

Inflation Monitor

August 2009



State Bank of Pakistan

Economic Analysis Department

ISSN 1992-8327 (print)

ISSN 1992-8335 (online)

The analysis in this document is based on data provided by
Federal Bureau of Statistics, Pakistan.

http://www.sbp.org.pk/publications/Inflation_Monitor

© 2009 State Bank of Pakistan

Contents

1.	Overview	1
2.	Consumer Price Index	4
	2.1 Food Inflation	5
	2.2 Non-food Inflation	8
	2.3 City-wise Inflation	9
	2.4 Income Group-wise Inflation	10
	2.5 Services and Non-services Inflation	11
3.	Wholesale Price Index	12
4.	Sensitive Price Indicator	16
5.	Global Commodity Prices	18

Annexure A:	25
--------------------	-----------

Table A1 :	CPI Inflation (YoY) by Groups
Table A2 :	Distribution of Price Changes of CPI Basket, August 2009 (YoY)
Table A3 :	Top Ten Contributors to YoY CPI Inflation in August 2009
Table A4 :	Distribution of YoY Price Changes - Selected CPI Items August 2009
Table A5 :	City-wise CPI Inflation (YoY) by Income Groups August 2009
Table A6 :	Income Group-wise CPI Inflation
Table A7 :	Distribution of Wholesale Price Changes (YoY), August 2009
Table A8 :	SPI Item-wise Price Movements for the month of August 2009
Table A9 :	Consumer Price Index Numbers by Major Groups and Selected Commodities for August 2009
Table A10:	Wholesale Price Index Numbers by Major Groups and Selected Commodities for August 2009
Table A11:	Price Indices-Base 2000-01=100

Figure A1: CPI Non-food Inflation

Figure A2: Frequency Distribution of Price Changes of CPI Items August 2009

Figure A3: Frequency Distribution of Price Changes of WPI Items August 2009

Annexure B: Technical Notes	40
------------------------------------	-----------

Team

Dr. Mian Farooq Haq	mian.farooq@sbp.org.pk
Mr. Saghir Pervaiz Ghauri	saghir.pervaiz@sbp.org.pk
Mr. Muhammad Usman Abbasi	muhammad.usman3@sbp.org.pk
Mr. Waseem Fazal Ur Rehman	waseem.fazal@sbp.org.pk
Mr. Zahid Hussain	zahid.hussain@sbp.org.pk

Editorial Assistance

Mr. Umar Siddique	umar.siddique@sbp.org.pk
-------------------	--

Overview

Inflationary pressures in the domestic economy continued to ease. Headline CPI inflation (YoY) was at 10.7 percent during August 2009; lower than 11.2 percent in the previous month and 25.3 percent in the same month last year. Like overall CPI inflation, both food and non-food groups of CPI also registered lower inflation (YoY) compared to the same month last year.

Despite a decline on YoY basis, CPI inflation (MoM) increased during August 2009, and was recorded at 1.7 percent compared to 1.5 percent in July 2009. CPI non-food group showed increase in MoM inflation; whereas food group showed a decline of 0.5 percentage points during the month under review.

Table 1.1: Inflation (YoY)

	CPI			Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed		percent
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
Dec-08	23.3	27.9	19.8	18.8	21.7	17.6	25.7
Jan-09	20.5	21.6	19.7	18.9	19.6	15.7	21.3
Feb-09	21.1	22.9	19.6	18.9	20.8	15.0	23.9
Mar-09	19.1	19.7	18.5	18.5	19.3	11.1	19.8
Apr-09	17.2	17.0	17.3	17.7	17.6	8.3	15.0
May-09	14.4	12.1	16.3	16.6	16.7	4.7	11.0
Jun-09	13.1	10.5	15.4	15.9	15.5	4.1	10.8
Jul-09	11.2	10.7	11.6	14.0	13.9	0.5	9.4
Aug-09	10.7	10.6	10.8	12.6	13.1	0.3	7.8

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

Both measures of core inflation, i.e., non-food non-energy (NFNE) and 20% trimmed mean declined during August 2009 compared to the same month last year and the previous month. NFNE inflation registered at 12.6 percent YoY during August 2009 compared to 16.4 percent in August 2008 and 14.0 percent in July 2009. Similarly 20% trimmed mean inflation (YoY) witnessed decline during the month under review and was recorded at 13.1 percent compared to 21.0 percent in August 2008 and 13.9 percent in the previous month (see **Table 1.1**).

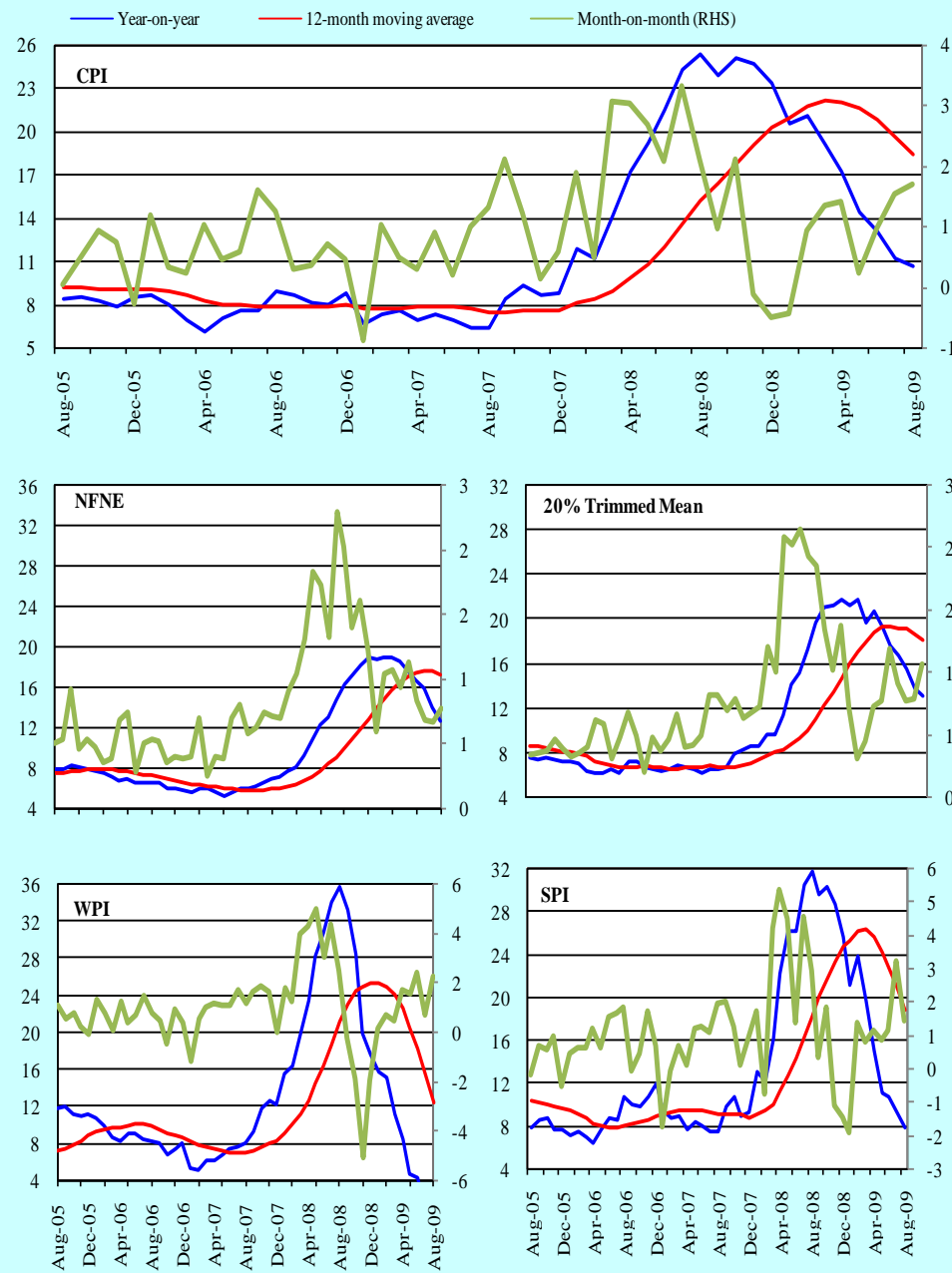
Despite showing some ease in August 2009 relative to July 2009, annual CPI inflation measured by 12-month moving average remained higher at 18.3 percent compared to 15.1 percent in August 2008. The non-food group of CPI also

followed a similar trend; however the food group registered lower growth compared to both August 2008 and July 2009 (see **Table 1.2**).

Wholesale Price Index (WPI) inflation (YoY) declined to 0.3 percent during August 2009 compared to 35.7 percent in the same month last year and 0.5 percent during the preceding month. Both food and non-food groups of WPI contributed in this downtrend, though the contribution of non-food group was more significant. Inflation (YoY) measured by sensitive price indicator (SPI) also showed deceleration and reached 7.8 percent compared to 31.8 percent during August 2008 and 9.4 percent in July 2009 (see **Figure 1.1**).

