveals that items showing more than 10 percent increase in their prices were dominant in WPI basket. The price distribution of YoY changes show that 42 items exhibited more than double digit YoY growth in their prices, ranging between 11 to 247 percent. The prices of major items that displayed double digit rise of above 10 percent

Table 3.2: WPI Price Distribution of YoY Changes (February 2008)

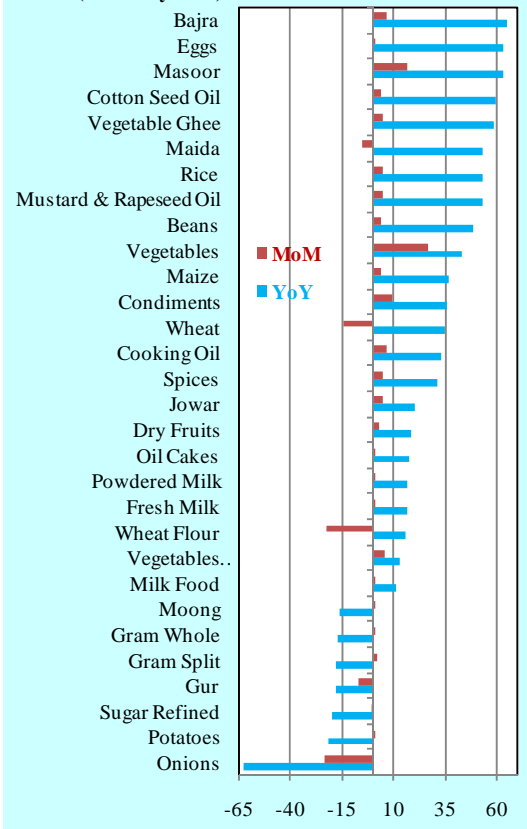
Groups	No. of Items				Total
	Decrease or no change	Up to 5%	5%-10%	More than 10%	
A. Food	12	5	2	24	43
B. Non-Food	11	20	14	18	63
Raw material	1	2	3	3	9
Fuel, Lighting and Lubricant	2	1	3	5	11
Manufactures	5	14	4	9	32
Building Material	3	3	4	1	11
Total	23	25	16	42	106

include tomatoes, coke, furnace oil, fertilizers, eggs, rice, vegetable ghee, cooking oil, wheat, maida, fresh milk, chemicals, cotton etc. Prices of 16 items exhibited growth between 5 to 10 percent in their wholesale prices whereas 25 items showed subdued increase while prices of other 23 items showed either decline or no change during the month under review (see **Table 3.2**).

Analysis of price distribution of YoY changes further reveals that the prices of 24 items of the total 43 food items included in the WPI basket witnessed a significant rise of over 10 percent in February 2008. There were only 2 food items that exhibited growth between 5 to 10 percent in their wholesale prices, while 5 items recorded subdued inflation of up to 5 percent. The wholesale prices of the remaining 12 food items either declined or remained stable.

WPI food inflation witnessed a sharp increase in February 2008 and continued to rise in double digits since May 2007. Food group showed a significant growth of 18.3 percent in wholesale prices during February 2008 compared to 8.7 percent in February 2007. Major food items that contributed in this steep rise include eggs, pulse masoor, vegetable ghee, rice, maida, wheat, fresh milk etc. A high upsurge was recorded in the wholesale price of tomatoes that showed an increase of 247 percent during the month under review. The steep rise in vegetable prices is attributed to the loss of crops due to extreme winter in Sindh. Whereas the continued increase in wholesale prices of cooking oil, vegetable ghee, rice etc. are attributed to the rising international prices of these commodities. However, few commodities showed YoY

Figure 3.3: Wholesale Price Inflation (%) in Selected Food Items (February 2008)



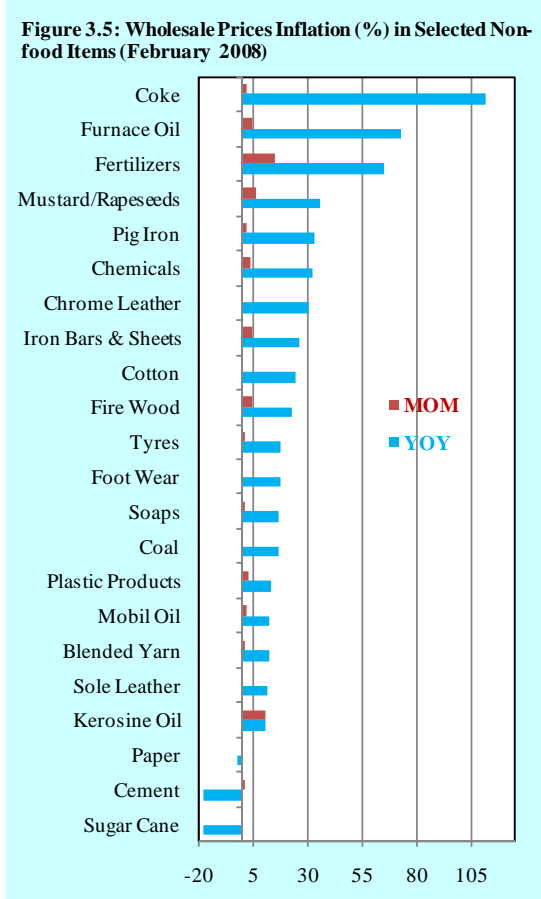
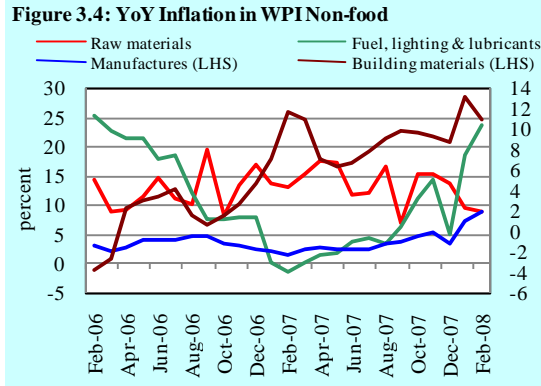
deflation of different magnitudes in their wholesale prices including onions (-63.6 percent), potatoes (-22.6 percent), sugar (-19.9 percent), gram split (-18.3 percent) and cement (-18.1 percent) etc. (see **Table A7 & Figure 3.3**).

The wholesale prices of non-food group of WPI witnessed a sharp uptrend and increased to 15 percent – highest since September 2005 – in February 2008 compared to 2.6 percent for the same month last year. The *fuel, lighting & lubricant* and *manufactures* sub groups witnessed a significant rise in their wholesale prices whereas the *raw material* and *building material* subgroups showed YoY deceleration in their wholesale prices in February 2008, compared to the same month last year (see **Figure 3.4**).

A rise of 12.5 percentage points in non-food WPI YoY inflation was attributed to a significant increase in the wholesale prices of coke, furnace oil, fertilizers, rapeseeds, chemicals, iron bars & sheets etc. in February 2008³. In particular, the wholesale price of coke witnessed a YoY rise of 111 percent in February 2008 on account of rising international energy prices. On the other hand, prices of 11 items declined or showed no change in February 2008; these included sugarcane, cement, paper etc. (see **Figure 3.5**).

Analysis of YoY inflation of various sub-groups of non-food group exhibited, that the *raw material* sub-group inflation further decelerated for the third consecutive month and was recorded at 8.9 percent in February 2008, compared to 13.9 percent during the same month last year. In this sub-group, the wholesale prices of sugarcane declined while the wholesale prices of wool and cotton seed registered subdued increase in February 2008.

