

Inflation Monitor

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Overview

Inflationary pressures remained strong in the economy with CPI inflation (YoY) reaching 24.7 percent during November 2008 compared to 8.7 percent in the same month last year. The November 2008 figure was only slightly lower than that in the previous month. This slight deceleration was mainly due to the food group of CPI that recorded 30.4 percent (YoY) inflation during the month under review as compared to 31.7 percent in October 2008. On the other hand, non-food inflation (YoY) accelerated further to reach 20.2 percent in November 2008. All sub-groups of CPI non-food group witnessed higher inflation (YoY) compared to the same month last year. In particular *transport & communication, education, cleaning, laundry & personal appearance, recreation* and *fuel & lighting* sub-groups witnessed more than 10 percentage points increase in inflation (YoY) during November 2008 compared to the same month last year. In contrast to a slight decline in CPI, WPI inflation for the month was 8.5 percentage points lower than in the preceding month. This sharper decline in wholesale prices suggests that headline inflationary pressures may also ease off in coming months.

Table 1.1: Inflation (YoY)

	percent						
	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		
Nov-07	8.7	12.5	5.9	6.9	8.6	12.6	9.0
Dec-07	8.8	12.2	6.3	7.2	8.7	12.2	9.2
Jan-08	11.9	18.2	7.3	7.8	9.6	15.5	13.1
Feb-08	11.3	16.0	7.8	8.1	9.6	16.4	12.3
Mar-08	14.1	20.6	9.4	9.3	11.3	19.8	16.2
Apr-08	17.2	25.5	11.2	10.8	14.1	23.5	22.3
May-08	19.3	28.5	12.5	12.3	15.1	28.2	26.2
Jun-08	21.5	32.0	13.8	13.0	17.2	30.6	26.3
Jul-08	24.3	33.8	17.3	14.7	19.7	34.0	30.6
Aug-08	25.3	34.1	18.7	16.4	21.0	35.7	31.8
Sep-08	23.9	29.9	19.2	17.3	21.2	33.2	29.6
Oct-08	25.0	31.7	19.7	18.3	21.7	28.4	30.3
Nov-08	24.7	30.4	20.2	18.9	21.3	19.9	28.8

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

On month-on-month (MoM) basis CPI inflation declined 0.1 percent compared to 0.1 percent increase in the same month last year. CPI food inflation (MoM) declined by 1.5 percent in November 2008. In contrast, non-food inflation (MoM) was recorded higher at 1.1 percent compared to 0.7 percent in the same month last year (see **Table 1.2**).

Both measures of core inflation (non-food non-energy and 20 percent trimmed mean) continued to show strong growth during November 2008. Core inflation (YoY) based on NFNE reached 18.9 percent in November 2008 compared to 6.9 percent in the same month last year. Similarly core inflation (YoY) based on 20 percent trimmed-mean also witnessed significant increase and was recorded at 21.3 percent compared to 8.6 percent in November 2007.

Although inflation measured by wholesale price index (WPI) remained significantly higher than in the same month last year, it decelerated sharply compared to the preceding month. Indeed,

WPI inflation has been in a downtrend since September 2008 reaching 19.9 percent (YoY) in November 2008. Though both food and non-food groups of WPI contributed in this downtrend, the contribution of WPI non-food group was greater. Sensitive price indicator (SPI) also decelerated and recorded 28.3 percent (YoY) inflation during the month under review compared to 30.3 percent in the preceding month (see **Figure 1.1**).

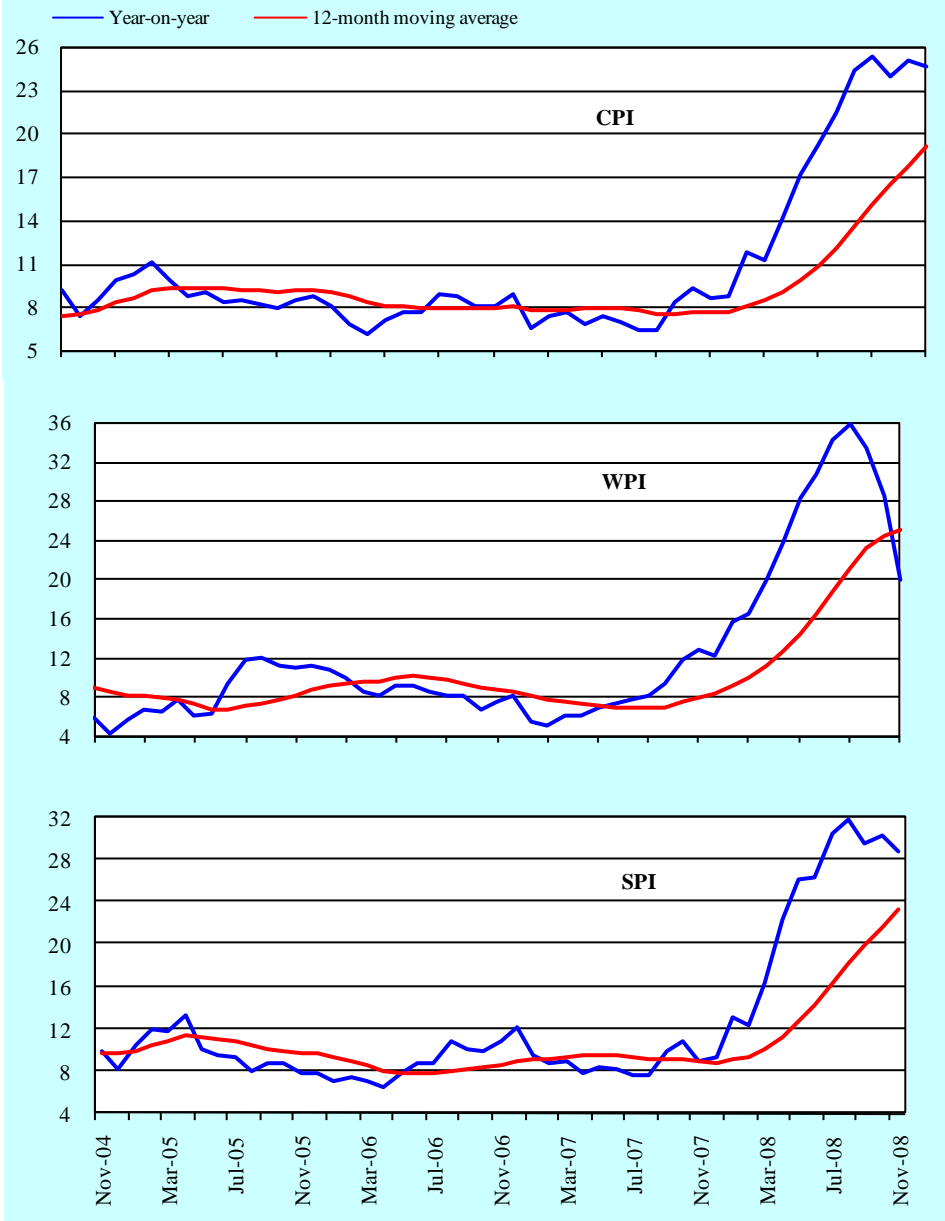
Table 1.2: Different Dimensions of Inflation (percent)

	Nov-06	Nov-07	Nov-08	5-year average#
Year-on-year (November over November)				
Overall CPI	8.1	8.7	24.7	7.6
Food group	10.6	12.5	30.4	9.6
Non-food group	6.3	5.9	20.2	6.3
Core Inflation				
NFNE*	5.9	6.9	18.9	6.2
Trimmed	6.5	8.6	21.3	6.9
Period average (July over November)				
Overall CPI	8.3	7.8	24.7	7.3
Food group	10.2	11.5	31.9	9.0
Non-food group	7.0	5.2	19.1	6.0
Core Inflation				
NFNE*	6.3	6.3	17.1	6.0
Trimmed	6.8	7.8	21.0	6.6
12-month moving average				
Overall CPI	7.9	7.6	19.1	6.9
Food group	8.1	10.8	26.3	8.3
Non-food group	7.7	5.3	13.7	5.9
Core Inflation				
NFNE*	6.8	5.9	12.9	5.7
Trimmed	6.7	7.1	16.1	6.2
Monthly (September over November)				
Overall CPI	0.7	0.1	-0.1	0.7
Food group	1.4	-0.6	-1.5	0.9
Non-food group	0.3	0.7	1.1	0.5
Core Inflation				
NFNE*	0.4	0.7	1.2	0.5
Trimmed	0.5	0.7	0.7	0.5

* NFNE is Non-food non-energy inflation

5-year average excluding FY09

Figure 1.1: Movements in Price Indices (percent change)



2. Consumer Price Index

After showing an increase in the previous month, CPI inflation (YoY) declined during November 2008 reaching 24.7 percent on YoY basis. This 24.7 percent (YoY) inflation is, however, still high compared to 8.7 percent (YoY) inflation in November 2007. Both, food and non-food groups recorded higher inflation in November 2008 as compared to the same

month last year. Food inflation reached 30.4 percent during the month under review compared to 12.5 percent during November 2007, while non-food inflation (YoY) was recorded at 20.2 percent in November 2008 compared to 5.9 percent during the same month last year (see **Figure 2.1**).

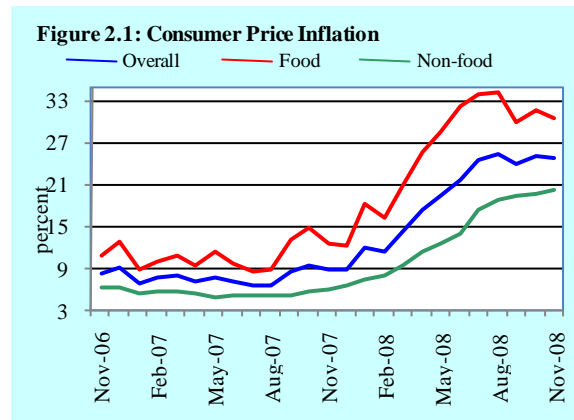
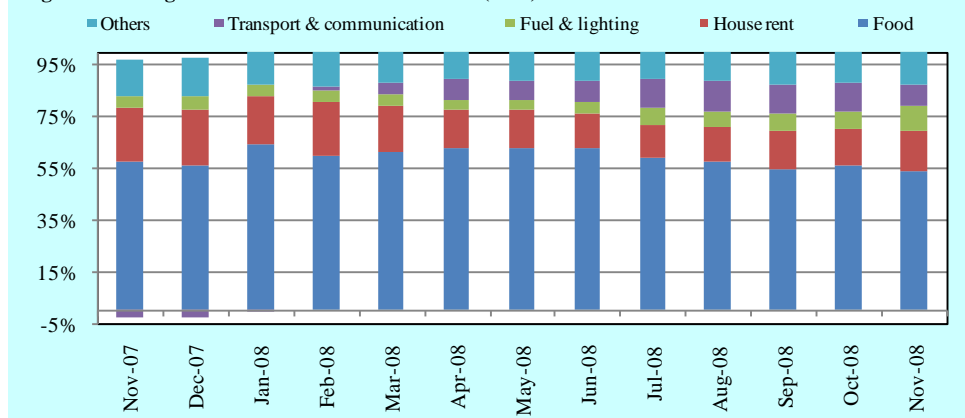


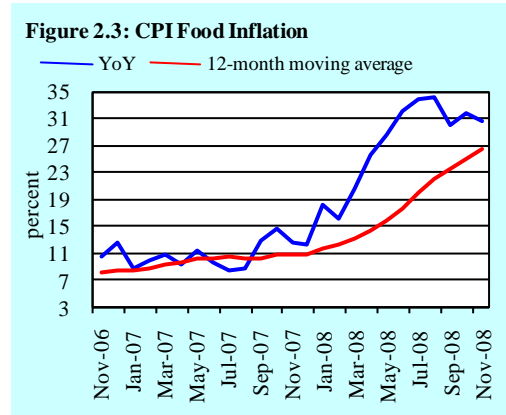
Figure 2.2: Weighted Contribution to CPI Inflation (YoY)



In terms of weighted contribution to overall inflation, food group's contribution came down to 54.1 percent during November 2008 compared to 60.9 percent in the same month last year. Whereas, the weighted contribution of non-food group increased to 45.9 percent during November 2008 compared to 39.1 percent in November 2007. Weighted contribution of *fuel & lighting* and *transport & communication* sub-groups were recorded higher at 8.1 percent and 9.5 percent during November 2008 as compared to 4.2 percent and (-) 2.8 in November 2007 (see **Figure 2.2**).