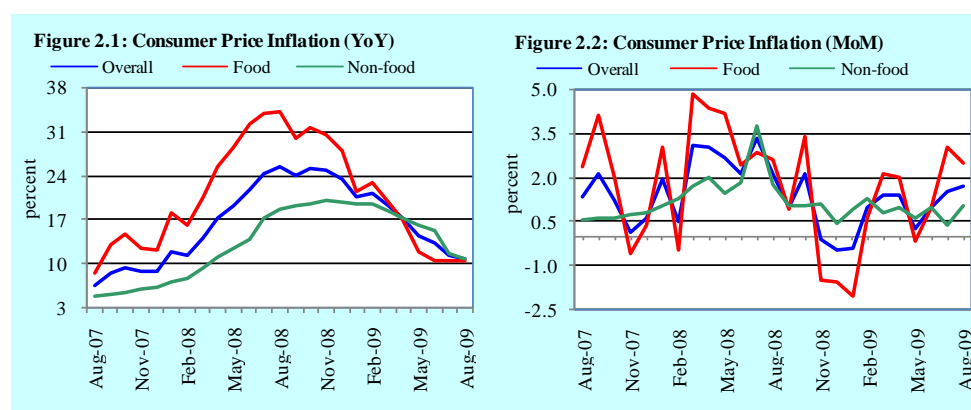
Table 1.2: Different Dimensions of Inflation (percent)					
	Aug-07	Aug-08	Jul-09	Aug-09	5-year average#
	Year-on-year (Aug over Aug)				
Overall CPI	6.5	25.3	11.2	10.7	11.7
Food group	8.6	34.1	10.7	10.6	15.2
Non-food group	4.9	18.7	11.6	10.8	9.1
WPI	8.0	35.7	0.5	0.3	14.3
Food group	11.5	33.5	8.7	8.3	14.7
Non-food group	5.6	37.4	-5.4	-5.6	14.1
SPI	7.6	31.8	9.4	7.8	14.2
Core Inflation					
NFNE*	6.0	16.4	14.0	12.6	8.6
Trimmed	6.7	21.0	13.9	13.1	10.1
	Period average (Jul over Aug)				
Overall CPI	6.4	24.8	11.2	10.9	11.5
Food group	8.5	34.0	10.7	10.6	15.0
Non-food group	4.9	18.0	11.6	11.2	9.0
WPI	7.8	34.9	0.5	0.4	14.1
Food group	11.4	33.0	8.7	8.5	14.5
Non-food group	5.3	36.3	-5.4	-5.5	13.8
SPI	7.5	31.2	9.4	8.6	13.9
Core Inflation					
NFNE*	6.0	15.5	14.0	13.3	8.4
Trimmed	6.6	20.3	13.9	13.5	9.9
	12-month moving average				
Overall CPI	7.5	15.1	19.6	18.3	9.1
Food group	10.1	21.9	21.7	19.8	11.8
Non-food group	5.6	10.1	17.9	17.2	7.2
WPI	6.9	21.0	15.3	12.3	10.7
Food group	9.7	22.6	21.2	19.0	11.5
Non-food group	4.9	19.8	10.9	7.3	10.1
SPI	9.0	18.3	20.8	18.8	10.7
Core Inflation					
NFNE*	5.8	10.0	17.5	17.1	7.0
Trimmed	6.8	12.4	18.8	18.2	7.9
	Monthly				
Overall CPI	1.3	2.1	1.5	1.7	1.1
Food group	2.4	2.6	3.0	2.5	1.3
Non-food group	0.5	1.8	0.3	1.0	0.8
WPI	1.2	2.5	0.7	2.2	0.9
Food group	2.0	2.7	2.0	2.3	1.2
Non-food group	0.6	2.3	-0.4	2.1	0.6
SPI	1.9	2.9	3.2	1.4	1.5
Core Inflation					
NFNE*	0.6	2.0	0.7	0.8	0.8
Trimmed	0.7	1.3	0.8	1.1	0.7
* NFNE is Non-food non-energy inflation					
# 5-year average for the month of August in the previous years					

Figure 1.1: Movements in Price Indices (percent change)



2. Consumer Price Index

During August 2009, CPI inflation continued to ease on year-on-year basis although it still remained in double digits. CPI inflation (YoY) was 10.7 percent in August 2009 compared to 25.3 percent during August 2008 and 11.2 percent during the previous month.

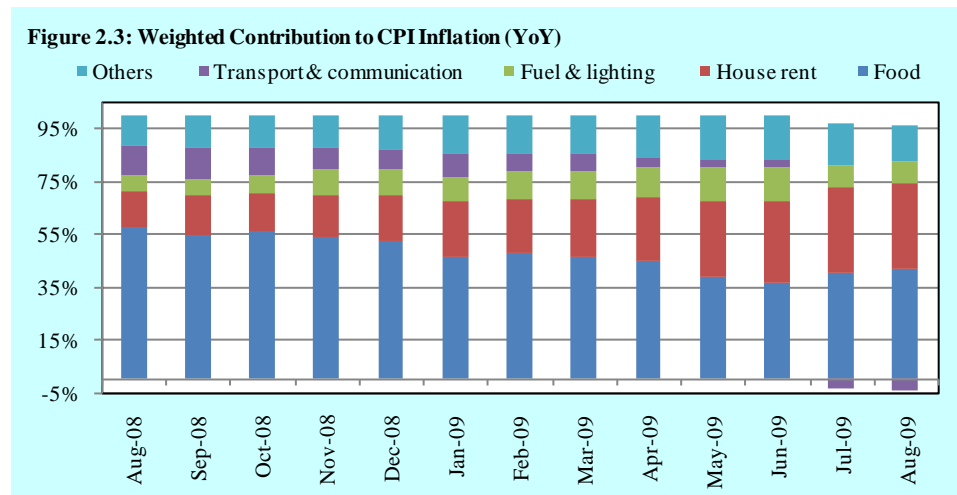


The decline in CPI inflation (YoY) was contributed by both food and non-food groups, though the decline in food inflation was more pronounced during August 2009 compared to the corresponding month last year. CPI food group registered YoY inflation of 10.6 percent during the month under review compared to 34.1 percent in August 2008. Non-food inflation (YoY) also declined during the review month and reached 10.8 percent compared to 18.7 percent in August 2008.

On MoM basis CPI inflation showed acceleration in August 2009 rising to 1.7 percent compared to 1.5 percent during July 2009. This increase in CPI inflation (MoM) was mainly due to an increase in non-food inflation (MoM). On the other hand, food inflation declined on MoM basis during August 2009 compared to the previous month (see **Figure 2.1 & 2.2**).

In terms of weighted contribution to overall CPI inflation, the contribution of food group dropped to 45.5 percent during August 2009 compared to 57.8 percent in the same month last year. However this contribution was slightly higher when compared to the previous month. Weighted contribution of non-food group remained higher compared to August 2008, though it remained lower than the previous month. Within the non-food group, the weighted contribution of its various components shows that house rent index recorded a significant increase of 21.8 percentage points during August 2009 compared

with the same month last year (see **Figure 2.3**). Transport and communication sub-group contributed negatively to overall CPI inflation.