The *fuel, lightning & lubricants* sub-group continued to show strong upward



³ The crude oil prices are continuously rising in international markets that affect directly furnace oil and coke prices domestically.

movement for the second consecutive month and recorded a YoY inflation of 23.5 percent during February 2008, compared to deflation of 1.4 percent during the same month last year. This steep rise largely reflected the impact of high crude oil prices in the international markets that directly affected the wholesale prices of coke, furnace oil, mobil oil in the domestic market. Within this sub-group, prices of coke, furnace oil, mobil oil, fire wood, and coal witnessed double digit (YoY) growth during the month under review (see **Table A7** in Annexure A).

The *manufactures* sub-group of WPI non-food group witnessed a higher YoY inflation of 8.8 percent in February 2008, compared to 1.6 percent in February 2007. This was mainly because of double-digit YoY rise in the wholesale prices of items such as fertilizers, chemicals, footwear, soaps, plastic products and sole leather. The most prominent upward movement was witnessed in the wholesale prices of fertilizers that registered 64.9 percent YoY growth due to the rising DAP⁴ prices in the international market. However, the impact of high fertilizer prices was partially offset by YoY deflation recorded in prices of paper, cotton yarn, and drugs & medicines prices. The *building material* sub-index decelerated and witnessed a lower YoY inflation of 10.9 percent in February 2008, compared to 11.6 percent for the same month last year. This slowdown is entirely owed to decline in cement prices during this period (see **Table A7** in Annexure A).

⁴ DAP: Diammonium Phosphate

4. Global Commodity Prices

International commodity prices continued to show an uptrend during February 2008. This upward movement in the global commodity prices was a result of an increase in food, energy and non-food non-energy prices. Energy prices, reflected by crude oil prices, as well as the IMF and World Bank energy indices showed strong upward movements in February 2008, compared to the same month last year. Crude oil price continued to rise in February 2008 to reach US\$ 93.7 per barrel compared to US\$ 57.6 per barrel in the same month last year. In food group, prices of rice, wheat, sugar, soybean oil and palm oil remained high in international market. In non-food non-energy group, steel and DAP prices increased, whereas urea and cotton prices showed a decline during February 2008 as compared to the previous month (see **Table 4.1**).

Table 4.1: International Commodity Prices/Indices

	Feb-07	Jun-07	Jan-08	Feb-08
Energy				
Crude Oil (US\$ per barrel)	57.6	68.2	90.8	93.7
IMF Energy Index (2005 =100)	109.1	126.5	168.1	176.3
WB Energy Index (1990=100)	251.6	298.0	396.4	408.2
Coal	56.7	66.0	98.3	140.6
Food (\$/MT)				
Rice	316.1	326.3	393.5	481.1
Wheat	200.0	223.0	369.6	425.0
Sugar	10.6	9.3	11.7	13.6
Palm Oil	553.8	748.4	987.0	1109.5
Soybean Oil	664.9	782.9	1143.1	1307.7
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	128.1	133.6	161.5	160.5
WB Steel Products Index (1990=100)	132.0	133.5	149.1	169.7
DAP (\$/MT)	345.4	434.5	707.7	828.1
Urea (\$/MT)	304.3	289.0	369.7	325.3

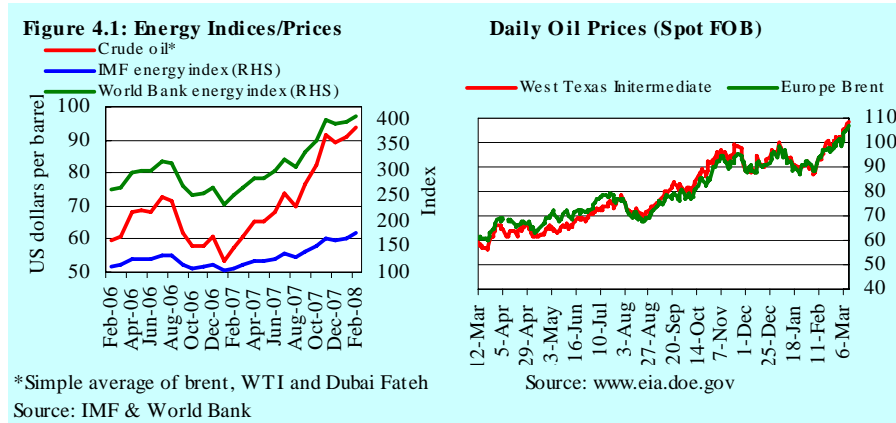
\$/MT = US\$ per metric tonne.

Middling 1-3/32 inch staple, Liverpool Index "A", average of the cheapest Cts/lb five of fourteen styles, CIF Liverpool (Cotton Outlook, Liverpool). From January 1968 to May 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16. 2/

Source: IMF and World Bank.

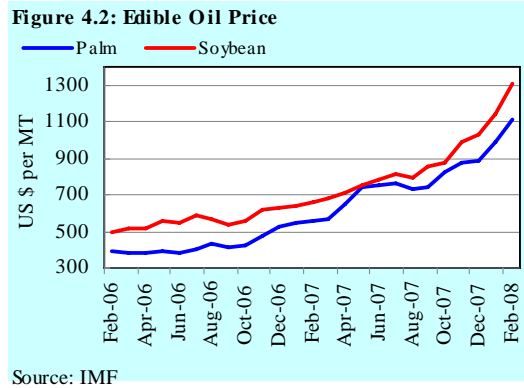
In February 2008, crude oil prices reached the mark of above US\$101.3 per barrel. This increase can be attributed to the low inventories of crude oil and rising concerns about its supply due to geo political situation⁵. The spot crude oil price in the international market fluctuated between the range of US\$ 87.9– US\$ 101.3 per barrel during February 2008 compared to US\$ 87.4 – US\$ 98.8 per barrel during the previous month.

⁵ World Bank Commodity Market Review, March 7, 2008



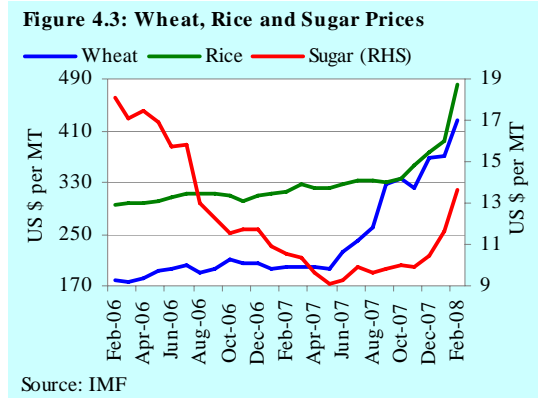
Palm and soybean oil prices continued to reflect strong YoY growth registering steep rises of 100.4 and 96.7 percent respectively in February 2008, compared to 41.8 and 33.6 percent in the same month last year (see

Figure 4.2). The current rise in palm and other vegetable oil prices is attributed to tight supplies and strong demand for food and bio-fuel production. According to the World Bank commodity market review, increase in soybean oil prices is mainly due to fears that

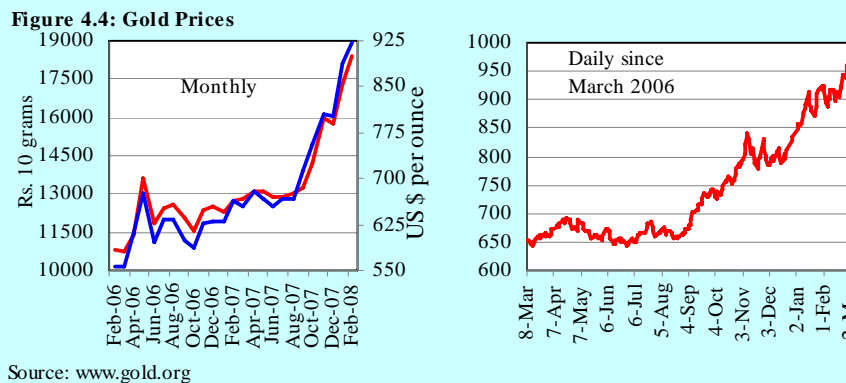


China's weather related soybean crop losses will raise Chinese imports. On a MoM basis, palm and soybean prices registered an increase of 12.4 and 14.4 percent respectively in February 2008.