2.1 Food Inflation

In November 2008 food inflation showed acceleration compared to the same month last year, however it was lower in comparison to November 2007. Food inflation was recorded 30.4 percent during November 2008 compared to 12.5 percent in November 2007 (see **Figure 2.3**). Major items that recorded rise (YoY) in their prices during the month under review include pulse masoor, wheat, fresh milk, sugar, pulse gram, bakery & confectionary, etc.



Out of 113 commodities reported in the CPI food basket during November 2008, four items -coriander seed powder (150.0 percent), pulse masoor (119.9 percent), cumin seed powder (104.5 percent) and curry powder (100.0 percent)-showed price increases¹ of over 100 percent, 18 showed a price rise between 50 to 100 percent, 71 items depicted a price rise between 10 to 50 percent, 14 showed single digit price growth and the remaining 5 showed a decline in their prices (see **Figure 2.4** and **Table A2** in **Annexure A**).

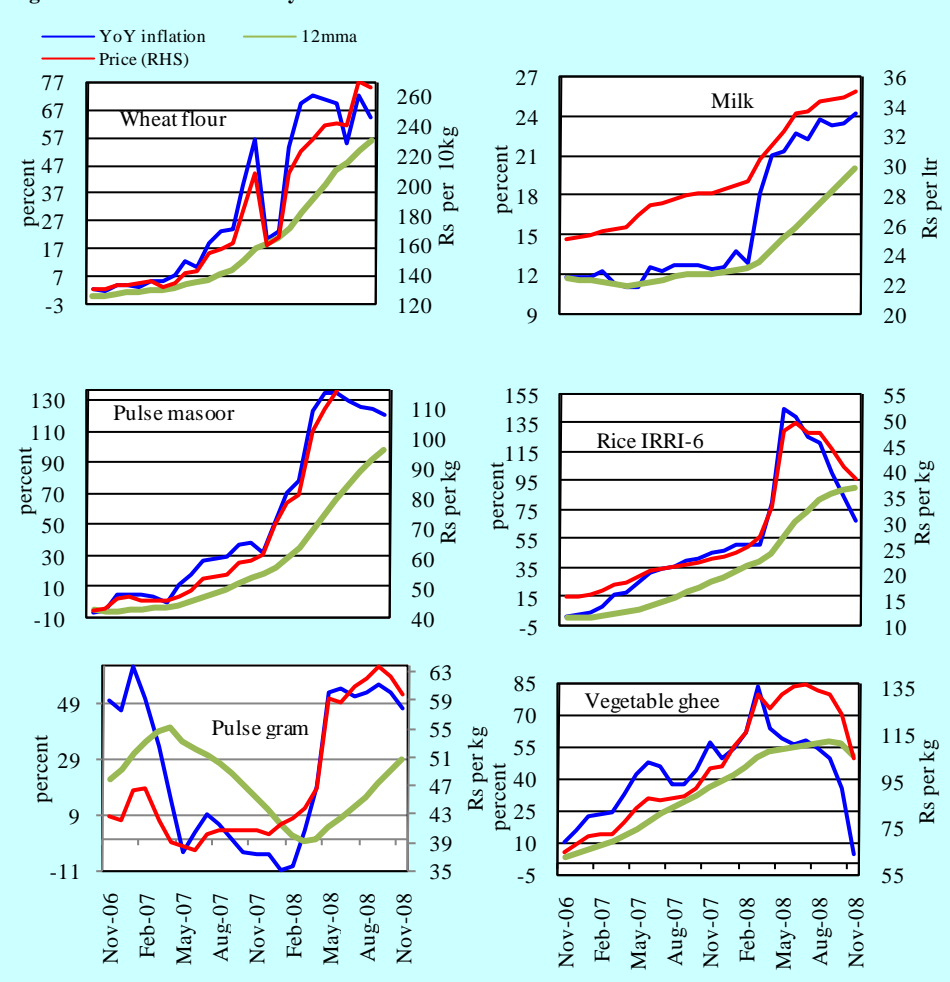
In terms of percent contribution to overall inflation (YoY), wheat flour and fresh milk were the second and third highest contributors to overall CPI inflation², with 14.9 percent and 7.1 percent share in overall CPI inflation (see **Table A3** in the Annexure). The high contribution of wheat flour was due to significant growth in its price (65.2 percent) and its high weight (5.1 percent). On the other hand, high contribution of fresh milk was primarily due to its high weight (6.7 percent). Moreover, within food group, four items i.e. wheat flour, milk fresh, rice and vegetables contributed about 53.4 percent to food inflation (YoY) in November 2008.

Composition of food items on monthly price change on (MoM) basis showed that nine items including turai, tomatoes, pistachio, coriander seed powder, curry powder, etc. exhibited double digit price change. Whereas prices of 37 items including vegetable ghee, cooking oil, all types of rice, sugar, wheat, wheat flour, etc. declined during the month under review.

¹ Price change are compared with November 2007

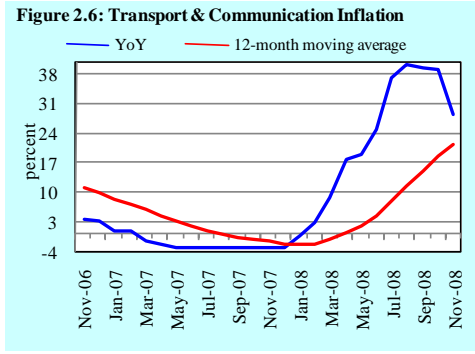
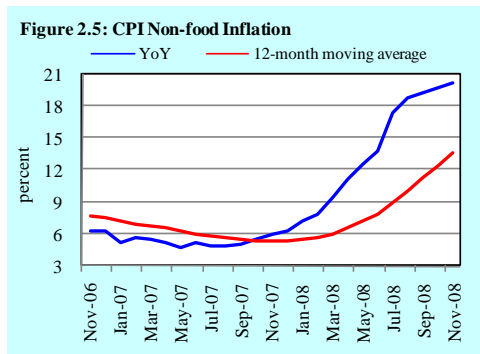
² house rent index of non-food group being the first

Figure 2.4: Price Trends in Key Food Items



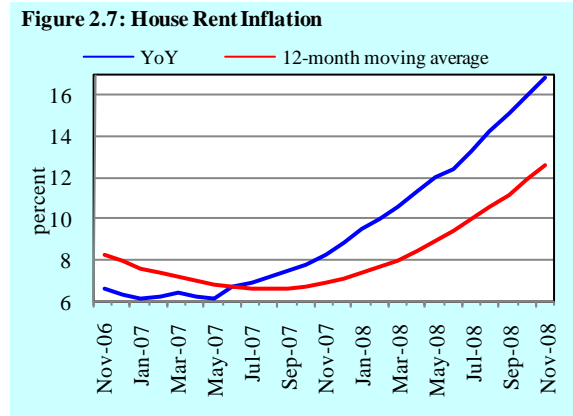
2.2 Non-food Inflation

In contrast to CPI food group inflation, non-food inflation (YoY) recorded a rise compared to the same month of last year. CPI non-food inflation (YoY) was recorded at 20.2 percent during the month under review compared to 5.9 percent in November 2007 (see **Figure 2.5**). Similar to previous month, all sub-groups of non-food group contributed to this rise, but acceleration in *transport & communication* and *fuel and lighting* sub-indices were more significant.



Since August 2008, inflation (YoY) in *transport & communication* sub-group has shown a decline due to some adjustment in OGRA³ administered domestic prices of petrol, diesel & CNG and a decline in international fuel prices. Inflation (YoY) in this sub-group was recorded at 28.6 percent during November 2008 compared to (-) 3.1 percent in the corresponding month last year and 39.9 percent in October 2008 (see **Figure 2.6**).

Increasing trend in inflation (YoY) of *house rent index* continued and was recorded at 16.8 percent in November 2008 compared to 8.3 percent during same month last year (see **Figure 2.7**). Similar to the previous month high HRI inflation reflects rise in the prices of building materials⁴ (38.3 percent in November 2008 compared to 9.3 percent in November 2007), such as cement, cement blocks, iron bars & sheets, timber, paints & varnishes, sanitary wares, etc.



The increasing trend in *apparel, textile & footwear* sub-group inflation (YoY) has continued first five months of FY09. Inflation (YoY) in this sub-group was recorded at 15.9 percent during November 2008 compare to 8.7 percent in same month last year. Item wise analysis of this sub-group reveals that out of total 42 items, 29 items showed 10 to 63 percent change in their prices, while 13 items

³ Oil and Gas regulatory Authority

⁴ Building materials of WPI

recorded a change of up to 10 percent with only one item showing no price change.

Fuel & lighting sub-group's inflation (YoY) continued its increasing trend and was recorded at 31.9 percent during November 2008 compared to 4.8 percent in the same month last year. Out of 15 items in this sub-group, 10 recorded price changes between 20 to 100 percent, four items saw price change between 4 to 8 percent and one item showed no price change during the month under review.

Inflation (YoY) in *household furniture & equipment* sub-group was recorded at 15.0 percent during November 2008 compared to 5.9 percent in the corresponding month last year. Detailed analysis of this sub-group showed that out of 44 items, 37 exhibited price change between 12 to 40 percent (whereas only two items showed price change in double digit during November 2007) and seven items showed price change between 5 to 10 percent during November 2008.

Recreation & entertainment sub-group's inflation (YoY) reached 12.5 percent during November 2008 compared to 0.3 percent during the corresponding month last year. Out of 16 commodities in this sub-group, six commodities recorded a price change between 15 to 50 percent; 10 commodities recorded a change between 0 to 10 percent (with two items showing no price change) during November 2008.

Inflation (YoY) in *cleaning, laundry & personal appearance* sub-group was recorded at 20.4 percent during the month under review compared to 8.8 percent in same month last year. Item-wise analysis of this sub-group showed that out of 36 items, 27 showed double digits price change ranging between 10 to 40 percent and remaining 12 recorded a price change between 0 to 10 percent (whereas only seven items showed double digit price change in November 2007) during the month under review.

Inflation (YoY) in *education* sub-group was recorded at 16.3 percent in November 2008 compared to 4.3 percent during the corresponding month last year. Detailed item-wise analysis of this sub-group showed that out of 24 items 16 showed price change between 10 to 77 percent (whereas only two items showed price change in double digits during November 2007), seven items showed price change between 0 to 10 percent (two commodities showed no price change) and only one item showed a decline in price.