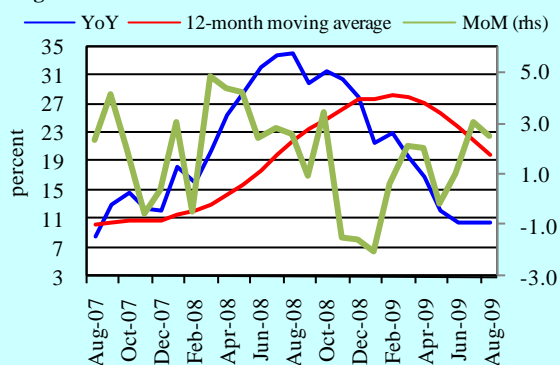


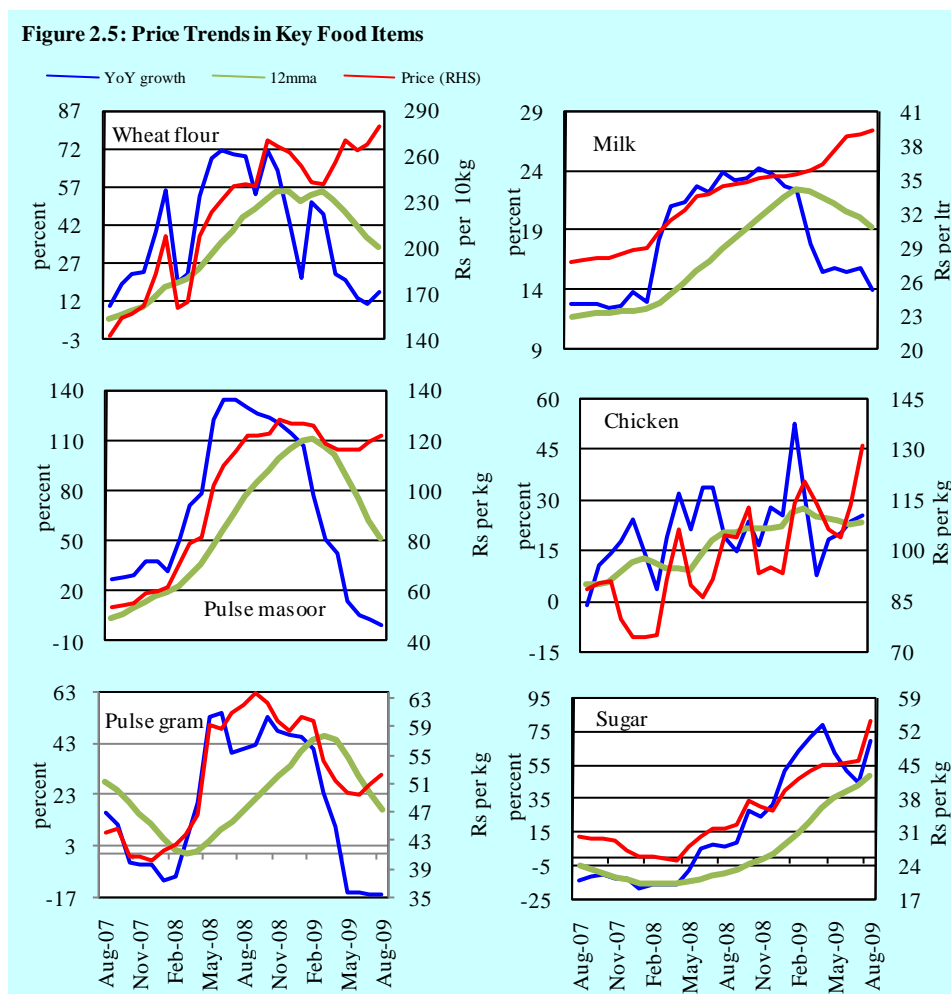
2.1 Food Inflation

Food inflation (YoY) declined to 10.6 percent during August 2009 compared to 34.1 percent in the same month last year and 10.7 percent in the previous month (see **Figure 2.4**).

In terms of weighted contribution, eight out of top ten commodities were from CPI food group during August 2009, i.e., wheat flour, fresh milk, sugar, vegetables, meat, fresh fruits, readymade food and chicken. These eight food commodities accounted for a total weighted contribution of 47.8 percent with 22.5 percent weight in the overall CPI inflation (see **Table A3** in the annexure). Within food group, only five items, i.e., wheat flour, fresh milk, meat, sugar, and vegetables, having a combined weight of 45.3 percent in food group, contributed 87.6 percent to YoY food inflation.

Figure 2.4: CPI Food Inflation





Price movements of the 113 food commodities reported in August 2009 showed that 19 commodities registered either price decrease or no price change, including different types of rice, chilies, tomatoes, ghee, pulse gram, and pulse moong. On the other hand, 19 commodities exhibited price change (YoY) between 0 to 10 percent, 73 commodities showed price change (YoY) between 10 to 70 percent and two food items, i.e., coffee and gur witnessed 100 percent or more price change (YoY) during the month under review (see **Figure 2.5** and **Table A2** in **Annexure A**).

On month-on-month (MoM) basis, CPI food inflation registered at 2.5 percent during the month under review, compared to 3.0 percent during July 2009 and 2.6 percent during August 2008. Detailed item-wise analysis of CPI food basket on MoM basis showed that prices of 17 items including tomatoes, onion, potatoes

declined, whereas prices of 16 items including garlic, ginger, and sugar showed double digit price change during August 2009.

Within food group, further disaggregation (of 40 composite food items in the CPI basket) on the basis of perishable¹ and non-perishable² commodities shows that inflation (YoY) in the perishable group witnessed decline and was recorded at 17.7 percent during August 2009 compared to 26.6 percent in July 2009 and 25.2 percent during the same month last year. Similarly, MoM inflation in perishable commodities also declined to 1.9 percent during August 2009 compared to 14.7 percent during the previous month and 9.7 percent during August 2008. During August 2009, inflation (YoY) in non-perishable group recorded slight increase (9.6 percent) compared to the previous month (8.6 percent), though it still remained lower compared to the same month last year (35.4 percent). On MoM basis inflation in non-perishable group reached 2.6 percent during August 2009 compared to 1.6 percent in August 2008 and 1.5 percent during July 2009 (see **Figure 2.6 & 2.7**).

Figure 2.6: Non-perishable & perishable food items Inflation (YoY)

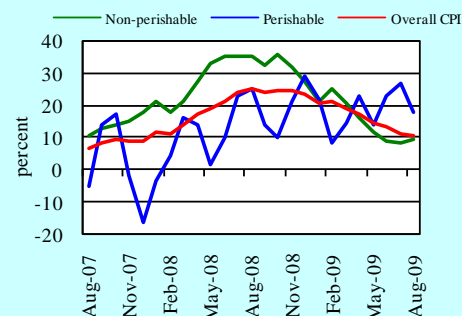
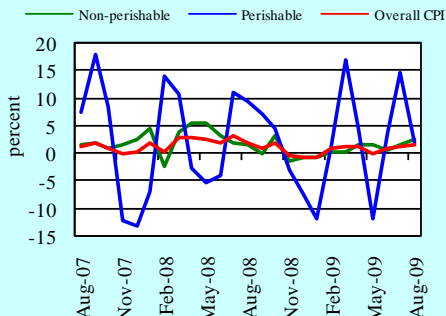


Figure 2.7: Non-perishable & perishable food items Inflation (MoM)

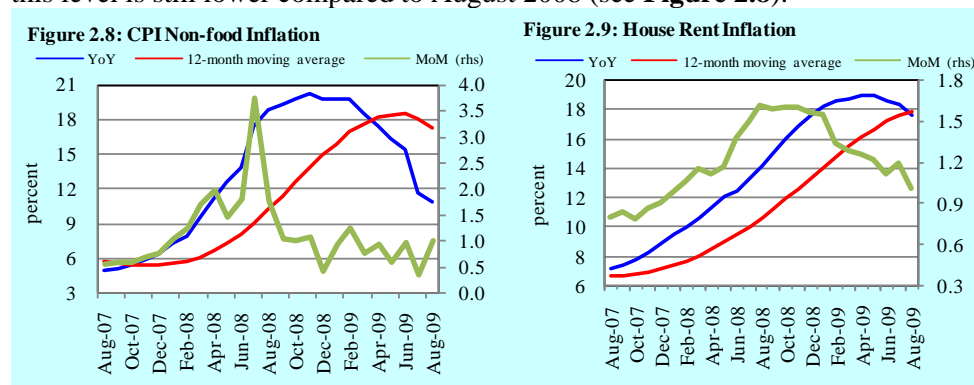


¹ Only five of these composite items, potatoes, onions, tomatoes, vegetables and fresh fruits, are included in perishable group with a total weight of 5.14 percent in overall CPI basket.

² The remaining 35 composite items have a weight of 35.0 percent, in the non-perishable group.

2.2 Non-food Inflation

In line with trends with both, the overall CPI and CPI food group inflation, CPI non-food group inflation (YoY) also declined during August 2009 and was recorded at 10.8 percent compared to 18.7 percent in August 2008 and 11.6 percent in the preceding month. During August 2009, inflation (YoY) in all sub-groups of non-food group showed a decline compared to the previous month (see **Figure A1** in Annexure). In comparison to August 2008 inflation all sub-groups, except *house rent index*, showed deceleration during August 2009. CPI non-food inflation on MoM basis increased during the month under review and was recorded at 1.0 percent compared with 0.3 percent during July 2009. However, this level is still lower compared to August 2008 (see **Figure 2.8**).



House rent index (HRI) registered 17.6 percent inflation (YoY) during August 2009 compared to 14.2 percent in August 2008 and 18.3 percent in the previous month. On MoM basis, HRI registered lower growth (1.0 percent) during August 2009 compared to the previous month (1.2 percent) as well as same month last year (1.6 percent) (see **Figure 2.9**).

Of the 250 non-food commodities included in the CPI basket, 73 commodities (92 commodities in July 2009) witnessed double digit price change (YoY) including text books, gold and electronic goods. Seventy five commodities (70 commodities in July 2009) showed moderate price increase in the range of 5 to 10 percent whereas all other commodities witnessed less than 5 percent price change (YoY), during August 2009 (see **Table A2 & A4** in the Annexure).

MoM price changes in the items included in the non-food group reveals that prices of 9 items (23 items in July 2009) recorded a decline, 137 commodities (130 items in July 2009) exhibited no change in their prices, 34 items (48 items in July 2009) recorded price change from 0 to 0.5 percent, prices of 40 items (31 items in July 2009) ranged between 0.5 to 1.0 percent, and remaining 30 items (18 items during July 2009) showed more than 1 percent change in prices.

2.3 City-wise Inflation

On YoY basis, all major cities registered a decline in inflation during August 2009 compared to both the previous month and the same month last year. Similar to the previous month, inflation (YoY) in all major cities³ was lower than the average inflation during the month under review. However, on MoM basis, only one major city (Peshawar) registered higher than average CPI inflation during August 2009 (see Table 2.1).

