Inflation Monitor

February 2007

State Bank of Pakistan

Research Department

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Contents

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Overview

Headline CPI inflation declined to 7.4 percent in February 2007 on year-on-year (YoY) basis from 8.0 percent registered in the same month of last year. However, food inflation rose to 10.0 percent in February 2007 from 7.5 percent last year, while non-food inflation declined to 5.6 percent in February 2007 from 8.4 percent a year earlier (see **Table 1.1**). Eight-month annualized period average rate of CPI also showed a decline in overall inflation during July-February FY07 compared with the same period last year. However, similar to YoY trend in February 2007, period average indicated a rise in food inflation and a fall in non-food inflation.

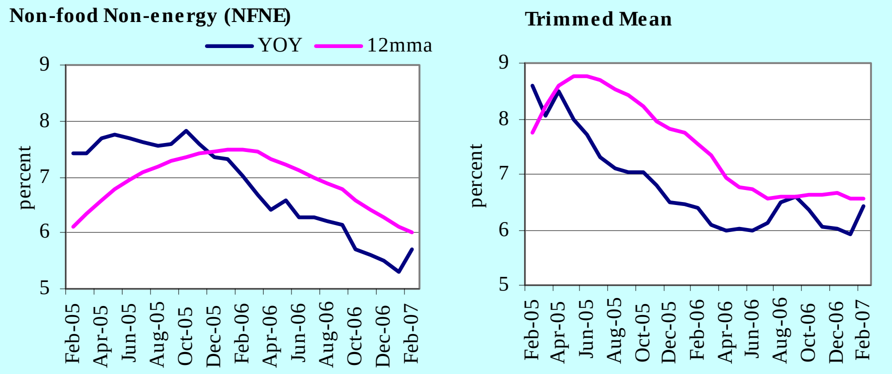
Table 1.1: Inflation (YoY)
Percent

	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
Feb-06	8.0	7.5	8.4	7.0	6.4	9.9	7.4
Mar-06	6.9	5.4	8.0	6.7	6.1	8.5	6.9
Apr-06	6.2	3.6	8.0	6.4	6.0	8.1	6.4
May-06	7.1	5.6	8.2	6.6	6.0	9.1	7.7
Jun-06	7.6	7.8	7.5	6.3	6.0	9.0	8.7
Jul-06	7.6	7.4	7.8	6.3	6.1	8.4	8.6
Aug-06	8.9	11.1	7.4	6.2	6.5	8.2	10.8
Sep-06	8.7	11.3	7.0	6.2	6.6	8.0	10.0
Oct-06	8.1	10.5	6.4	5.7	6.4	6.7	9.9
Nov-06	8.1	10.6	6.3	5.6	6.1	7.5	10.7
Dec-06	8.9	12.7	6.2	5.5	6.0	8.0	12.0
Jan-07	6.6	8.7	5.2	5.3	5.9	5.4	9.5
Feb-07	7.4	10.0	5.6	5.7	6.4	5.1	8.8

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

Year-on-year CPI Inflation rates in February 2007, when compared with the rates in January 2007, show upward movements in overall inflation as well as in its two broad components of food and non-food inflation. This is mainly due to an unusually high one-month increase (February over January) in CPI and its components. Overall CPI increased by 1.0 percent, which is twice the five-year average of January-February increase. The extent of one-month increase in food inflation is close to five-times of the five-year January-February increase. However, increase in one-month non-food inflation is only one-third higher than the respective five-year average (see **Table 1.2**).

Figure 1.1: Core Inflation



Core inflation (non-food non-energy) also declined to 5.7 percent in February 2007 from 7.0 percent in February 2006 on YoY basis, while core inflation based on 20% trimmed-mean CPI remained the same during this period. Nevertheless, the declining trend in both measures of core inflation is clearly visible in terms of eight-month annualized period average rates as well as twelve-month moving average rates (see **Figure 1.1**).

The wholesale price inflation (WPI) declined to 5.1 percent in February 2007 on YoY basis from 9.9 percent in the corresponding month last year. This significant decline in WPI was due to sharp deceleration in non-food inflation during February 2007 compared to the corresponding month of last year. In contrast with CPI and WPI, sensitive price indicator

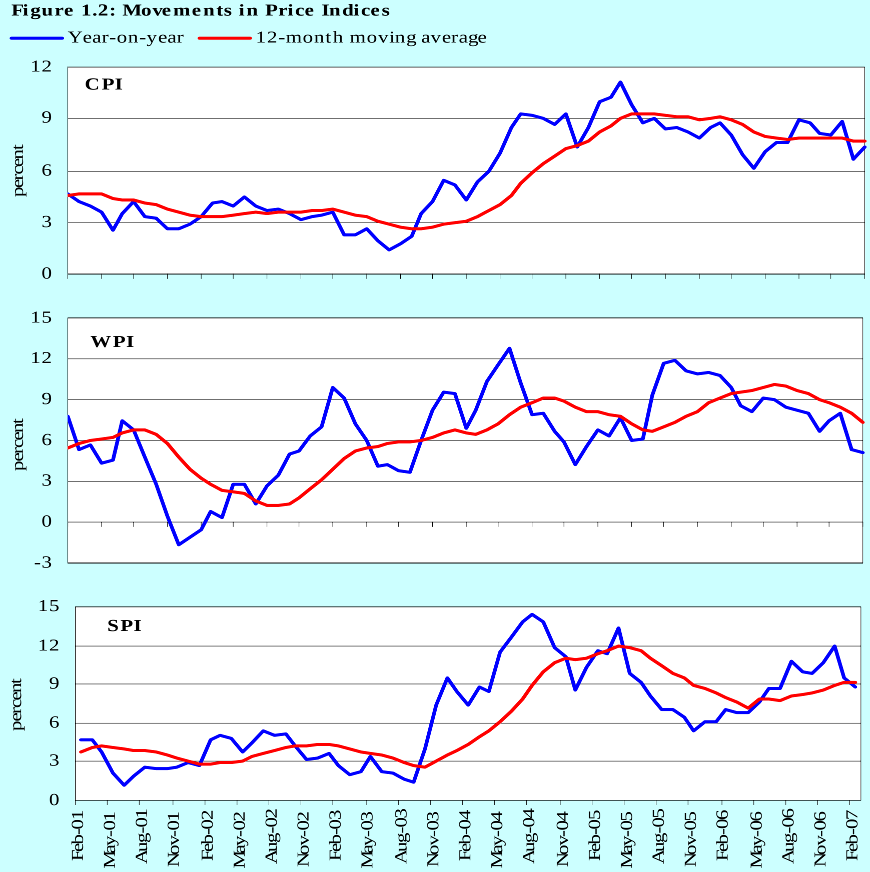
Table 1.2: Different Dimensions of Inflation (percent)

	Feb-05	Feb-06	Feb-07	5-year average
Year-on-year (Feb *over* Feb)				
Overall CPI	9.9	8.0	7.4	6.6
Food group	12.9	7.5	10.0	7.8
Non-food group	8.0	8.4	5.6	5.9
Core Inflation				
NFNE	7.4	7.0	5.7	5.3
Trimmed	8.6	6.4	6.4	6.3
Period average (Jul-Feb *over* Jul-Feb)				
Overall CPI	8.9	8.4	8.0	6.5
Food group	12.4	7.6	10.3	7.6
Non-food group	6.6	9.0	6.5	5.7
Core Inflation				
NFNE	6.7	7.5	5.8	5.1
Trimmed	8.5	7.0	6.6	6.4
12-month moving average				
Overall CPI	8.2	8.9	7.7	6.3
Food group	11.5	9.2	8.7	7.3
Non-food group	6.0	8.7	6.9	5.7
Core Inflation				
NFNE	6.1	7.5	6.0	5.6
Trimmed	7.7	7.6	6.6	6.2
Monthly (Feb over Jan)				
Overall CPI	1.0	0.3	1.0	0.5
Food group	0.9	0.2	1.4	0.3
Non-food group	1.1	0.4	0.8	0.6
Core Inflation				
NFNE	0.6	0.3	0.7	0.4
Trimmed	0.5	0.3	0.5	0.4

(SPI) increases to 8.8 percent in February 2007 on YoY basis from 7.4 percent in February 2006.

Trend rates of inflation continue to be on a downward direction, although the pace of downtrend remains sluggish. Twelve-month moving average rates in overall CPI and its broad categories of both food and non-food indices share this direction, unlike the YoY and period average rates that showed an upward movement in food inflation. Trend rate in CPI declined to 7.7 percent in February 2007 from 8.9 percent a year earlier. Similarly, trend rate in food inflation also declined to 8.7 percent from 9.2 percent in the same period, while the extent of decline in trend rate of non-food inflation was 6.9 per cent in February 2007 from 8.7 percent in February 2006 (see **Table 1.2**). The WPI inflation that remained on a rising trend during FY06, started to decline from the beginning of FY07. This decelerating trend has continued over the subsequent months of current fiscal year (see **Figure 1.2**).

Figure 1.2: Movements in Price Indices



2. Consumer Price Inflation

In February 2007, CPI YoY inflation was recorded at 7.4 percent depicting a rise of more than 0.8 percentage points as compared to the previous month and a decline of 0.6 percentage points than that of the corresponding month last year. The main contributing factor for this rise was food inflation which was 1.3 percentage points more than that of the previous month. Non-food inflation also increased and was recorded at 5.6 percent (see **Figure 2.1**). The increase in YoY inflation is due to a rise in prices of some major food items and some components of fuel & lighting group, specifically electricity charges.