Inflation (YoY) in *medicare* sub-group increased and was recorded at 12.5 percent during November 2008 compared to 7.9 percent in the corresponding month last year (see **Figure A1** in Annexure).

Detailed item-wise analysis of non-food group revealed that out of 250 items included in this group, 167 registered double digit price change during November 2008 compared to only 27 items during November 2007. The commodities showing double digit price change include UMS charges, rail and road fares, kerosene oil, high speed diesel, petrol super, gold and silver tezabi, and firewood whole, etc. Further 38 commodities showed price change in the range of 5 to 10 percent, 17 showed price change between 0 to 5 percent, 24 recorded no change in their prices (49 commodities showed no price changes during November 2007) and only four commodities showed a decline in prices (21 commodities showed decline in prices in November 2007) (see **Table A2 & A4** in the Annexure).

2.3 City-wise Inflation

During November 2008 city-wise inflation (YoY) remained high. In major cities including Islamabad, Lahore, Karachi, Quetta and Peshawar, inflation (YoY) was recorded at 21.0, 22.5, 24.2, 26.9 and 27.8 percent compared to 8.0, 7.0, 8.7, 9.8 and 9.8 percent respectively during same month last year. Similar to previous month inflation (YoY) in Quetta and Peshawar was higher than the overall CPI inflation during month under review (see **Table 2.1**).

	Overall CPI	Islamabad	Lahore	Karachi	Quetta	Peshawar
Nov-07	8.7	8.0	7.0	8.7	9.8	9.8
Dec-07	8.8	7.7	7.5	8.1	9.0	9.2
Jan-08	11.9	9.1	10.1	10.7	12.3	12.2
Feb-08	11.3	9.8	10.4	9.8	11.1	11.4
Mar-08	14.1	11.6	12.0	13.3	13.8	15.8
Apr-08	17.2	13.8	15.4	16.0	17.5	18.9
May-08	19.3	16.4	17.4	18.6	21.8	21.8
Jun-08	21.5	17.7	18.0	21.1	25.3	22.3
Jul-08	24.3	20.9	21.0	23.4	26.3	26.0
Aug-08	25.3	21.3	21.9	24.8	28.6	27.0
Sep-08	23.9	21.5	21.0	25.2	27.4	26.2
Oct-08	25.0	21.7	22.5	24.2	28.7	30.1
Nov-08	24.7	21.0	22.5	24.2	26.9	27.8

Out of 35 cities included in the city-wise inflation (YoY) analysis, 18 fell in the category of high inflation recording higher inflation than the overall headline inflation, while remaining 17 cities recorded inflation that was below the average CPI inflation during November 2008. Detailed analysis shows that inflation recorded in Bannu and Nawabshah (31.5 percent) and was the highest among the 35 cities, followed by Shahdadpur (29.9 percent). The lowest inflation (YoY) was

recorded in Bahawalpur (19.5 percent). The highest food inflation (YoY) was recorded in Bannu (42.1 percent) and lowest in Bahawalpur (19.5 percent), whereas the highest non-food inflation was also observed in Mardan (25.4 percent) and the lowest in Islamabad (16.6 percent) during the month under review (see **Table 2.2**).

Table 2.2: City wise Inflation in CPI (YoY) November 2008

	High inflation cities			Low inflation cities			
	General	Food	Non-food	General	Food	Non-food	
Bannu	31.5	42.1	23.6	Vehari	24.5	28.8	21.1
Nawabshah	31.5	40.2	25.1	D.G. Khan	24.5	23.7	25.1
Shahdadpur	29.9	36.2	25.2	Hyderabad	24.4	29.5	20.4
Loralai	29.7	38.2	23.7	Karachi	24.2	29.5	20.2
Mardan	29.3	34.3	25.4	Sialkot	23.9	29.7	19.1
Khuzdar	29.2	35.5	24.4	Rawalpindi	23.6	29.3	19.5
Peshawar	27.8	33.8	23.1	Larkana	23.5	25.9	21.6
Sukkur	27.7	35.1	22.3	Jhelum	23.0	27.3	19.8
D.I.Khan	27.5	37.5	19.9	Gujranwala	22.9	25.2	21.0
Turbat	27.3	34.7	22.0	Samundari	22.6	23.9	21.7
Abbotabad	27.1	33.0	22.4	Lahore	22.5	27.6	18.4
Quetta	26.9	36.9	19.2	Attock	22.5	27.4	18.9
Mirpur Khas	26.5	29.4	24.3	Faisalabad	22.5	23.8	21.4
Sargodha	25.8	30.8	21.9	Bahawalnagar	22.0	27.0	18.3
Mianwali	25.6	30.4	22.0	Multan	21.1	25.0	17.9
Okara	25.5	27.4	24.0	Islamabad	21.0	27.0	16.6
Kunri	25.2	26.6	24.1	Bahawalpur	19.5	21.7	17.7
Jhang	24.7	26.6	23.3				

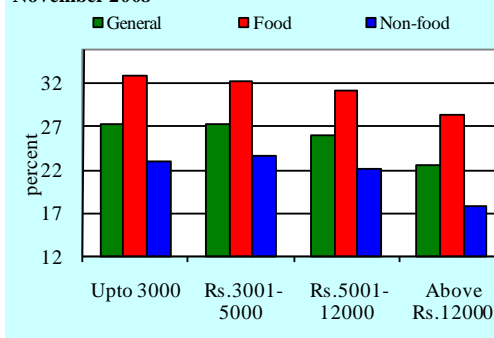
Note: High inflation refers to above average inflation, and low inflation refers to below average inflation

2.4 Income Group-wise Inflation

Income group-wise inflation continued to show strength during November 2008. Inflation (YoY) in all income groups, except the highest income group, was recorded higher than overall CPI inflation (YoY) during the month under review (see **Figure 2.8**).

The highest CPI inflation (YoY) of 27.4 percent was recorded for the lowest income group earning

Figure 2.8 : Income Group-wise CPI Inflation (YoY) November 2008

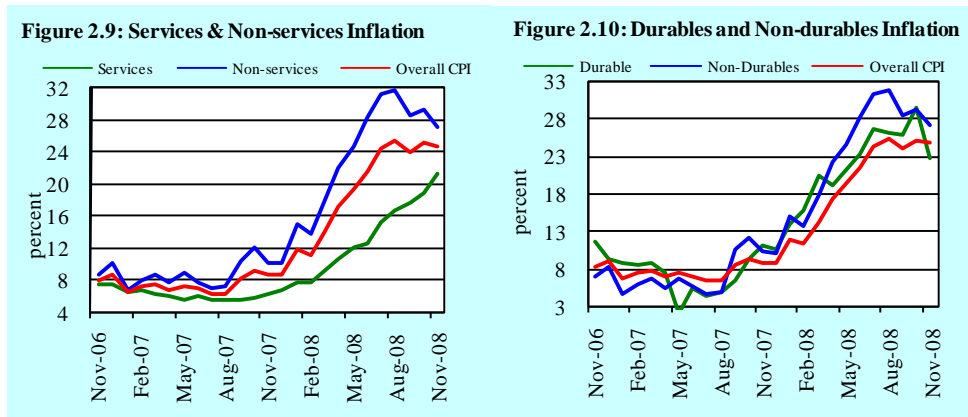


between Rs. 3001 to 5000, followed by income group upto Rs. 3000 at 27.3 percent and income group of Rs. 5001 to 12000 at 26.1 percent. The highest income group of above Rs. 12000 experienced the lowest inflation of 22.5 percent (overall inflation during November 2008 being 24.7 percent).

City and income group wise data, which covers 17 cities, revealed that Khuzdar recorded the highest inflation for all income groups and Bahawalpur experienced lowest inflation for all income groups during November 2008 (see **Table A5** in Annexure A).

2.5 Services and Non-services Inflation

Inflation (YoY) in both services⁵ and non-services sectors showed an increase during November 2008. On year on year basis inflation in services sector was recorded at 21.3 percent compared to 6.8 percent in November 2008. Similarly, in the non-services sector inflation (YoY) recorded an increase reaching 27.1 percent in November 2008 compared to 10.3 percent during corresponding month last year (see **Figure 2.9**).



Within the non-services sector, YoY inflation in both durable⁶ and non-durable sub-groups increased during the month under review compared to November 2007. Inflation (YoY) in durable goods was recorded at 22.9 percent compared to 11.1 percent in same month last year. This increase was contributed by the rising prices of all items included in this sub-group, however the highest inflation among the items included in this subgroup was jewelry (26.4 percent in November 2008

⁵ Services group of the CPI basket includes items like house rent index, electricity charges, marriage halls, household servants, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges, etc.

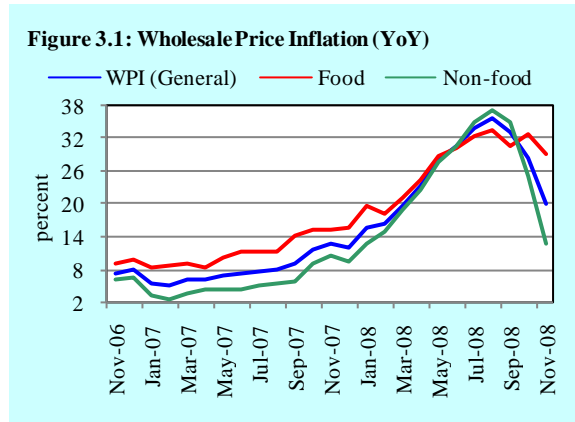
⁶ Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerators, air conditioners, vehicles, computer & allied products, watches and jewelry, etc.

compared to 22.4 percent in November 2007). Inflation (YoY) in non-durable goods was recorded at 27.2 percent during November 2008 compared to 10.3 percent in same month last year. The major contributing items to this significant increase were pulse masoor, match box, condiments, wheat, wheat flour, kerosene oil, rice, potatoes, spices, diesel, etc. (see **Figure 2.10**).

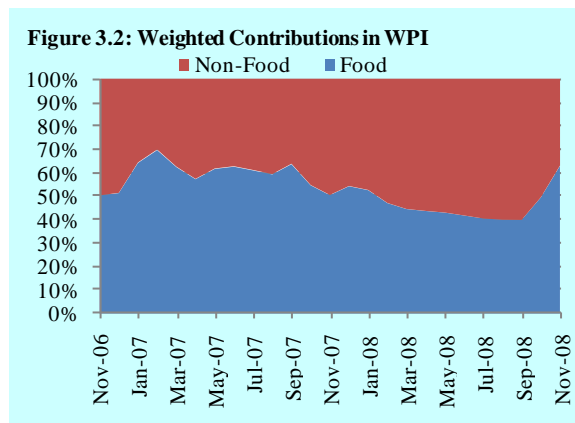
3. Wholesale Price Index

The declining trend in Wholesale Price Index (WPI) inflation continued for the third consecutive month, as it dropped significantly to 19.9 percent (YoY) during November 2008 compared to 28.4 percent in the previous month. Though both food and non-food groups of WPI contributed in this downtrend, the contribution of WPI non-food group was more

significant. WPI non-food inflation (YoY) was recorded 12.8 percent (YoY) during November 2008 compared to 25.2 percent in the previous month (see **Figure 3.1**). Despite relative weakness compared to the previous month, the overall WPI inflation, and inflation in both food and non-food groups remained high compared to the same month last year.