	Aug-08		Jul-09		Aug-09	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	2.1	25.3	1.5	11.2	1.7	10.7
Islamabad	1.7	21.3	1.0	10.1	1.2	9.6
Lahore	2.3	21.9	1.6	11.0	1.6	10.3
Karachi	2.7	24.8	1.5	10.1	1.5	8.9
Quetta	2.3	28.6	1.0	10.7	1.1	9.5
Peshawar	2.5	27.0	1.5	10.9	2.2	10.5

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

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Okara	13.7	13.1	14.2	Peshawar	10.5	9.9	11.1
Sargodha	13.5	14.5	12.6	Lahore	10.3	11.1	9.6
Vehari	13.0	13.6	12.5	Bahawalpur	9.6	9.9	9.4
Mianwali	13.0	15.6	10.9	Islamabad	9.6	11.9	7.7
Faisalabad	12.8	14.8	11.0	Quetta	9.5	7.6	11.2
D.G. Khan	12.7	14.0	11.7	Larkana	9.3	7.2	11.1
Attock	12.3	14.5	10.6	Khuzdar	9.2	7.8	10.4
Bahawalnagar	12.3	13.6	11.3	D.I.Khan	9.2	8.0	10.2
Jhang	12.2	13.5	11.1	Sukkur	9.1	5.0	12.6
Rawalpindi	12.1	14.5	10.2	Karachi	8.9	7.7	9.9
Shahdarpur	12.0	10.7	13.1	Loralai	8.8	6.5	10.6
Nawabshah	12.0	11.6	12.3	Bannu	8.1	6.2	9.7
Samundari	11.9	12.8	11.2	Turbat	7.1	4.5	9.2
Jhelum	11.8	12.6	11.1				
Mardan	11.8	11.2	12.2				
Sialkot	11.7	12.8	10.7				
Gujranwala	11.6	13.0	10.4				
Abbotabad	11.3	9.3	13.0				
Kunri	11.2	11.1	11.3				
Multan	10.8	11.6	10.1				
Mirpur Khas	10.8	8.8	12.4				
Hyderabad	10.7	9.2	12.0				

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

³ Federal and provincial capitals

City-wise inflation data further reveals that out of 35 cities included in the basket, 22 cities (19 in July 2009) were having above average inflation, while remaining 13 (16 in July 2009) were categorized as below average inflation cities during August 2009. The highest overall CPI inflation (YoY) was recorded in Okara, whereas the lowest inflation (YoY) was recorded in Turbat. Mianwali and Turbat recorded the highest and lowest food inflation (YoY) whereas Okara and Islamabad recorded the highest and lowest non-food inflation during the month under review (see **Table 2.2**).

2.4 Income Group-wise Inflation

Similar to the previous month, middle income group having income range of Rs. 3001 – 5000 (per month per household), experienced the highest inflation during August 2009. All income groups except the highest income group having income above Rs.12000, witnessed higher than overall CPI inflation (YoY). Similarly on MoM basis, only the highest income group had less than overall CPI inflation (see **Table 2.3**).

Table 2.3: Income Group-wise CPI Inflation							percent	
	Upto 3000		Rs. 3001-5000		Rs. 5000-12000		Above Rs. 12000	
	Aug-08	Aug-09	Aug-08	Aug-09	Aug-08	Aug-09	Aug-08	Aug-09
Year on Year (August over August)								
General	28.5	11.1	28.0	11.2	26.4	11.1	23.7	10.0
CPI Food	37.3	11.2	37.2	10.5	35.2	10.5	31.4	10.8
CPI Non-food	22.0	11.1	21.3	11.7	19.8	11.7	17.8	9.4
Month on Month (August over July)								
General	2.4	1.9	2.4	1.8	2.3	1.7	1.9	1.6
CPI Food	2.8	2.6	2.7	2.7	2.6	2.6	2.5	2.4
CPI Non-food	2.1	1.2	2.1	1.1	2.1	1.0	1.4	1.0

During August 2009, city and income group wise inflation (YoY) data, collected from 17 cities revealed that Sargodha recorded the highest inflation for all income groups except the highest income group. Khuzdar recorded the highest inflation for the highest income group. Bannu experienced the lowest inflation for the highest income group and income group between Rs.5000-12000, whereas Karachi and Khuzdar recorded the lowest inflation for income group with earning between Rs.3001-5000 and up to Rs.3000 respectively (see **Table A5** in Annexure A).

2.5 Services and Non-services Inflation

Services⁴ sector recorded lower inflation (YoY) during August 2009 compared to the previous month as well as the same month last year. Inflation (YoY) in services sector was 13.7 percent compared to 16.8 percent during the corresponding month last year and 15.1 percent in the previous month. Non-services sector registered slightly higher inflation (YoY) during August 2009 compared to the previous month but was still lower than the level in the same month last year (see **Figure 2.10**). A comparison of the services and non-services sectors with overall CPI inflation reveals that services sector recorded higher whereas non-services sector recorded lower inflation than overall CPI inflation.

Figure 2.10: Services & Non-services Inflation

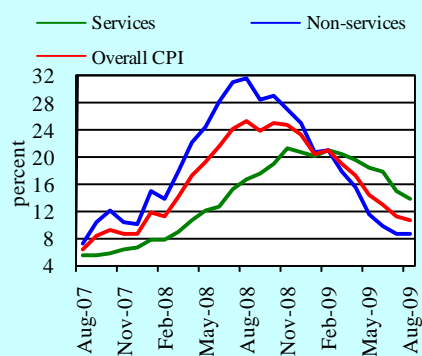
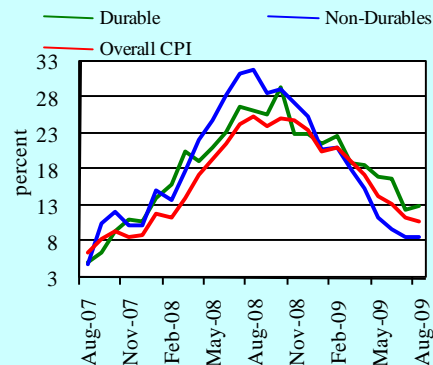


Figure 2.11: Durables and Non-durables Inflation



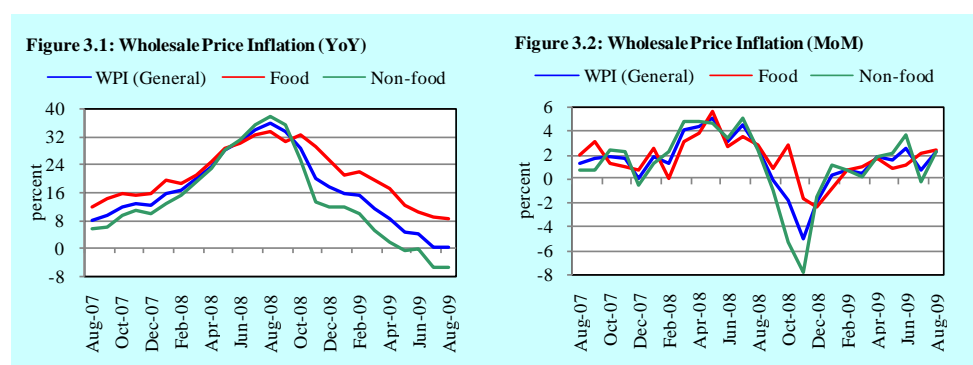
Further disaggregation of non-services sector into durable⁵ and non-durable items showed that inflation (YoY) in durable items increased slightly to 13.0 percent during August 2009 compared to 12.5 percent in the preceding month. However, this level of inflation was still lower than 26.2 percent seen during August 2008. Inflation in non-durable items declined and was recorded at 8.5 percent during the month under review compared to 31.9 percent in August 2008 (see **Figure 2.11**).

⁴ Services group of the CPI basket include 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.

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

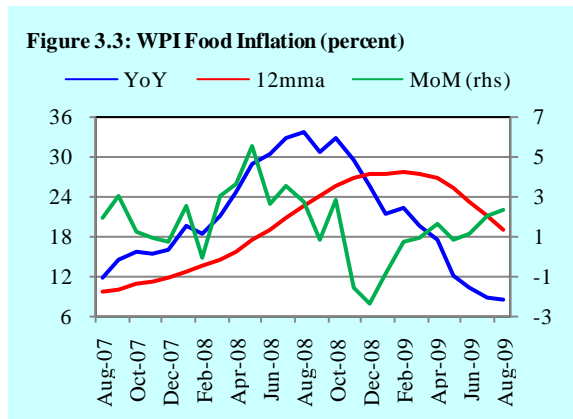
3. Wholesale Price Index

Inflation (YoY) measured by wholesale price index (WPI), during August 2009, continued to show declining trend and reached 0.3 percent (lowest level since May 2002), compared to 35.7 percent (highest level) during the same month last year and 0.5 percent compared with the preceding month.



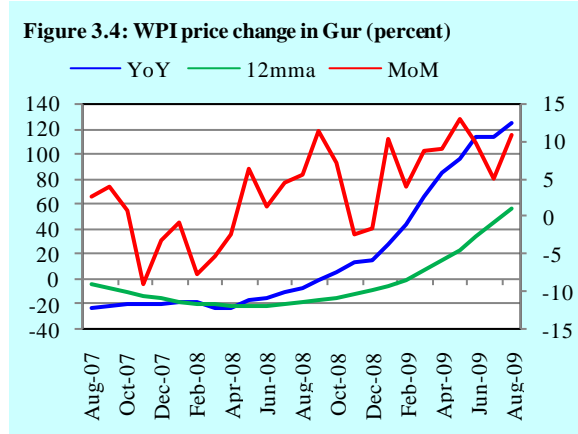
This significant decline, during August 2009, in WPI inflation (YoY) was contributed by both food and non-food groups. In particular, WPI non-food group registered a deflation of 5.6 percent, compared to a very high inflation of 37.4 percent during August 2008. WPI food inflation also declined during the month and was recorded at 8.3 percent compared to 33.5 percent during the same month last year.