Figure 2.1: Consumer Price Inflation

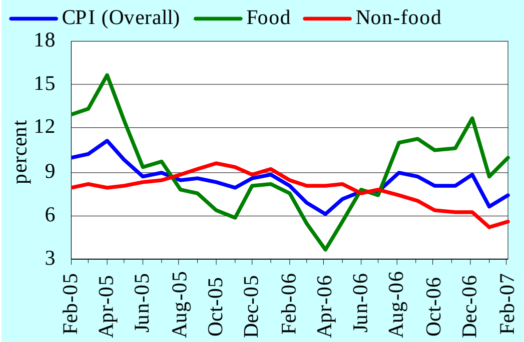
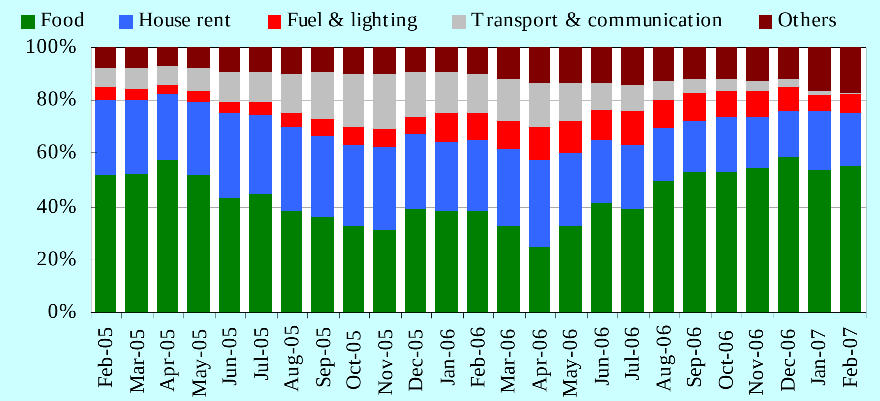


Figure 2.2: Weighted Contribution to CPI Inflation (YoY)

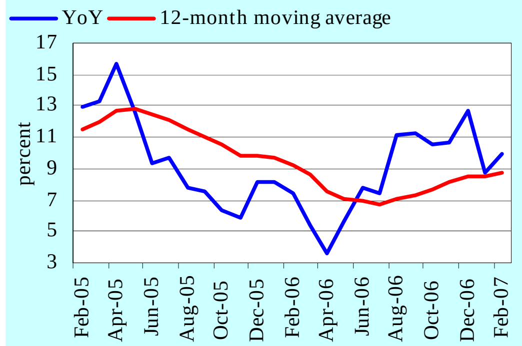


The contribution of food group in overall inflation was 55.4 percent in February 2007 which was marginally higher than that of January 2007 (1.6 percentage points), but was significantly higher than 38.3 percent contribution of food during the corresponding month last year. The contribution of house rent index (the single largest item of the CPI basket) also declined from 27.1 percent during the corresponding month last year to 20 percent (see **Figure 2.2**) in February 2007.

2.1 Food Inflation

Food inflation (YoY) increased from 8.7 percent in January 2007 to 10 percent (YoY) in February 2007, driven mainly by an increase in prices of different types of rice, fruits including kinnu, musambi and apple. The weight of these items is 4.6 percent of the total food group. Food inflation has been within double digit range apart from remaining at single digit only during January 2007 since August 2006.

Figure 2.3: CPI Food Inflation

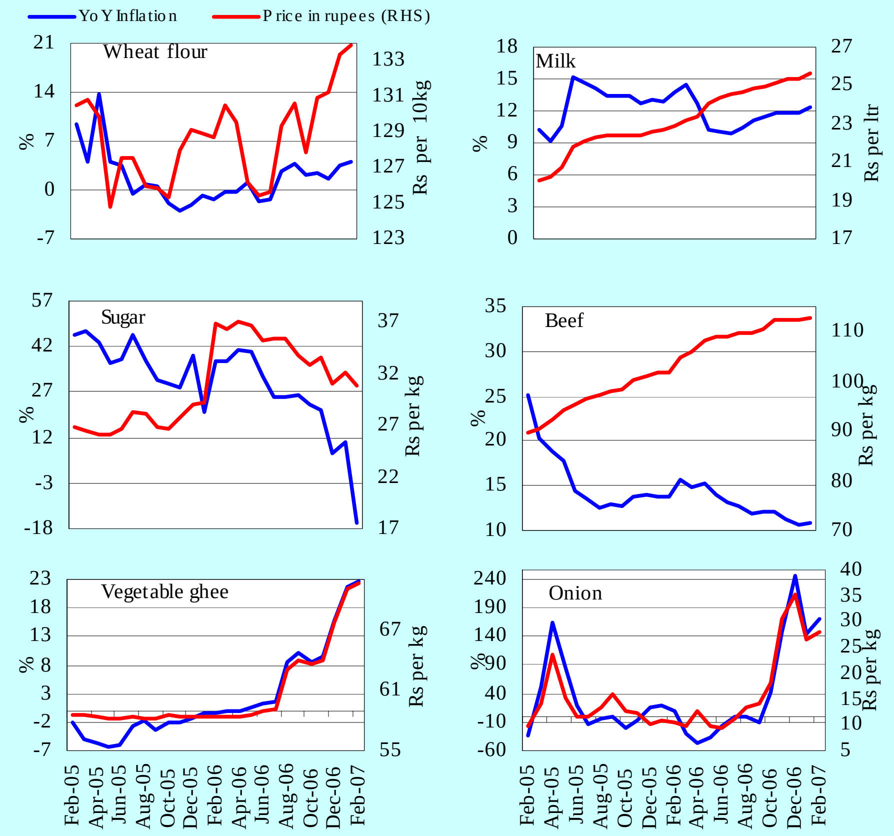


Of the total 124 commodities included in the food group, 45 commodities including fresh milk, beef, pulse gram, vegetable ghee, mutton and some fruits exhibited inflation (YoY) in the range of 10 to 52 percent in February 2007. The combined weight of commodities with double digit inflation is about 53 percent of the food group. Only three commodities of food group have crossed the 100 percent inflation (YoY), these items include onion (170 percent), kinnu (124 percent) and Malta (102 percent). On the other hand inflation (YoY) of 13 commodities like tomatoes, potatoes, green chilies, sugar, ginger, and peas either declined or remained same during the month. Rest of the items having a weight of 30 percent in the food group exhibited subdued or moderate inflation (see **Table A2** in Annexure A).

As compared to January 2007 there was an increase in average prices of food items like wheat flour, fresh milk, and beef during February 2007. During the month the price of onion increased by about 5 percent as compared to the previous month (see Figure 2.4); and is almost double than its price in February 2006.

In terms of percent contribution to overall inflation (YoY), fresh milk and onion were the second and third highest contributors (house rent index of non-food group being the first) with 11.4 percent and 11.3 percent share in overall CPI inflation (see **Table A4** in the annexure). The high contribution of onion was due to exceptionally high growth in its price (170 percent) though its weight in the CPI basket is just 0.64 percent. On the other hand, high contribution of fresh milk was primarily due to its high weight (6.5 percent) while increase in its price was also higher than overall food inflation.

Figure 2.4: Price Trends in Key Food Items



2.2 Non-food Inflation

Like food inflation, non-food inflation also increased from 5.2 percent in January 2007 to 5.6 percent in the month of February 2007. This marginal rise in inflation is primarily due to an increase in almost all groups of non-food group including fuel & lighting, apparel, textile & footwear, education, house rent index, household furniture & equipment, transport & communication, cleaning and laundry & personal appearance. Only two groups recreation & entertainment and medicare of non-food group showed a decline in inflation (YoY) during February 2007 (see **Figure 2.5**).

Fuel & lighting sub-group witnessed a price increase (YoY) of 6.5 percent in February 2007 as compared to 5.8 percent in January 2007. This is due to a high base effect similar to that of the same month last year (February 2006). The electricity charges have increased appreciably as compared to the corresponding month last year.

The inflation in transport & communication sub-group slightly increased to 0.9 percent in February 2007 from 0.8 percent in the preceding month. Inflation (YoY) in apparel, textile & footwear sub-group was recorded at 6.2 percent in February 2007 as compared to 4.1 percent in January 2007. This is mainly because of an increase in the prices of footware.

The declining trend of house rent index (HRI) changed in the month of February 2007 and was recorded at 6.3 percent in February 2007 as compared to 6.2 percent in the month of January 2007 (see **Figure 2.6**).

Other indices of non-food group also exhibited an increase in inflation during the month which included household furniture & equipment and cleaning, laundry & personal appearance. The medicare sub-group index registered an increase of 9.3 percent in the month under review as compared to that of 3 percent growth in the same month last year (see **Figure A1** in annexure).

Figure 2.5: CPI Non-food Inflation

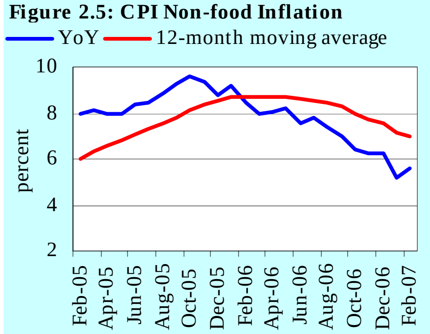
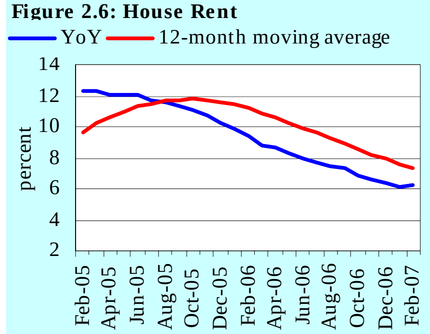


Figure 2.6: House Rent



Of the 250 non-food commodities included in the CPI basket, 30 commodities witnessed double digit inflation which included items like firewood, fares train economy, air fare economy class, primary school fee (English medium), gold tezabi, silver tezabi and doctor clinic fee, etc. There were 53 commodities that showed moderate inflation in the range of 5 to 10 percent; all other commodities witnessed either YoY deflation or inflation of less than 5 percent (see **Table A2** in the annexure). The commodities showing deflation include petrol super, a number of durable goods like telephone charges, computer, video cassette player, refrigrator, sewing machines, etc (see **Table A3** in the annexure).