The declining trend in WPI non-food inflation has resulted in its lower weighted contribution of 36.9 percent in overall WPI inflation during November 2008 compared to 50.3 percent in October 2008. Accordingly, the weighted contribution of food group in overall WPI inflation registered an increase and reached 63.1 percent in November 2008 compared to 49.7 percent during the previous month (see **Figure 3.2**).



A disaggregated analysis of WPI basket shows that out of 106 items, 76 exhibited double digit price change ranging between 11.7 to 127.3 percent during the month under review. In particular items like pulse masoor, condiments, fertilizers, maida, vegetables, coke, wheat, pig iron, mustard/rapeseed, etc. exhibited more than 50 percent price change during November 2008.

Fifteen items exhibited growth between 5 to 10 percent in their wholesale prices whereas seven items showed a subdued price increase. Prices of the remaining eight items either declined or showed no change during the month under review (see **Table 3.1**).

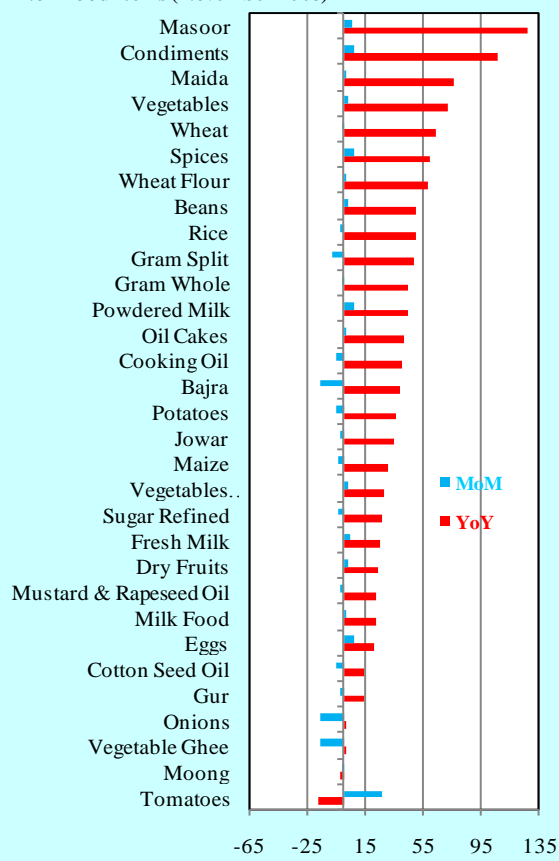
WPI food group inflation was recorded 29.2 percent (YoY) during November 2008 compared to 15.3 percent in November 2007. Within the WPI food group major items recording high growth include pulse masoor, condiments, maida, vegetables, wheat, besan, etc. Specifically, pulse masoor continued to register strong YoY growth and recorded growth of more than 100 percent for the seventh consecutive month. Conversely, three food items showed negative growth including tomatoes (-18.0 percent), pulse moong (-2.9 percent) and vegetable ghee (-0.1 percent) (see **Table A7 & Figure 3.3**).

Inflation measured by the WPI non-food group declined sharply during November 2008 and was recorded at 12.8 percent (YoY) during the month under review compared to 25.2 percent in October 2008. All sub-groups of the non-food group witnessed

Table 3.1: WPI Price Distribution of YoY Changes (November 2008)

Groups	No. of Items				Total
	Decrease or no change	Up to 5%	5%-10%	More than 10%	
A. Food	3	4	2	34	43
B. Non-Food	5	3	13	42	63
Raw material	1		2	6	9
Fuel, lighting & lubricant	1		1	9	11
Manufactures	2	2	10	18	32
Building material	1	1		9	11
Total	8	7	15	76	106

Figure 3.3: Wholesale Prices Inflation (%) in Selected Non-food Items (November 2008)



lower YoY inflation in November 2008 compared to the previous month (see **Figure 3.4**). WPI non-food inflation during November 2008 is, however, still high compared to the same month last year.

A detailed analysis of the items included in the WPI non-food group shows that more than 67 percent of the items registered double digit YoY price growth.

In particular fertilizers, coke, pig iron, nylon yarn, mustard/rapeseeds, etc. witnessed more than 50 percent price growth. On the contrary, prices of five non-food items, including furnace oil, cotton yarn, tiles etc., either declined or showed no change during the month under review (see **Figure 3.5**).

In terms of weighted contribution of different sub-groups of non-food group to overall WPI non-food inflation, the *fuel, lighting & lubricant* recorded a drop in its contribution as it reached 30.6 percent in November 2008 compared to 57.1 percent during the same month last year (**Table 3.2**). The relatively lower weighted contribution of this sub-group reflects the impact of downward revision of domestic oil prices followed by an ease in international crude oil prices during the last four months.

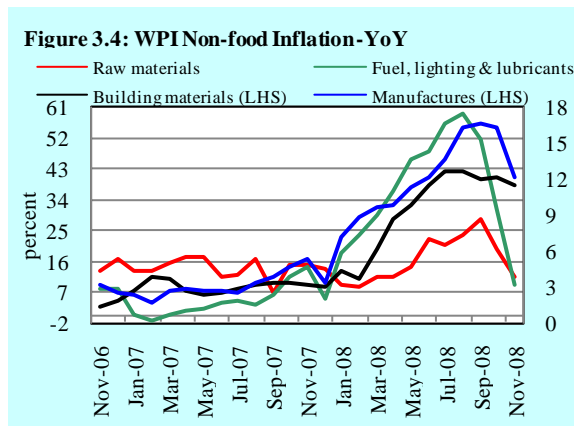
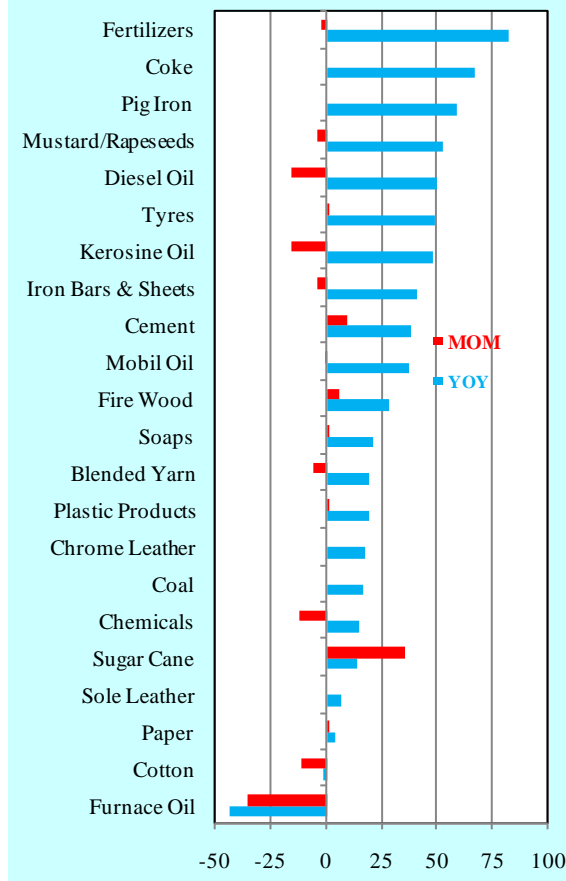


Figure 3.5: Wholesale Prices Inflation (%) in Selected Non-food Items (November 2008)



Further analysis of various sub-indices of non-food group shows that the *fuel, lightning & lubricants* sub-group recorded (YoY) inflation of 9.0 percent during November 2008 compared to 14.4 percent during same month last year. Price growth (YoY) of all items included in the sub-group, except motor spirit and furnace oil, remained in double digits with items like coke; diesel and kerosene oil recording more than 45 percent price growth during the month under review (see **Table A7** in Annexure A).

The *raw material* sub-group inflation (YoY) eased during the month under review to reach 11.7 percent during November 2008 compared to 15.1 percent in November 2007. Within the sub-group, the wholesale prices of cotton declined while the prices of mustard/rapeseed and pig iron recorded more than 50 percent YoY growth during the month under review.

Table 3.2: Contribution of Sub-Indices to WPI Non-food Inflation

	Nov-07	Jun-08	Oct-08	Nov-08
Raw materials	17.9	9.5	9.9	12.1
Fuel, lighting & lubricants	57.1	65.8	53.8	30.6
Manufactures	17.8	14.2	23.0	32.8
Building materials	7.2	10.5	13.4	24.5

The *manufactures* sub-group also witnessed an ease in inflation during the month under review as it reached 12.2 percent (YoY) compared to 16.4 during the previous month. Within the sub-group, items including fertilizers, nylon yarn, tyres and tubes recorded more than 45 percent price growth in November 2008. Inflation (YoY) recorded by the *building material* sub-group, however, remained strong and reached 38.3 percent during the month under review compared to 9.3 percent during November 2007. Within the sub-group more than eighty percent of items recorded double digit YoY price change with items such as cement blocks, iron bars & sheets, wires & cable, cement and glass sheets registering more than 34 percent price change in November 2008 (see **Table A7** in Annexure A).

4. Global Commodity Prices

Commodity prices continued to fall in November 2008, as reflected by the IMF commodity price indices. The strong downtrend is evident from double digit decline in non-fuel, food, metals and energy prices on YoY basis (see **Table 4.1**). According to the World Bank's commodity market review, slowing global demand, credit constraints and further appreciation of US dollar versus euro contributed towards the decline in international commodity prices. Detailed analysis of commodities shows that all major commodities recorded a MoM decline i.e. nickel (-64.7), lead (-61.3), zinc (-54.2), urea (-34.8) palm oil (-50.6) and crude oil (-40.8) (see **Figure 4.1**).

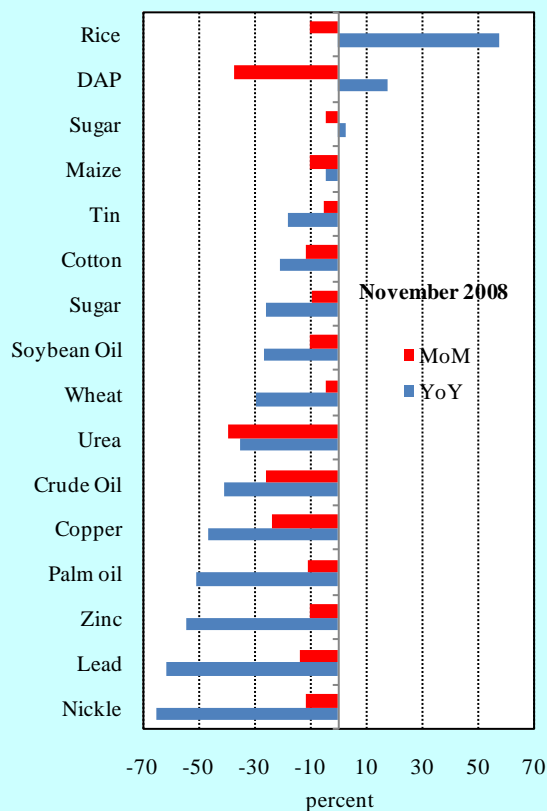
In energy group, average crude oil⁷ prices dropped by 40.8 percent (YoY) in November 2008 due to a fall in US consumption and an expected rise in non-OPEC supplies over the next year⁸. Daily average West Texas International (WTI) crude oil price fluctuated between US\$ 48.9 and US\$ 70.4 per barrel during the month under review (see **Figure 4.2**). The crude oil prices further

Table 4.1: Commodity Price Indices (November 2008)

	YoY	MoM
All Commodities	-27.0	-16.8
Non-Fuel	-19.7	-7.8
Food	-10.8	-5.5
Metals	-32.8	-11.7
Energy	-30.7	-21.3

Source: IMF

Figure 4.1: Percent Change in Price

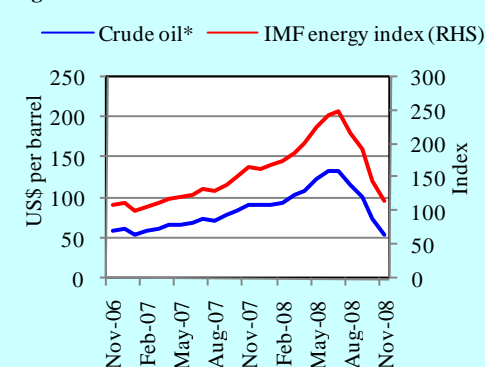


⁷ Simple average of Brent, WTI and Dubai Fateh

⁸ WB Commodity market review December 2008; and www.reuters.com (The US crude oil consumption down by 6.1 percent for since January 2008).