In food group, prices of key food items such as wheat, rice and sugar witnessed an uptrend on YoY basis in February 2008. Wheat prices exhibited a sharp YoY growth of 112.5 percent mainly due to record low stocks and poor crop prospects in the southwest US and northern China⁶. Similarly sugar and rice prices registered positive YoY growth of 28.7 and 52.3 percent respectively



in February 2008 (see **Figure 4.3**). Rise in sugar prices was due to an increased use of Brazilian sugarcane for ethanol and the consequent drop in exportable sugar supplies, whereas rice prices increased due to limited export supplies, deteriorating prospects for the next crop and the impact of higher wheat prices.⁷

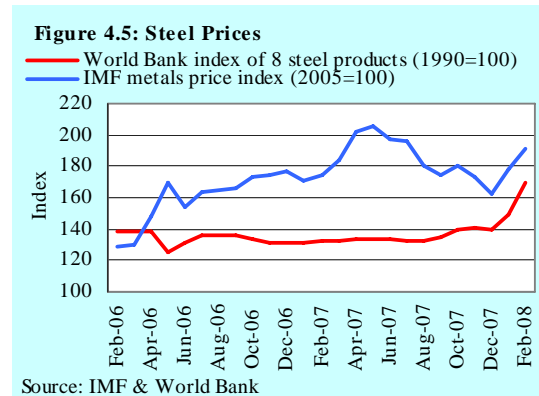


Within the non-food group, gold prices continued to remain strong and further increased to US\$922.3 per ounce in February 2008. Gold prices exhibited a YoY growth of 38.7 percent in February 2008 compared to 19.8 percent in the same month last year. A weak dollar, investors' concerns about rising inflation and lower economic growth have contributed towards this rising trend of global gold prices. On daily basis, gold price remained high and fluctuated in a wider range of US\$ 887.5- US\$ 971.5 per ounce during February 2008, compared to US\$ 846.7- US\$ 924.5 per ounce during January 2008 (see **Figure 4.4**).

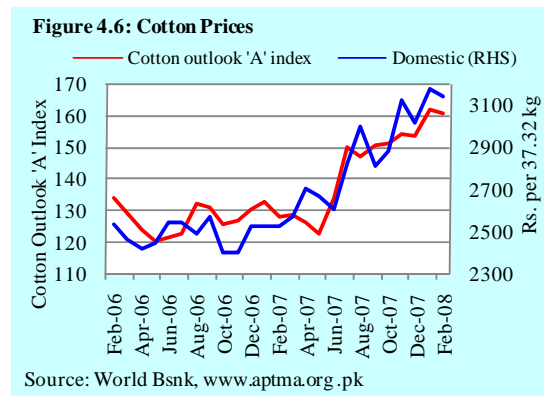
⁶ World Bank Commodity Market Review, March 7, 2008

⁷ World Bank Commodity Market Review, March 7, 2008

The World Bank index of 8-steel products and the IMF metals price index displayed increasing trends in February 2008⁸. World Bank index showed double digit YoY growth of 28.5 percent in February 2008 compared to 13.5 percent in the preceding month. Similarly, the IMF metals price index showed a YoY increase of 9.7 percent during the month under review (see **Figure 4.5**). All major items included in the metals & minerals group including lead, copper, gold, silver, aluminum and copper registered an increase in their prices. Copper prices increased due to falling stocks, a pick-up in China's export and expected tight supply conditions. Silver prices increased due to strong investment demand and as a hedge against the falling dollar and rising inflation. The prices of aluminum rose due to power cuts to energy-intensive smelters in China and South Africa which resulted in lower production.⁹



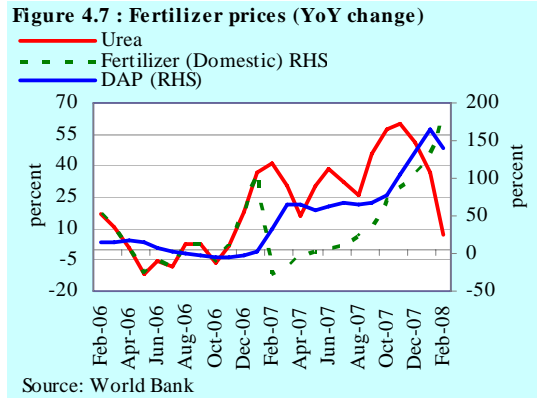
Cotton prices represented by the cotton outlook 'A' index increased by 21.6 percent YoY in February 2008 in the international markets. Similarly, cotton prices in the domestic market rose by 25.9 percent YoY during the month under review (see **Figure 4.6**). On monthly basis the cotton outlook 'A' index increased to 5.3 percent and a rise of 5.4 percent was recorded in the domestic market. The uptrend in global cotton prices is the result of strong demand and lower cotton planting in major cotton producing countries.



⁸ IMF Commodity Metals Price Index includes Copper, Aluminum, Iron Ore, Tin, Nickel, Zinc, Lead, and Uranium Price Indices whereas World Bank index consists of ebar (concrete reinforcing bars), merch bar (merchant bars), wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet, and galvanized iron sheet.

⁹ World Bank Commodity Market Review, March 7, 2008

Fertilizer prices decelerated on YoY basis in the international market during February 2008, as compared to the previous month; however domestic market experienced a rise in YoY growth. DAP and urea prices exhibited YoY growth of 139.8 and 6.9 percent respectively (see **Figure 4.7**). The strong YoY growth in DAP prices is mainly due to high energy prices, production capacity constraints and strong demand fueled by high commodity prices¹⁰. On monthly basis, prices of DAP registered growth of 17 percent, whereas urea saw a negative growth of 12 percent in the international market. Due to higher DAP prices in the international market, fertilizer prices witnessed an increase of 14.7 percent domestically.



¹⁰ World Bank Commodity Market Review, March 7, 2008

5. Sensitive Price Indicator

Sensitive price indicator (SPI) showed significant rise in inflation (YoY) and reached at 12.3 percent in February 2008 compared to 8.8 percent in the same month last year. Strong SPI inflation during the last few months, resulted in its rising long-run path as indicated by 12mma (see **Figure 5.1**).

Item wise analysis of SPI indicates that out of 53 items, 28 items showed more than 10 percent YoY inflation, 6 items showed YoY inflation between 5 to 10 percent, 5 items recorded inflation between 0 to 5 percent inflation and 14 items showed no change or deflation in February 2008 (see **Table 5.1**).