However, WPI inflation on month-on-month (MoM) basis showed acceleration during August 2009 and was recorded at 2.2 percent compared to 0.7 percent in July 2009. This significant increase was mainly due to increase in non-food inflation (MoM) during August 2009, which was recorded at 2.1 percent in August 2009 compared to (-) 0.4 percent during July 2009 (see **Figure 3.1 & 3.2**).

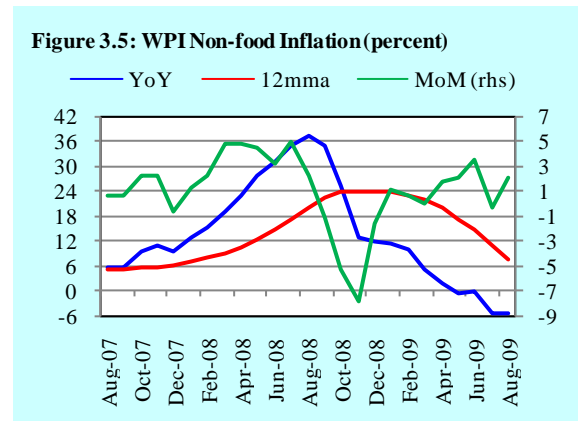


While the declining trend in WPI food inflation (YoY) continued in August 2009, WPI food inflation (MoM) showed increase during the month and was recorded at 2.3 percent compared to 2.0 percent during July 2009.

A detailed look at price movements of individual items in the WPI food group shows that out of 43 items, prices (YoY) of 9 items declined, 5 items showed price change between 0 to 5 percent, 5 items recorded price change between 5 to 10 percent and 24 items showed price change of more than 10 percent (33 items in August 2008) during August 2009. The significant price change (YoY) was recorded in four items including, gur (124.1 percent in August 2009 compared with (-) 7.3 percent during August 2008), sugar (65.0 percent in August 2009 compared with 7.8 percent during August 2008), vegetables (53.9 percent in August 2009 compared with 1.4 percent during August 2008) and mash (50.3 percent in August 2009 compared with 3.3 percent during August 2008 (see **Figure 3.5 & Table A7**).



Declining trend in WPI non-food group inflation (YoY) continued (which started in September 2008) during the month under review. WPI non-food deflation was recorded at 5.6 percent during August 2009 compared with 5.4 percent during July 2009 and inflation of 37.4 percent in the same month last year. However, WPI non-food inflation (MoM) showed significant acceleration during August 2009 and reached 2.1 percent compared with (-) 0.4 percent in July 2009.



A frequency distribution of price change during August 2009 shows that of the 63 non-food commodities included in WPI basket, 20 commodities witnessed double digit price change (YoY) which includes glass products, sugarcane, pig iron, cement, mobil oil, diesel etc. Fourteen commodities showed moderate inflation in the range of 5 to 10 percent. All other commodities witnessed price change (YoY) either less than 5 percent, no change or declined. Only two commodities showed over 60 percent rise in prices, i.e., glass products (71.5 percent) and sugarcane (67.2 percent (see **Table A7**).

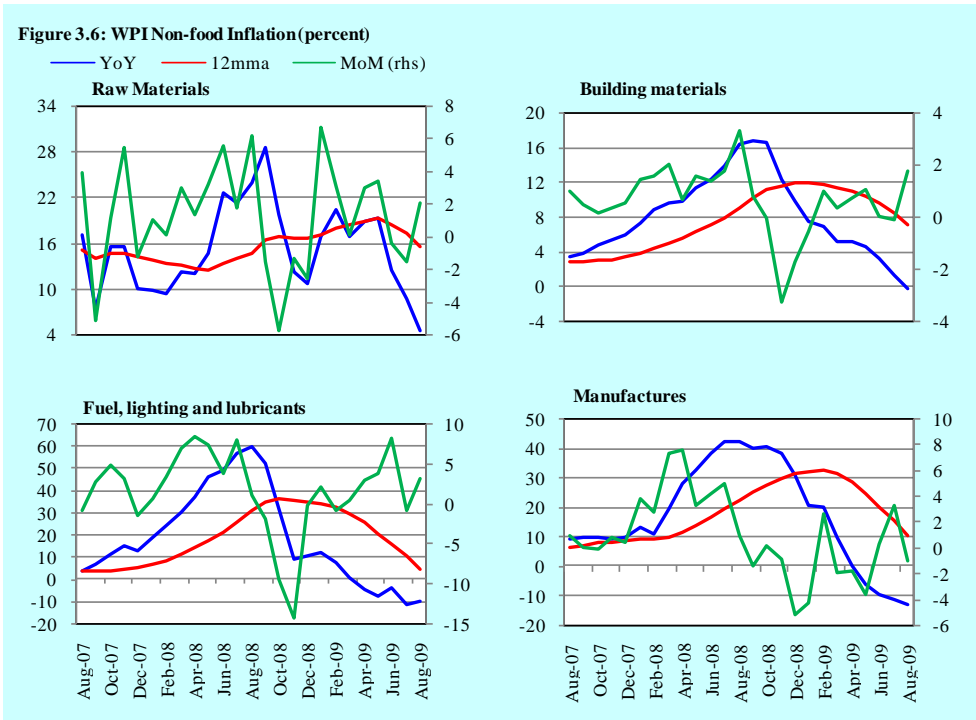
During August 2009 inflation (YoY) in all sub-groups of WPI non-food showed decline compared to both the same month last year and the previous month except *fuel, lighting and lubricants* sub-group which showed rise relative to the previous month. However, out of four sub-groups, three sub-groups showed significant acceleration in inflation (MoM) during August 2009 compared to July 2009.

Inflation (YoY) in *raw materials* sub-group during August 2009 was recorded at 4.1 percent compared to 23.4 percent in August 2008 and 8.3 percent during the preceding month. However, inflation (MoM) in this sub-group reached 2.0 percent during the month under review compared to (-) 1.5 percent in July 2009.

Fuel, lighting and lubricants sub-group's inflation (YoY) also declined and was recorded at (-) 10.0 percent during August 2009 compared to 59.4 percent in the same month last year and (-) 11.8 percent in July 2009. However on month-on-month basis, significant acceleration in inflation was recorded in this sub-group and reached 3.0 percent as compared to (-) 0.9 percent during July 2009.

Inflation (YoY) in *manufactures* sub-group, during August 2009, was recorded at (-) 0.3 percent as compared to 16.3 percent in August 2008 and 1.2 percent during July 2009. In contrast to YoY inflation, MoM inflation in this sub-group showed significant acceleration and was recorded at 1.8 percent during the month under review as compared to (-) 0.1 percent in July 2009.

Inflation (YoY) in *building material* sub-group also depicts the same trend as other sub-groups of WPI non-food group. During August 2009 inflation (YoY) reached (-) 13.3 percent compared to 42.2 percent in August 2008 and (-) 11.5 percent during July 2009. This is the only sub-group in which inflation on month-on-month basis was declined during ((-) 1.1 percent) August 2009 as compared to (3.3 percent) in July 2009 (see **Figure 3.6**).



4. Sensitive Price Indicator

Inflation measured by sensitive price indicator (SPI) continued to show declining trend with 24.0 percentage points decline in inflation (YoY) during August 2009 compared to the same month last year. In contrast to CPI and WPI, inflation (MoM) in SPI also declined during the month because the POL prices are not incorporated in SPI whereas the same are incorporated in CPI and WPI. Similarly, the long run trend in SPI inflation measured by 12 month moving average (12mma) also decelerated during August 2009 and dropped to 18.8 percent compared to 20.8 percent in the previous month (see **Figure 4.1**).

Figure 4.1: SPI Inflation (percent)

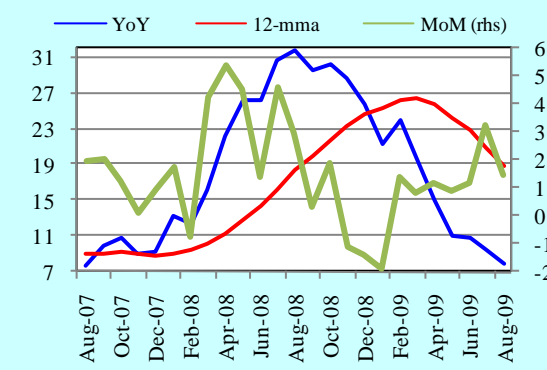


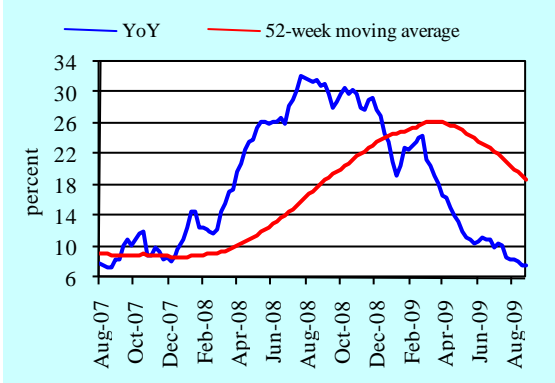
Table 4.1: Distribution of Price Changes of SPI Basket (YoY)

Percent Change	Number of items			
	Aug-08	Dec-08	Jul-09	Aug-09
0 or less	4	5	14	18
0 to 5	3	2	6	10
5 to 10	3	3	4	4
10 or above	43	43	29	21
Minimum	-18.1	-13.8	-32.0	-30.1
Maximum	124.4	112.2	95.5	126.0

The ease in inflationary pressures in SPI basket can be seen from the fact that there are 21 individual items showing double digit inflation compared to 43 items in the same month last year. The individual items mainly contributing to decline in SPI inflation (YoY) includes red chillies, petrol, and rice irri (see **Table 4.1 & A8** in Annexure A).