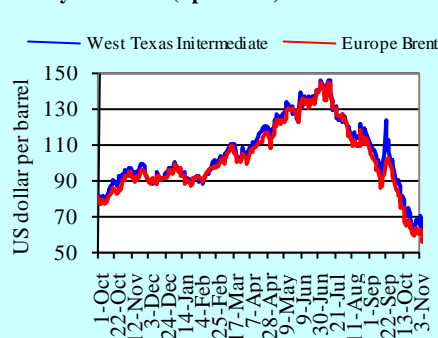
weakened and reached US\$ 41.0 per barrel on December 5, 2008 (lowest since December 2004). The weakening of crude oil prices was also reflected by IMF energy index, which declined by 30.7 percent (YoY) in November 2008 compared to an acceleration of 51.7 percent during the same month last year.

Figure 4.2: Oil Price/Index



*Simple average of Brent, WTI and Dubai Fateh
Source: IMF & World Bank

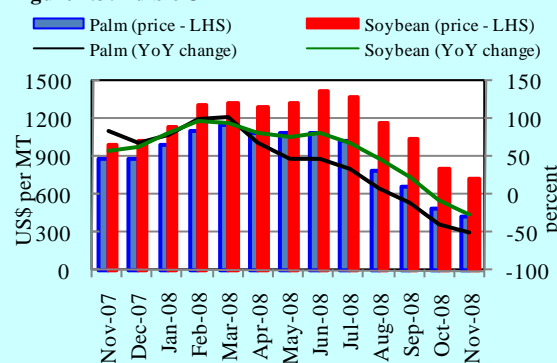
Daily Oil Prices (Spot FOB)



Source: www.eia.doe.gov

Edible oil (Palm and soybean) prices declined in November 2008 on YoY basis. Palm and soybean oil prices dropped by 50.6 and 26.3 percent respectively over the same month of last year. This downtrend in edible oil prices is mainly due to ample supplies and weak import demand by India and China⁹ - two of the world's largest consumers of edible oil (see **Figure 4.3**).

Figure 4.3: Edible Oil



Source: IMF

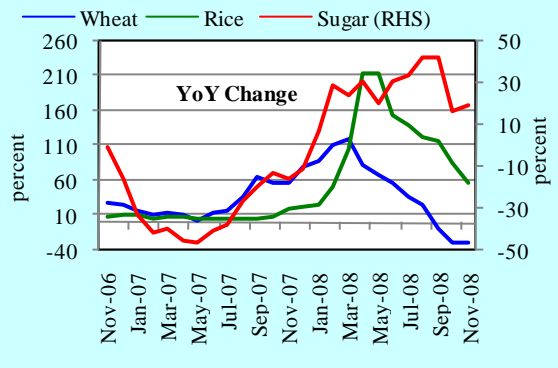
In food grains, wheat prices declined by 29.5 percent (YoY) as US dollar strengthened against euro and because of a projected increase in the global production of wheat¹⁰.

⁹ WB Commodity Markets Review (December 11, 2008)

¹⁰ www.bloomberg.com and www.reuters.com

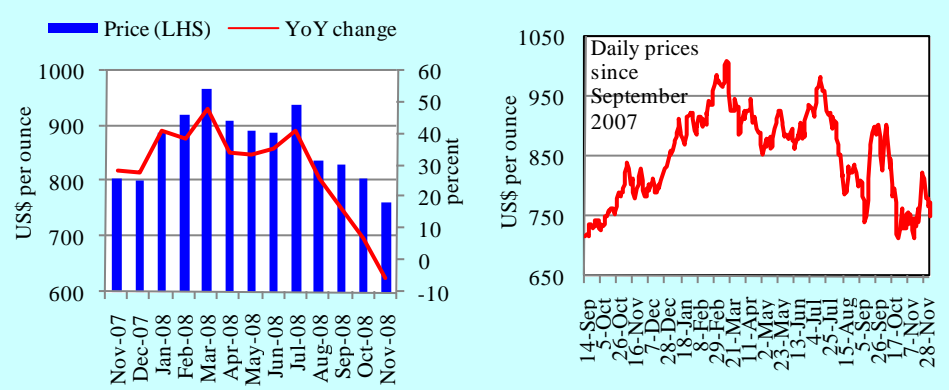
After decelerating October 2008, sugar prices witnessed growth of 19.5 percent (YoY) in November 2008 on account of news that Pakistan, Asia's third-largest user, will import as much as 500,000 metric tons in the current fiscal year to avoid a shortage. The country's production in the year that started from October 1 may fall by 1 million tons to 3.7 million tons. The country is set to become an importer after selling as much as 400,000 tons abroad in the year ended September 30, 2008 as output exceeded demand. Moreover, sugar futures rose after the reports that global demand will exceed output this year for the first time since 2006¹¹ (see **Figure 4.4**).

Figure 4.4: Wheat, Rice and Sugar Prices



Gold prices eased further in the international markets to reach US\$ 760.9 per ounce in November 2008. Gold prices fell mainly due to weaker oil prices, stronger dollar, tumbling stock market and fears over economic slowdown¹². On daily basis, gold price fluctuated between US\$ 713.5 and US\$ 822.5 per ounce during the month under review (see **Figure 4.5**).

Figure 4.5: Gold



Source: www.gold.org

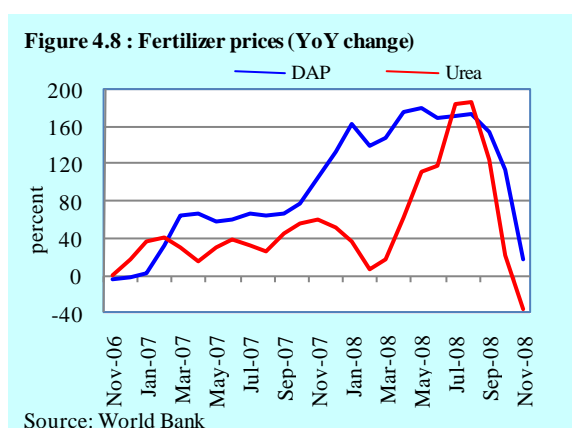
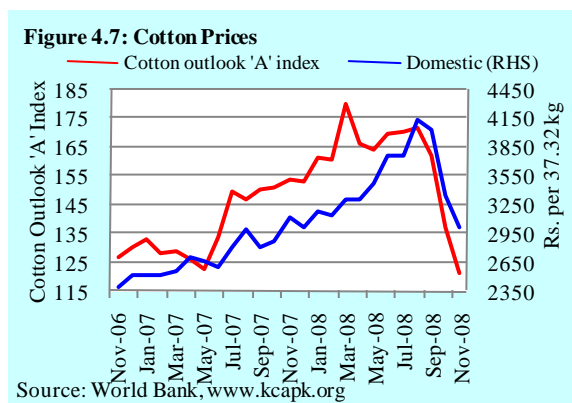
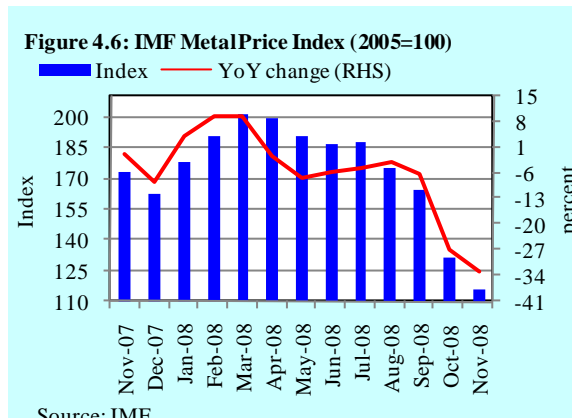
¹¹ www.bloomberg.com

¹² www.bloomberg.com

Metal prices witnessed a decline for the 8th consecutive month as reflected by the IMF metal price index that plunged by 32.8 percent on YoY basis (see **Figure 4.6**). The drop was mainly due to a decline in industrial production as demand slowed significantly in the construction sector. All major industrial metals, including nickel, copper, zinc, tin, lead and aluminum witnessed a decline in prices during the month under review due to weak demand and rising stocks.

Cotton prices plunged for the second consecutive month on YoY basis and witnessed a strong decline of 21.3 percent (YoY) in november 2008 as reflected by the World Bank Cotton Outlook 'A' Index. The decline in cotton prices was mainly on account of its weak demand from key textile producers including China, India and Pakistan (see **Figure 4.7**).

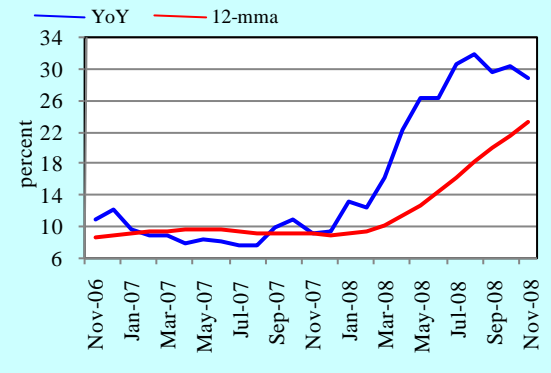
Fertilizer prices showed a sharp downtrend during November 2008. The price of urea witnessed strong negative growth of 34.8 percent (YoY) while DAP prices decelerated sharply during the month under review. This slow down of fertilizer prices in the international market can be attributed to the sharp fall in demand and rising inventories (see **Figure 4.8**).



5. Sensitive Price Indicator

Inflation measured by sensitive price indicator (SPI) witnessed slight ease during November 2008 as it reached 28.8 percent on YoY basis, compared to 30.3 percent during the previous month. This inflation is, however, still high as compared to the same month last year. The long-run trend in SPI, indicated by 12-month moving average, continued to grow stronger to reach 23.3 percent during the month under review (see **Figure 5.1**).

Figure 5.1: SPI Inflation (YoY)



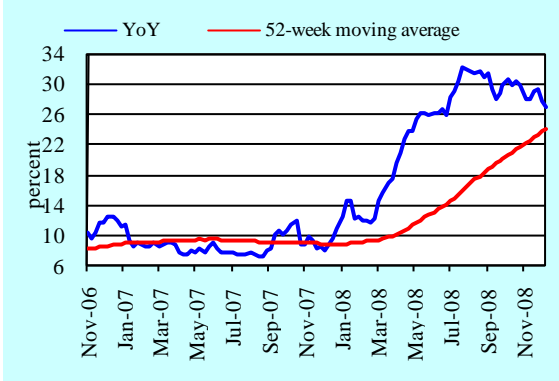
Out of 53 items included in the SPI basket, prices of five either declined or saw no change, two items registered a price change between 0 to 5 percent, five items recorded price change between 5 to 10 percent and the remaining forty one items witnessed double digit inflation (see **Table 5.1**). The major items that witnessed strong growth include pulse masoor (118.3 percent), kerosene (79.5 percent), diesel (66.9 percent), wheat (63.7 percent) and rice irri-6 (63.3 percent).