On month over month (MoM) basis, the SPI depicted a deflation of 0.8 percent in February 2008 compared to January 2008. This decline in SPI was the result of a decline in the prices of onion (-21.0 percent), wheat flour (-15.0 percent), wheat (-8.8 percent), garlic (-15.0 percent), eggs (-7.5 percent) and LPG¹¹ (-7.1 percent) (see **Table A8** in Annexure A).

Weekly SPI inflation (YoY)

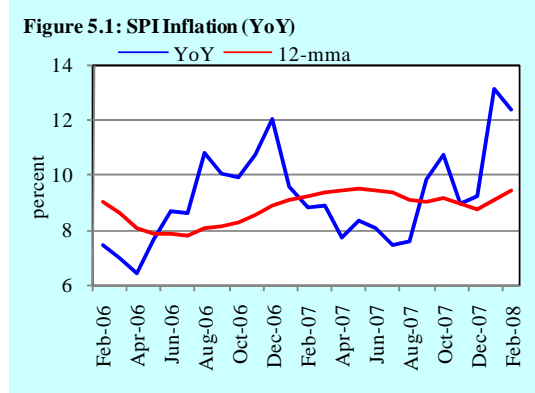
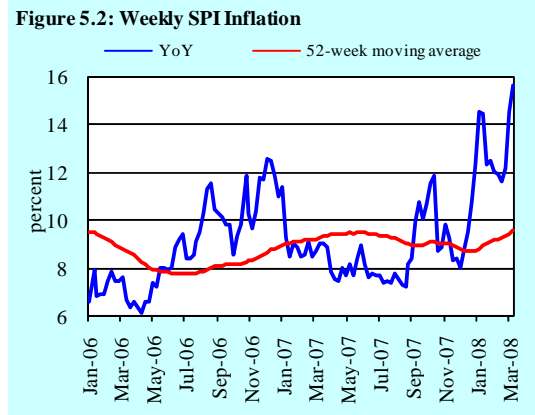


Table 5.1: Distribution of Price Changes of SPI Basket (YoY)

Change in percent	Number of items			
	Feb 07	Jun 07	Jan 08	Feb 08
0 or less	9	13	9	14
0 to 5	9	8	10	5
5 to 10	8	12	10	6
10 or above	27	20	24	28
Minimum	-50.4	-29.2	-47.2	-57.1
Maximum	157.5	67.1	63.6	211.7



¹¹ LPG: Liquefied Petroleum Gas

remained in double digits in February 2008 and fluctuated within the range of 11.6 percent to 12.2 percent. Weekly SPI inflation (YoY) was recorded at 12.2 percent in the last week of February 2008 which further accelerated to 15.7 percent in the second week of March 2008. The weekly SPI inflation (YoY) is on the rising long-run trend since the first week of January 2008 as indicated by 52-week moving average that increased to 9.6 percent in the second week of March 2008 compared to 8.7 percent during the last week of December 2007 (see **Figure 5.2**).

Like previous months, the SPI inflation remained highest in the lowest income group in February 2008. This is understandable as SPI basket consists of the most essential items and has significant impact on the poorest stratum of the economy. The income group-wise SPI inflation further reveals that all income groups showed higher SPI inflation than the average SPI inflation except for the highest income group during the month under review (see **Table 5.2**).

Income Groups	percent				
	Feb-07	Jun-07	Dec-07	Jan-08	Feb-08
Up to Rs. 3000	10.6	9.7	11.8	16.3	14.6
Rs. 3001-5000	10.0	9.6	11.5	15.9	14.3
Rs. 5000-12000	9.7	8.9	10.4	14.5	13.2
Above Rs. 12000	7.8	6.2	7.1	10.6	10.4
All income groups	8.8	8.0	9.2	13.1	12.3

Annexure A

	Weights	Feb-04	Feb-05	Feb-06	Feb-07	Feb-08
I. Food Group	40.3	5.8	12.9	7.5	10.0	16.0
II. Non-Food Group	59.7	3.3	8.0	8.4	5.6	7.8
Apparel, textile, etc.	6.1	2.5	2.6	3.9	6.2	6.7
House rent	23.4	5.2	12.3	9.4	6.3	10.0
Fuel & lighting	7.3	2.7	5.8	10.1	6.5	6.2
Household furniture & equipt	3.3	2.8	7.0	4.4	7.5	6.3
Transport & com.	7.3	1.1	9.3	15.9	0.9	3.0
Recreation & entert.	0.8	-1.5	0.1	-0.2	-0.1	0.7
Education	3.5	3.6	2.5	6.7	8.3	3.4
Cleaning, laundry, etc.	5.9	2.5	4.8	3.0	4.5	13.0
Medicare	2.1	1.5	1.2	3.0	9.3	7.9
Headline	100	4.3	9.9	8.0	7.4	11.3

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	16.0	108	20	8	12	68
II. Non-Food Group	7.8	250	71	69	75	35
Apparel, textile, etc.	6.7	42	7	16	14	5
House rent	10.0	1			1	
Fuel & lighting	6.2	15	6		6	3
Household furniture & equipt	6.3	44	1	10	25	8
Transport & com.	3.0	43	20	9	10	4
Recreation & entert.	0.7	16	8	6		2
Education	3.4	24	8	10	2	4
Cleaning, laundry, etc.	13.0	36	3	11	16	6
Medicines	7.9	29	18	7	1	3
Overall	11.3	358				

Note: Prices of 16 seasonal items were not reported during the month.

Table A3: Top Ten Contribution to YoY CPI Inflation in February 2008					
Items	weights	YoY change		Weighted Contribution	
		Feb-07	Feb-08		
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	6.27	9.96	20.68
2	Vegetable Ghee	2.67	17.08	51.60	13.08
3	Wheat Flour	5.11	3.35	25.31	11.23
4	Milk Fresh	6.66	12.33	13.04	8.27
5	Rice	1.34	14.84	56.19	6.68
6	Vegetables	1.80	-12.26	40.52	6.49
7	Tomatoes	0.50	-45.83	190.88	4.55
8	Readymade Food	1.68	9.36	17.16	2.78
9	Natural Gas	2.05	1.66	9.73	2.57
10	Cooking Oil	0.69	11.14	40.91	2.49
Total		45.92			78.81
B. Ranked by Percentage Change					
1	Tomatoes	0.50	-45.83	190.88	4.55
2	Mustard Oil	0.05	21.59	60.85	0.25
3	Rice	1.34	14.84	56.19	6.68
4	Eggs	0.41	33.89	52.94	1.95
5	Vegetable Ghee	2.67	17.08	51.60	13.08
6	Maida	0.11	0.15	51.44	0.44
7	Pulse Masoor	0.22	4.77	51.16	0.92
8	Condiments	0.34	3.58	41.44	1.00
9	Wheat	0.48	3.59	41.10	1.77
10	Cooking Oil	0.69	11.14	40.91	2.49
Total		6.79			33.13
C. Ranked by Weights					
1	House Rent Index	23.43	6.27	9.96	20.68
2	Milk Fresh	6.66	12.33	13.04	8.27
3	Wheat Flour	5.11	3.35	25.31	11.23
4	Electricity	4.37	10.07	0.00	0.00
5	Bakery & Confectionary	2.98	2.97	8.17	1.79
6	Meat	2.70	11.06	5.77	2.07
7	Vegetable Ghee	2.67	17.08	51.60	13.08
8	Tuition Fees	2.36	10.19	3.39	0.70
9	Transport Fare/Charges	2.12	2.81	2.66	0.60
10	Natural Gas	2.05	1.66	9.73	2.57
Total		54.45			61.00
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 11.3 percent in February 2008.					