SPI inflation (MoM) also declined and was recorded at 1.4 percent during the month under review compared to 3.2 percent in July 2009. Major items recording double digit MoM price increase during the month under review included garlic (50.0 percent as compared to 47.6 percent in July 2009), chicken (11.4 percent compared to 12.3 percent in July 2009) and sugar

Figure 4.2: Weekly SPI Inflation



(11.0 percent compared to 3.1 percent in July 2009) (see **Table A8** in Annexure A). On the other hand, more than 45 percent of the items included in the SPI basket either declined or showed no change in price on MoM basis during August 2009.

Weekly SPI inflation (YoY) generally depicted a declining trend during August 2009, and decelerated from 8.3 percent recorded during the last week of July 2009 to 7.5 percent during the last week of August 2009 (see **Figure 4.2**).

Table 4.2 : Income Group-wise SPI Inflation (percent)						
	Aug-08		Jul-09		Aug-09	
	YoY	MoM	YoY	MoM	YoY	MoM
Up to Rs. 3000	33.9	2.3	9.7	2.8	9.0	1.7
Rs. 3001-5000	32.7	2.2	10.4	2.8	9.8	1.6
Rs. 5000-12000	32.1	2.8	11.1	2.8	9.7	1.5
Above Rs. 12000	31.6	3.7	8.8	3.4	6.0	1.1
All income groups	31.8	2.9	9.4	3.2	7.8	1.4

Income group-wise SPI data for the the month under review indicates significant decline in SPI inflation (YoY) for all income groups compared to August 2008. The incidence of SPI inflation (YoY) was the highest for the two middle income groups. The income groups-wise SPI inflation further reveals that all income groups, except the highest income group, observed higher SPI inflation (YoY) compared to overall SPI inflation (YoY) during August 2009. However on month-on-month (MoM) basis the lowest income group experienced the highest SPI inflation (see **Table 4.2**).

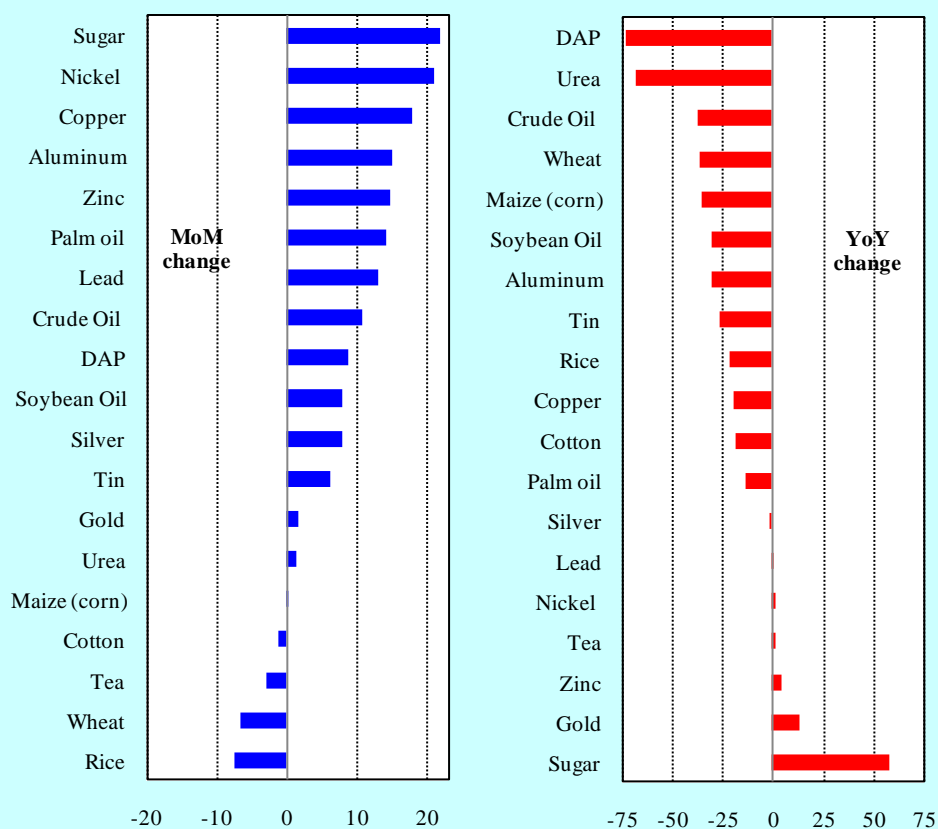
5. Global Commodity Prices

Overview

Prices of most of the commodities rose during August 2009 as indicated by IMF commodity price index which rose 7.5 percent during the month on MoM basis; however on YoY basis prices have declined during the month under review. Prices rose during August 2009 due to weakening of dollar and continuing recovery in the global demand (see **Figure 5.1**).

Sugar prices increased on global supply concerns due to lower production. Industrial metal prices rose on improved prospects for global metal demand. Edible oil prices rose on strong demand and fears of supply shortages. Crude oil and precious metal prices rose due to weakening of dollar, and drop in crude oil inventories.

Figure 5.1: Percent Change in Price - August 2009

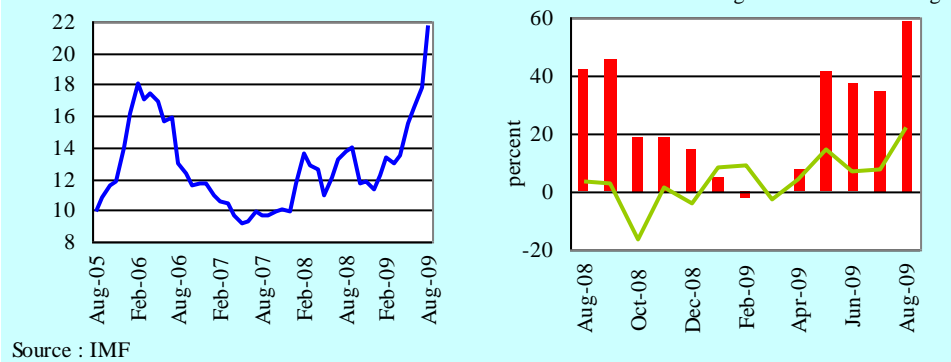


Source: IMF and World

Food Group

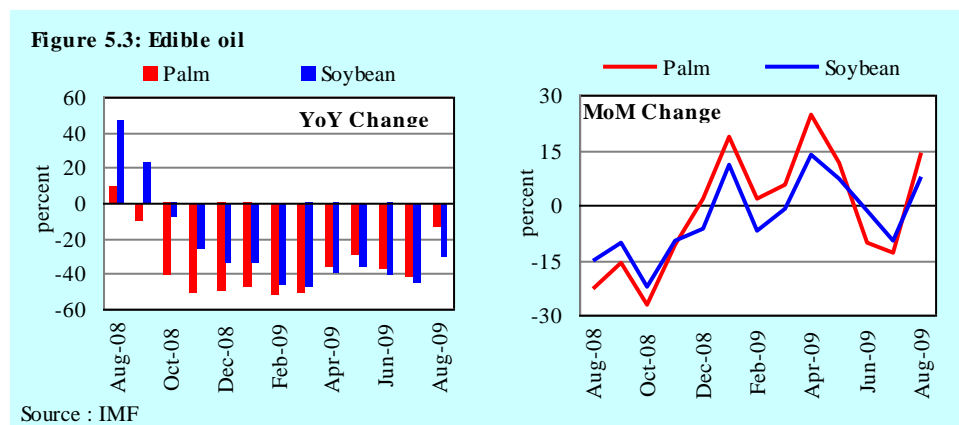
Prices of most of the commodities in the food group increased as indicated by IMF food price index which rose 1.5 percent on MoM basis in August 2009 due to large gains in sugar and vegetable oils. The grain markets remained bearish in line with bearish supply news from the US Department of Agriculture.

Figure 5.2 : Sugar Prices



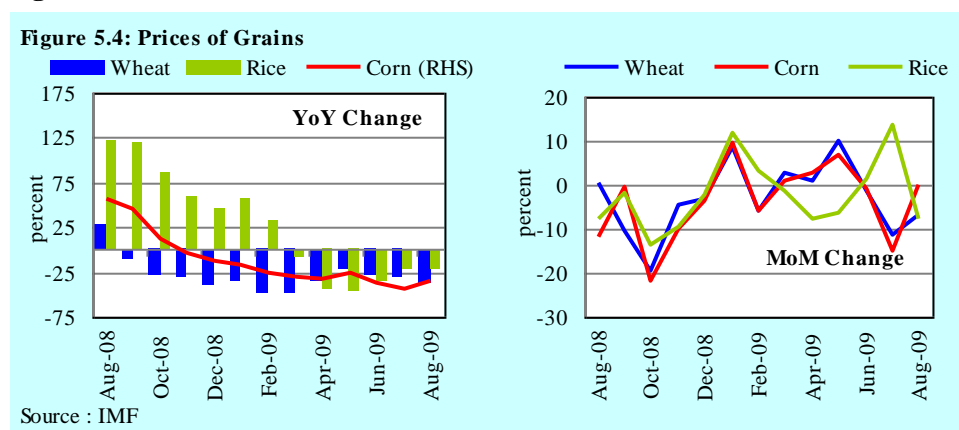
Sugar was the leading food commodity in price increase with a 22.0 percent rise in prices as compared to July 2009, and an increase of 58.8 percent as compared to August 2008 (see **Figure 5.2**). Increasing trend in sugar prices, which was started earlier in April 2009 continued during August 2009 also, took the sugar prices to the highest level since March 1981. Sugar prices increased to US cents 21.7 per pound after India, the second biggest grower after Brazil, had its driest June in 83 years and parts of Brazil had four times more rain than normal. According to International Sugar Organization worldwide, demand for sugar will exceed output by 9.35 million tons in the year ending September 30.