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

Percent Change	Number of items			
	Nov-07	Jun-08	Oct-08	Nov-08
0 or less	14	7	5	5
0 to 5	6	3	1	2
5 to 10	8	6	6	5
10 or above	25	37	41	41
Minimum	-43.3	-59.4	-36.6	-58.0
Maximum	59.7	134.9	124.6	118.3

On month over month (MoM) basis SPI witnessed negative growth for the first time since March 2008. This fall in SPI inflation (MoM) can be attributed to negative growth in prices of vegetable ghee (-13.8 percent), petrol (-11.9 percent), chicken (-10.6 percent), L.P.G (-10.4 percent) and diesel (-7.7

Figure 5.2: Weekly SPI Inflation



percent) (see **Table A8** in Annexure A).

Weekly SPI data showed mixed trends in YoY inflation during the month under review and fluctuated within the range of 27.9 percent to 29.4 percent. The long run trend in weekly SPI inflation, indicated by 52-week moving average, continued on its uptrend during November 2008 (see **Figure 5.2**).

Income group-wise SPI data for November 2008 showed a decline in SPI inflation (YoY) for all income groups compared to the preceding month. Like previous month, the incidence of SPI inflation (YoY) remained highest for the lowest income group. Analysis of

	Nov-07	Jun-08	Oct-08	Nov-08
Up to Rs. 3000	11.0	30.0	32.7	29.8
Rs. 3001-5000	10.9	29.2	31.4	29.4
Rs. 5000-12000	9.9	27.0	30.9	29.5
Above Rs. 12000	6.9	23.5	30.1	28.4
All income groups	9.0	26.3	30.3	28.8

the income group-wise SPI inflation further revealed that all income groups, except the highest income group, experienced higher SPI inflation than the average SPI inflation for the month under review (see **Table 5.2**).

Annexure A

	Weights	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08
I. Food Group	40.3	13.6	5.8	10.6	12.5	30.4
II. Non-Food Group	59.7	6.3	9.4	6.3	5.9	20.2
Apparel, textile, etc.	6.1	2.6	4.0	3.6	8.7	15.9
House rent	23.4	11.2	10.8	6.6	8.3	16.8
Fuel & lighting	7.3	1.9	7.5	10.5	4.8	31.9
Household furniture & equipment	3.3	6.2	5.2	6.9	5.9	15.0
Transport & com.	7.3	4.1	22.7	3.7	-3.1	28.6
Recreation & entertainment	0.8	0.2	-0.4	0.2	0.3	12.5
Education	3.5	2.6	6.6	7.2	4.3	16.3
Cleaning, laundry, etc.	5.9	5.2	2.4	4.1	8.8	20.4
Medicare	2.1	1.0	1.6	9.7	7.9	12.5
Headline	100	9.3	7.9	8.1	8.7	24.7

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	30.4	113	6	4	10	93
II. Non-Food Group	20.2	250	28	17	37	168
Apparel, textile, etc.	15.9	42	1	2	10	29
House rent	16.8	1				1
Fuel & lighting	31.9	15	1	1	3	10
Household furniture & equipment	15.0	44			6	38
Transport & com.	28.6	43	4	1	2	36
Recreation & entertainment	12.5	16	2	5	3	6
Education	16.3	24	3	2	3	16
Cleaning, laundry, etc.	20.4	36	1	2	6	27
Medicines	12.5	29	16	4	4	5
Overall	24.7	363				

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

Table A3: Top Ten Contribution to YoY CPI Inflation in November 2008					
Items	weights	YoY change		Weighted Contribution	
		Nov-07	Nov-08		
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	8.27	16.80	15.73
2	Wheat Flour	5.11	24.74	65.24	14.92
3	Milk Fresh	6.66	12.57	24.16	7.12
4	Transport Fare/Charges	2.12	1.55	53.12	5.15
5	Electricity	4.37	10.07	33.20	4.57
6	Rice	1.34	56.63	55.60	3.92
7	Natural Gas	2.05	-2.48	27.46	3.15
8	Vegetables	1.92	9.41	29.22	2.95
9	Meat	2.70	4.59	15.44	2.43
10	Readymade Food	1.68	7.91	32.93	2.40
Total		51.38			62.35
B. Ranked by Percentage Change					
1	Pulse Masoor	0.22	37.50	119.87	1.13
2	Match Box	0.13	0.00	100.00	0.34
3	Condiments	0.34	12.69	90.22	1.02
4	Wheat	0.48	27.97	66.18	1.48
5	Wheat Flour	5.11	24.74	65.24	14.92
6	Maida	0.11	26.77	64.87	0.30
7	Kerosene	0.14	0.00	63.66	0.54
8	Rice	1.34	56.63	55.60	3.92
9	Transport Fare/Charges	2.12	1.55	53.12	5.15
10	Potatoes	0.55	-34.02	53.03	1.46
		10.54			30.26
C. Ranked by Weights					
1	House Rent Index	23.43	8.27	16.80	15.73
2	Milk Fresh	6.66	12.57	24.16	7.12
3	Wheat Flour	5.11	24.74	65.24	14.92
4	Electricity	4.37	10.07	33.20	4.57
5	Bakery & Confectionary	2.98	4.41	14.48	1.40
6	Meat	2.70	4.59	15.44	2.43
7	Vegetable Ghee	2.67	46.07	13.01	1.87
8	Tution Fees	2.36	4.70	13.00	1.17
9	Transport Fare/Charges	2.12	1.55	53.12	5.15
10	Natural Gas	2.05	-2.48	27.46	3.15
		54.45			57.51
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 24.7 percent in November 2008.					

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

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Chowkelate Candy (Small Size)		Bananas, Cold Drink (Standard Size)	Milk Fresh ,Wheat Flour Bag, Sugar
	Tomatoes		Cigarettes Capstan	Refined, Corriander
	Pulse Moong (Washed)	Vegetable Ghee (Loose)	Cigarettes K-2, Pulse Mash , Radish	Seed Powd.Nationa Wheat Flour fine
	Chillies Green	Toffee (Hilal)	Jam Ahmed	Vegetable Ghee Tin
	Garlic	Apple	/Mitchelles, Rooh	Pulse Masoor ,
	Arvi	Biscuits-Packed	Afza, Fruit Juice Tetra Pack	Chicken Farm Broiler Cooking Oil (Dalda)
Apparel & Textile		Pullover Ladies Oxford/Bon.	School Uni. Kameez Shalwar Girl, Tailoring Coat-Pant	Long Cloth Av.Qlty. Shirting Av.Qlty. Ladies Spoung
	Gents Sandal Bata	Pullover (Gents) Others	Suit, Gents Shoe	Chappal Bata
House Rent Index	--	--	--	House Rent Index
Fuel & Lighting			Gas Charges 3.3719 - 6.7438 Mmb, Gas Charges Upto 3.3719 Mmbtu, Bulb Philips 100-Watts	Elect. Charges Above 1000 Unit, Elect. Charges 301 - 1000 Unit, Gas Charges 6.7438 - 10.1157 Mmb, Gas Charges 10.1157 - 13.4876 Mmb
	Elect.Charges Upto 50 Units	Tube Light Philips 40 Watts		
Household Furniture & Equipment	--	--	Carpet Plain Av. Qlty Blanket (90" X 54")	Electric Juicer For Apple, Farshi Dari 12'X9' Av.Qlty Wall Clock Quartz Av.Qlty
Transport & Communication.	Car Tax For 800CC To 1300CC, Plateform Ticket			Petrol Super, A/C Bus Fare Outside City, U.M.S. Reg
	Postal Envelope Domestic	Telephone Charges Local Call	Tel Charges Out Side City, Petrol Super	Charges Min., High Speed Diesel HSD
Recreation & Entertainment	Aerogram For Saudi Arabia	Tape Recorder Cassette Blan, V.C.P.	T.V. 20" Colored With R/Cont, Cinema A/C. Highest Class	Daily "Dawn" Dry Cell 1.5 Volt(Local)
	Weekly "Akhbar-E-Jahan", Tv.Licence Feedomestic	Panasonic/Lg/Nat Vid. Cassette Blk. Tdk/Sony	Cinema Non-A/C High Class	Daily "Jang"
Education	Com. C.D. (Tdk/Imation)	Govt. Engg. Coll. Fee 1 Year	Govt. University Fee Msc.	School Fee 2Nd-Ry Eng.Med.
	Govt. College Fee Ist. Year	Comp. With Printer & Speaker	Govt. Med. College Fee Mbbs Urdu Book Class V (T.B.Bord)	School Fee Primary Eng.Med. Paper Foolscape (27"X17")
Cleaning & Laundry			Talc Powder Vice Roay,B.Cat, Toilet Paper Roll (R.Petel)	Tissu Paper Perfumed 100 Pcs Toothbrush Sheild A/Plauque, Wrist Watch Ladies Citizen
	Toothpaste Macklines 70 Grm	Brylcreem 210 Ml. Lipstick S.Miss/Medora	Hair-Colour Begin (6 Gms), Blade Treet Ordinary 10'S	Wrist Watch Gents Citizen
Medicare	Dettol (Medium)	Entox Tab.	Cotton Bandage 2" - 4"	Doctor (MBBS) Clinic Fee
	Jouhar Joshanda	Flagyl Tab. 200 Mg.	Brufen Tabs 200-Mg.	Gripe-Water Woodward
	Cac. 1000 Tab	Sepran Tablets	Thermometer China	Galxos-D (450 Grms)

Table A5: City-wise Inflation (YoY) by Income Groups, November 2008							
		Upto Rs:3000			Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	24.6	29.6	21.2	25.2	29.7	22.1
2	Faisalabad	23.2	25.2	21.8	24.9	25.8	24.2
3	Rawalpindi	25.4	30.5	21.9	26.3	32.0	22.5
4	Multan	21.8	26.4	18.7	22.4	26.3	19.8
5	Gujranwala	24.0	27.3	21.8	25.1	27.7	23.4
6	Islamabad	23.0	27.9	19.7	23.0	29.1	18.8
7	Sargodha	27.1	33.1	23.0	27.1	32.6	23.3
8	Sialkot	23.7	29.4	19.8	25.1	30.6	21.4
9	Bahawalpur	19.8	23.2	17.5	20.8	23.4	19.0
10	Karachi	27.1	31.6	24.1	27.7	32.1	24.7
11	Hyderabad	25.4	31.0	21.6	24.6	29.2	21.5
12	Sukkur	27.8	36.6	21.8	28.7	36.8	23.2
13	Larkana	23.1	26.6	20.8	22.6	24.4	21.5
14	Peshawar	26.9	31.7	23.6	30.9	36.3	27.2
15	Bannu	32.1	41.0	26.1	32.6	43.0	25.5
16	Quetta	29.5	38.0	23.8	27.8	36.8	21.7
17	Khuzdar	33.5	42.5	27.3	33.7	41.7	28.4
		Rs 5001-12000			above Rs 12000		
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	24.0	28.9	20.7	20.7	25.6	17.4
2	Faisalabad	24.0	25.0	23.3	21.0	22.3	20.1
3	Rawalpindi	25.0	30.4	21.2	22.1	27.4	18.5
4	Multan	22.0	25.9	19.4	19.1	22.5	16.9
5	Gujranwala	23.3	25.5	21.8	20.2	22.0	18.9
6	Islamabad	23.8	30.0	19.5	20.5	26.3	16.6
7	Sargodha	26.6	31.6	23.3	23.4	27.8	20.4
8	Sialkot	24.8	30.3	21.1	23.1	29.2	19.1
9	Bahawalpur	19.8	21.9	18.3	18.3	19.6	17.4
10	Karachi	26.5	30.8	23.6	21.7	27.3	17.9
11	Hyderabad	24.9	29.9	21.5	22.8	28.3	19.1
12	Sukkur	27.9	35.3	23.0	26.3	32.9	21.9
13	Larkana	23.2	25.5	21.7	24.9	28.2	22.6
14	Peshawar	29.1	34.9	25.2	26.0	31.8	22.2
15	Bannu	31.4	42.8	23.8	30.6	40.6	23.9
16	Quetta	27.7	37.6	21.0	25.9	36.2	19.0
17	Khuzdar	30.5	40.4	23.8	26.4	35.6	20.2