2.3 City-wise Inflation

City-wise inflation followed the trend of overall CPI inflation. In February 2007 the highest inflation (YoY) was 10.9 percent and the lowest was 5.2 percent recorded in Gujranwala and Loralai Cantt respectively, whereas in January 2007 the highest inflation was 9.4 percent and lowest was 4.5 percent. Gujranwala (8.4 percent) was at 6th position among high inflation cities in January 2007. Kunri was in high inflation cities (8.1 percent) in January 2007 but in the current month it is among the low inflation cities with YoY inflation of 7.1 percent. Islamabad lost its position of being 2nd (9.4 percent) in January 2007 and is now reported at the 4th

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

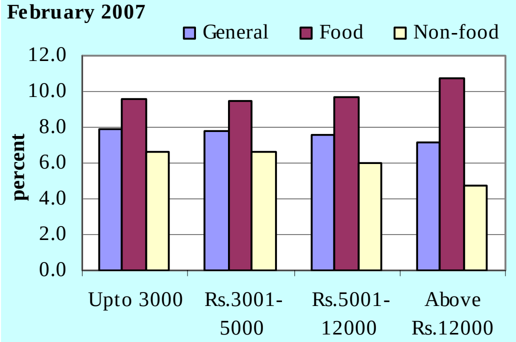
	High inflation cities				Low inflation cities		
	General	**Food**	**Non-food**		**General**	**Food**	**Non-food**
Gujranwala	10.9	14.7	8.3	Mardan	7.1	8.4	6.2
Mianwali	10.0	12.7	8.1	Kunri	7.1	9.2	5.6
Okara	10.0	13.7	7.3	Turbat	7.1	6.1	7.8
Islamabad	9.6	11.7	8.2	Sialkot	7.0	11.4	3.9
Jhelum	9.5	12.9	7.2	Hyderabad	7.0	8.0	6.3
Multan	9.2	10.9	8.1	Abbotabad	6.5	8.6	5.0
Rawalpindi	8.4	10.6	6.9	Faisalabad	6.5	10.8	3.5
Attock	8.3	11.4	6.3	D.I.Khan	6.5	8.2	5.3
Bahawalpur	8.2	11.1	6.2	Peshawar	6.3	7.4	5.5
Sargodha	8.2	12.5	5.3	Sukkur	5.4	5.4	5.4
Nawabshah	8.2	9.7	7.1	Loralai Cantt	5.2	5.8	4.7
Larkana	8.1	10.9	6.1				
Bahawalnagar	8.1	10.6	6.3				
D.G. Khan	8.1	10.6	6.3				
Vehari	8.1	7.7	8.3				
Mirpur Khas	8.0	10.4	6.3				
Bannu	7.9	7.8	8.0				
Samundari	7.8	11.6	5.3				
Khuzdar	7.8	9.0	7.0				
Jhang	7.6	11.3	5.2				
Karachi	7.5	10.6	5.5				
Lahore	7.4	10.9	5.0				
Quetta	7.4	10.7	5.1				
Shahdadpur	7.4	7.6	7.2				

Note: High inflation refers to above average inflation, and low inflation refers to below average inflation position (9.6 percent) in February 2007. Although Islamabad lost its position but the increase in inflation is not significant. Other cities like Turbat, Hyderabad, Abbotabad, Sukkur and Faisalabad maintained their position in the low inflation cities.

2.4 Income Group-wise Inflation

The income group wise inflation data reveals that all income groups have experienced the conventional trend of CPI inflation. CPI inflation (YOY) for all income groups except for the highest income group is higher (see **Figure 2.7**) than the overall average CPI inflation in all three categories (general, food and non-food). However as compared to the previous month all income groups depicted an increasing trend in all the categories.

Figure 2.7: Income Group-wise CPI Inflation February 2007



City-wise data reveals that Gujranwala captures the position of highest inflation in all income groups. Whereas Khuzdar has taken the position of low inflation in all income groups (see **Table A5** in annexure A).

2.5 Services and Non-services Inflation

Inflation in the services[1] sector showed a marginal increase in February 2007 with the non-services sector also showing a significant increase. Inflation (YoY) in services was recorded at 6.6 percent in February 2007 as compared to 6.4 percent in the previous month and 8.9 percent in the corresponding month last year. The inflation of non-services sector was 8 percent in February as compared to 7.4 percent in the corresponding month last year (see **Figure 2.8**).

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

Figure 2.8: Services & Non-services Inflation

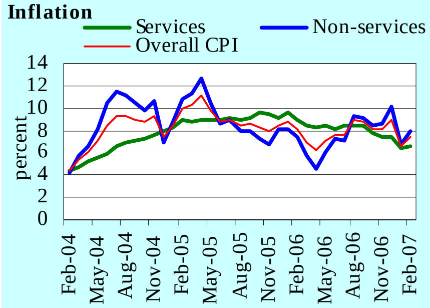
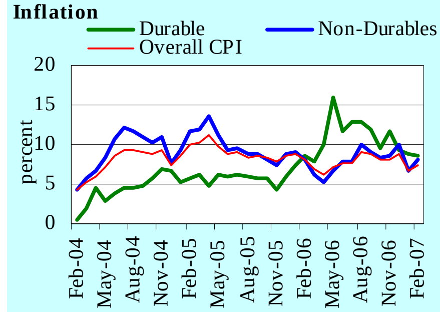


Figure 2.9: Durables and Non-durables Inflation

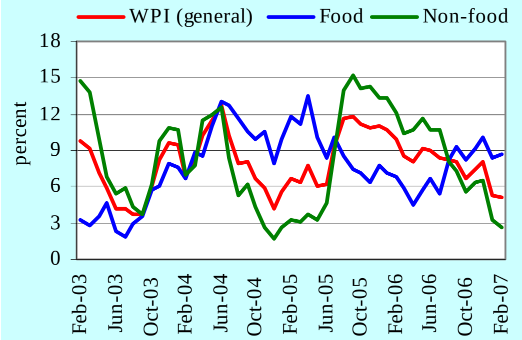


Within the non-services sector, inflation in durable[2] items decreased to 8.5 percent in February 2007 as compared to 8.7 percent that of January 2007 (see **Figure 2.9**). The non-durable goods inflation also decreased to 8 percent in February 2007 from 6.7 percent of January 2007 and 8.1 percent during the corresponding month last year. The items that caused low non-durable inflation are almost the same that contributed to a decline in overall CPI inflation, i.e. rice, onion, fresh fruits, footwear, etc.

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

3. Wholesale Price Inflation

Figure 3.1: Wholesale Price Inflation



Wholesale price inflation further decelerated in February 2007 and dipped to 5.1 percent – lowest in the last two years – as compared to 5.4 percent in the last month and 9.9 percent of the same month last year. Non-food group was mainly responsible for this decline (see **Figure 3.1**). The long-run trend of WPI inflation measured by 12-month moving average continued its deceleration trend that commenced at the start of FY07 on account of continuously declining – with few exceptions – YoY growth in WPI since February 2006.

Unlike the overall WPI inflation and the *non-food* group, the wholesale prices of food group registered a rise of 3 percentage points as compared to the preceding month. The non-food WPI inflation that witnessed a YoY decline, stood at 2.6 percent in the month under review – lowest since February 2005 (see **Figure 3.1**). All sub groups of non-food group in WPI contributed in bringing down the non-food inflation, particularly the fuel, lighting and lubricants sub group showed a YoY deflation during the month under review.

Commodity wise break up of WPI inflation depicted that tomatoes, potatoes, vegetables, furnace oil, motor spirit, natural gas, fertilizers, glass products etc. showed decline of varying magnitudes in their prices. The wholesale prices of more than 50 percent items declined, remained stable or exhibited lower growth than that of overall WPI.

A distribution of price change suggests that 17 out of 43 food items witnessed a rise of more than 10 percent in inflation during the month under review. While 9 items recorded moderate inflation of 5 to 10 percent, other 9 items showed subdued inflation of up to 5 percent. The wholesale prices of remaining 8 food items declined or remained stable. In case of the non-food group, the prices of 23 items revealed a positive change up to 5 percent, 17 items showed a decrease or no change, 13 items demonstrated double digit rise of above 10 percent and the remaining 10 items displayed a moderate inflation, i.e. 5 to 10 percent (see **Table A7** in Annexure A).

Figure 3.2: Wholesale Price Inflation (YoY) in Selected Food Items

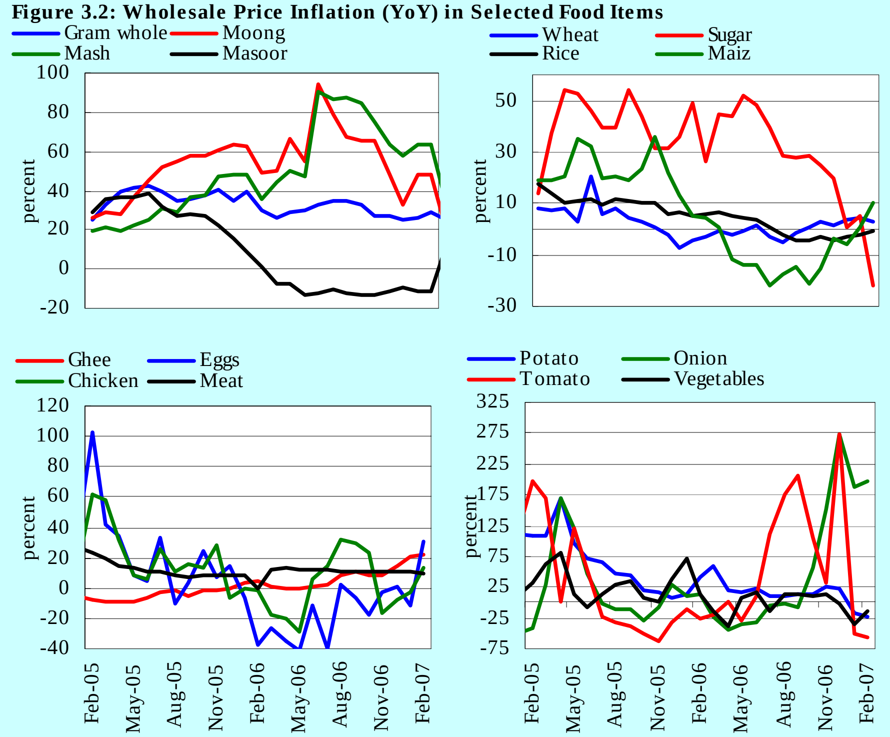
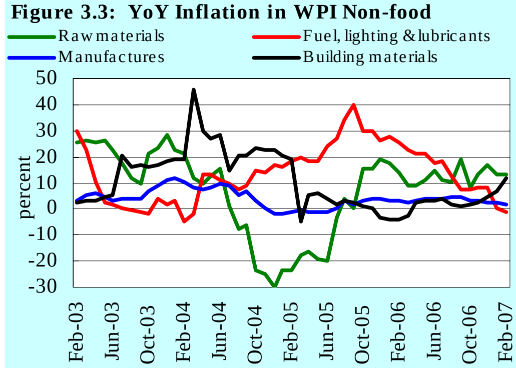


