

Inflation Monitor

November 2006



State Bank of Pakistan
Research Department

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Overview

The headline inflation in November 2006 remained at its previous month rate of 8.1 percent with a slight rise in food inflation that was counterbalanced by a decline in non-food inflation. The non-food inflation continued its declining trend that has been witnessed since the end of the last fiscal year while food inflation edged up to 10.6 percent in the month from 10.5 percent in the previous month (see **Table 1.1**). Double digit food inflation for consecutive four months had been the main cause of persistently high inflation; however, given the favorable weather conditions and positive outlook of wheat production along with proper stock management, the current hike in food inflation may ease off during the second half of the current fiscal year.

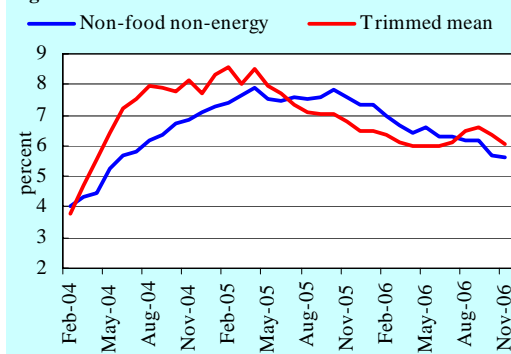
percent	CPI			WPI			SPI	Core Inflation	
	General	Food	Non-food	General	Food	Non-food		NFNE *	Trimmed
Nov-05	7.9	5.8	9.4	10.9	6.4	14.3	5.4	7.6	6.8
Dec-05	8.5	8.1	8.8	11.0	7.8	13.4	6.2	7.4	6.5
Jan-06	8.8	8.2	9.2	10.8	7.2	13.4	6.0	7.3	6.5
Feb-06	8.0	7.5	8.4	9.9	6.9	12.2	7.0	7.0	6.4
Mar-06	6.9	5.4	8.0	8.5	5.9	10.4	6.8	6.7	6.1
Apr-06	6.2	3.6	8.0	8.1	4.5	10.8	6.8	6.4	6.0
May-06	7.1	5.6	8.2	9.1	5.7	11.6	8.6	6.6	6.0
Jun-06	7.6	7.8	7.5	9.0	6.7	10.7	8.9	6.3	6.0
Jul-06	7.6	7.4	7.8	8.4	5.4	10.7	8.9	6.3	6.1
Aug-06	8.9	11.1	7.4	8.2	8.2	8.1	11.0	6.2	6.5
Sep-06	8.7	11.3	7.0	8.0	9.2	7.2	11.2	6.2	6.6
Oct-06	8.1	10.5	6.4	6.7	8.2	5.6	11.8	5.7	6.4
Nov-06	8.1	10.6	6.3	7.5	9.1	6.3	13.4	5.6	6.1

*: NFNE is Non-food non-energy inflation; see Annexure B for more on measures of core inflation.

The core inflation, measured both as non-food non-energy (NFNE) and 20 percent trimmed mean, declined in November registering at 5.6 percent and 6.1 percent respectively compared with 7.6 percent and 6.8 percent in the corresponding month last year (see **Figure 1.1**).

Unlike CPI, the WPI and SPI inflation increased in the month

Figure 1.1: Core Inflation



under review; particularly SPI inflation increased significantly from 11.8 percent in October to 13.4 percent in November 2006. The rise in SPI was due to sharp increase in prices of certain food items.¹

The monthly inflation, i.e. percent change of price index in November over October 2006, in the overall CPI was 0.7 percent with incremental inflation in food group at 1.4 percent and non-food group at 0.3 percent (see **Table 1.2**).

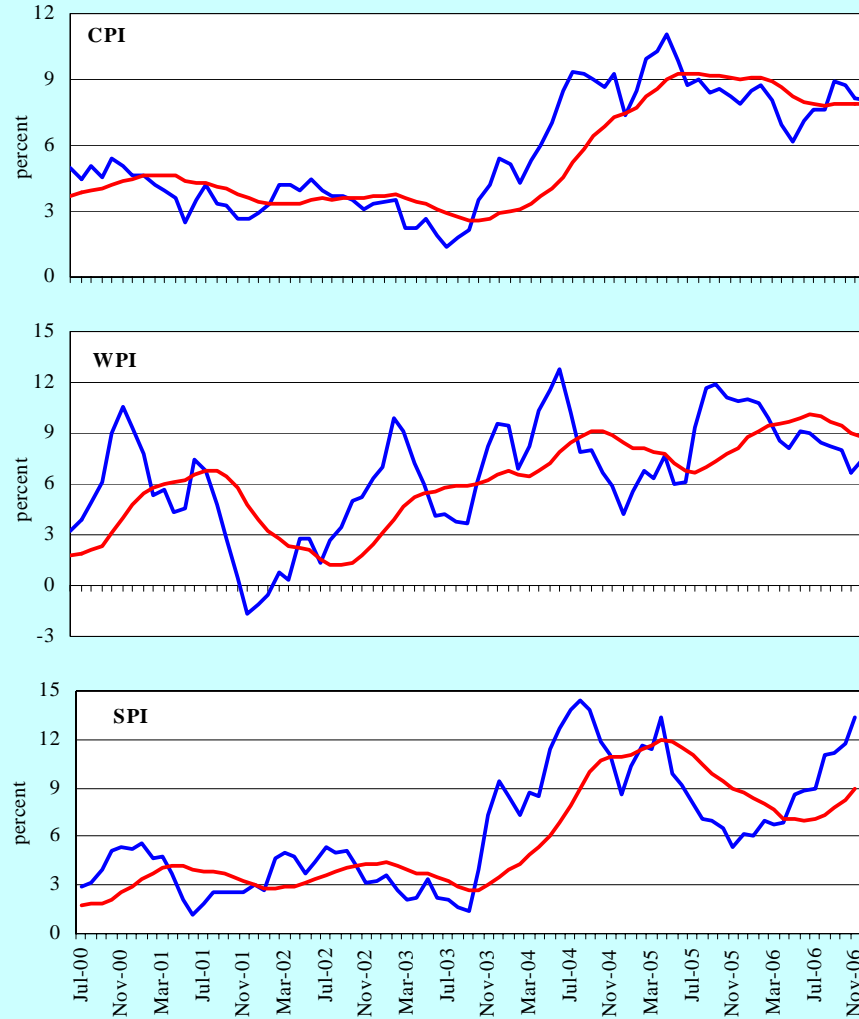
The long run trend of CPI inflation (measured as 12-month moving average) did not change since August 2006 and remained at 7.9 percent in November 2006. The long run trend in SPI, on the other hand, moved further up during the month (see **Figure 1.2**). Contrary to CPI and SPI, the long run inflation in wholesale price index that remained on a rising path during FY06, went down in the July 2006 and declined further in November, supported mainly by non-food inflation.

	Nov-04	Nov-05	Nov-06	5-year average
Year-on-year (Nov over Nov)				
Overall CPI	9.3	7.9	8.1	6.4
Food	13.6	5.8	10.6	7.5
Non-food	6.3	9.4	6.3	5.7
Period average (Jul-Nov over Jul-Nov)				
Overall CPI	9.1	8.4	8.3	6.4
Food	13.6	7.4	10.2	7.6
Non-food	6.1	9.1	7.0	5.6
12-month moving average				
Overall CPI	7.3	9.0	7.9	6.0
Food	10.8	9.9	8.1	6.7
Non-food	5.0	8.4	7.7	5.5
Monthly (Nov over Oct)				
Overall CPI	1.1	0.8	0.7	0.8
Food	1.8	1.3	1.4	1.4
Non-food	0.6	0.4	0.3	0.4

¹ See section 5 for detailed analysis of SPI.

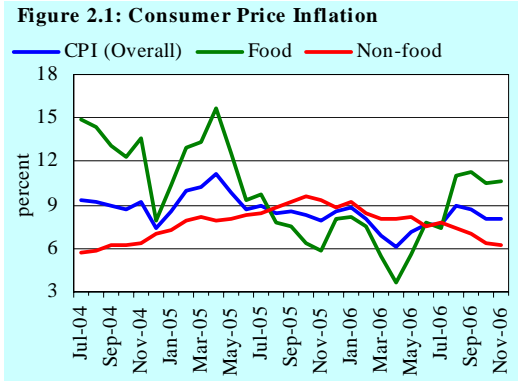
Figure 1.2: Movements in Price Indices

— Year-on-year — 12-month moving average

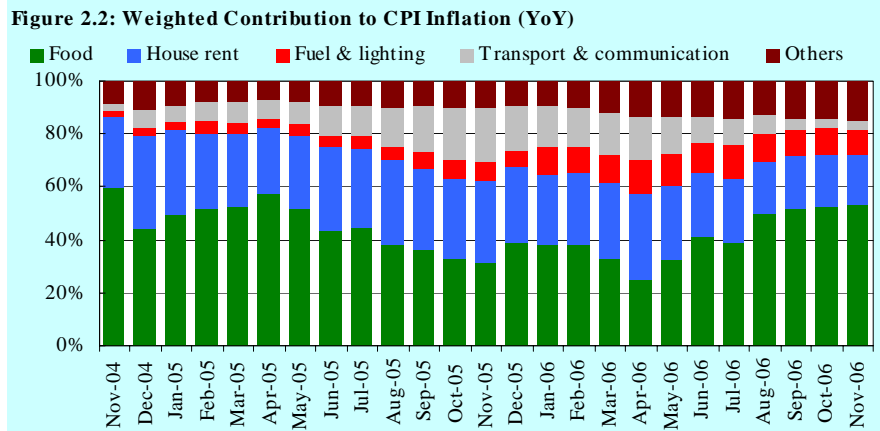


2. Consumer Price Inflation

The consumer price inflation in November 2006 was recorded at 8.1 percent YoY – the same rate as was observed in the previous month (see **Figure 2.1**). However, comparing with the corresponding month last year, it was 0.2 percentage points higher which was a net result of about 5 percentage points increase in food inflation and 3 percentage points decline in non-food inflation during this period.