Table A4: Distribution of Price Changes - Selected CPI Items, February 2008

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Sugar Refined	Chicken Farm Broiler (Live)	Beef With Bone Av.Qlty.	Milk Fresh (Unboiled)
	Onion, Tea Loose Kenya Av.Qlty	Fish-Rahu Medium Size	Mutton Av.Qlty. Tea Prepared (Ordinary)	Wheat Flour Bag
	250G,Pulse Gram Tea(L/R)	Cigarettes K-2 10'S	Cigarettes Gold Leaf 20'S, Guava	Vegetable Ghee (Loose)
	Brookbond	Rooh Afza	Cigarettes Morven Gold 20'S, Betel	Wheat Flour Fine/Superior.
	Supreme 250Gm.	Fruit Juice Tetra Pack	Honey Langanese 500 Gm.	Vegetable Ghee Tin
	Kinnu, Pulse	Betel Nuts	Leaves, Biscuits-Packed, Almonds	Cooking Oil (Dalda)
	Moong (Washed)	Milo 200 Gm.	Whole Av.Qlty.	Apple
	Malta/Mosambi			Tomatoes
	Gram Whole			Wheat
	Yellow Av.Qlty			
	Apparel & Textile	Ladies Sandal Bata	Lawn Av.Qlty.	
Ladies Spoung		School Uni.		Nylon Jogger 27 Size
Chappal Bata		Kameez,Shal.Girl	Long Cloth Av.Qlty.	2-5
Gents Shoes Paul Bata		Tailoring Coat-Pant Suit	Shirting Av.Qlty. Tailoring Shirt	Child Shoe Power Lite Bata
House Rent Index			House rent index	
Fuel & Lighting	Elect.Charges Above 1000 Uni		Gas Chrg 6.7438 - 10.1157Mmb	Firewood Whole
	Match Box Small		Gas Chrg 10.1157 - 13.4876Mmb	Gas Cylinder Stand.
	Elect.Charges 01 - 100 Unit		Gas Chrg Upto 3.3719 Mmbtu	Size Kerosene Oil
H/hold Furniture	Sewing Machine(Singer)	Household Servant Female P/T	Quilt (Lihaf) 3 Kg.	Bucket(Balti) Plastic
		Blanket (90" X 54")	Cotton, Tea Set Pak.	Med.Si, Marriage Hall
Transport & Comm.	Tel Charges Out Side City	A/C Bus Fare Outside City, Car Suzuki 800 Cc (W/O. A/C)	Petrol Super	Taxi 4 Seater Fare
	Telephone Charges	Minibus Fare	Car Service Charges	Air Fare Economy Class.
	Local Call	Max.With In Cit	Tyre Car With Tube General	T.C.S. Ch. Min.With In Zone
	Bus Fare Outside City, Car Tax For 800Cc To 1300Cc	Bus Fare Min (Within City)	High Speed Diesel Hsd	Tyre Motor Cycle Without Tub
Recreation & Entertainment	Tv.Licence	Cinema A/C. Highest Class, Radio With		Dry Cell 1.5
	Feedomestic Daily "Jang"	C.Player National		Volt(Local)
Education	Daily "Nawa-E-Waqt"	Vid. Cassette Blk. Tdk/Sony		Weekly "Akhbar-E-Jahan"
	Govt. College Fee Ist. Year	School Fee 2Nd-Ry	Exercise.Book Lined 80/100 P	Paper Foolscape (27"X17")
	Govt. College Fee 4Th. Year, Urdu	Eng.Med., School Fee	Maths Book Class Ix Or X, Maths Book	Urdu Book Class Ix/X(T.B.B)
	Book Ist.Year/Inter	Primary Eng.Med. Eng. Book Ist.Yr Complete Se	Ist.Year (T.B.B)	Ball Pen (Local)
Cleaning & Laundry	Toothpaste	Perfume Med.Size	Haircut Charges For Men, Shampoo Plain	Washing Soap Nyl(135-160Gms)
	Macklines 70 Grm	Medora/Broa	Medora 200 Ml.	Toilet Soap Lux 95 Grams, Toilet Soap
	Lipstick	Talc Powder Vice	Washing Powder 1000 Grm, Surf (Medium) 160 Grm	Lifebouy 140 Grm
	S.Miss/Medora	Roay.B.Cat, Cleanser		Gold Tezabi 24 Ct
Medicare	Robin Blue (35 Grams)	Powder Vim 1000 Gm		
	Gripe-Water , oodwards	O.R.S. (Nimcol)		Doctor (Mbbs) Clinic
	Dettol (Medium)	Cotton Bandage 2" - 4"	Galxos-D (450 Grms)	Fee, Disprin Tab.
Jouhar Joshanda	Daonil Tab. 5 Mg.		Polyfax Eye Ointment	

Table A5: City-wise Inflation (YoY) by Income Groups, February 2008							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	12.0	17.5	8.2	12.1	18.1	8.0
2	Faisalabad	11.5	17.4	7.5	12.4	17.5	8.9
3	Rawalpindi	10.1	12.5	8.5	10.6	14.1	8.2
4	Multan	13.2	18.5	9.5	13.2	19.4	9.0
5	Gujranwala	14.3	19.0	11.2	15.2	20.4	11.8
6	Islamabad	12.1	16.7	9.1	12.0	15.7	9.5
7	Sargodha	13.6	16.4	11.7	12.6	15.6	10.5
8	Sialkot	11.3	16.0	8.2	11.3	15.8	8.2
9	Bahawalpur	11.8	16.4	8.7	11.7	16.8	8.3
10	Karachi	11.7	16.3	8.6	11.0	15.3	8.2
11	Hyderabad	14.7	18.0	12.5	15.0	19.2	12.1
12	Sukkur	15.1	21.1	11.0	14.7	20.1	11.1
13	Larkana	13.0	17.7	9.8	13.5	18.2	10.3
14	Peshawar	13.0	17.4	10.0	13.7	18.9	10.2
15	Bannu	15.9	18.9	13.8	16.2	19.1	14.2
16	Quetta	13.4	16.3	11.4	11.7	14.8	9.7
17	Khuzdar	14.4	14.7	14.1	14.5	14.5	14.5
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	11.3	17.9	6.8	9.4	16.1	4.8
2	Faisalabad	11.8	17.9	7.7	9.9	17.1	5.0
3	Rawalpindi	10.3	13.6	8.0	9.2	12.3	7.0
4	Multan	12.2	18.9	7.7	9.6	16.6	4.9
5	Gujranwala	14.2	19.6	10.5	11.5	15.7	8.7
6	Islamabad	11.1	16.0	7.8	9.5	13.6	6.8
7	Sargodha	11.4	14.4	9.4	8.8	11.6	6.9
8	Sialkot	10.8	15.8	7.5	10.1	15.0	6.7
9	Bahawalpur	10.6	16.3	6.8	8.7	15.2	4.4
10	Karachi	10.6	14.5	7.9	9.0	13.6	5.9
11	Hyderabad	14.7	19.4	11.6	13.2	17.5	10.3
12	Sukkur	14.0	19.6	10.3	13.2	18.8	9.4
13	Larkana	12.6	17.5	9.2	10.4	14.7	7.4
14	Peshawar	12.2	18.2	8.2	10.2	15.9	6.3
15	Bannu	15.5	18.4	13.5	13.0	15.8	11.1
16	Quetta	11.1	14.3	9.0	11.0	14.9	8.5
17	Khuzdar	14.0	14.1	13.9	12.9	12.1	13.4