Figure 3.3: YoY Inflation in WPI Non-food

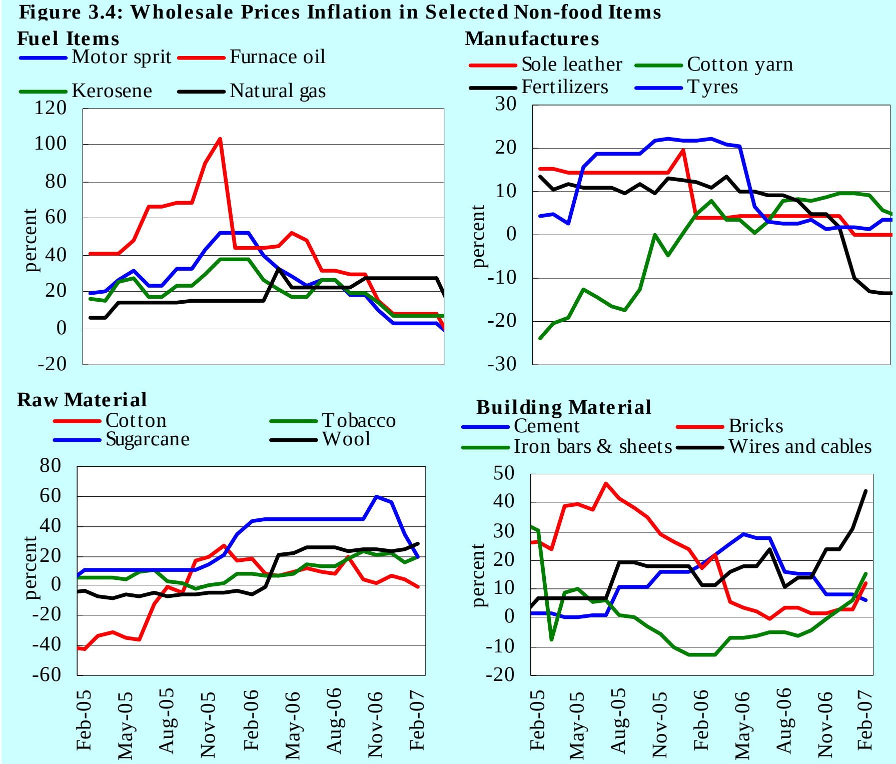


Further classification of non-food group revealed that all subgroups, i.e. raw materials, fuel, lighting & lubricants, manufactures and building materials decelerated during February 2007. The rate of increase in *raw materials* was recorded at 13.1 percent YoY: lower as compared to 13.4 of the previous month. By analyzing the individual commodities amongst the *raw material* sub group, it was observed that the wholesale price of cotton declined and wholesale prices of tobacco and sugarcane decelerated significantly. On the other hand wholesale price of pig iron and wool showed higher YoY growth in February 2007 than the previous month (see **Figure 3.3**).

A turnaround in *fuel, lightning & lubricants* from a positive to negative growth was mainly on account of deflation in the wholesale prices of motor spirit, furnace oil and natural gas.

Manufactures sub-group decelerated for the fifth consecutive month and recorded a lower inflation of 1.6 percent in February 2007 as compared to 2.3 percent during the last month. This was mainly due to the fact that high YoY inflation in some items like chemicals and hosiery was offset by low YoY inflation in other items like fertilizers and blended yarn.

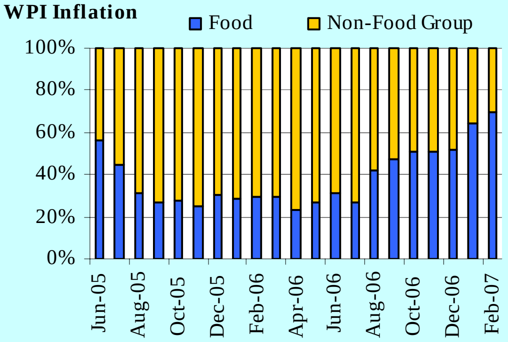
Figure 3.4: Wholesale Prices Inflation in Selected Non-food Items



The *building material* sub-group depicted a significantly higher YoY growth of 11.6 percent in February 2007 as compared to the 6.8 percent of last month on account of picking up of construction activities at the start of spring season. The prices of all items except tiles reported under this group exhibited positive growth during the month under study; particularly wholesale prices of bricks, wires & cables and timber rose sharply (see **Figure 3.4**).

The weighted contribution of food group in WPI inflation increased continuously from 27.0 percent in June 2006 to 69.9 percent in February 2007. On the other hand contribution of non-food group declined further to 30.1 percent in February 2007 from 73 percent in June 2006 due to continuous deceleration in fuel, lighting & lubricants and manufactures sub-groups during the last few months (see **Figure 3.5**).

Figre 3.5: Weighted Contributions in WPI Inflation



Within non-food group, the contributions of its sub-groups showed mixed trends. The contributions of raw materials and building materials went up significantly whereas the manufactures group's contribution declined significantly in February 2007. The most peculiar change was observed in the *fuel, lighting & lubricant* group whose contribution in non-food group turned into a negative zone to -22.0 percent during February 2007 which was around 69 percent at the start of FY07 (see **Table 3.1**).

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

	Jul	Jan	Feb
Raw materials	12.9	51.6	62.3
Fuel, lighting & lubricants	68.5	4.5	-22.0
Manufactures	15.1	26.5	22.9
Building materials	3.5	17.3	36.5

4. Global Commodity Prices

In international markets the prices of selected items firmed up in February 2007 led by energy, food and other commodity groups except for sugar and cotton (see **Table 4.1**). Energy prices represented by IMF and World Bank energy indices along with the crude oil and coal prices increased significantly during February 2007 because of OPEC's decision to cut oil production and return of cold weather in the North America. Food prices also registered an increase in the international market except for sugar prices due to supply short falls and seasonal drop in winter production. In the non-food non-energy group, a surge in prices was led by fertilizer and metal prices on account of higher demand for urea and DAP in Latin America, Europe and United States[3].

Table 4.1: International Commodity Prices/Indices

	Jul 06	Aug 06	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07
Energy								
Crude Oil (US$ per barrel)	72.5	71.8	62.0	58.0	58.1	61.0	53.4	57.6
IMF Energy Index	389.5	386.7	336.2	317.3	320.2	333.3	295.4	317.3
WB Energy Index	316.7	313.5	271.5	253.1	254.1	266.6	233.9	251.6
Coal	56.5	54.6	50.7	47.2	49.3	53.3	55.0	56.7
Food								
Rice	312.4	313.4	312.9	309.6	300.6	309.3	313.5	316.1
Wheat	202.4	189.9	196.0	212.1	205.8	204.3	196.1	200.0
Sugar	15.9	13.0	12.3	11.5	11.7	11.7	10.9	10.6
Palm Oil	404.0	434.5	416.9	422.3	476.7	528.2	550.8	553.8
Soybean Oil	586.8	562.5	534.3	559.7	623.6	628.6	635.6	664.9
Sunflower Oil	673.0	673.0	673.0	673.0	673.0	673.0	673.0	673.0
Non-Food Non-Energy								
Cotton Outlook 'A' Index	56.7	59.9	58.8	57.0	57.4	59.4	59.1	57.9
WB Steel Products Index	135.8	135.8	135.8	133.7	131.5	131.0	131.4	132.0
DAP	261.3	260.9	258.8	255.6	253.5	253.5	267.6	345.4
Urea	202.3	213.7	215.3	211.8	235.6	254.7	269.8	304.3

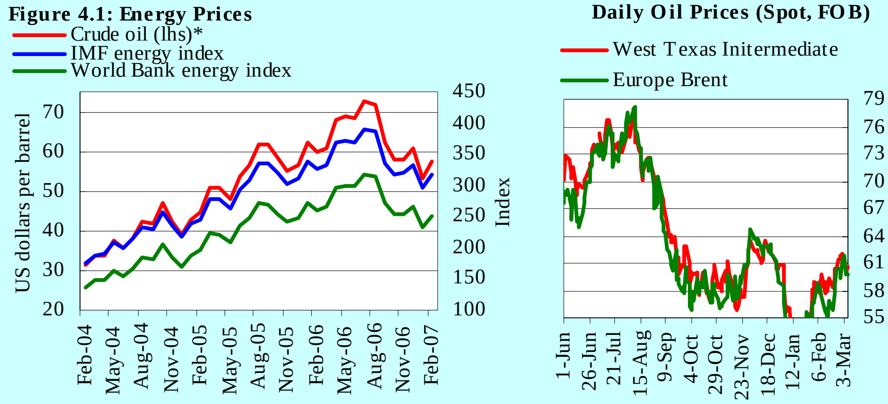
Note: Prices for all commodities are in US$ per metric tonne except for crude oil.

[3] Source: World Bank Commodity Market Review.

In the energy group, oil prices again picked up in February 2007 and registered a rise of 7.8 percent over the preceding month after significantly declining during January 2007. Cold weather in February and higher demand in heating fuel reduced petroleum inventories that in turn pushed up spot crude oil prices during the month. The upward trend that continued during the month was led by expectations that OPEC was going to cut oil output to balance the market.[4] However, crude oil prices (YoY) declined by 3.6 percent due to the high base effect. The average monthly price of crude oil in the international market remained within a relatively lower range of US $56.1 per barrel to the maximum level of US $60.9 per barrel. The volatility – measured by the standard deviation – also reduced during the month under review reflecting relatively stable international crude oil prices. The fluctuation around average price during the month of February 2007 was 1.5 as compared to 2.2 of the preceding month. In accordance with the international oil prices, the IMF and the World Bank energy

Figure 4.1: Energy Prices

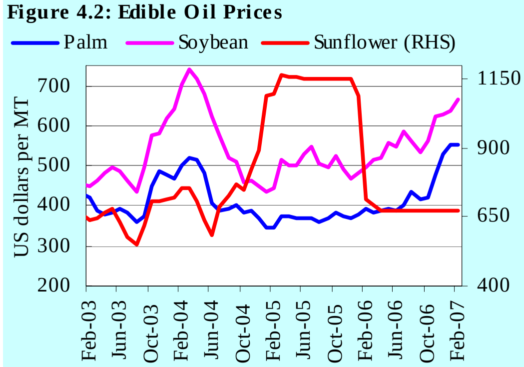
Daily Oil Prices (Spot, FOB)



*Simple average of brent, WTI and Dubai Fateh

Source: www.eia.doe.gov

Figure 4.2: Edible Oil Prices



[4] Source: OPEC's Monthly Oil Market Report.

indices for February 2007 exhibited a rise over the preceding month (see **Figure 4.1**).