Due to persistently high inflation during the last four months of the current fiscal year, the contribution of food group in overall inflation increased significantly to 53.1 percent in November 2006 from 30 percent during FY06; the non food group's contribution declined accordingly in the month. Within the non-food group, the contribution of house rent index also declined from 32 percent during the last fiscal year to below 19.2 percent (see **Figure 2.2**).

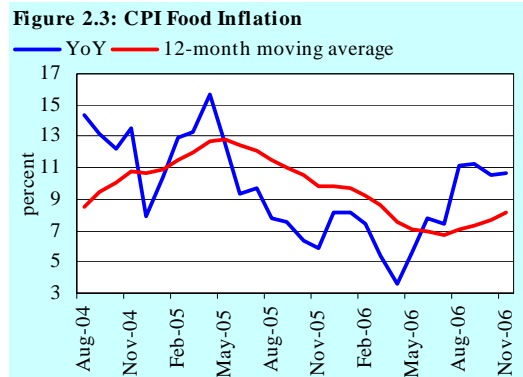


2.1 Food Inflation

Like in the previous month, the food inflation was recorded in double digits at 10.6 percent YoY in November 2006, driven mainly by increase in prices of vegetables

including onion and chillies along with persistent pressure on prices of some pulses (see **Figure 2.3**). It is interesting to see that food inflation comes down to single digit if sharp increases in prices of onion, potatoes and eggs are excluded; only these three commodities have contributed to food inflation by more than 1 percentage points.

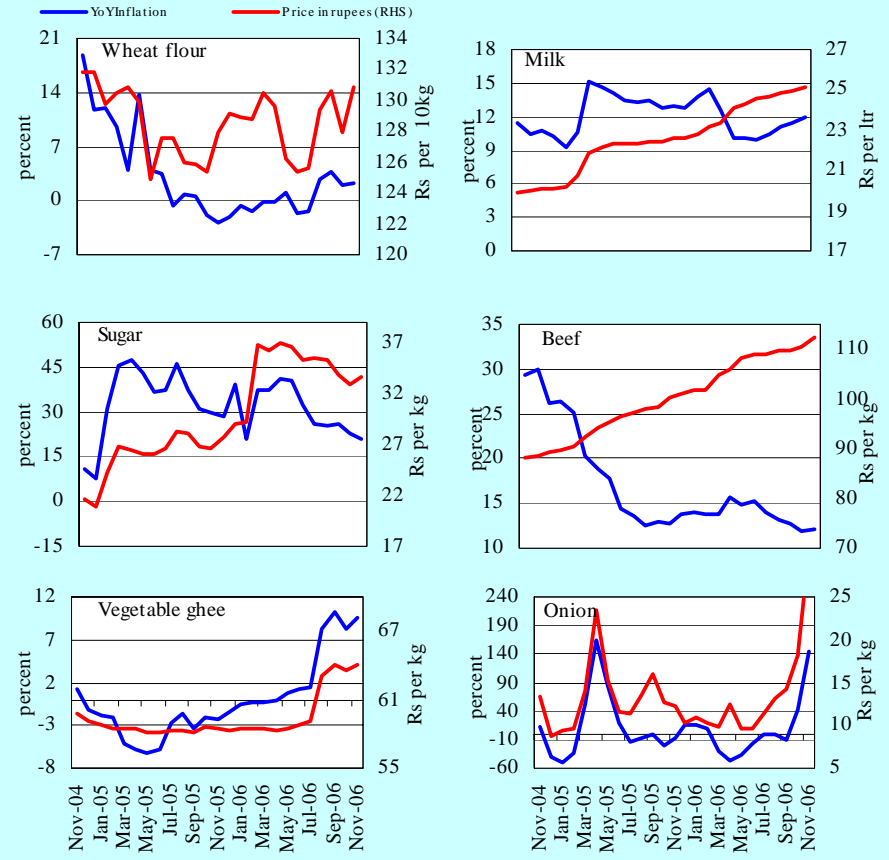
A closer look at price movements of individual items included in the CPI food group reveals that prices of 51 commodities including fresh milk, beef, sugar, chicken, pulses gram, mash and moong, cooked mutton, honey, onion, tomatoes, and chillies exhibited inflation in the range of 10 to 145 percent YoY in November 2006. The combined weight of such commodities (with double digit inflation) is about 48 percent of the food group. On the other hand, prices of 12 commodities like apple, ginger, pulse masoor and peas declined during the month. The rest of items, having a weight of 43 percent in food group exhibited subdued or moderate inflation (see **Table A2** in annexure for distribution of CPI items).



Among the key food items, average price of wheat flour was recorded at Rs 130.89 per 10 kg bag during November 2006 which was about Rs 3.03 less than that in the previous month. Fresh milk price showed a YoY increase of 11.9 percent in the month compared with 11.4 percent in October, while increases in prices of sugar and vegetable ghee were lower in November than those in the previous month (see **Figure 2.4**). The price of onion has shown the highest increase of more than 146.0 percent in November 2006 followed by basen (52 percent), pulse gram (50 percent), chillies (49 percent), and sugar (21 percent).

In terms of percent contribution to overall inflation, onion and fresh milk were the second and third highest contributors (house rent index of non-food group being the first) with 10.4 percent and 9.6 percent share in overall YoY inflation of CPI (see **Table A4** in the Annexure).

Figure 2.4: Price Trends in Key Food Items

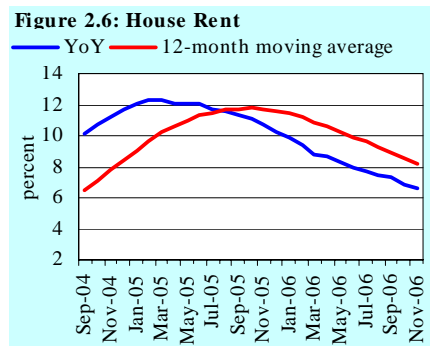
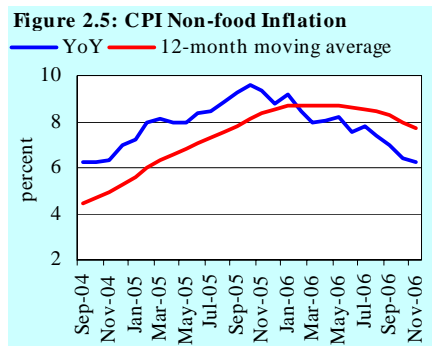


2.2 Non-food Inflation

Contrary to food inflation, non-food inflation declined from 9.4 percent in November 2005 to 6.3 percent in the month under review primarily due to decline in inflation of transport & communication and fuel & lighting sub-indexes and continued deceleration in house rent index. The long run trend in CPI non-food inflation also continued to decelerate in the month (see **Figure 2.5**).

House rent index (HRI) maintained its declining trend which started after February 2005, and recorded a moderate increase of 6.6 percent in November 2006

compared with about 10.8 percent in the corresponding month last year (see **Figure 2.6**).



Other sub-indexes of non-food group that exhibited deceleration in the month included Apparel, textile & footwear, Fuel & lighting, Transport and communication, Recreation and entertainment and Medicare. Fuel and lighting inflation declined to 10.5 percent in November 2006 from 11.3 percent in the preceding month. Most notable decline was recorded in transport and communication: YoY inflation of 3.7 percent in November 2006 compared with 22.7 percent in the same month of last year. On the other hand, education sub index registered a significant increase of 7.3 percent in the month under review compared to 6.6 percent growth in the same month last year (see **Figure A1** in annexure).

Of the 250 non-food commodities included in the CPI basket, 28 commodities witnessed double digit inflation which include items like gents shoe, gas cylinder, mattress, fares of different modes of transportation, primary school fee (English medium), gold tezabi, and doctor clinic fee, etc. There were 54 commodities that showed moderate inflation in the range of 5 to 10 percent; all other commodities witnessed either YoY deflation or inflation of less than 5 percent (see **Table A2** in the annexure). The commodities showing deflation included a number of durable goods like telephone charges, computer, video cassette player, refrigerator, sewing machines, etc (see **Table A3** in the annexure).

2.3 Region wise Inflation

Province wise data of inflation indicates that within the four provinces, the Punjab experienced the highest CPI inflation (YoY) in November 2006 followed by NWFP. The average CPI inflation in Punjab was 8.7 percent during the month with food inflation at 11.4 percent and non-food inflation at 6.8 percent. On the

other hand the province of Sindh witnessed the lowest inflation; as against the other provinces as well as national average, the food inflation in Sindh remained in single digit (see **Table 2.1**). Following the trend of the last month, average inflation in Islamabad – the federal capital – was higher than that in provinces; it was true for overall as well as food and non-food inflation.

City wise inflation data for November 2006 reveals that 20 cities out of 35 had experienced more than the average inflation with the highest CPI inflation of 11.8 percent (YoY) in Okara and the lowest inflation of 5.8 percent in Sukkur (see **Table 2.2**).