Table A6 : Income Group-wise Inflation (YoY)								percent
	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08
<u>Up to Rs. 3000</u>								
General	20.2	23.2	25.3	27.2	28.5	26.4	28.1	27.3
Food	27.4	31.5	34.7	36.4	37.3	32.2	34.7	33.0
Non-food	15.1	17.1	18.6	20.6	22.0	21.9	23.0	22.9
<u>Rs. 3001-5000</u>								
General	19.9	22.6	24.8	26.9	28.0	25.9	27.5	27.4
Food	27.6	31.4	34.8	36.6	37.2	32.0	34.2	32.4
Non-food	14.5	16.3	17.8	19.8	21.3	21.4	22.4	23.7
<u>Rs. 5000-12000</u>								
General	18.1	20.4	22.6	25.3	26.4	24.7	26.1	26.1
Food	26.3	29.5	33.0	34.8	35.2	30.6	32.5	31.2
Non-food	12.2	13.7	14.9	18.2	19.8	20.2	21.0	22.2
<u>Above Rs. 12000</u>								
General	15.7	17.4	19.8	22.8	23.7	22.6	23.3	22.5
Food	23.6	26.1	29.8	31.4	31.4	28.1	29.5	28.5
Non-food	9.7	10.8	12.4	16.5	17.8	18.3	18.4	17.7
<u>All income groups</u>								
General	17.2	19.3	21.5	24.3	25.3	23.9	25.0	24.7
Food	25.5	28.5	32.0	33.8	34.1	29.9	31.7	30.4
Non-food	11.2	12.5	13.8	17.3	18.7	19.2	19.7	20.2

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

Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Price Nov-08	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	25.1	63.7	-1.3
2	Wheat flour average quality.	Kg.	27.1	59.6	-2.2
3	Rice basmati broken	Kg.	49.0	48.0	-2.3
4	Rice irri-6	Kg.	39.4	63.3	-6.5
5	Masur pulse washed	Kg.	129.2	118.3	2.9
6	Moong pulse washed	Kg.	50.1	-1.4	-3.9
7	Mash pulse washed	Kg.	74.9	6.3	0.5
8	Gram pulse washed	Kg.	58.8	46.3	-5.0
9	Beef	Kg.	142.2	17.1	1.1
10	Mutton	Kg.	256.4	9.9	0.6
11	Egg Hen (farm)	Doz.	67.0	24.9	9.7
12	Bread plain	Each	23.9	37.1	1.5
13	Sugar	Kg.	35.9	24.0	-4.0
14	Gur	Kg.	39.5	15.4	-0.7
15	Milk fresh	Litr	36.0	22.5	0.7
16	Milk powdered Nido	400g	170.0	17.0	0.0
17	Curd	Kg.	43.0	24.6	0.8
18	Veg.ghee tin	2.5k	355.0	27.5	-7.8
19	Veg.ghee loose	Kg.	102.3	3.4	-13.8
20	Mustard oil	Kg.	145.3	29.9	-2.7
21	Cooking oil	2.5L	375.0	34.7	-4.4
22	Potatoes	Kg.	27.6	58.3	3.5
23	Onions	Kg.	23.9	21.5	0.7
24	Tomatoes	Kg.	38.7	23.8	37.3
25	Bananas	Doz.	31.7	10.8	-12.2
26	Salt powdered	Kg.	6.0	19.0	2.7
27	Red chillies (powder)	Kg.	143.8	7.9	-3.2
28	Garlic	Kg.	44.2	-14.4	-3.9
29	Tea packet	250g	104.4	60.6	9.3
30	Tea (prepared)	Cup	8.3	26.4	0.4

continued

Table A8 (continued)

Table A8: SPI Item-wise Price Movements					
S.No	Items	Unit	Price Nov-08	Percentage change	
				YoY	Monthly
31	Cooked beef plate	Each	40.2	25.8	2.0
32	Cooked dal plate	Each	25.7	33.8	2.2
33	Cigarettes K-2	10's	8.9	7.1	0.1
34	Coarse latha	Mtr.	45.1	16.6	0.0
35	Lawn (avg.+s.qlty)	Mtr.	89.9	11.1	0.0
36	Voil printed	Mtr.	45.5	16.0	0.0
37	Shirting	Mtr.	78.9	11.5	0.8
38	Sandel gents bata	Pair	499.0	0.0	0.0
39	Sandel ladies bata	Pair	379.0	26.8	0.0
40	Chappal spng. Bata	Pair	129.0	30.3	0.0
41	Kerosene	Litr	70.8	79.5	-5.1
42	Firewood	40kg	264.2	25.0	3.0
43	Elec. Bulb 60-wats	Each	13.8	9.0	1.9
44	Match box	Each	1.0	16.3	0.0
45	Washing soap	Cake	12.7	40.5	-0.4
46	Bath soap lifebuoy	Cake	22.0	29.4	1.6
47	Chicken (farm)	Kg.	94.1	18.8	-10.6
48	Gas chrg. All clb. Comb	D.mmbt	273.7	21.8	0.0
49	LPG.(cylinder 11kg.)	Each	844.0	23.8	-10.4
50	Elec.chrg.all slabs com	Bd. Unit	6.2	20.3	11.2
51	Petrol	Litr	72.3	34.3	-11.9
52	Diesel	Litr	63.2	66.9	-7.7
53	Telephone local	Call	2.4	2.6	2.6
Maximum				118.3	37.3
Median				23.8	0.0
Minimum				-14.4	-13.8

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

Item and Specification	Weights	Index	
		Nov-07	Nov-08
GENERAL	100.0010	153.87	191.85
FOOD & BEVERAGES.	40.3416	167.22	218.12
1 WHEAT	0.4830	175.32	291.35
2 WHEAT FLOUR	5.1122	169.84	280.65
3 MAIDA	0.1059	164.49	271.20
4 BESAN	0.1320	147.12	214.09
5 RICE	1.3369	200.41	311.84
6 PULSE MASOOR	0.2214	161.34	354.74
7 PULSE MOONG	0.2230	171.30	166.95
8 PULSE MASH	0.2017	155.58	167.03
9 PULSE GRAM	0.4272	140.29	206.72
10 GRAM WHOLE	0.1491	135.35	183.17
11 MUSTARD OIL	0.0456	203.73	260.96
12 COOKING OIL	0.6858	178.64	235.55
13 VEGETABLE GHEE	2.6672	204.32	230.90
14 SUGAR	1.9467	106.54	131.45
15 GUR	0.0735	132.52	147.35
16 TEA	1.2559	109.03	163.19
17 MILK FRESH	6.6615	168.11	208.72
18 MILK POWDER	0.1105	171.13	204.71
19 MILK PRODUCTS	0.5607	154.16	195.49
20 HONEY	0.0358	130.45	171.23
21 CEREALS	0.0878	149.54	223.69
22 JAM,TOMATO,PICKLES & VINEGAR	0.2472	136.69	161.65
23 BEVERAGES	0.7286	142.70	163.33
24 CONDIMENTS	0.3392	126.98	241.54
25 SPICES	0.6008	136.88	209.02
26 DRY FRUIT	0.2760	227.54	294.78
27 BAKERY & CONFECTIONARY	2.9837	122.78	140.56
28 CIGARETTES	0.9527	157.93	174.71
29 BETEL LEAVES & NUTS	0.1851	145.16	166.83
30 READYMADE FOOD	1.6833	164.31	218.42
31 SWEETMEAT & NIMCO	0.3846	168.82	220.75
32 FISH	0.2703	150.02	174.21
33 MEAT	2.6981	221.74	255.97
34 CHICKEN FARM	0.9158	151.94	176.87
35 EGGS	0.4119	202.11	239.21
36 POTATOES	0.5542	188.57	288.57
37 ONIONS	0.5973	197.14	218.27
38 TOMATOES	0.4569	203.41	181.41
39 VEGETABLES	1.9165	200.22	258.72
40 FRESH FRUITS	1.6160	159.39	180.02
APPAREL, TEXTILE & FOOTWEAR.	6.0977	131.84	152.74
41 COTTON CLOTH	1.6197	135.52	155.34
42 SILK,LINEN,WOOLEN/CLOTH	0.5766	132.76	150.90
43 TAILORING CHARGES	0.8636	135.04	159.03
44 HOSIERY	0.1528	140.58	161.91
45 READYMADE GARMENTS	1.2038	126.08	140.01
46 WOOLEN READYMADE GARMENTS	0.1485	141.01	169.56
47 FOOTWEAR	1.5327	128.58	154.59
HOUSE RENT.	23.4298	151.73	177.22
48 HOUSE RENT INDEX (Combined)	23.4298	151.73	177.22

(continued)

(continued)