Edible oil prices also rose during the month under review due to strong worldwide demand. Palm oil prices rose 14.1 percent on MoM basis while soybean prices increased by 7.9 percent during August 2009 compared to July 2009. However, prices of palm oil and soybean have declined on YoY basis by 13.2 percent and 30.4 percent respectively (see **Figure 5.3**).



Strong palm oil demand from China, India, Middle East and Pakistan up ahead of major festivals, of Eid and the mooncake in September- October raised the palm oil prices to the current level. On the other hand, fears of slow soybean plant growth in the US, the world's largest grower and exporter raised the soybean prices as it is increasing the risk of soybean crop damage from an early freeze.

Grains prices remained lower during August 2009 due to better than expected worldwide output of wheat, corn and rice. Wheat prices fell by 6.5 percent; rice price decreased 7.5 percent while corn prices remained unchanged during August 2009 on MoM basis. On YoY basis wheat price fell 36.2 percent, corn prices 35.4 percent, and rice prices fell 21.8 percent during the month under review (see **Figure 5.4**).



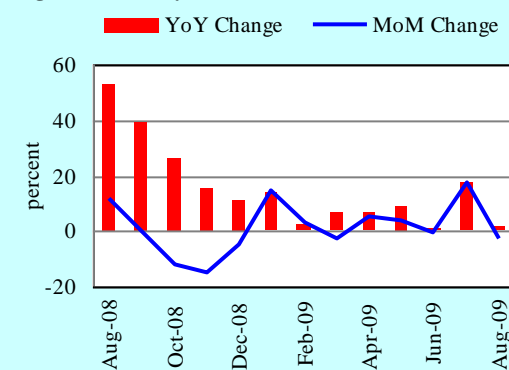
Wheat prices fell due to speculation that favorable weather will boost crop production in US, Russia, and Canada. Moreover, China's wheat production has also exceeded the earlier estimates. Ukraine is also planning to export wheat this

year. According to the US Department of Agriculture (USDA) US stockpiles of the wheat will be 743 million bushels by May 2010, against an earlier forecast of 706 million bushels. Similarly, global stock of the grain will be 183.6 million tons by May 2010; this is higher than earlier estimate of 181.3 million tons.

Rice prices declined during August 2009 due to ample supplies of the grain coming from Thailand, the world's largest rice exporter. According to the Rice Exporters Association of Thailand, rice stocks in the country have risen to 7 million tons, which is the highest ever volume of government stockpiles.

Kenya tea price fell during August 2009 to the level of US cent 328 per kg from previous month price of US cents 337.7 per kg. Prices have fallen by 1.9 percent on MoM basis however, prices are still higher than the price level of August 2008. Prices declined during August 2009 after the traders curtailed their buying witnessing the prices soaring much higher level than expected (see **Figure 5.5**).

Figure 5.5: Kenya Tea

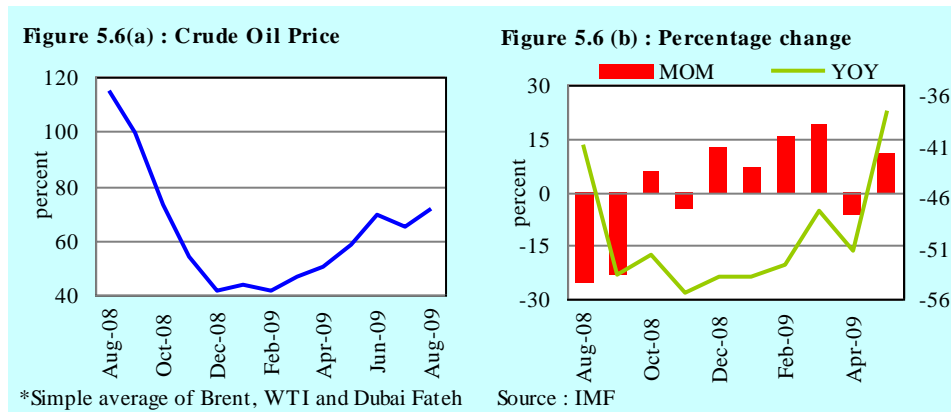


Source : IMF

Non-food group

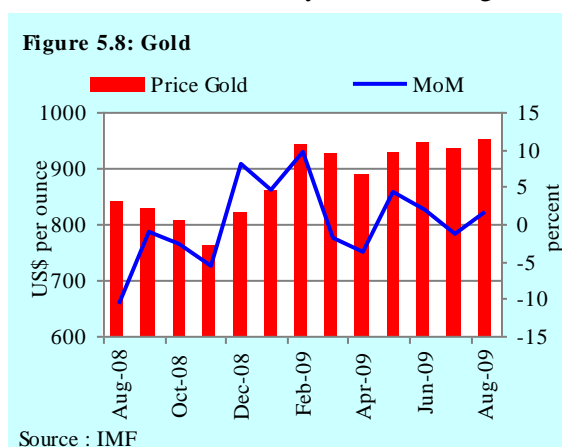
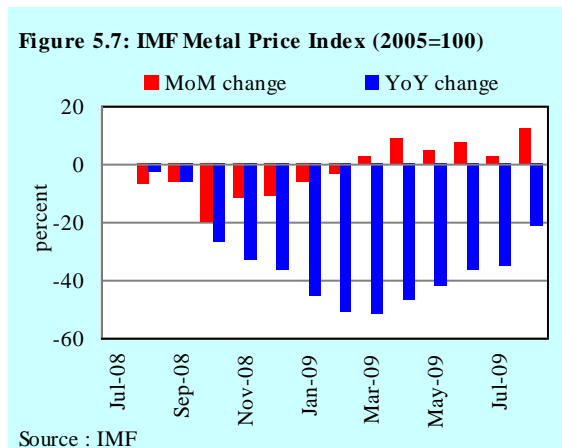
Among non-food group, energy, metals, and fertilizer prices rose whereas cotton prices declined during August 2009 on MoM basis.

Bullish reports about US manufacturing sector, European banking industry and performance of the Chinese economy collectively improved market sentiment, which drove the crude oil prices to the highest level since October 2008. In conjunction with these developments, depreciation of the US dollar and improvement in US second quarter GDP growth; supported the crude oil prices. Crude oil prices recorded an increase of 10.7 percent on MoM basis during August 2009, but the prices were still lower than a year earlier level (see **Figure 5.6**).



Industrial metal prices increased 12.4 percent in August 2009 on MoM basis; however on YoY basis industrial metals prices declined 21.5 percent during the month (see **Figure 5.7**). Industrial metal prices increased mainly due to some supply constraints in the first half of the month. In the second half of the month prices dropped after the reports showed that China's imports of industrial metals remained slower in the second half of the year. According to London Metal Exchange (LME) total metal inventories increased by 3.8 percent during August 2009, while the rise in metal inventories was 3.2 percent in July 2009. Weak dollar was another factor in raising industrial metal prices.

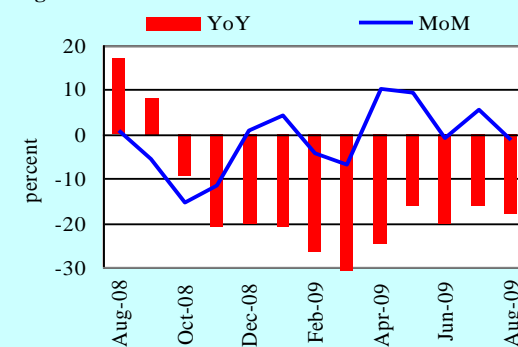
Gold prices rose 1.6 percent during August 2009 on MoM basis. Gold prices showed an increase of 13.25 percent in August 2009 compared to



August 2008. Gold price was recorded at US\$ 949.4 per troy ounce which is the highest level since March 2008 (see **Figure 5.8**). Weak dollar was the main driver of gold prices during the month as dollar value shares an inverse relationship with gold prices. On the other hand, world's second largest gold mining company Lihir Gold Ltd. announced 66 percent increase in output during second quarter of the year; however according to the company, production is likely to be lower this quarter due to plant maintenance at the Lihir Island mine.