	General	Food	Non-food
Punjab	8.7	11.4	6.8
NWFP	8.2	10.8	6.3
Sindh	7.8	9.6	6.5
Balochistan	7.9	10.4	6.2
Islamabad	9.9	11.3	8.9

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Okara	11.8	15.7	9.0	Nawabshah	8.0	9.5	7.0
Multan	10.9	14.0	8.7	Jhang	7.9	10.5	6.2
Attock	10.0	13.6	7.6	Jehlum	7.7	8.6	7.0
Vehari	10.0	13.0	7.8	Mirpur Khas	7.6	9.3	6.4
Islamabad	9.9	11.3	8.9	Karachi	7.6	9.3	6.4
Kunri	9.7	15.2	5.9	D.I.Khan	7.6	11.5	4.9
Gujranwala	9.5	12.0	7.8	Loralai&Cantt	7.4	10.6	5.3
Mardan	9.4	11.9	7.6	Abbotabad	7.3	8.5	6.4
Rawalpindi	9.3	11.2	8.0	Sialkot	7.0	7.9	6.2
Lahore	8.9	13.1	5.9	Samundari	6.9	10.7	4.4
Quetta	8.9	11.9	6.8	Larkana	6.9	7.9	6.1
Bahawalpur	8.8	11.5	6.8	Mianwali	6.8	8.4	5.7
D.G. Khan	8.7	11.6	6.7	Khuzdar	6.6	10.1	4.2
Bahawalnagar	8.7	11.4	6.8	Faisalabad	6.4	9.0	4.5
Bannu	8.6	10.8	7.0	Sukkur	5.8	5.3	6.2
Shahdadpur	8.5	10.4	7.2				
Peshawar	8.4	11.2	6.4				
Sargodha	8.3	11.0	6.3				
Hyderabad	8.1	10.2	6.5				
Turbat	8.1	8.9	7.5				

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

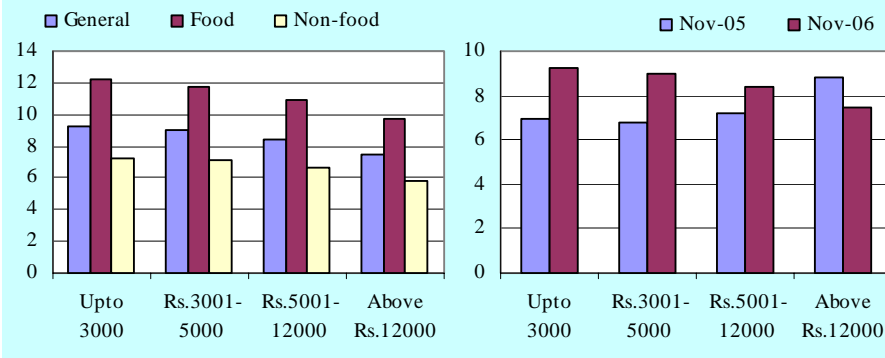
After an unusual rise in inflation in last month, the city of Karachi came back to low inflation group in the month under review with a YoY inflation of 7.6 percent. Some of the other cities also shifted from high inflation group to low inflation group including Mirpur Khas, D.I.Khan, Loralai and Mainwali. On the other hand,

Turbat was the only city that shifted from low inflation group to high inflation group with an inflation of 8.1 percent in November 2006.

2.4 Income Group-wise Inflation

Income group wise CPI inflation continued its pattern for the consecutive fourth month; all income groups had experienced higher than average CPI Inflation except the highest income group (see **Figure 2.7**).

Figure 2.7: Income Group-wise CPI Inflation, November 2006



If this income group wise inflation is analyzed on provincial basis,² the data reveals that Punjab experienced the highest CPI inflation for all income groups (see **Table 2.3**). On the other hand, Sindh maintained its lowest position for all income groups just like the previous month. However the capital city of Islamabad experienced higher CPI inflation than all the provinces and for all income groups except

Table 2.3: Province Wise Inflation by Income Groups

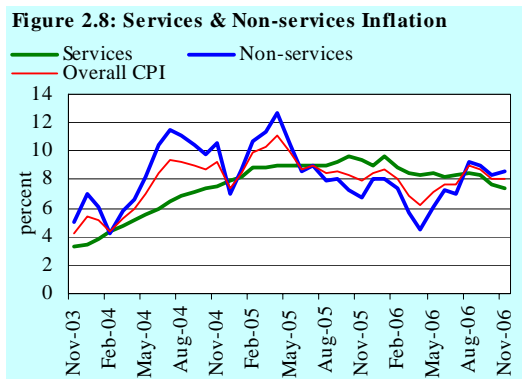
	Upto Rs. 3000			Rs.3001-5000		
	General	Food	Non-food	General	Food	Non-food
Punjab	9.7	13.1	7.3	9.6	12.4	7.6
Sindh	7.6	9.3	6.4	7.6	9.1	6.6
NWFP	8.7	11.2	7.0	9.5	11.8	7.9
Balochistan	9.4	12.8	7.0	8.7	12.0	6.4
Islamabad	9.5	11.9	7.8	9.7	11.9	8.2
	Rs.5000-12000			Above Rs. 12000		
	General	Food	Non-Food	General	Food	Non-Food
Punjab	8.9	11.6	7.1	7.8	10.1	6.2
Sindh	7.2	8.4	6.3	6.7	7.4	6.2
NWFP	8.9	11.5	7.1	7.7	10.0	6.0
Balochistan	8.1	11.6	5.7	7.5	9.9	5.8
Islamabad	9.7	11.5	8.4	9.9	11.2	9.0

² The data has been calculated on the basis of given data of income group wise inflation 17 cities.

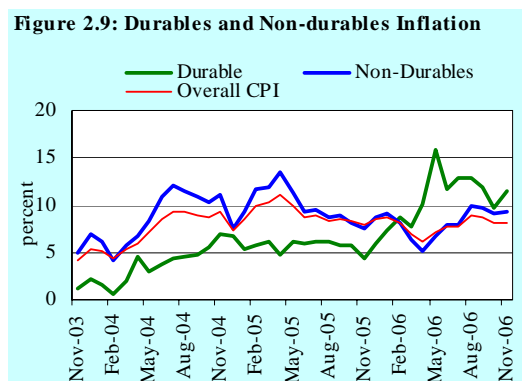
for the lowest one; for the lowest income group, Punjab experienced inflation even higher than Islamabad.

2.5 Services and Non-services Inflation

Following the trend of overall inflation, both the services³ and commodities groups of CPI basket witnessed decline in inflation in November 2006. YoY inflation in services was recorded at 7.5 percent in November compared with 7.7 percent in the previous month and 9.4 percent in the corresponding month last year. The prices of non-services (commodities) marginally increased by 8.6 percent in November 2006 as compared to 8.4 percent in the previous month (see **Figure 2.8**).



Within the non-services sector, further breakup is for durables⁴ and non-durables goods. The inflation of durable items increased significantly, and stood at 11.6 percent in November 2006 as compared with 9.6 percent in October 2006 (see **Figure 2.9**). This



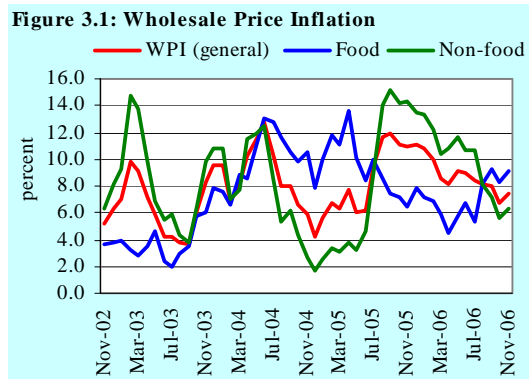
significant increase is due to price increase in jewellery which has 25 percent weight among durable goods. On the other hand, the non-durable goods inflation was recorded at 9.2 percent in November 2006 as compared with 9.1 percent in October 2006 and 7.5 percent in the corresponding month last year.

³ The services group of CPI basket includes item 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.

⁴ Durable items includes suitcase, furniture (ready made), electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerator, air conditioners, vehicles, computer & allied products, watches and jewellery, etc.

3. Wholesale Price Inflation

The wholesale price inflation rebounded and accelerated in November 2006 after witnessing a decelerating trend since June 2006. Wholesale Price Index (WPI) exhibited a rise of 7.5 percent in the month of November 2006 up from 6.7 percent in the preceding month but significantly lower than the 10.9 percent increase in average wholesale prices in November 2005. This increase in wholesale

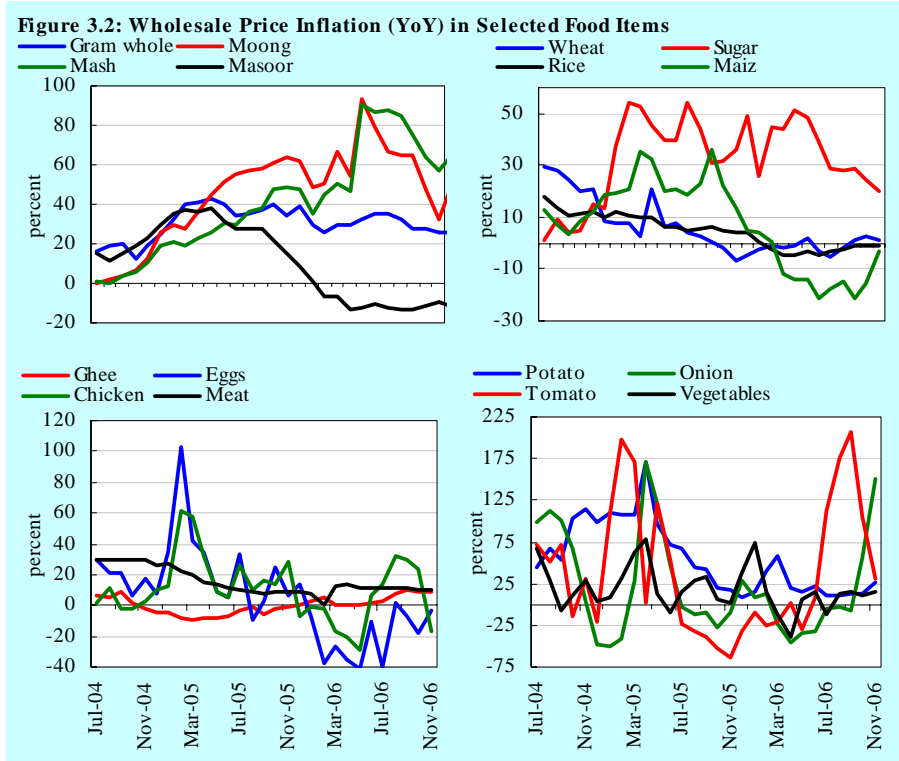


price inflation was contributed both by food and non-food groups of WPI (see **Figure 3.1**). The rise in food and non-food groups of WPI was the result of higher wholesale prices of food, raw materials, fuel, lightening & lubricants and building material sub-groups. However WPI trend inflation – measured by 12 month moving average – declined significantly due to continuous deceleration in WPI inflation since December 2005 with few exceptions.