Table A6 : Income Group-wise Inflation (YoY)								percent
	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08
<u>Up to Rs. 3000</u>								
General	7.5	7.3	9.9	11.2	10.1	10.4	14.7	13.4
Food	8.7	8.4	13.0	14.9	12.2	12.4	20.0	17.2
Non-food	6.7	6.5	7.6	8.5	8.6	9.0	10.9	10.7
<u>Rs. 3001-5000</u>								
General	7.5	7.3	9.9	11.2	10.2	10.4	14.5	13.0
Food	8.8	8.6	13.4	15.4	12.7	12.8	20.3	17.2
Non-food	6.6	6.5	7.4	8.2	8.3	8.7	10.5	10.0
<u>Rs. 5000-12000</u>								
General	6.9	6.9	9.1	10.2	9.4	9.5	13.0	12.0
Food	8.6	8.7	13.2	15.0	12.6	12.5	19.0	16.5
Non-food	5.6	5.6	6.1	6.7	7.0	7.4	8.6	8.7
<u>Above Rs. 12000</u>								
General	5.6	5.8	7.3	8.0	7.7	7.7	10.2	10.1
Food	8.1	8.6	12.6	13.9	12.3	11.8	16.6	15.0
Non-food	3.8	3.7	3.4	3.6	4.3	4.7	5.5	6.6
<u>All income groups</u>								
General	6.4	6.5	8.4	9.3	8.7	8.8	11.9	11.3
Food	8.5	8.6	13.0	14.7	12.5	12.2	18.2	16.0
Non-food	4.9	4.9	5.0	5.4	5.9	6.3	7.3	7.8

Table A7: Distribution of Price Change (YoY)--WPI Items: February 2008				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Onions			Milk Food, Vegetables
	Potatoes			Prepared/Preserved
	Sugar Refined			Wheat Flour, Fresh Milk, Powdered Milk
	Gur			Oil Cakes, Dry Fruits
	Gram Split			Jowar, Spices, Cooking Oil, Wheat
	Gram Whole			Condiments, Maize
	Moong	Sugar		Vegetables, Beans
	Besan	Confectionary		Mustard & Rapeseed
	Fresh Fruits	Mineral Water		Oil, Rice, Maida
	Tea	MEAT	Beverages	Vegetable Ghee
	Mash	FISH	Fruit	Cotton Seed Oil
Chicken	SALT	Prepared/Preserved	Masoor, Eggs, Bajra, Tomatoes	
Raw material		Wool	Tobacco	Cotton
	Sugar Cane	Cotton Seeds	Skins Hides	Pig Iron Mustard/Rapeseeds
Fuel & lighting	Electricity Ind.			Mobil Oil
	Supply Tariff-B		Natural Gas	Coal, Fire Wood
	Elec. Agriculture		Motor Sprit	Furnace Oil
	Tariff-D	Diesel Oil	Kerosine Oil	Coke
Manufactures		Cosmetics, Other		
		Electrical Goods		
		Woolen Textiles		
		Cotton Textiles		
		Ready Made		
		Garments, Jute		Sole Leather
		Manufactures		Blended Yarn
	Paper	Nylon Yarn		Plastic Products
	Drugs & Medicines	Pesticides & Insecticised	Dyeing Materials	Soaps
	Cotton Yarn	Mattresses,	Silk & Reyon	Foot Wear
	Glass Products	Transports, Utensils	Textiles	Tyres
Audio-Visual	Cigarettes, Matches	Machinery	Chrome Leather	
Instruments	Hosiery	Tubes	Chemicals	
Building material	Cement		Tiles	
	Paints & Varnishes	Sanitary Wares	Wires And Cables	
	Cement Blocks	Glass Sheets	Pipe Fittings	
		Timber	Bricks	Iron Bars & Sheets

Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Price Feb-08	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	17.3	38.9	-21.0
2	Wheat flour a.qlt.	Kg.	16.5	18.5	-15.0
3	Rice basmti.broken	Kg.	36.6	60.2	-12.4
4	Rice irri-6	Kg.	26.6	53.2	-8.8
5	Masur pulse washed	Kg.	75.0	59.1	-7.5
6	Moong pulse washed	Kg.	52.0	-9.4	-7.1
7	Mash pulse washed	Kg.	71.0	-0.2	-3.7
8	Gram pulse washed	Kg.	42.2	-9.8	-1.0
9	Beef	Kg.	122.9	3.8	-0.6
10	Mutton	Kg.	236.0	5.4	-0.1
11	Egg hen (farm)	Doz.	54.4	36.5	0.0
12	Bread plain m.s.	Each	19.4	25.4	0.0
13	Sugar	Kg.	25.7	-17.1	0.0
14	Gur	Kg.	30.9	-16.9	0.0
15	Milk fresh	Litr	29.9	12.5	0.0
16	Milk powdered nido	400g	145.1	20.9	0.0
17	Curd	Kg.	35.0	12.3	0.0
18	Veg.ghee tin	2.5k	317.9	39.7	0.0
19	Veg.ghee loose	Kg.	117.7	63.2	0.0
20	Mustard oil	Kg.	133.2	65.2	0.1
21	Cooking oil	2.5l	322.5	41.7	0.2
22	Potatoes	Kg.	11.5	-5.2	0.4
23	Onions	Kg.	12.0	-57.1	0.4
24	Tomatoes	Kg.	36.9	211.7	0.6
25	Bananas	Doz.	32.9	0.2	0.6
26	Salt powdered	Kg.	5.2	11.0	0.7
27	Red chillies(powd)	Kg.	137.4	36.3	0.7
28	Garlic	Kg.	43.0	-37.2	0.9
29	Tea packet	250g	69.1	-1.3	1.0
30	Tea (prepared)	Cup	7.1	10.2	1.0

continued

Table A8 (continued)

Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Price Feb-08	Percentage change	
				YoY	Monthly
31	Cooked beef plate	Each	33.5	11.1	1.1
32	Cooked dal plate	Each	20.5	13.9	1.2
33	Cigarettes k-2	10's	8.4	4.4	1.3
34	Coarse latha	Mtr.	39.2	12.3	1.4
35	Lawn (avg.+s.qlty)	Mtr.	80.4	3.5	1.7
36	Voil printed	Mtr.	39.3	6.0	2.1
37	Shirting	Mtr.	71.9	9.8	2.3
38	Sandel gents bata	Pair	499.0	25.1	2.9
39	Sandel ladies bata	Pair	299.0	0.0	2.9
40	Chappal spng. Bata	Pair	99.0	11.2	3.8
41	Kerosene	Litr	42.4	8.4	4.4
42	Firewood	40kg	231.8	17.9	4.5
43	Elec. Bulb 60-wats	Each	12.9	6.4	5.2
44	Match box	Each	1.0	35.1	5.8
45	Washing soap	Cake	10.2	26.1	6.1
46	Bath soap lifebuoy	Cake	18.1	29.4	6.2
47	Chicken (farm)	Kg.	74.3	2.8	6.3
48	Gas chrg. All clb. Comb	D.mmbt	239.4	-1.8	6.3
49	L.p.g ,(cylender 11kg.)	Each	792.9	26.0	6.4
50	Elec.chrg.all slabs com	Bd. Unit	5.1	9.9	7.2
51	Petrol	Litr	53.8	0.0	7.5
52	Diesel	Litr	37.9	0.0	16.3
53	Telephone local	Call	2.3	0.0	29.7
Maximum				211.7	29.7
Median				11.0	0.7
Minimum				-57.1	-21.0