The prices of palm and soybean oils continued to show strong growth in the international market during February 2007 as compared to the corresponding month last year,. The prices of both edible oils increased due to the rise in demand due to winter season coupled with poor rapeseed harvest. The soybean oil prices reached 32-month high and 41.8 percent inflation (YoY) was recorded in February 2007. Whereas the sunflower price has not exhibited any change since April 2006 (see **Figure 4.2**).

After declining for three consecutive months from November 2006 to January 2007 wheat prices edged up by 2 percent in February 2007 with a YoY increase of 11.2 percent. The average monthly sugar prices have continued to decline for the third consecutive month, mainly because of increasing supplies from Brazil, China, India and Thailand. This decline in sugar prices (41.4 percent) is rather sharp in comparison to the same month last year (see **Figure 4.3**). Average monthly gold prices showed slight increase over the previous month while it increase sharply compare to the same month of the last year. During February 2007 daily gold price in the international market remained higher and fluctuated in a wider range between $651 per ounce and $685 per ounce. Moreover, the variation in gold prices declined during the month showing a standard deviation (SD) of 10.6 around higher mean of US$664 per ounce as

Figure 4.3: Sugar and Wheat

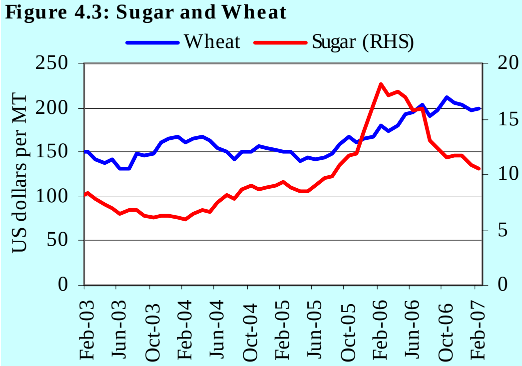
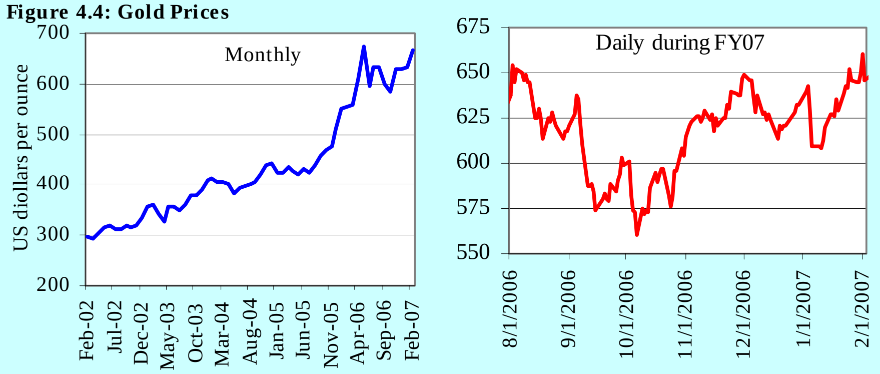


Figure 4.4: Gold Prices



compared to the SD of 14.5 around mean of US$631 per ounce a month earlier (see **Figure 4.4**).

Figure 4.5: Steel Prices

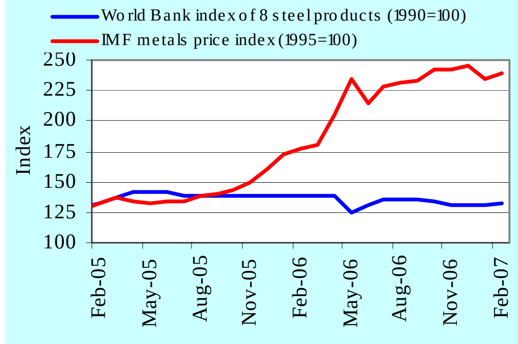
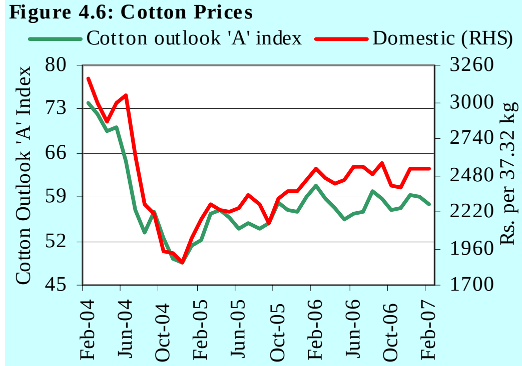


Figure 4.6: Cotton Prices



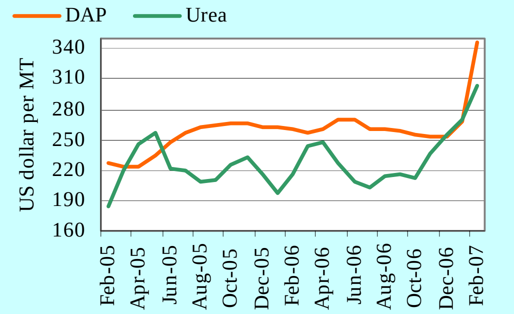
Barring steel and related products, the prices of all other metals including zinc, aluminum, tin, lead, nickel, etc., increased sharply in February 2007 as compared to the same month last year. This is also reflected by the IMF metal price index that rose by 34.6 percent during February 2007 as compared to the corresponding month last year. The steel prices – measured by the World Bank Index of 8 steel products[5] – declined by 4.75 percent. Nickel was the star performer in the metal group whose prices exhibited a steep rise of 175 percent in February 2007 as compared to the same month last year on account of low stocks, ongoing supply problems and threat of strikes in Canada (see **Figure 4.5**).

Cotton prices – represented by cotton outlook 'A' index[6] – dropped by 4.7 percent in February 2007 as compared to the corresponding month last year in the international market and declined by 2 percent than that of January 2007. In the domestic cotton market, cotton prices continued to rise for the third consecutive month due to less than targeted cotton production as the growers shifted their focus from cotton to sugarcane cultivation (see **Figure 4.6**).

[5] The eight products are as follow: rebar (concrete reinforcing bars), merchant bars, wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet and galvanized iron sheet.
[6] Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, average of cheapest 5 of 15 styles traded in Northern Europe, c.i.f.

Fertilizer prices in the international market increased significantly during the month of February 2007 than that of the corresponding month last year as well and as compared to the preceding month. The rise in prices of DAP[7] and urea in the international market was mainly due to strong demand in United States and Europe following the recent increase in oil prices (see **Figure 4.7**).

Figure 4.7: Fertilizer Prices

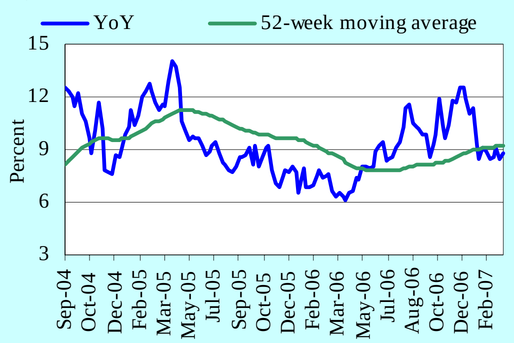


Source: World Bank

5. Sensitive Price Indicator

Weekly SPI witnessed mixed trends in inflation during the month under review. Thus after recording a slight decrease in the first two weeks of February, weekly YoY SPI inflation has shown a slight increase in the remaining two weeks (see **Figure 5.1**).

Figure 5.1: Weekly SPI Inflation



On monthly basis, the sensitive price indicator continued its decelerating trend that started in January 2007. Thus the YoY growth that was recorded at 9.5 percent in January 2007 came further down to 8.8 percent in February 2007 -- the lowest since August 2006. However the long run trend indicated by 12-month moving average showed a slight increase in inflation during the month under review: a 9.2 percent increase was observed as compared to 9.1 percent of the previous month.

Major items contributing to the SPI inflation were pulses, onion, gas and electricity charges. During February 2007, 30 items in the SPI basket recorded inflation (YoY) more than the average level of 8.8 percent with some of the items like pulses gram and mash, onions, red chilies, eggs, gas charges, electricity charges, etc., witnessing inflation of more than 30 percent. While 23 items

[7] DAP: Diammonium Phosphate

recorded inflation (YoY) less than the average level of 8.8 percent with sugar, potatoes, tomatoes and petrol showing negative growth.

Compared with the prices of the previous month, almost 50 percent of the items included in the SPI basket either declined or experienced no change in the price level. Only one item (chicken) has shown double digit growth in inflation as compared to the previous month (see **Table A8** in Annexure A).

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

Percent

	Up to Rs. 3000	Rs. 3001-5000	Rs. 5000-12000	Above Rs. 12000	All income groups
Jul-06	8.9	8.6	8.8	10.0	8.6
Aug-06	11.0	10.7	11.1	12.0	10.8
Sep-06	11.2	10.8	10.8	10.6	10.0
Oct-06	11.8	11.3	11.2	9.8	9.9
Nov-06	13.4	12.5	12.2	10.1	10.7
Dec-06	14.5	14.0	13.5	11.2	12.0
Jan-07	12.1	11.3	10.7	8.5	9.5
Feb-07	10.6	10.0	9.7	7.8	8.8

According to Income Group-wise SPI inflation the lowest income group was affected the most. Despite showing a slightly lower inflation (YoY) in February 2007, the lowest income group maintained a persistent double digit increase in the sensitive price indicator. The least affected group was the highest income group maintaining a (YoY) inflation of single digit in February 2007 (see **Table 5.1**). This is because most of the items showing high inflation are from the food group, having a more significant impact on the lowest income group as compared to the other income groups.