WPI food inflation registered a higher growth of 9.1 percent not only compared to the same month last year but also remained well above the average WPI inflation of last five years for the month of November. A disaggregated analysis showed that the significant rise in the prices of meat, vegetables, gur, moong, gram whole, potatoes, gram split, onion, tea, salt, fresh milk etc. contributed in the WPI food inflation. However, there were some food items whose prices declined or showed no change during the month of November 2006 like chicken, maize, eggs, masoor, rice, dry fruits etc. (see **Figure 3.2**). More specifically, it was the price of onion that actually drove the food inflation significantly higher than the previous month. If we ignore the wholesale price of onion, the food inflation remained at previous month level and the overall WPI to show deceleration.

After showing a continuous deceleration since September 2005, WPI non-food inflation exhibited higher growth of 6.3 percent in November 2006; however, this growth is still much lower than that of the five years average of months of November. The raw materials, fuel, lightening & lubricants and building material sub groups contributed in non-food WPI inflation during the month under review. Among the individual commodities of non-food group, wholesale prices of wool, mobil oil, fire wood, natural gas, mattresses, wires & cables, kerosine oil, furnace oil, chemicals, cotton yarn, cement etc. increased significantly on YoY basis

during the month of November; whereas the wholesale prices of fertilizers, woolen textiles, cosmetics etc. declined during the month under review.



A distribution of price change suggested that the 15 out of 43 food items (35 percent) witnessed a rise of more than 10 percent in inflation in the month under review. While 9 items recorded moderate inflation of 5 to 10 percent and WPI inflation of 8 items of food group showed subdued inflation of up to 5 percent. The wholesale prices of remaining 11 percent food items declined or remained stable. In case of non-food group, the prices of 24 items revealed a positive change up to 5 percent, 18 items showed decrease or no change, 11 items demonstrated double digit rise of above 10 percent and remaining 10 items displayed a moderate inflation i.e. 5 to 10 percent (see **Table A7** in annexure).

In November 2006, all non-food sub groups exhibited YoY rise in inflation except manufactures. Raw materials, Fuel & lightening and building materials prices depicted higher inflation in comparison to the preceding month as well as to the corresponding month last year, whereas the manufactures wholesale prices

decelerated and showed 3.1 percent growth. In fuel, lighting & lubricants sub group that recorded a higher growth of 7.9 percent in prices was mainly the impact of surge in natural gas and mobil oil prices on account of rising demand of natural gas at the start of winter season. The significant rise in raw material prices was the outcome of high growth in sugarcane and wool prices. The sharp surge in sugarcane price was mainly due to the start of crushing season in Pakistan. All selected items under manufactures sub group of non-food WPI recorded low to moderate YoY growth in prices (see Figures 3.3 & 3.4).

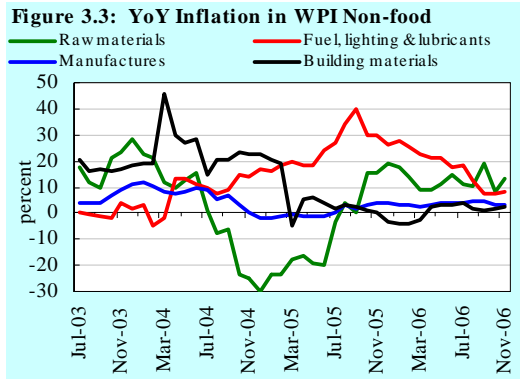
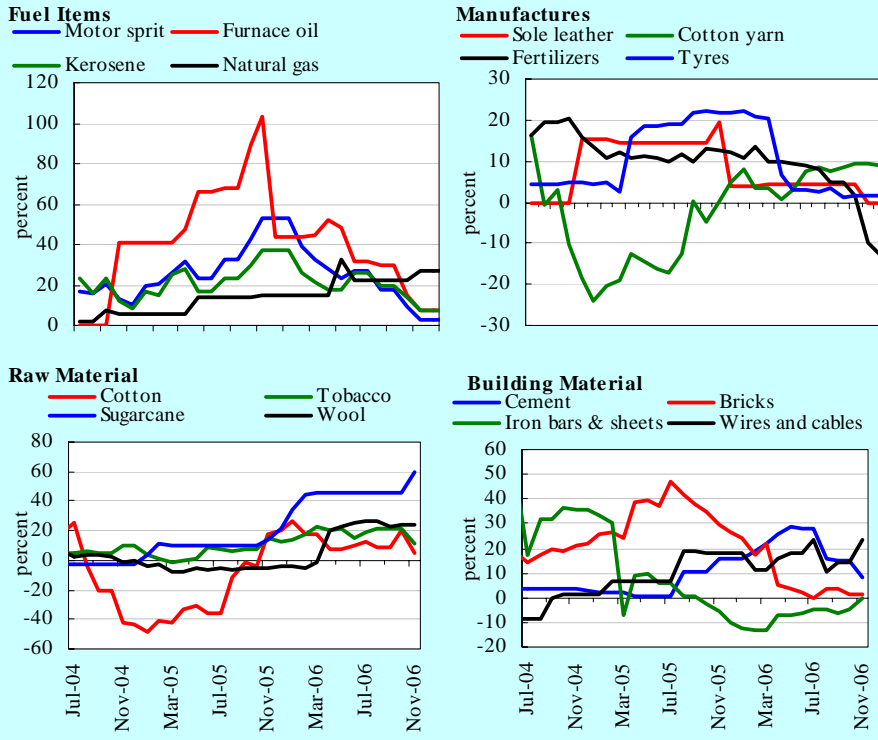
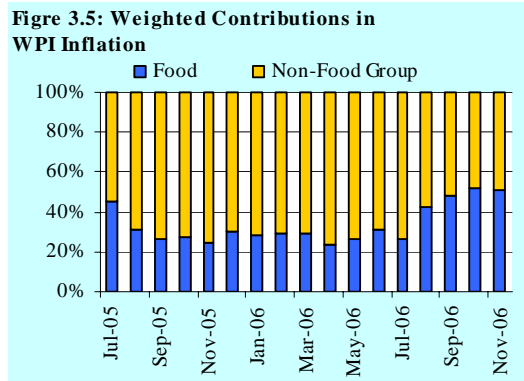


Figure 3.4: Wholesale Prices Inflation in Selected Non-food Items

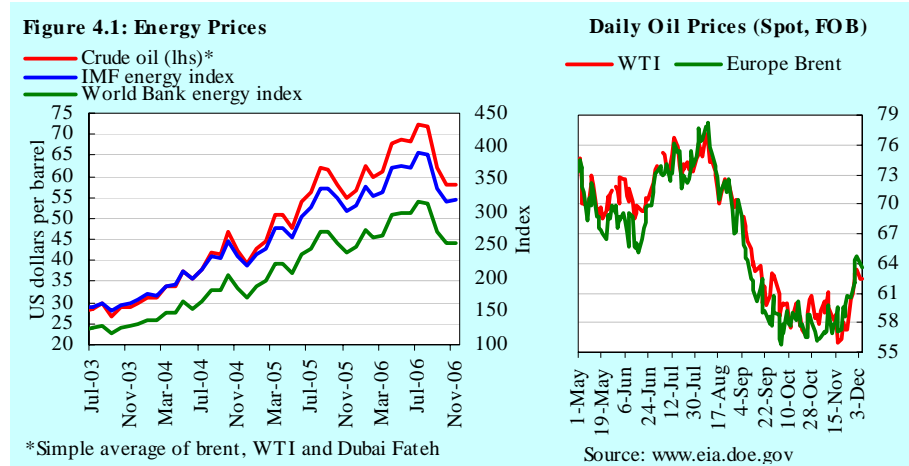


The weighted contributions of food and non-food groups of WPI inflation remained almost at previous month levels. Food group covered more than half share of overall WPI inflation after remaining below 50 percent for the last 15 months. This rising contribution of food group in WPI was attributed to the higher wholesale prices in most of the major food items during the last four months. The weighted contribution of non-food inflation in WPI that remained around 70 percent during FY06 declined significantly to 48.8 percent in November 2006 (see **Figure 3.5**).



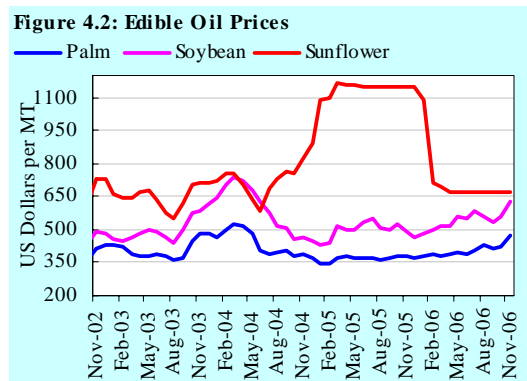
4. Global Commodity Prices

The oil prices exhibited a volatile behaviour in November 2006 with the average price of crude oil in international market fluctuated in a wider range of US \$56.46 per barrel to the maximum level of US \$63.67 per barrel. After falling for three consecutive months from August 2006 to October 2006, the crude oil prices slightly picked up in November 2006 compared to the preceding month and showed a moderate rise of 5.7 percent over the same month last year. Expectation of an OPEC output cut somewhat firmed the crude oil prices. In accordance with



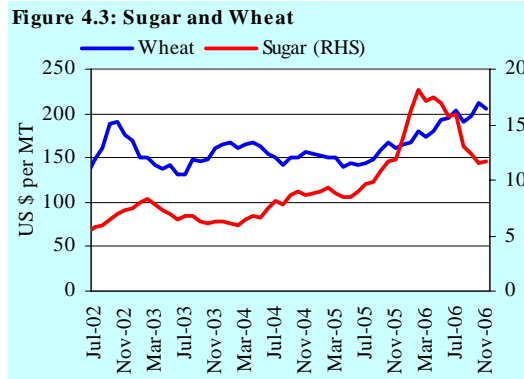
the trend of oil prices the IMF and World Bank energy indices for November 2006 exhibited a rise over the preceding month (see **Figure 4.1**).