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities

Item and Specification	Weights	Index	
		Feb-07	Feb-08
GENERAL	100.0006	142.47	158.50
FOOD & BEVERAGES.	40.3412	148.35	172.16
1 WHEAT	0.4830	142.92	201.66
2 WHEAT FLOUR	5.1122	139.17	174.40
3 MAIDA	0.1059	130.88	198.21
4 BESAN	0.1320	160.53	150.83
5 RICE	1.3369	142.57	222.68
6 PULSE MASOOR	0.2214	129.95	196.43
7 PULSE MOONG	0.2230	188.92	171.43
8 PULSE MASH	0.2017	156.92	155.43
9 PULSE GRAM	0.4272	160.67	146.30
10 GRAM WHOLE	0.1491	147.02	136.89
11 MUSTARD OIL	0.0456	144.52	232.46
12 COOKING OIL	0.6858	142.20	200.38
13 VEGETABLE GHEE	2.6672	152.40	231.04
14 SUGAR	1.9467	111.96	93.56
15 GUR	0.0735	142.86	119.18
16 TEA	1.2559	114.81	112.22
17 MILK FRESH	6.6615	152.74	172.65
18 MILK POWDER	0.1105	135.20	175.38
19 MILK PRODUCTS	0.5607	138.77	156.64
20 HONEY	0.0358	131.56	133.24
21 CEREALS	0.0878	132.35	164.69
22 JAM,TOMATO,PICKLES & VINEGAR	0.2472	126.78	140.37
23 BEVERAGES	0.7286	127.70	142.34
24 CONDIMENTS	0.3392	114.27	161.62
25 SPICES	0.6008	119.16	167.34
26 DRY FRUIT	0.2760	214.28	243.91
27 BAKERY & CONFECTIONARY	2.9837	117.90	127.53
28 CIGARETTES	0.9527	147.45	158.57
29 BETEL LEAVES & NUTS	0.1851	136.09	148.51
30 READYMADE FOOD	1.6833	154.23	180.69
31 SWEETMEAT & NIMCO	0.3846	151.64	182.53
32 FISH	0.2703	148.87	153.87
33 MEAT	2.6981	213.01	225.30
34 CHICKEN FARM	0.9158	137.74	142.28
35 EGGS	0.4119	143.38	219.28
36 POTATOES	0.5931	134.63	121.31
37 ONIONS	0.6362	275.92	108.79
38 TOMATOES	0.4958	77.05	224.12
39 VEGETABLES	1.7998	142.64	200.44
40 FRESH FRUITS	1.6156	183.16	167.95
APPAREL, TEXTILE & FOOTWEAR.	6.0977	125.09	133.42
41 COTTON CLOTH	1.6197	128.28	136.38
42 SILK,LINEN,WOOLEN/CLOTH	0.5766	127.04	135.52
43 TAILORING CHARGES	0.8636	128.47	137.40
44 HOSIERY	0.1528	135.80	143.72
45 READYMADE GARMENTS	1.2038	122.38	127.55
46 WOOLEN READYMADE GARMENTS	0.1485	139.26	155.82
47 FOOTWEAR	1.5327	118.78	128.66
HOUSE RENT.	23.4298	142.10	156.25
48 HOUSE RENT INDEX (Combined)	23.4298	142.10	156.25
FUEL AND LIGHTING.	7.2912	151.13	160.45
49 KEROSENE	0.1366	235.87	276.35
50 FIREWOOD	0.4778	208.41	250.96
51 MATCH BOX	0.1301	100.00	100.00
52 BULB & TUBE	0.1311	86.73	93.52

(continued)

Table A10 (continued)

Item and Specification	Weights	Index	
		Feb-07	Feb-08
53 ELECTRICITY	4.3698	119.53	119.53
54 NATURAL GAS	2.0458	206.99	227.12
H.HOLD.FURNITURE & EQUIPMENT ETC.	3.2862	132.97	141.41
55 UTENSILS	0.3690	119.43	127.62
56 PLASTIC PRODUCTS	0.1055	137.16	150.33
57 SUITCASE	0.0470	121.49	131.28
58 HOUSE HOLD EQUIPMENTS	0.0953	118.78	126.13
59 FURNITURE (Ready Made)	0.3054	130.91	144.20
60 FURNISHING	0.6362	128.31	136.94
61 ELECT.IRON FANS & WASHING MACHINE	0.1889	119.90	128.11
62 SEWING MACHINE,CLOCK AND NEEDLES	0.1270	117.72	120.24
63 REFRIGERATOR & AIRCONDITIONER	0.1756	95.90	102.62
64 MARRIAGE HALL	0.0445	139.33	158.65
65 HOUSE HOLD SERVANT	1.1918	150.33	157.63
TRANSPORT & COMMUNICATION.	7.3222	148.74	153.15
66 PETROL	1.7253	175.59	192.05
67 DIESEL	0.2070	238.74	260.92
68 CNG. FILLING CHARGES	0.1649	140.33	153.67
69 SERVICE CHARGES	0.3835	130.09	138.49
70 VEHICLES	0.2596	100.89	102.73
71 TYRE & TUBE	0.2831	122.50	129.67
72 TRANSPORT FARE/CHARGES	2.1236	171.45	176.01
73 TRAIN FARE	0.1514	170.01	170.01
74 AIR FARE	0.0983	218.72	280.47
75 COMMUNICATION	1.9255	99.44	86.82
RECREATION & ENTERTAINMENT.	0.8259	105.56	106.34
76 RECREATION	0.3399	100.00	101.91
77 ENTERTAINMENT	0.4860	109.44	109.44
EDUCATION.	3.4548	134.97	139.60
78 TUTION FEES	2.3629	140.81	145.58
79 STATIONERY	0.3500	120.51	131.43
80 TEXT BOOKS	0.6894	126.25	127.69
81 COMPUTER & ALLIED PRODUCTS	0.0525	82.86	81.52
CLEANING LAUNDRY & PER.APPEARANCE.	5.8788	125.19	141.52
82 WASHING SOAP & DETERGENT	1.5535	116.30	128.48
83 TOILET SOAP	0.7436	119.28	161.07
84 TOOTH PASTE	0.4036	107.01	108.92
85 SHAVING ARTICLES	0.3480	111.24	121.35
86 COSMETICS	1.4272	123.51	128.86
87 WATCHES	0.0552	118.84	128.62
88 JEWELLERY	0.3936	194.77	259.38
89 LAUNDRY CHARGES	0.2207	141.87	152.65
90 HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	128.03	135.87
MEDICARE.	2.0728	121.72	131.34
91 DRUGS & MEDICARES	1.0752	106.61	108.19
92 DOCTOR'S FEE	0.9976	138.01	156.29