6. Wage Inflation in Construction Sector

After decelerating in January 2007, the wage inflation of construction workers again went up in February 2007 reflecting the picking up of construction activities at the start of the spring season. Wage inflation (YoY) in February 2007 was recorded higher at 13.7 percent as compared to the 12.9 percent of January 2007. However, the trend rate of wage inflation (measured as 12-month moving average) continued its downward direction that started in September 2006 due to the deceleration in construction sector wage inflation (see **Figure 6.1**). Both skilled as well as unskilled workers registered a comparatively higher YoY growth of 13.3 and 17.1 percent respectively in their wages during the month under review compared to 12.5 and 16.3 percent for the preceding month. Further break-up exhibited that the wages of all types of labor, except carpenters, picked up during the month under review as compared to the previous month (see **Table 6.1**).

Figure 6.1: Wage Inflation

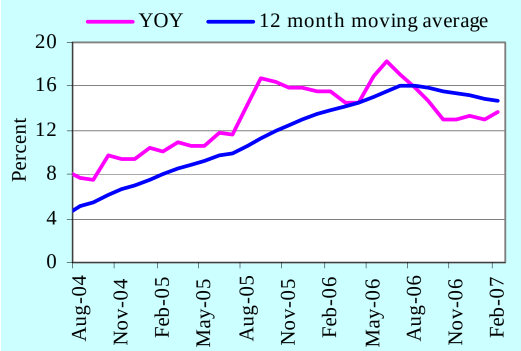
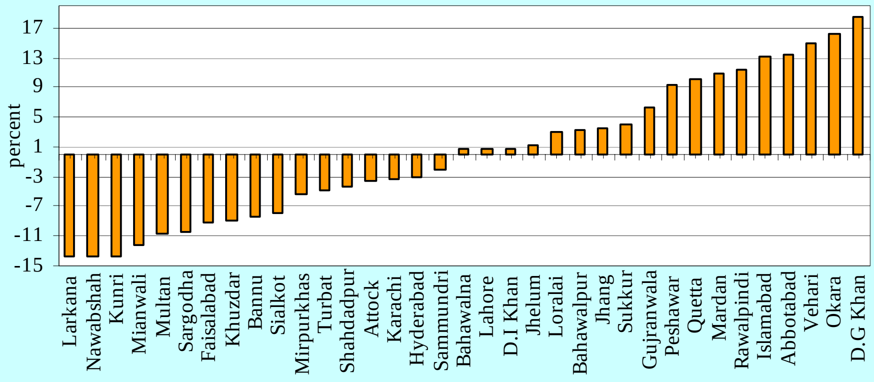


Table 6.1: Wage Inflation FY07

	Jul- 06	Aug- 06	Sep- 06	Oct- 06	Nov- 06	Dec- 06	Jan- 07	Feb- 07
Overall	***17.0***	***15.9***	***14.8***	13.0	13.0	13.3	12.9	13.7
Skilled:	**16.8**	**15.7**	**14.6**	**12.6**	**12.5**	**12.9**	**12.5**	**13.3**
Carpenter	15.0	13.4	13.3	11.8	11.9	12.1	12.4	12.8
Mason	18.4	17.8	15.2	12.6	12.5	12.6	12.1	13.9
Plumber	14.0	13.2	12.1	10.7	10.8	11.7	10.6	11.3
Electrician	19.8	18.6	17.8	15.1	14.8	15.0	14.9	15.1
Unskilled:	**18.5**	**16.9**	**16.4**	**16.2**	**16.6**	**16.8**	**16.3**	**17.1**
Laborer	18.5	16.9	16.4	16.2	16.6	16.8	16.3	17.1

Figure 6.2: City-wise Wage Inflation - Difference from Mean in February 2007



The upper and lower limit of construction workers' nominal wages in the country improved during February 2007 as compared to the preceding month. The average wages of all types of workers increased by 12.9 percent for February 2007 in comparison to the corresponding month last year and remained within the range of Rs 221.9 rupees per day for Kunri and Rs 443.8 rupee per day for Islamabad (see **Table A9** in Annexure 'A'). Figure 6.2 presents the picture of city wise deviation in wages from mean during the month of February 2007. Out of 35 cities, 18 recorded higher than average wage inflation and 17 cities witnessed lower than average inflation during the month. The highest wage inflation was observed in D.G.Khan followed by Okara and Vehari whereas Larkana, Nawabshah, Kunri, etc., showed the lowest changes in wages.

Annexure A

Table A1: CPI Inflation (YoY) by Groups						(percent)
	Weights	**Feb-03**	**Feb-04**	**Feb-05**	**Feb-06**	**Feb-07**
I. Food Group	**40.3**	**2.6**	**5.8**	**12.9**	**7.5**	**10.0**
II. Non-Food Group	**59.7**	**4.1**	**3.3**	**8.0**	**8.4**	**5.6**
Apparel, textile, etc.	6.1	4.3	2.5	2.6	3.9	6.2
House rent	23.4	0.5	5.2	12.3	9.4	6.3
Fuel & lighting	7.3	9.2	2.7	5.8	10.1	6.5
Household furniture & equipt	3.3	3.2	2.8	7.0	4.4	7.5
Transport & com.	7.3	9.9	1.1	9.3	15.9	0.9
Recreation & entert.	0.8	0.9	-1.5	0.1	-0.2	-0.1
Education	3.5	5.0	3.6	2.5	6.7	8.3
Cleaning, laundry, etc.	5.9	5.7	2.5	4.8	3.0	4.5
Medicines	2.1	2.8	1.5	1.2	3.0	9.3
Headline	**100**	**3.5**	**4.3**	**9.9**	**8.0**	**7.4**

Table A2: Distribution of Price Changes of CPI Basket, February 2007 (YoY)

Groups	**% Changes**	**Total Number of Items**	**No. of Items in each Inflation Range**			
			Decrease or no change (0 % or less)	**Subdued increase (0 to 5%)**	**Moderate increase (5 to 10%)**	**Double digit increase (over 10%)**
I. Food Group	**10.0**	**108**	**13**	**18**	**29**	**48**
II. Non-Food Group	**5.6**	**250**	**63**	**104**	**53**	**30**
Apparel, textile, etc.	6.2	42	3	19	16	4
House rent	6.3	1			1	
Fuel & lighting	6.5	15	3	5	2	5
Household furniture & equipt	7.5	44	2	23	16	3
Transport & com.	0.9	43	16	13	6	8
Recreation & entert.	-0.1	16	13	1	1	1
Education	8.3	24	6	12	2	4
Cleaning, laundry, etc.	4.5	36	2	23	7	4
Medicines	9.3	29	18	8	2	1
Overall	**7.4**	**358**	**76**	**122**	**82**	**78**

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

Table A3: Top Ten Contributors to YoY CPI Inflation in February 2007

	Items	weights	YoY change Feb-06	YoY change Feb-07	Weighted Contribution
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	10.44	6.27	20.04
2	Milk Fresh	6.66	13.75	12.33	11.39
3	Onions	0.64	7.92	169.53	11.26
4	Fresh Fruits	1.62	7.08	44.43	9.28
5	Vegetable Ghee	2.67	-0.36	17.08	6.05
6	Meat	2.70	11.89	11.06	5.84
7	Electricity	4.37	0.00	10.07	4.87
8	Tution Fees	2.36	6.65	10.19	3.14
9	Rice	1.34	1.26	14.84	2.51
10	Pulse Gram	0.43	1.18	51.19	2.37
	Total	**46.2**			**76.7**
B. Ranked by Percentage Change					
1	Onions	0.64	7.92	169.53	11.26
2	Pulse Gram	0.43	1.18	51.19	2.37
3	Besan	0.13	3.22	46.64	0.69
4	Fresh Fruits	1.62	7.08	44.43	9.28
5	Air Fare	0.10	-9.43	39.97	0.63
6	Pulse Mash	0.20	36.98	36.31	0.86
7	Eggs	0.41	-35.43	33.89	1.52
8	Mustard Oil	0.05	0.37	21.59	0.12
9	Pulse Moong	0.22	51.02	20.92	0.74
10	Doctor'S Fee	1.00	5.66	17.39	2.08
	Total	**4.8**			**29.5**
C. Ranked by Weights					
1	House Rent Index	23.43	10.44	6.27	20.04
2	Milk Fresh	6.66	13.75	12.33	11.39
3	Wheat Flour	5.11	-0.89	3.35	2.35
4	Electricity	4.37	0.00	10.07	4.87
5	Bakery & Confectionary	2.98	3.45	2.97	1.03
6	Meat	2.70	11.89	11.06	5.84
7	Vegetable Ghee	2.67	-0.36	17.08	6.05
8	Tution Fees	2.36	6.65	10.19	3.14
9	Transport Fare/Charges	2.12	19.93	2.81	1.01
10	Natural Gas	2.05	20.56	1.66	0.70
	Total	**54.5**			**56.4**

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 7.4 percent in February 2007.