Among the selected food items, the prices of palm and soybean oils showed a steep rise during the month under review due to the increase in demand at the start of winter season coupled with the poor rapeseed harvest. The palm and soybean oil recorded 26.9 and 27.3 percent YoY inflation in November 2006 respectively whereas the price of sunflower did not show any change since April 2006. In accordance to the previous YoY trend, the prices of palm as well as



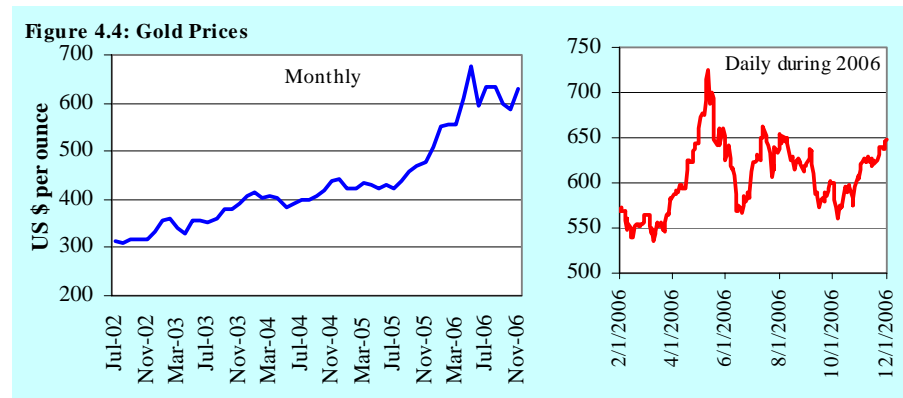
soybean oil witnessed a rise over the preceding month (see **Figure 4.2**).

Wheat prices touched US \$200 per MT mark in August 2006 – its highest price in 10 years⁵ – and showed further YoY increase of 27.9 percent in November 2006. The higher global food prices are being compounded by low domestic stocks in China as the domestic suppliers have sold much of their inventory during October. However, the price of wheat showed a meager decline of 2.8



percent over the previous month. In contrast, sugar price depicted a small decline of 0.9 percent for the third consecutive month after registering a significant rise of around 30 percent on average for more than two years (see **Figure 4.3**).

The price of gold in international market exhibited a steep rise of 107.2 percent in November 2006 over the preceding month and also registered a significant increase over the same month last year. This sharp rise was attributed to higher demand of gold on the back of falling US dollar and expectations about higher



crude oil prices in international market. (see **Figure 4.4**). Moreover, the variation in gold prices reduced significantly during November 2006 showing a standard

⁵ <http://www.ap-foodtechnology.com/news/ng.asp?n=72357-biofuel-oil-oilseeds>

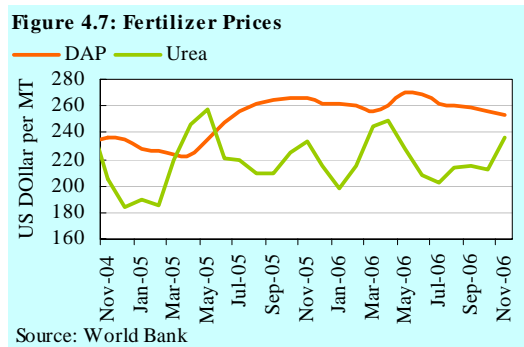
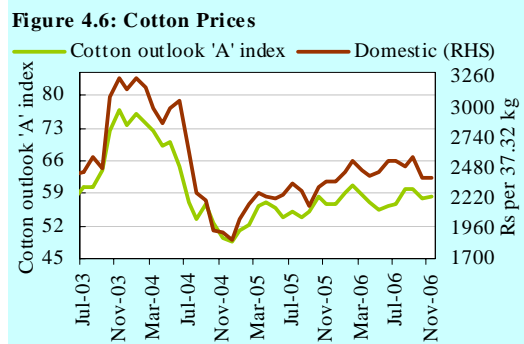
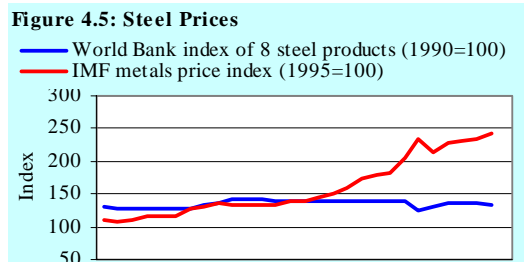
deviation (SD) of 7.91 around higher mean of US\$627.83 per ounce compared to SD of 12.72 around mean of US\$585.78 per ounce a month earlier.

The prices of all major metals including zinc, aluminum, iron ore, tin, lead, uranium etc. increased further in November 2006 compared to the month earlier. However, a significant decline was observed in the wholesale price of copper in international market mainly due to the expectations about the slowdown in housing construction industry and cutbacks in overtime hours in copper rolling, drawing,

extruding, and alloying plants in US. The IMF metal price index showed a marginal rise in November 2006 over the preceding month whereas it recorded a significant YoY growth of 62.5 percent in November 2006 due to the base effect. In contrast, steel prices – as measured by the World Bank index of 8 steel products – exhibited a monthly decline of 7.0 percent in November 2006 (see **Figure 4.5**).

Cotton prices decelerated further in international market and registered a small YoY growth of 1.3 percent in November 2006. Whereas monthly wholesale price of cotton declined for the second consecutive month and registered a marginal decline compared to the preceding month (see **Figure 4.6**).

Urea prices increased significantly by 11.3 percent in November 2006 over the preceding month and also registered a small YoY growth of 1.2 percent in November 2006. On the other hand monthly prices of DAP continued its declining

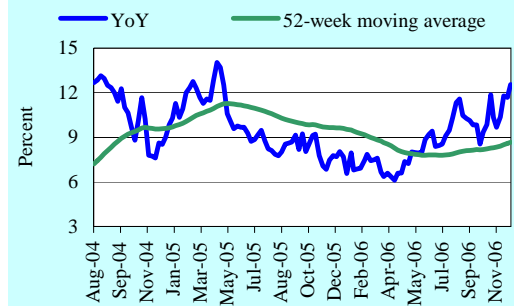


trend that started from August 2006 and declined by 4.4 percent in November 2006 on YoY basis as against a significant increase of 12.5 percent in the same month last year (see **Figure 4.7**).

5. Sensitive Price Indicator

The increasing trend in the food inflation of the CPI basket has resulted into proportionate change in SPI as it contains more than 60 percent of the food items. Thus the SPI inflation (YoY) has risen to 13.4 percent in November - highest in the last two years- compared to 8.9 percent in the last month and 5.4 percent in the corresponding month last year. Similarly the long-run trend indicated by the 12-month moving average also shows an increase in inflation in the month under review: 8.9 percent increase compared with 8.2 percent in the previous month.

Figure 5.1: Weekly SPI Inflation



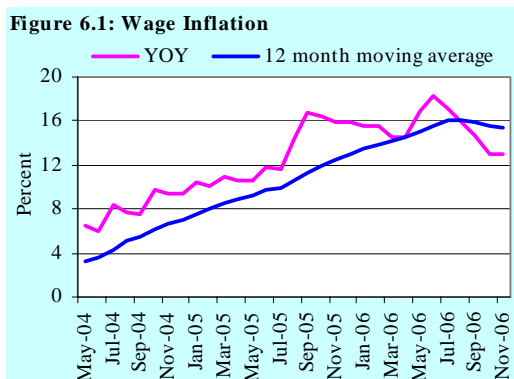
The major contributory items to the SPI inflation were pulses, vegetables, gas and other liquid fuel prices. About 40 percent of the total items in the SPI basket recorded double-digit YoY inflation during November 2006 with some major items like pulses gram and mash, tomato, onions, gas charges, electricity charges, etc. witnessed inflation of more than 30 percent compared with the last month double digit growth in prices was witnessed in egg, red chillies and tomatoes (see **Table A8** in Annexure A).

Weekly SPI also witnessed high average inflation during the month. The first two weeks witnessed a slightly lower YoY growth as compared to the last week of October (see **Figure 5.1**).

As regards the SPI inflation incidence in different income groups, the lowest income group was affected the most as it showed persistent double digit YoY increase in the SPI whereas the least affected group was the highest income group. This was because most of the items showing high inflation have more significance to the lowest income group as compared to other income groups.

6. Wage Inflation

After declining for the four consecutive months, wage inflation remained at 13.0 percent in November 2006; however, the long trend of wage inflation (measured as 12-month moving average) continued to decelerate for the third month (see **Figure 6.1**). The wages of skilled labour declined marginally whereas the unskilled workers' wages that depicted a higher YoY growth



of 16.6 percent in the month under review. Further breakup exhibited that the wages of carpenters, laborers, and plumbers increased during the month of November 2006 while the wages of masons and electricians showed deceleration compared to the same month last year (see **Table 6.1**).