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

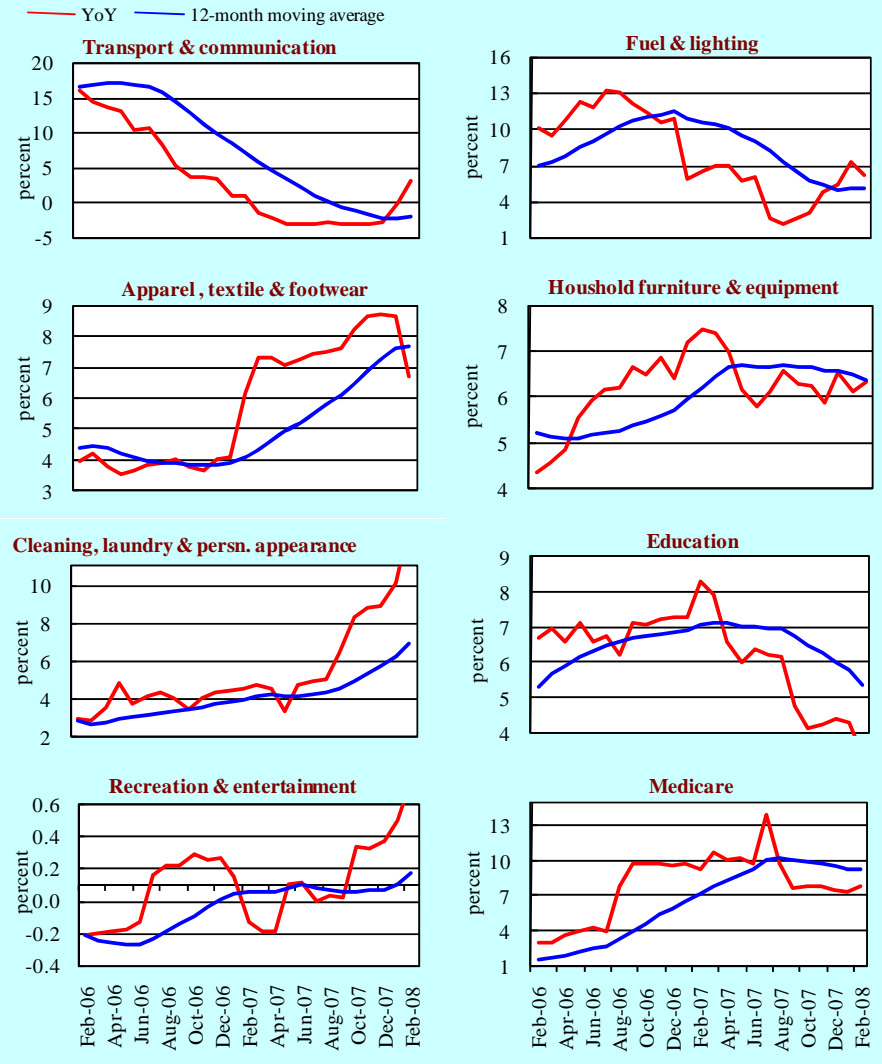


Figure A2: Frequency Distribution of Price Changes of CPI Items, February 2008

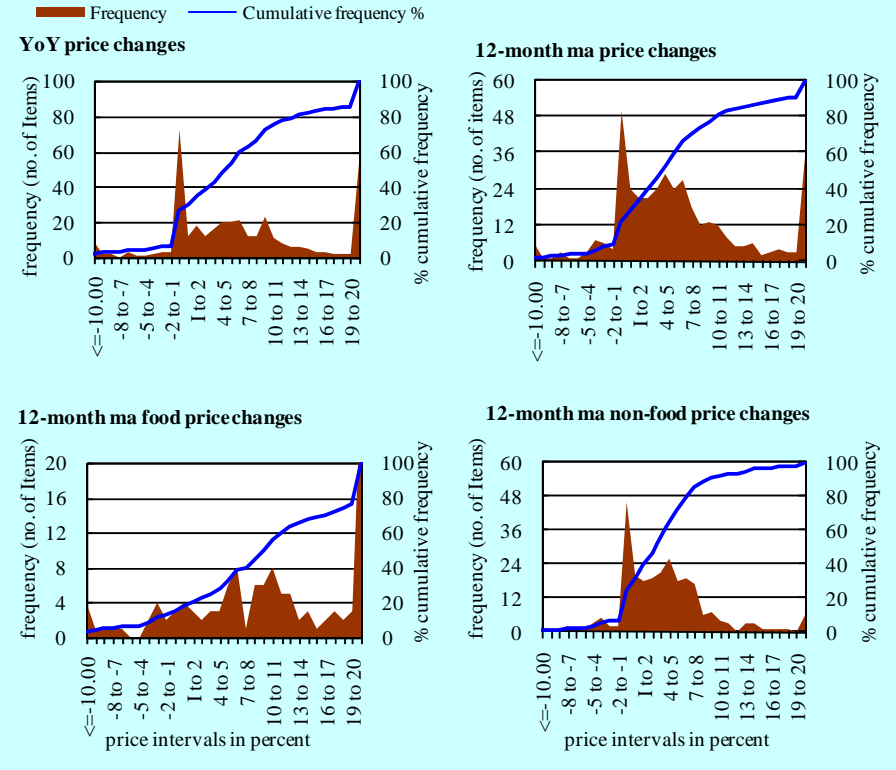
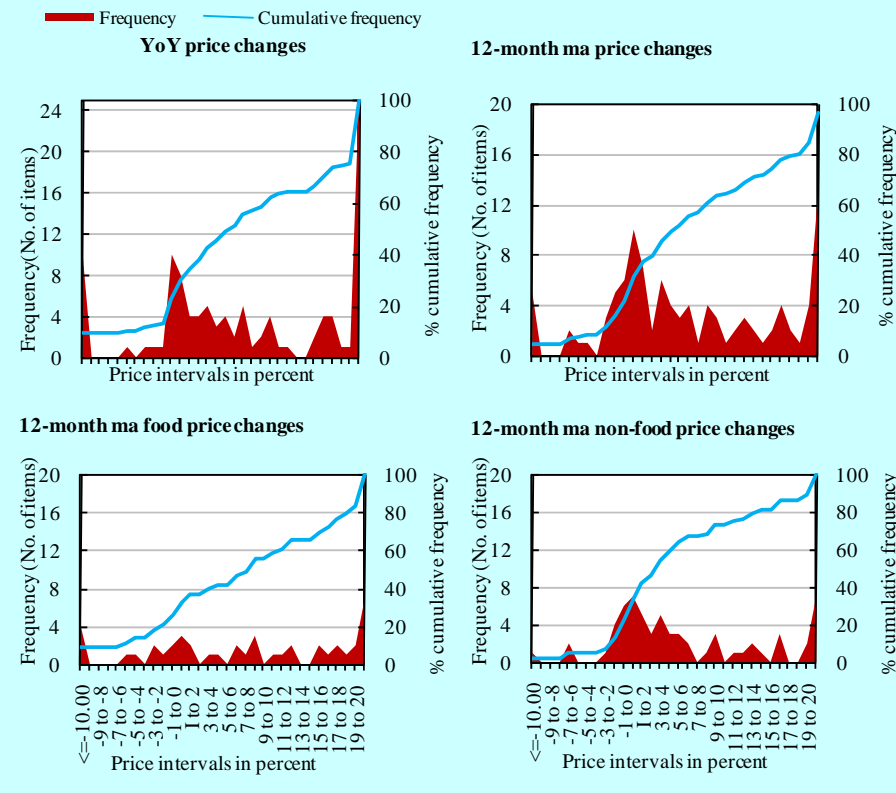


Figure A3: Frequency Distribution of Price Changes of WPI Items, February 2008



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^{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