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

Item and Specification	Weights	Index	
		Nov-07	Nov-08
FUEL AND LIGHTING.	7.2912	154.36	203.62
49 KEROSENE	0.1366	235.87	386.02
50 FIREWOOD	0.4778	229.43	296.00
51 MATCH BOX	0.1301	100.00	200.00
52 BULB & TUBE	0.1311	93.52	99.31
53 ELECTRICITY	4.3698	119.53	159.21
54 NATURAL GAS	2.0458	213.14	271.66
H.HOLD.FURNITURE & EQUIPMENT ETC.	3.2862	138.31	159.08
55 UTENSILS	0.3690	123.55	145.07
56 PLASTIC PRODUCTS	0.1055	144.83	185.78
57 SUITCASE	0.0470	128.51	148.09
58 HOUSE HOLD EQUIPMENTS	0.0953	123.29	145.86
59 FURNITURE (Ready Made)	0.3054	139.36	170.33
60 FURNISHING	0.6362	133.43	151.51
61 ELECT.IRON FANS & WASHING MACHINE	0.1889	126.79	156.91
62 SEWING MACHINE,CLOCK AND NEEDLES	0.1270	119.21	136.22
63 REFRIGERATOR & AIRCONDITIONER	0.1756	101.03	126.82
64 MARRIAGE HALL	0.0445	153.03	180.22
65 HOUSE HOLD SERVANT	1.1918	155.02	170.44
TRANSPORT & COMMUNICATION.	7.3222	146.85	188.88
66 PETROL	1.7253	175.59	189.71
67 DIESEL	0.2070	238.74	362.66
68 CNG. FILLING CHARGES	0.1649	142.87	189.08
69 SERVICE CHARGES	0.3835	134.42	160.83
70 VEHICLES	0.2596	101.27	125.00
71 TYRE & TUBE	0.2831	125.47	154.47
72 TRANSPORT FARE/CHARGES	2.1236	173.38	265.48
73 TRAIN FARE	0.1514	170.74	253.24
74 AIR FARE	0.0983	253.00	342.93
75 COMMUNICATION	1.9255	86.77	91.30
RECREATION & ENTERTAINMENT.	0.8259	106.21	119.47
76 RECREATION	0.3399	101.91	128.36
77 ENTERTAINMENT	0.4860	109.22	113.25
EDUCATION.	3.4548	139.17	161.90
78 TUTION FEES	2.3629	145.17	164.04
79 STATIONERY	0.3500	130.11	162.94
80 TEXT BOOKS	0.6894	127.62	160.07
81 COMPUTER & ALLIED PRODUCTS	0.0525	81.52	82.86
CLEANING LAUNDRY & PER.APPEARANCE.	5.8788	134.36	161.71
82 WASHING SOAP & DETERGENT	1.5535	121.88	156.42
83 TOILET SOAP	0.7436	144.11	186.50
84 TOOTH PASTE	0.4036	108.23	112.34
85 SHAVING ARTICLES	0.3480	117.18	144.17
86 COSMETICS	1.4272	127.38	143.02
87 WATCHES	0.0552	125.18	137.86
88 JEWELLERY	0.3936	230.74	291.57
89 LAUNDRY CHARGES	0.2207	148.35	175.94
90 HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	131.74	147.45
MEDICARE.	2.0728	129.81	146.10
91 DRUGS & MEDICARES	1.0752	107.19	113.31
92 DOCTOR'S FEE	0.9976	154.20	181.45

Figure A1: CPI Non-food Inflation

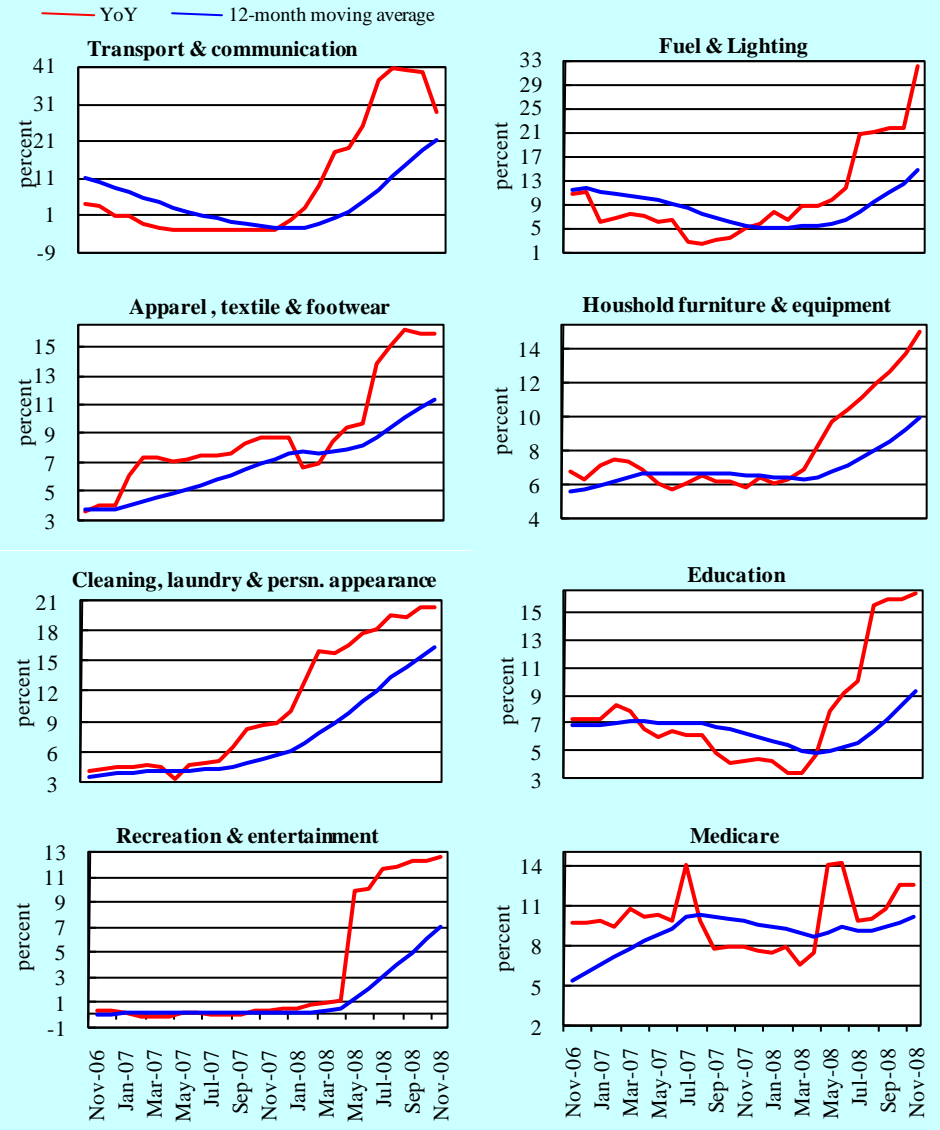


Figure A2: Frequency Distribution of Price Changes of CPI Items, November 2008

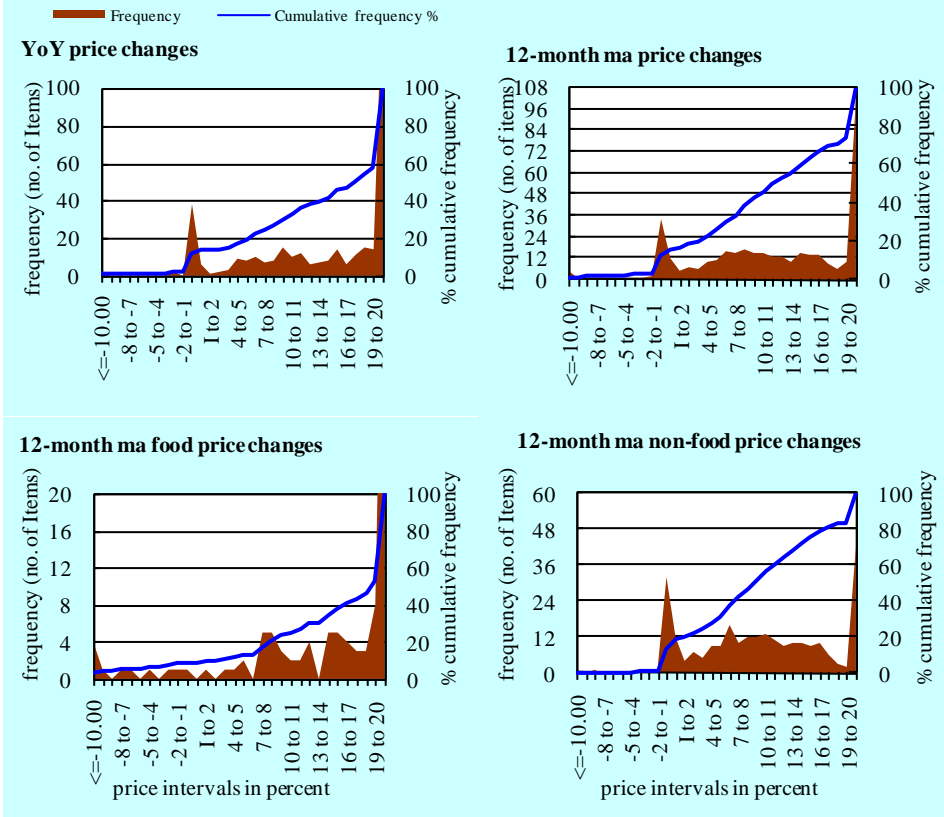
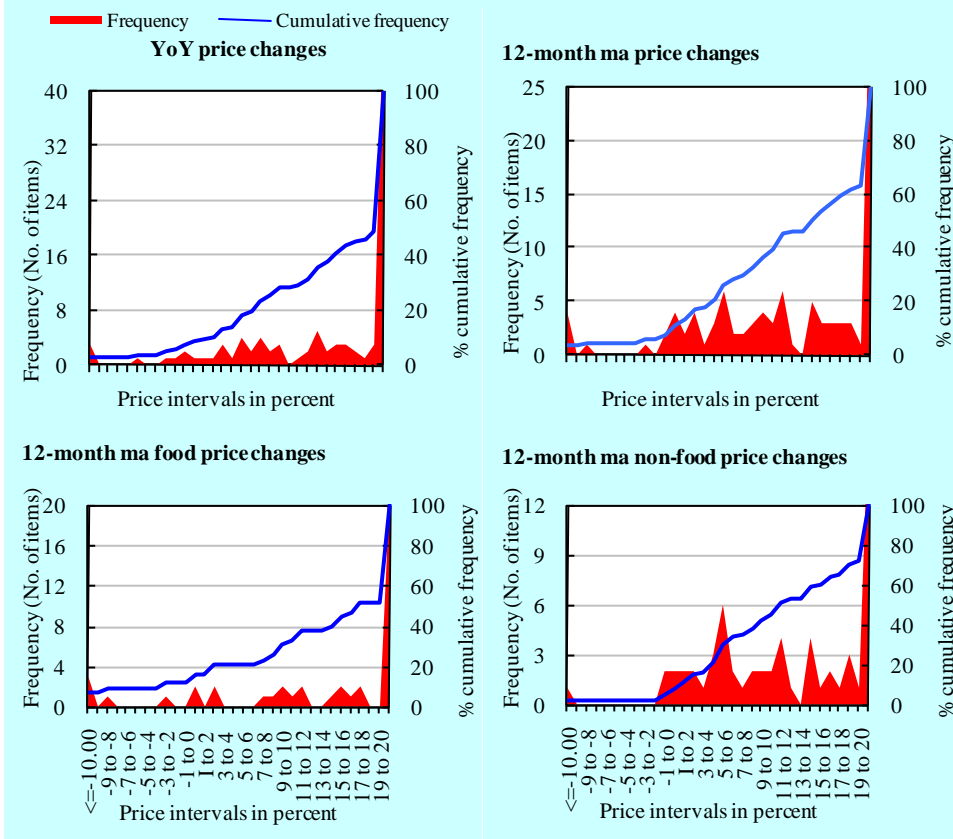


Figure A3: Frequency Distribution of Price Changes of WPI Items, November 2008



Annexure B

Technical Notes

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

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

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

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

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

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

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

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

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

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

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

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

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

- a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.
- b) 20% trimmed-mean inflation; it is computed through the following steps:
 - i. All CPI items are arranged in ascending order according to YoY/12-month moving average/monthly/period average changes in their price indices in a given month.
 - ii. 20 percent of the items showing extreme changes are excluded with 10 percent of the items at the top of the list (corresponding to cumulative weight of 90% or more) and 10 percent of the items at the bottom of the list (corresponding to cumulative weight of 10 percent or less).
 - iii. The weighted mean of the changes in price indices of the rest of the items is core inflation.

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

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

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

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

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

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

$$\alpha_{it-12} = \frac{I_{it-12}}{I_{t-12}}; \text{ i.e. ratio of item's index to overall index in}$$

the reference month

w_i : Weights of i^{th} item

π_{it} : Inflation of i^{th} item

π_t : Overall inflation