Table 6.1: Wage Inflation

	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06
Overall	18.2	17.0	15.9	14.8	13.0	13.0
Skilled:	18.1	16.8	15.7	14.6	12.6	12.5
Carpenter	15.9	15.0	13.4	13.3	11.8	11.9
Mason	19.7	18.4	17.8	15.2	12.6	12.5
Plumber	15.2	14.0	13.2	12.1	10.7	10.8
Electrician	21.4	19.8	18.6	17.8	15.1	14.8
Unskilled:	19.5	18.5	16.9	16.4	16.2	16.6
Laborer	19.5	18.5	16.9	16.4	16.2	16.6

Like nominal wage inflation the growth in average real wages remained at the previous month level as the average nominal wages and CPI inflation witnessed the same YoY growth as of last month. The real wages of skilled workers that were showing deceleration from the start of FY07 stabilized in November 2006 but on the other hand, the unskilled workers' real wages turned up in the month under review. Skilled and unskilled workers registered real wage inflation growth of 4.4 and 8.6 percent respectively compared to 7.4 and 11.6 percent growth in the corresponding month of last year.

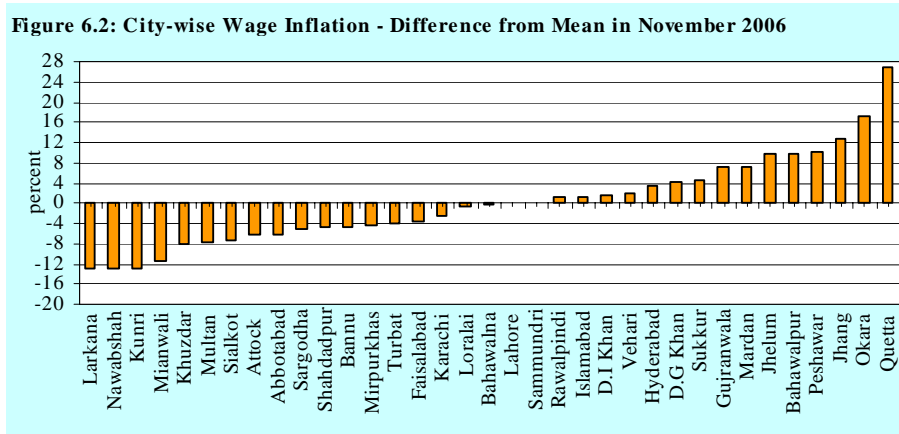


Figure 6.2 presents the picture of city wise deviation in wages from mean during the month of November 2006. Out of 35 cities, 16 recorded higher than average wage inflation and 19 cities witnessed lower than average inflation during the month. The highest wage inflation was evidenced in Quetta followed by Okara and Jhang whereas Larkana, Nawabshah, Kunri etc. showed lowest changes in wages. The month wise average wages of all types of workers increased by 13.0 percent during November 2006 over the corresponding month of last year and lie between Rs 221 rupees per day and Rs 400 rupee per day (see **Table A9** in the Annexure).

Annexure A

	Weights	Nov-02	Nov-03	Nov-04	Nov-05	Nov-06
I. Food Group	40.3	2.6	5.4	13.6	5.8	10.6
II. Non-Food Group	59.7	3.5	3.4	6.3	9.4	6.3
Apparel, textile, etc.	6.1	2.3	4.4	2.6	4.0	3.6
House rent	23.4	0.7	3.2	11.2	10.8	6.6
Fuel & lighting	7.3	9.9	3.3	1.9	7.5	10.5
Household furniture & equipt	3.3	2.6	2.7	6.2	5.2	6.9
Transport & com.	7.3	5.3	5.2	4.1	22.7	3.7
Recreation & entert.	0.8	2.2	-2.6	0.2	-0.4	0.2
Education	3.5	4.4	4.3	2.6	6.6	7.2
Cleaning, laundry, etc.	5.9	5.3	2.6	5.2	2.4	4.1
Medicines	2.1	3.1	2.3	1.0	1.6	9.7
Headline	100	3.1	4.2	9.3	7.9	8.1

Groups	% Changes	Total Number of Items	No. of Items in each Inflation Range			
			Decrease or no change	Subdued increase	Moderate increase	Double digit increase
			(0 % or less)	(0 to 5%)	(5 to 10%)	(over 10%)
I. Food Group	10.6	113	15	23	24	51
II. Non-Food Group	6.3	250	63	105	54	28
Apparel, textile, etc.	3.6	42	6	21	13	2
House rent	6.6	1	0	0	1	0
Fuel & lighting	10.5	15	7	2	1	5
Household furniture & equipt	6.9	44	2	23	17	2
Transport & com.	3.7	43	12	12	7	12
Recreation & entert.	0.2	16	10	5	0	1
Education	7.2	24	6	11	4	3
Cleaning, laundry, etc.	4.1	36	5	20	9	2
Medicines	9.7	29	15	11	2	1
Overall	8.1	363	78	128	78	79

Note: Prices of 11 seasonal items were not reported during the month.

Table A3: Distribution of Price Changes - Selected CPI Items, November 2006				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Chowkelate Candy (Small Size)	Wheat Flour Bag	Vegetable Ghee (Loose)	Milk Fresh (Unboiled)
	Chicken Farm Broiler (Live), Eggs	Cooking Oil (Dalda)	Vegetable Ghee Tin	Sugar Refined
Apparel & Textile	Farm, Apple	Wheat Bread Tandoori St. Size	Toffee (Hilal)	Onion
	Pulse Masoor (Washed)		Tomatoes	Pulse Gram
House Rent Index			Tea Loose Kenya Av.Qlty 250G	Besan Av. Qlty.
			Tailoring Suit	
Fuel & Lighting	Ladies Sandal Bata		Female Heavy Wt. Suiting	Nylon Jogger 27 Size 2-5
	Child Shoe Power	Lawn Av.Qlty.	Law.Pur	Gents Shoe, Art
H/hold Furniture	Lite Bata	Long Cloth Av.Qlty.	Underwear Av.Qlty	1109 Service
	Gents Shoes Paul Bata	Shirting Av.Qlty.	Medium Siz	
Transport & Comm.			HRI	
	Elect.Charges Above 1000 Unit,	Gas Cylinder Stand. Size		Gas Chrg10.1157 - 13.4876Mmb
Recreation	Elect.Charges 301 - 1000 Unit,	Bulb Philips 100- Watts	Kerosene Oil	Gas Chrg Upto 3.3719 Mmbtu
	Elect.Charges 101 - 300 Unit			Gas Chrg 6.7438 - 10.1157Mmb
Education	Refr. Dawlence 10 Cft. D.Doo	Quilt (Lihaf) 3 Kg. Cotton	Household Servant	Pedestal Fan 22"
	Sewing Machine(Singer)	Tea Set Pak. Chinaware 21 Pc' Blanket (90" X 54")	Female P/T, Ceiling Fan 48" Super Qlty, Bucket(Balti) Plastic Med.Si	Super Qlty Mattress Single(4"Thick)
Cleaning & Laundry	Telephone Charges Local Call, Tel	Petrol Super	Tyre Car With Tube General, Bus Fare	Train Fare Eco. > 500 Km.
	Charges Out Side City, Bus Fare Outside City	Car Service Charges High Speed Diesel Hsd	Max (Within Cit, Bicycle With Tyres & Tubes	Cng Filling Charges Taxi 4 Seater Fare
Medicare	Tv.Licence	T.V. 20" Colored With R/Cont		Dry Cell 1.5 Volt(Local)
	Feedomestic Daily "Jang"	Video Game Sega 16 Byte		
Medicare	Daily "Nawa-E-Waqt"			
	Govt. College Fee Ist. Year	Paper Foolscape (27"X17")	School Fee 2Nd-Ry Eng.Med.	School Fee Primary Eng.Med.
Medicare	Govt. College Fee 4Th. Year	Exercise.Book Lined 80/100 P	English Book Class	Eng. Book Ist.Yr Complete Se
	English Book Class V1	Urdu Book Class 1x/X(T.B.B)	Ix Or X	Govt. University Fee Msc.
Medicare	Toilet Soap Lux 95 Grams	Shampoo Plain	Haircut Charges For Men	
	Toilet Soap Lifebouy 140 Grm, Toothpaste	Medora 200 Ml., Washing Powder 1000 Grm	Washing Soap Nyl(135-160Gms), Dry Cleaning Suit Coat Pant	Gold Tezabi 24 Ct Silver Tezabi 24 Ct
Medicare	Macklines 70 Grm	Amoxil Capsule 250 Mg.S		
		Cac. 1000 Tab	Jouhar Joshanda	Doctor (Mbbs) Clinic Fee
Medicare	Cac. 1000 Tab	Renitec Tab. 5 Mg.		
	Renitec Tab. 5 Mg.			

Table A4: Top Ten CPI Items (Ranked by Inflation Contribution)							
Items	Unit	weights	Price		YoY change		Weighted Contribution
			Nov-06	Nov-05	Nov-06	Nov-06	
A. Ranked by Weighted Contribution							
1	House Rent Index	Month	23.43	139.53	11.12	6.63	19.25
2	Onion	Kg	0.58	18.18	-20.87	145.87	10.44
3	Milk Fresh (Unboiled)	Ltr.	6.53	24.94	13.42	11.90	9.64
4	Sugar Refined	Kg.	1.95	32.87	29.55	20.91	5.04
5	Gas Chrg 10.1157 - 13.4876Mmb	Tu Mmbtu	0.93	387.90	14.54	27.00	3.12
6	Pulse Gram	Kg.	0.43	42.52	3.61	50.30	2.66
7	Beef With Bone Av.Qlty.	Kg	1.61	110.45	12.83	12.20	2.43
8	Gas Chrg Upto 3.3719 Mmbtu	Mmbtu	0.84	102.38	0.00	20.39	2.12
9	Train Fare Eco. > 500 Km.	P/Km.	0.48	0.51	5.56	34.21	2.04
10	Mutton Av.Qlty.	Kg	1.09	206.89	6.78	12.80	1.73
Total			37.9				58.5
B. Ranked by Percentage Change							
1	Onion	Kg	0.58	18.18	-20.87	145.87	10.44
2	Besan Av. Qlty.	Kg.	0.13	46.13	6.43	52.01	0.85
3	Silver Tezabi 24 Ct	10 Gm.	0.03	219.15	11.60	51.67	0.18
4	Pulse Gram	Kg.	0.43	42.52	3.61	50.30	2.66
5	Chillies Green	Kg	0.14	51.28	2.77	49.35	0.88
6	Pulse Mash (Washed)	Kg.	0.20	68.50	27.81	48.42	1.21
7	Air Fare Economy Class.	P/Km.	0.10	8.05	-4.96	40.00	0.49
8	Brinjal Train Fare Eco. 101-500	Kg	0.12	14.81	14.19	37.62	0.56
9	Km.	P/Km.	0.01	0.57	5.00	35.71	0.05
10	Gold Tezabi 24 Ct	10 Gm.	0.20	11544.22	13.35	35.28	0.89
Total			1.9				18.2