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

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Chillies Green Tomatoes Peas Potatoes Ginger	Wheat Flour Bag Wheat Flour Fine/Superior. Toffee (Hilal) Wheat Wheat Flour Fine/Superior.	Tea Prepared (Ordinary) Tea Loose Kenya Av.Qlty 250G Cigarettes K-2 10'S Cigarettes Gold Leaf 20'S	Milk Fresh (Unboiled) Vegetable Ghee (Loose) Kinnu Besan Av. Qlty. Onion
Apparel & Textile	Gents Shoes Paul Bata Ladies Sandel Bata Child Shoe Power Lite Bata	Pullover (Gents) Others A.Qt Socks Nylon (Pakistani) Awami-Suit W&W (Gents)Av.Qlt	Pullover Gents Oxford/Bon. Pullover Ladies Oxford/Bon. Shoe Repair Half Sole	Gents Spoung Chappal Bata Gents Sandel Bata Nylon Jogger 27 Size 2-5
House Rent Index			House rent index	
Fuel & Lighting	Match Box Small Tube Light Philips 40 Watts, Elect.Charges Upto 50 Units	Gas Cylinder Stand. Size, Gas Chrg Upto 3.3719 Mmbtu Gas Chrg10.1157 - 13.4876Mmb	Bulb Philips 100-Watts Kerosene Oil	Elect.Charges Above 1000 Uni, Elect.Charges 301 - 1000 Uni, Firewood Whole
H/hold Furniture	Sewing Machine(Singer) Refg. Dawlence 10 Cft. D.Doo	Quilt (Lihaf) 3 Kg. Cotton, Tea Set Pak. Chinaware 21 Pc Blanket (90" X 54")	Bedsheet Single Bed Sup.Qlty, Celing Fan 48" Super Qlty Bucket(Balti) Plastic Med.Si	Household Servant Female P/T, Pedestal Fan 22" Super Qlty, Carpet Plain Av. Qlty
Transport & Comm.	Petrol Super Telephone Charges Local Call Tel Charges Out Side City Internet Charges	Car Service Charges Auto Rickshaw Fares Minibus Fare Max.With In Cit	Tyre Car With Tube General Cng Filling Charges Bus Fare Max (Within Cit	Train Fare Eco. > 500 Km. Taxi 4 Seater Fare Air Fare Economy Class. Aerogram For Saudi Arabia
Recreation	Tv.Licence Feedomestic Daily "Jang", Video Game Sega 16 Byte	Cinema A/C. Highest Class	Cinema Non-A/C High Class	Dry Cell 1.5 Volt(Local)
Education	Govt. College Fee Ist. Year, Govt. College Fee 4Th. Year, English Book Class V1	Paper Foolscape (27"X17") Exercise.Book Lined 80/100 P Urdu Book Class V (T.B.Bord)	English Book Class Ix Or X, Ball Pen (Local)	School Fee 2Nd-Ry Eng.Med., School Fee Primary Eng.Med., Eng. Book Ist.Yr Complete Se
Cleaning & Laundry	Blade 7-O-Clock Stain. 5'S Hair-Colour Begin (6 Gms)	Washing Soap Nyl(135-160Gms), Toilet Soap Lux 95 Grams, Shampoo Plain Medora 200 Ml.	Haircut Charges For Men Dry Cleaning Suit Coat Pant Artificial Jewellary Set	Gold Tezabi 24 Ct Robin Blue (35 Grams) Silver Tezabi 24 Ct
Medicare	Renitec Tab. 5 Mg. Betnesol Eye Drops Hydryllin Syrup 120 Ml.	Amoxil Capsole 250 Mg.S Thermometer China Cotton Bandage 2" - 4"	Jouhar Joshanda Galxos-D (450 Grms)	Doctor (Mbbs) Clinic Fee

Table A5: City-wise Inflation (YoY) by Income Groups, February 2007

		Upto Rs:3000			Rs 3001-5000		
		General	**Food**	**Non-Food**	**General**	**Food**	**Non-Food**
1	Lahore	8.5	12.3	6.0	7.9	10.5	6.2
2	Faisalabad	7.0	11.0	4.3	7.1	10.1	5.1
3	Rawalpindi	8.6	11.3	6.8	8.3	10.3	7.0
4	Multan	9.7	10.7	9.1	9.5	10.6	8.7
5	Gujranwala	10.4	15.3	7.1	10.7	14.2	8.3
6	Islamabad	9.2	11.6	7.7	9.4	12.0	7.6
7	Sargodha	8.7	12.9	5.9	8.5	12.1	6.1
8	Sialkot	7.6	10.8	5.4	7.6	10.7	5.5
9	Bahawalpur	8.2	9.3	7.5	8.6	10.0	7.7
10	Karachi	7.0	9.4	5.4	7.6	10.5	5.6
11	Hyderabad	7.3	7.7	7.1	7.1	7.7	6.7
12	Sukkur	5.9	6.2	5.7	5.6	5.5	5.7
13	Larkana	7.8	10.2	6.2	7.6	9.3	6.4
14	Peshawar	6.8	7.4	6.4	6.4	6.2	6.6
15	Bannu	5.7	4.0	6.8	7.2	5.9	8.1
16	Quetta	8.1	9.5	7.2	7.4	9.9	5.6
17	Khuzdar	4.4	4.7	4.2	4.9	5.1	4.8
		Rs 5001-12000			**above Rs 12000**		
		General	**Food**	**Non-Food**	**General**	**Food**	**Non-Food**
1	Lahore	7.4	10.4	5.5	7.3	11.6	4.5
2	Faisalabad	6.8	10.2	4.5	6.2	11.5	2.6
3	Rawalpindi	8.1	10.1	6.8	8.7	11.2	7.0
4	Multan	9.1	10.9	7.8	9.2	11.0	8.1
5	Gujranwala	10.9	14.4	8.4	11.2	15.8	8.1
6	Islamabad	8.9	10.6	7.8	9.7	11.9	8.2
7	Sargodha	8.2	11.6	5.8	8.2	14.8	3.8
8	Sialkot	7.4	11.2	4.8	6.8	11.6	3.5
9	Bahawalpur	8.6	11.1	6.8	7.6	12.4	4.3
10	Karachi	7.6	10.5	5.6	7.5	10.7	5.4
11	Hyderabad	7.0	7.7	6.5	7.0	8.9	5.8
12	Sukkur	5.4	5.4	5.4	5.3	5.2	5.3
13	Larkana	8.1	10.7	6.4	8.5	12.6	5.7
14	Peshawar	6.2	6.7	5.9	6.3	8.6	4.7
15	Bannu	7.7	7.2	8.1	9.1	11.0	7.7
16	Quetta	7.3	10.3	5.3	7.5	11.4	4.9
17	Khuzdar	5.2	5.9	4.7	5.1	5.5	4.8

Table A6 : Income Group-wise Inflation (YoY)

	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07
Up to Rs. 3000								
General	7.6	9.3	9.4	8.8	9.3	10.1	7.6	7.9
Food	7.8	11.0	11.5	11.0	12.2	14.1	9.4	9.6
Non-food	7.6	8.1	8.0	7.3	7.2	7.4	6.3	6.7
Rs. 3001-5000								
General	7.5	9.2	9.3	8.7	9.0	10.0	7.3	7.8
Food	7.5	10.9	11.3	10.8	11.7	13.7	9.0	9.4
Non-food	7.5	8.1	7.9	7.3	7.1	7.4	6.1	6.7
Rs. 5000-12000								
General	7.5	9.0	9.0	8.4	8.4	9.3	6.9	7.5
Food	7.4	11.0	11.2	10.6	10.9	13.0	8.7	9.6
Non-food	7.5	7.7	7.5	6.8	6.6	6.8	5.6	6.0
Above Rs. 12000								
General	7.8	8.7	8.3	7.7	7.4	8.1	6.3	7.2
Food	7.4	11.3	11.3	10.3	9.7	11.9	8.7	10.7
Non-food	8.1	7.0	6.3	5.8	5.8	5.5	4.6	4.7
All income groups								
General	7.6	8.9	8.7	8.1	8.1	8.9	6.6	7.4
Food	7.4	11.1	11.3	10.5	10.6	12.7	8.7	10.0
Non-food	7.8	7.4	7.0	6.4	6.3	6.2	5.2	5.6

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

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

Table A8: SPI Item-wise Price Movements

			Price	Percentage change over	
S.No	**Items**	**Unit**	**Feb -07**	**Feb -07**	**Jan-06**
1	Wheat	Kg.	12.4	4.3	0.5
2	Wheat flour a.qlt.	Kg.	13.9	5.4	0.2
3	Rice basmti. broken	Kg.	21.4	13.4	6.8
4	Rice irri-6	Kg.	16.5	8.7	5.6
5	Masur pulse washed	Kg.	46.7	4.3	0.9
6	Moong pulse washed	Kg.	55.1	21.3	4.0
7	Mash pulse washed	Kg.	69.9	36.1	1.6
8	Gram pulse washed	Kg.	46.6	54.4	0.4
9	Beef	Kg.	118.2	11.1	0.2
10	Mutton	Kg.	223.0	11.7	0.4
11	Egg hen (farm)	Doz.	45.0	38.5	-11.6
12	Bread plain m.s.	Each	15.5	8.0	0.0
13	Sugar	Kg.	31.6	-12.8	-1.7
14	Gur	Kg.	38.9	7.2	-4.4
15	Milk fresh	Litr	26.6	12.6	0.0
16	Milk powdered Nido	400g	120.0	11.4	0.0
17	Curd	Kg.	31.1	11.0	0.1
18	Veg.ghee tin	2.5k	222.5	11.8	2.3
19	Veg.ghee loose	Kg.	71.8	21.9	0.5
20	Mustard oil	Kg.	77.8	20.0	3.6
21	Cooking oil	2.5l	223.0	11.4	2.0
22	Potatoes	Kg.	12.9	-22.2	-6.3
23	Onions	Kg.	28.7	157.5	-2.9
24	Tomatoes	Kg.	17.4	-50.4	-31.9
25	Bananas	Doz.	30.5	22.4	7.7
26	Salt powdered	Kg.	4.8	20.4	-1.3
27	Red chilies (powd)	Kg.	98.9	46.6	1.9
28	Garlic	Kg.	69.3	14.5	-1.3
29	Tea packet	250g	69.9	13.1	0.1
30	Tea (prepared)	Cup	6.3	9.4	1.4

continued

S.No	Items	Unit	Price Feb -07	Percentage change over Feb -07	Jan-06
31	Cooked beef plate	Each	30.2	17.1	0.0
32	Cooked dal plate	Each	17.9	16.4	0.2
33	Cigarettes k-2	10's	7.9	12.8	0.8
34	Coarse latha	Mtr.	34.9	1.2	0.0
35	Lawn (avg.+s.qlty)	Mtr.	77.7	4.6	0.0
36	Voil printed	Mtr.	37.1	3.5	0.0
37	Shirting	Mtr.	65.4	4.7	0.0
38	Sandel gents bata	Pair	399.0	0.0	0.0
39	Sandel ladies bata	Pair	299.0	0.0	0.0
40	Chappal spng. Bata	Pair	89.0	0.0	0.0
41	Kerosene	Litr	39.1	7.0	0.0
42	Firewood	40kg	193.9	12.4	1.4
43	Elec. Bulb 60-wats	Each	12.1	6.8	0.3
44	Match box	Each	0.7	19.4	4.2
45	Washing soap	Cake	8.1	3.9	0.0
46	Bath soap lifebuoy	Cake	14.0	0.5	0.1
47	Chicken (farm)	Kg.	62.4	21.6	15.9
48	Gas chrg. All clb. Comb	D.mmbt	243.7	161.7	0.0
49	L.p.g .(cylinder 11kg.)	Each	610.0	10.1	3.1
50	Elec.chrg.all slabs com	Bd. Unit	4.7	93.4	0.0
51	Petrol	Litr	55.8	-4.6	-3.6
52	Diesel	Litr	38.4	1.5	-1.3
53	Telephone local	Call	2.3	0.0	0.0
Max:				**161.7**	**15.9**
Median				**11.1**	**0.1**
Min:				**-50.4**	**-31.9**