Table A5: City-wise Inflation (YoY) by Income Groups, October 2006							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	10.9	16.8	6.7	10.2	14.7	6.9
2	Faisalabad	7.0	10.5	4.4	7.4	10.5	5.2
3	Rawalpindi	9.6	12.6	7.5	9.4	11.7	7.8
4	Multan	12.2	15.2	10.2	12.0	14.8	10.0
5	Gujranwala	10.7	14.9	7.7	10.1	12.9	8.1
6	Islamabad	9.5	11.9	7.8	9.7	11.9	8.2
7	Sargodha	9.7	12.9	7.5	9.4	12.3	7.4
8	Sialkot	7.2	8.6	6.2	7.9	9.4	6.8
9	Bahawalpur	10.5	13.1	8.7	10.2	12.7	8.5
10	Karachi	7.7	10.4	5.9	8.2	10.9	6.3
11	Hyderabad	9.1	11.4	7.4	8.8	11.1	7.1
12	Sukkur	5.9	6.3	5.7	6.1	5.8	6.3
13	Larkana	7.7	9.3	6.5	7.4	8.6	6.5
14	Peshawar	9.1	12.7	6.7	9.7	12.6	7.7
15	Bannu	8.3	9.6	7.3	9.2	11.0	8.0
16	Quetta	9.9	12.4	8.0	9.4	13.0	7.1
17	Khuzdar	8.9	13.1	5.9	8.0	11.1	5.8
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	9.3	13.5	6.3	8.3	12.2	5.4
2	Faisalabad	7.0	9.7	5.0	5.8	8.0	4.2
3	Rawalpindi	9.3	11.5	7.8	9.3	10.7	8.2
4	Multan	11.1	14.2	8.9	10.1	12.9	8.0
5	Gujranwala	9.7	12.2	7.9	8.6	10.2	7.5
6	Islamabad	9.7	11.5	8.4	9.9	11.2	9.0
7	Sargodha	8.6	11.0	6.9	7.0	10.1	4.8
8	Sialkot	7.3	8.5	6.5	6.6	7.4	6.1
9	Bahawalpur	9.2	11.8	7.3	6.9	9.4	5.1
10	Karachi	7.8	10.0	6.3	7.4	8.1	6.9
11	Hyderabad	8.1	10.2	6.6	7.7	10.0	6.1
12	Sukkur	5.7	5.2	6.1	5.9	5.1	6.4
13	Larkana	7.1	8.3	6.3	5.7	6.3	5.2
14	Peshawar	8.9	11.6	7.0	7.6	10.1	5.8
15	Bannu	8.9	11.4	7.2	7.8	10.0	6.2
16	Quetta	9.0	12.1	6.8	8.6	11.4	6.7
17	Khuzdar	7.3	11.0	4.7	6.3	8.3	4.8

Table A6 : Income Group-wise Inflation (YoY)								
	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06
<u>Up to Rs. 3000</u>								
General	6.0	7.5	8.0	7.6	9.3	9.4	8.8	9.3
Food	4.5	7.2	8.4	7.8	11.0	11.5	11.0	12.2
Non-food	7.1	7.7	7.6	7.6	8.1	8.0	7.3	7.2
<u>Rs. 3001-5000</u>								
General	5.8	7.1	7.7	7.5	9.2	9.3	8.7	9.0
Food	4.0	6.5	8.0	7.5	10.9	11.3	10.8	11.7
Non-food	7.1	7.6	7.5	7.5	8.1	7.9	7.3	7.1
<u>Rs. 5000-12000</u>								
General	5.8	6.9	7.6	7.5	9.0	9.0	8.4	8.4
Food	3.8	5.9	7.9	7.4	11.0	11.2	10.6	10.9
Non-food	7.3	7.6	7.3	7.5	7.7	7.5	6.8	6.6
<u>Above Rs. 12000</u>								
General	6.5	7.3	7.7	7.8	8.7	8.3	7.7	7.4
Food	3.2	4.8	7.6	7.4	11.3	11.3	10.3	9.7
Non-food	9.0	9.2	7.8	8.1	7.0	6.3	5.8	5.8
<u>All income groups</u>								
General	6.2	7.1	7.6	7.6	8.9	8.7	8.1	8.1
Food	3.6	5.6	7.8	7.4	11.1	11.3	10.5	10.6
Non-food	8.0	8.2	7.5	7.8	7.4	7.0	6.4	6.3

Table A7: Distribution of Price Change (YoY)--WPI Items: November 2006				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Bajra, Chicken Jowar, Maize Eggs Masoor Rice Dry Fruits Fresh Fruits Maida Fish	Wheat Flour Sugar Confectionary Wheat Condiments Spices Powdered Milk Mineral Water Cooking Oil	Cotton Seed Oil Milk Food Salt Vegetable Ghee Fresh Milk Beverages Mustard & Rapeseed Oil Vegetables Prepared/Preserved Tea	Meat, Vegetables Beans, Fruit Prepared/Preserved Gur, Moong Sugar Refined Gram Whole Potatoes, Oil Cakes Tomatoes, Mash Besan, Gram Split Onions
Raw material	Skins Pig Iron Hides	Cotton		Cotton Seeds, Tobacco Mustard/Rapeseeds Wool Sugar Cane
Fuel & lighting	Coke Electricity Ind. Supply Tariff-B Elec. Agriculture Tariff-D	Coal Motor Sprit Diesel Oil	Kerosine Oil Furnace Oil	Mobil Oil Fire Wood Natural Gas
Manufactures	Fertilizers Nylon Yarn Woolen ,Textiles Dying Materials Other Electrical Goods Glass Products Cosmetics Sole Leather Chrome Leather Audio-Visual Instruments Matches	Blended Yarn Drugs & Medicines Machinery Foot Wear Plastic Products Tubes, Tyres Utensils Ready Made Garments, Paper Cotton Textiles Silk & Reyon Textiles, Transports Soaps	Jute Manufactures Cigarettes Hosiery Pesticides & Insecticised Cotton Yarn Chemicals	Mattresses
Building material	Iron Bars & Sheets	Paints & Varnishes Bricks, Tiles Cement Blocks Glass Sheets Sanitary Wares	Pipe Fittings Cement	Timber Wires And Cables

Table A8: SPI Item-wise Price Movements					
S.No	Items	Unit	Price Nov -06	Percentage change over	
				Nov-05	Oct -06
1	Wheat	Kg.	11.9	2.9	1.3
2	Wheat flour a.qlt.	Kg.	13.5	3.6	3.3
3	Rice basmti.broken	Kg.	20.8	3.3	1.6
4	Rice irri-6	Kg.	16.2	1.6	0.4
5	Masur pulse washed	Kg.	42.4	-6.8	1.9
6	Moong pulse washed	Kg.	53.0	28.5	-6.0
7	Mash pulse washed	Kg.	68.1	48.3	-1.2
8	Gram pulse washed	Kg.	42.8	50.6	0.2
9	Beef	Kg.	118.0	13.7	2.0
10	Mutton	Kg.	222.4	13.0	1.1
11	Egg hen (farm)	Doz.	43.1	-1.4	20.6
12	Bread plain m.s.	Each	15.5	9.1	0.4
13	Sugar	Kg.	33.2	20.5	0.9
14	Gur	Kg.	41.7	20.1	-4.4
15	Milk fresh	Litr	26.4	12.1	1.5
16	Milk powdered nido	400g	116.9	8.9	5.9
17	Curd	Kg.	30.9	10.4	0.8
18	Veg.ghee tin	2.5k	213.6	4.8	0.3
19	Veg.ghee loose	Kg.	65.3	11.0	2.1
20	Mustard oil	Kg.	72.0	7.8	1.6
21	Cooking oil	2.5l	213.9	4.6	0.3
22	Potatoes	Kg.	25.4	29.1	9.1
23	Onions	Kg.	34.7	181.1	45.9
24	Tomatoes	Kg.	26.1	19.9	-6.5
25	Bananas	Doz.	28.9	7.4	-11.4
26	Salt powdered	Kg.	4.8	25.4	1.5
27	Red chillies(powd)	Kg.	91.3	28.3	10.0
28	Garlic	Kg.	63.3	14.3	5.2
29	Tea packet	250g	69.5	12.5	0.8
30	Tea (prepared)	Cup	6.2	10.7	0.0

continued

S.No	Items	Unit	Price Nov -06	Percentage change over	
				Nov-05	Oct -06
31	Cooked beef plate	Each	29.8	16.4	1.4
32	Cooked dal plate	Each	17.8	16.2	0.3
33	Cigarettes k-2	10's	7.9	8.9	0.0
34	Coarse latha	Mtr.	34.9	1.5	0.0
35	Lawn (avg.+s.qlty)	Mtr.	78.7	4.1	0.0
36	Voil printed	Mtr.	37.7	3.1	-0.1
37	Shirting	Mtr.	65.4	5.2	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	187.1	18.9	0.9
43	Elec. Bulb 60-wats	Each	12.0	4.6	0.0
44	Match box	Each	0.7	9.7	1.5
45	Washing soap	Cake	8.1	5.3	0.0
46	Bath soap lifebuoy	Cake	13.9	0.1	0.1
47	Chicken (farm)	Kg.	67.4	-13.8	-16.5
48	Gas chrg. All clb. Comb	D.mmbt	243.7	186.6	0.0
49	L.p.g .(cylinder 11kg.)	Each	532.6	9.6	-12.5
50	Elec.chrg.all slabs com	Bd. Unit	4.7	93.4	0.0
51	Petrol	Litr	57.8	2.5	0.0
52	Diesel	Litr	38.9	4.2	0.0
53	Telephone local	Call	2.3	0.0	0.0
Max:				186.6	45.9
Median				8.9	0.3
Min:				-13.8	-16.5

Table A9: Daily Labor Wages (Rs. per day)--Average of 35 Cities						
	Carpenter	Mason	Laborer	Plumber	Electrician	Average
Jan-05	248.5	263.3	130.4	245.8	242.8	226.1
Feb-05	248.2	265.6	130.9	245.7	242.8	226.6
Mar-05	250.5	269.2	132.5	250.0	244.3	229.3
Apr-05	253.3	269.8	134.4	255.4	247.7	232.1
May-05	256.0	273.1	136.5	256.8	247.7	234.0
Jun-05	258.1	275.2	138.5	258.6	248.8	235.8
Jul-05	264.2	280.9	142.5	264.6	252.1	240.8
Aug-05	269.9	284.1	145.8	270.2	256.0	245.2
Sep-05	275.8	293.6	149.3	276.6	257.7	250.6
Oct-05	280.8	302.1	152.2	280.4	263.8	255.9
Nov-05	281.5	304.2	152.9	281.3	265.5	257.1
Dec-05	283.8	308.6	154.7	282.5	266.8	259.3
Jan-06	284.9	311.2	156.0	286.1	267.9	261.2
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

Source: Federal Bureau of Statistics

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

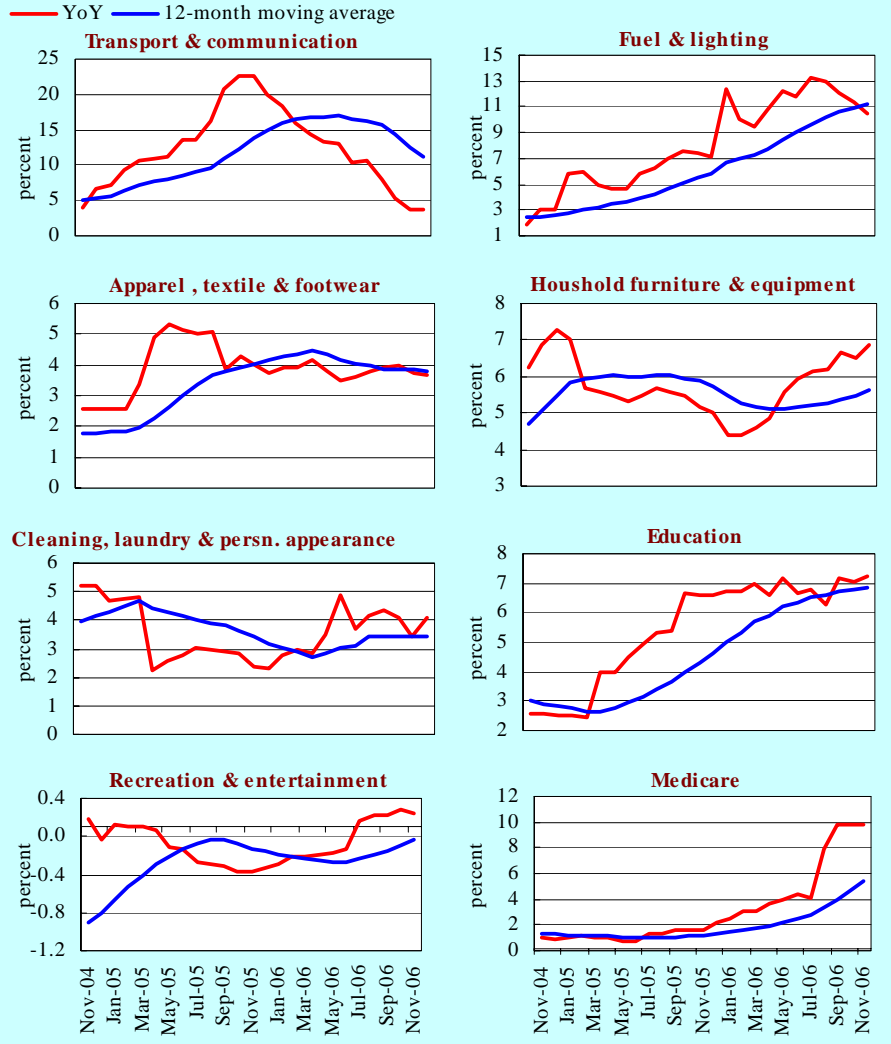


Figure A2: Frequency Distribution of Price Changes of CPI Items, November 2006

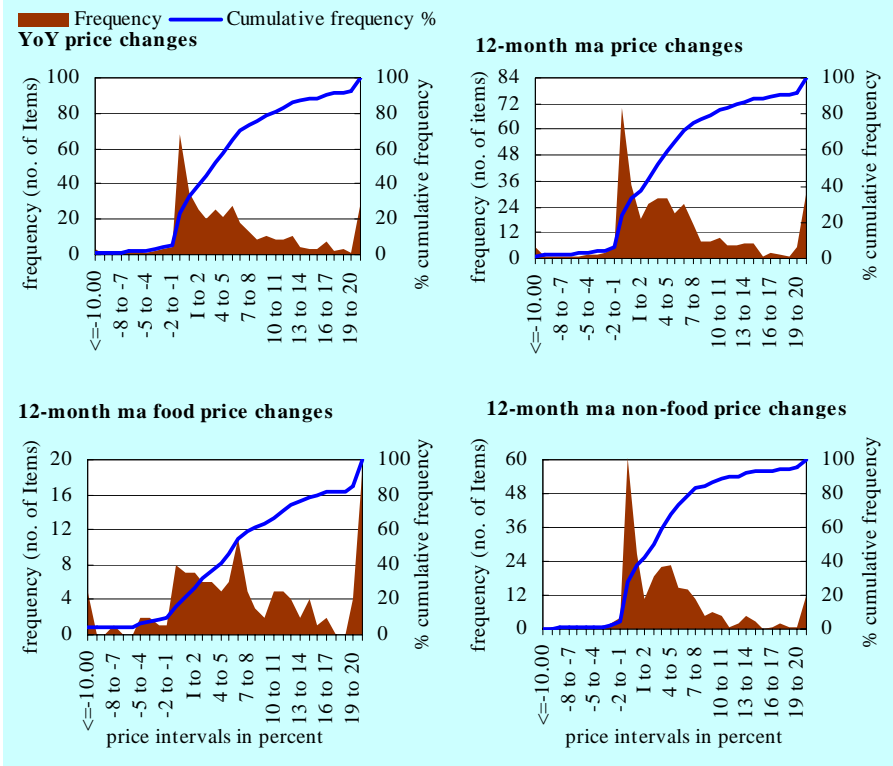
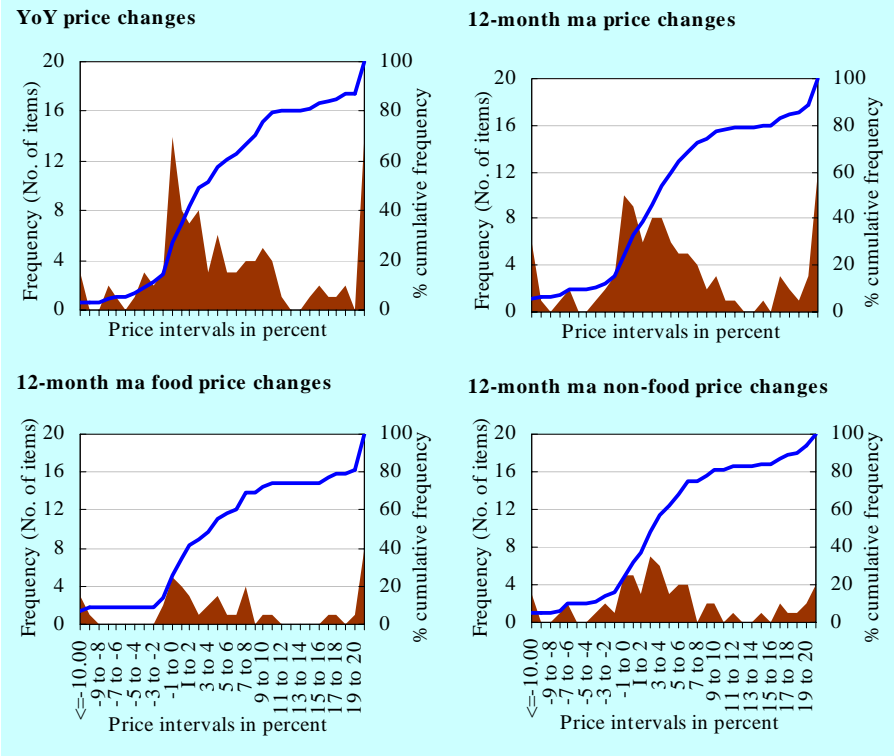


Figure A3: Frequency Distribution of Price Changes of WPI Items, November 2006



Annexure B

Technical Notes

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

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

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

2. Base year for all the indices is the year 2000-01.
3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities, list of which is given in Table A3.
4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

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

5. Period average inflation is the percent change of the average index during the period from July to the given month of a fiscal year over the average index during the corresponding period of the last year. It is computed as follows:

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

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

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

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

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

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

8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods:

- a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.
- b) 20% trimmed-mean inflation; it is computed through the following steps:
 - i. All CPI items are arranged in ascending order according to YoY 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.