Table A9: Daily Labor Wages (Rs. per day)--Average of 35 Cities

	Carpenter	Mason	Laborer	Plumber	Electrician	Average
			Annual Averages			
FY03	218	225.4	107.7	219.8	216.4	197.4
FY04	224.5	237.4	114.5	225	221.9	204.6
FY05	245.8	261.4	129.5	245.5	240.3	224.5
FY06	283.2	306.0	154.7	283.2	270.1	259.4
			Monthly averages			
Feb-06	287.4	311.4	156.2	287.4	267.9	262.1
Mar-06	286.5	312.1	157.7	287.8	269.6	262.8
Apr-06	290.9	313.9	159.4	291.0	274.3	265.9
May-06	293.4	319.9	163.6	292.7	297.7	273.5
Jun-06	299.2	329.4	165.6	297.8	302.0	278.8
Jul-06	303.9	332.7	168.9	301.7	302.0	281.8
Aug-06	306.0	334.5	170.4	305.7	303.6	284.0
Sep-06	312.4	338.2	173.7	310.1	303.7	287.6
Oct-06	313.9	340.3	176.9	310.4	303.7	289.0
Nov-06	315.0	342.2	178.4	311.8	304.8	290.4
Dec-06	318.1	347.6	180.7	315.5	306.9	293.8
Jan-07	320.2	349.0	181.5	316.3	307.9	295.0
Feb-07	324.1	354.7	182.9	319.8	308.3	298.0

Source: Federal Bureau of Statistics

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

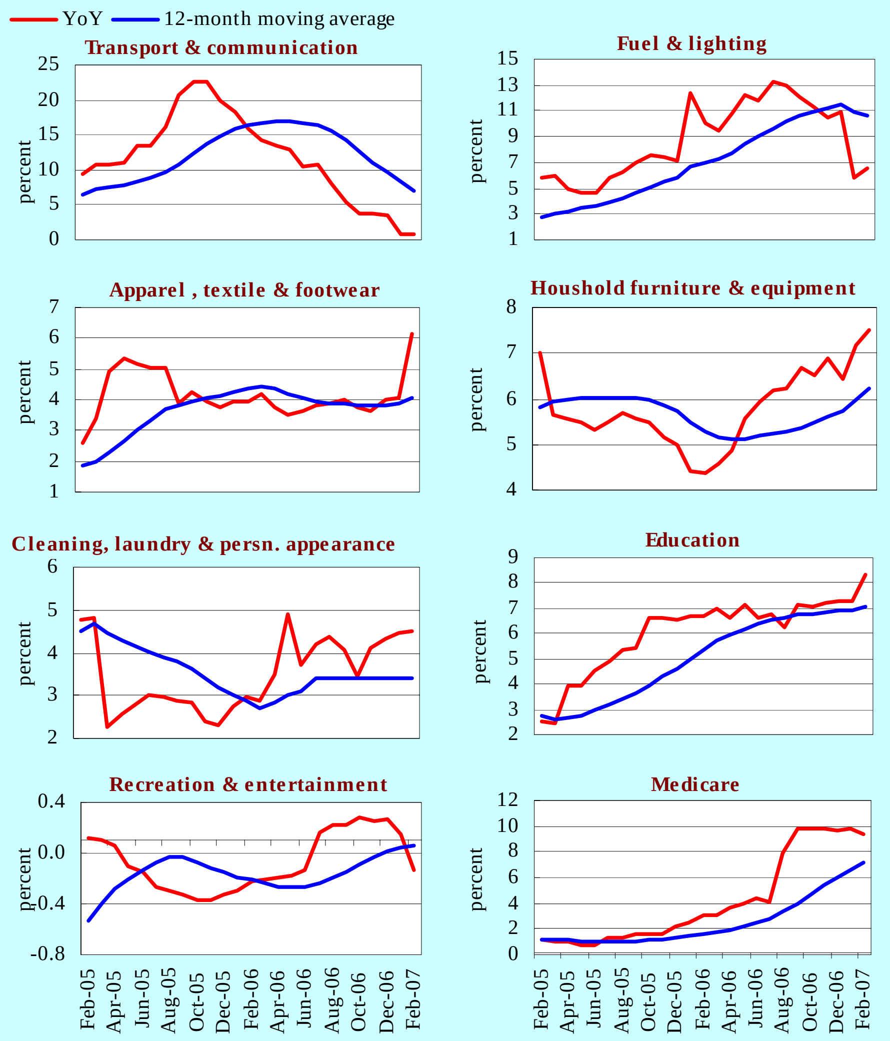


Figure A2: Frequency Distribution of Price Changes of CPI Items, February 2007

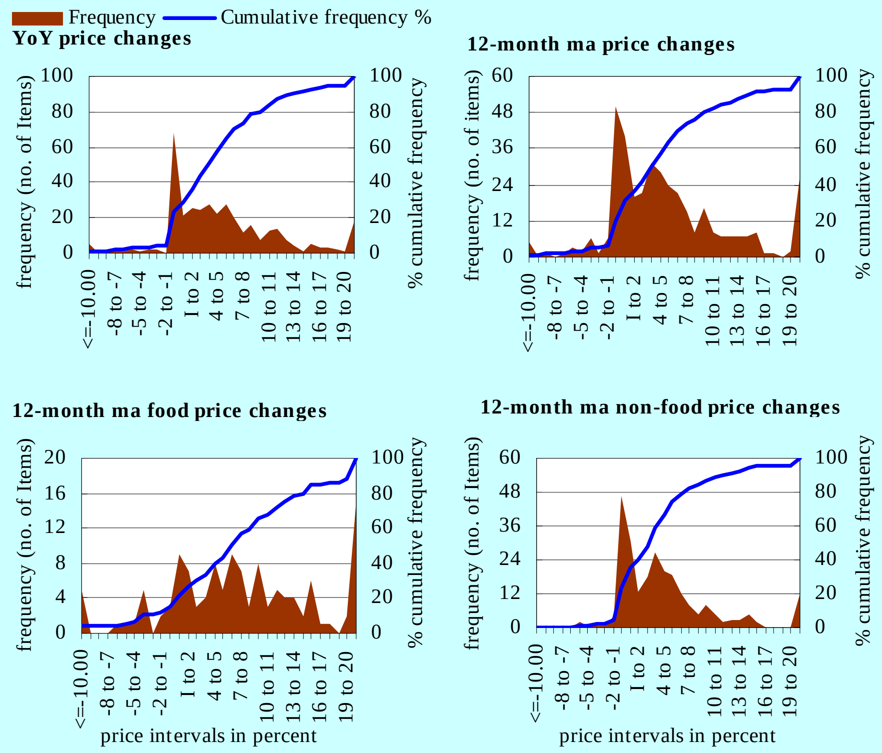
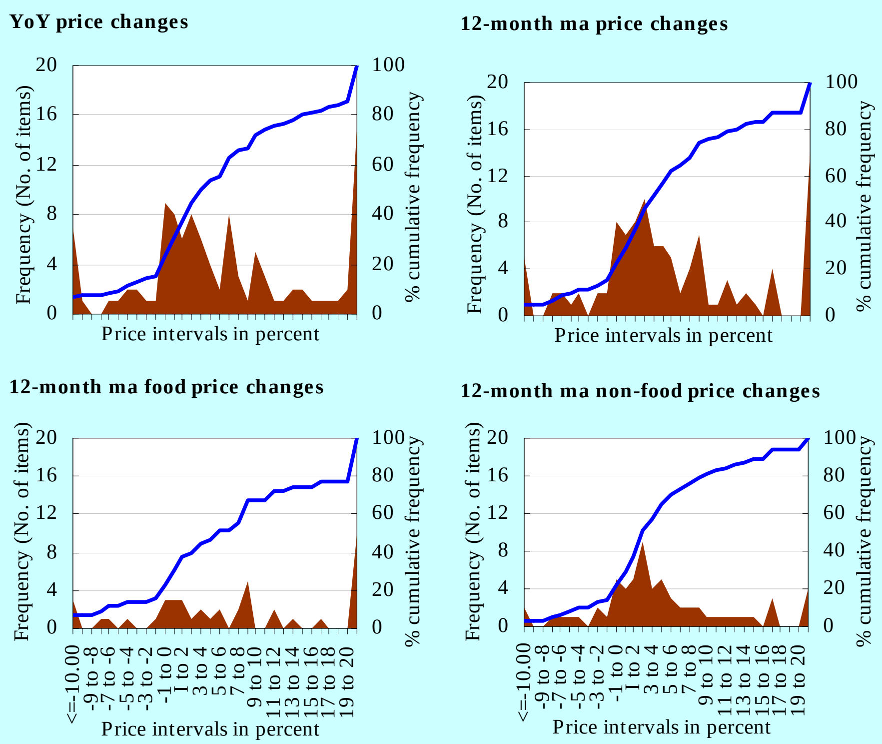


Figure A3: Frequency Distribution of Price Changes of WPI Items, February 2007



Annexure B

Technical Notes

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

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

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

2. Base year for all the indices is the year 2000-01.

3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities, list of which is given in Table A3.

4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

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

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:

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

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

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

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

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

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

8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods:
   a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.

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

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

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

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

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

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

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

$\alpha_{it-12} = \dfrac{I_{it-12}}{I_{t-12}}$; 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