Cotton prices fell during August 2009 as indicated by Cotton outlook 'A' index which fell 1.2 percent on MoM basis and 18 percent on YoY basis (see **Figure 5.9**). Cotton prices declined mainly due to improved crop conditions in the US, the world's biggest exporter, signaling a bigger harvest this year. According to the US Department of

Figure 5.9: Cotton Outlook 'A' Index

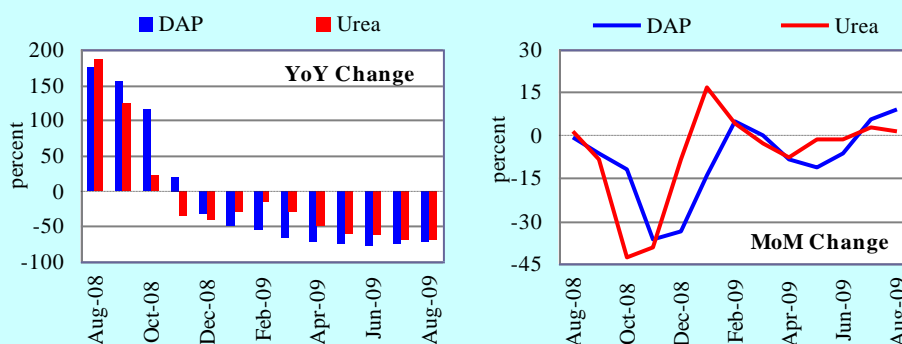


Source : IMF

Agriculture, 51 percent of the US cotton crop was in excellent condition up till August 30, 2009; while in July 2009 this was 46 percent. On the other hand, cotton prices fell after equities in China, the biggest user and importer of the fiber; dropped.

Fertilizer prices showed an increasing trend during August 2009 as price of DAP (Di-Ammonium Phosphate) rose 8.6 percent while Urea price increased by 1.4 percent during August 2009 on MoM basis. However, DAP and Urea prices declined by 72.9 percent and 67.9 percent on YoY basis (see **Figure 5.10**).

Figure 5.10 : Fertilizer prices



Source : World Bank

Upward trend in Urea and DAP prices is mainly due to increased demand as a result of cheap fertilizer prices. Second, the prices moved upward due to increase in crude oil prices.

Annexure A

Table A1: CPI Inflation by Groups

	Weights	MoM change			YoY change		
		Aug-08	Jul-09	Aug-09	Aug-08	Jul-09	Aug-09
I. Food Group	40.3	2.6	3.0	2.5	34.1	10.7	10.6
II. Non-Food Group	59.7	1.8	0.3	1.0	18.7	11.6	10.8
Apparel, textile, etc.	6.1	1.3	0.3	0.5	14.9	6.9	6.1
House rent	23.4	1.6	1.2	1.0	14.2	18.3	17.6
Fuel & lighting	7.3	0.8	-0.7	0.5	21.0	13.5	13.2
Household furniture & equipment	3.3	1.5	0.0	0.3	12.0	9.1	7.8
Transport & communication	7.3	2.7	-0.7	2.5	40.5	-5.5	-5.6
Recreation & entertainment	0.8	0.3	0.0	0.0	11.7	3.1	2.9
Education	3.5	5.2	0.0	1.4	15.4	17.8	13.5
Cleaning, laundry, etc.	5.9	1.6	0.1	0.6	19.6	12.9	11.9
Medicare	2.1	0.1	0.0	0.0	9.9	6.1	6.0
Headline	100	2.1	1.5	1.7	25.3	11.2	10.7

Table A2: Distribution of Price Changes of CPI Basket, August 2009 (YoY)

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	19	8	11	75
II. Non-Food Group	10.8	250	64	38	75	73
Apparel, textile, etc.	6.1	42	6	5	23	8
House rent	17.6	1				1
Fuel & lighting	13.2	15	6	2	1	6
Household furniture & equipt	7.8	44		9	22	13
Transport & communication	-5.6	43	21	7	9	6
Recreation & entertainment	2.9	16	6	6	2	2
Education	13.5	24	5	2	4	13
Cleaning, laundry, etc.	11.9	36	4	3	13	16
Medicines	6.0	29	16	4	1	8
Overall	10.7	363				

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

Table A3: Top Ten Contribution to YoY CPI Inflation in August 2009

Items	Weights	YoY change		Weighted Contribution	
		Aug-08	Aug-09		
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	14.18	17.55	34.90
2	Wheat Flour	5.11	68.84	16.13	10.4
3	Milk Fresh	6.66	23.73	14.07	9.65
4	Sugar	1.95	5.72	69.57	7.86
5	Electricity	4.37	6.44	25.58	7.14
6	Vegetables	1.84	18.46	36.42	6.41
7	Meat	2.70	11.57	16.76	5.58
8	Fresh Fruits	1.62	21.11	19.36	3.08
9	Readymade Food	1.68	27.26	14.86	2.57
10	Chicken Farm	0.92	18.55	25.34	2.32
Total		50.27			89.89
B. Ranked by Percentage Change					
1	Gur	0.07	-4.01	108.16	0.52
2	Sugar	1.95	5.72	69.57	7.86
3	Pulse Mash	0.20	3.80	46.87	0.77
4	Vegetables	1.84	18.46	36.42	6.41
5	Text Books	0.69	26.21	30.66	1.68
6	Honey	0.04	12.20	30.15	0.08
7	Electricity	4.37	6.44	25.58	7.14
8	Chicken Farm	0.92	18.55	25.34	2.32
9	Dry Fruit	0.28	20.45	22.73	0.84
10	Bulb & Tube	0.13	11.96	22.08	0.14
Total		10.48			27.75
C. Ranked by Weights					
1	House Rent Index	23.43	14.18	17.55	34.90
2	Milk Fresh	6.66	23.73	14.07	9.65
3	Wheat Flour	5.11	68.84	16.13	10.39
4	Electricity	4.37	6.44	25.58	7.14
5	Bakery & Confectionary	2.98	13.59	6.20	1.27
6	Meat	2.70	11.57	16.76	5.58
7	Vegetable Ghee	2.67	51.21	-15.22	-5.65
8	Tution Fees	2.36	12.03	8.64	1.66
9	Transport Fare/Charges	2.12	44.73	1.62	0.43
10	Natural Gas	2.05	31.09	2.15	0.60
Total		54.45			65.98

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 10.7 percent in August 2009.

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

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Rice Irri-6 (Sindh/Punjab), Rice Basmati 385/386, Rice Basmati Sup. Qlty. Chillies Powd. National 200Gm, Tomatoes, Vegetable Ghee (Loose), Rice Basmati Broken Av. Qlty, Pulse Gram, Besan Av. Qlty.	Pulse Moong (Washed), Eggs Farm, Betel Nuts, Cinamon Loose Av. Qlty, Milo 200 Gm, Betel Leaves Biscuits-Packed, Milk Powder Loose/Packed	Bread Tandoori, Pepper Black National, Rooh Afza, Bananas, Cardamom Large Loose Av. Qlty, Lactogen 400 Grams, Tea Lipton Yellow Label 200G, Groundnuts (With Shell), Cloves Loose Av. Qlty	Dates Av. Qlty, Pulse Mash (Washed), Pistachio Av. Qlty., Raisins Av. Qlty., Chillies Green, Sugar Refined, Coffee-Nescafe 75 Gm. Gur Av. Qlty, Garlic
Apparel & Textile	Gents Shoes Paul Bata, Gents Sandal Bata, Gents Spoung Chappal Bata	Long Cloth Av. Qlty.	Linen Av. Qlty	Pullover Gents Oxford/Bonanza, Second -Hand Coat For Men, Tailoring Shirt
House Rent Index				House Rent Index
Fuel & Lighting	Gas Cylinder Stand. Size, Gas Chrg Upto 3.3719 Mmbtu, Gas Chrg 3.3719 - 6.7438 Mmb	Gas Chrg 10.1157 - 13.4876 Mmb	Elect. Charges 1 - 100 Unit	Tube Light Philips 40 Watts, Firewood Whole Elect. Charges 101 - 300 Unit, Elect. Charges 301 - 1000 Unit
Household Furniture & Equipment		Carpet Plain Av. Qlty, S. Steel Deghchi Medium Size, Table Spoon S. Steel Sup. Qlty	Household Servant Female P/T, Electric Juicer For Apple, Farshi Dari 12'X9' Av. Qlty	Tea Set Pak. Chinaware 21 Pc, Washing Machine Singer, D- Freezer Waves 8 Cft.
Transport & Communication.	Petrol Super, Minibus Fare Min. Within City, A/C Bus Fare Outside City, Minibus Fare Max. Within City	High Speed Diesel HSD, Suzuki Fare Maximum, CNG Filling Charges, Bus Fare Outside City	Motorcycle Yamaha 100CC, Auto Rickshaw Fares, Motor Cycle Service Charges, Bicycle With Tyres & Tubes	Motorcycle Honda CD- 70, Tyre Cycle Specify Brand Nam, Car Suzuki 800 Cc (W/O. A/C), Tyre Car With Tube General
Recreation & Entertainment	Daily "Dawn", Daily "Jang", Daily "Nawa-E-Waqt"	V.C.P., Video Game , Tape Recorder	Cinema Non-A/C High Class	Dry Cell 1.5 Volt (Local), Monthly "Naunehal Digest"
Education	Computer CD, Govt. University Fee MSc. Govt. College Fee Ist. Year	Govt. Engg. Coll. Fee Ist Year, Computer With Printer & Speaker	Fountain Pen Youth China School Fee Secondary Eng. Med.	Pencil goldfish/Deer, Maths Book Ist. Year
Cleaning & Laundry	Silver Tezabi 24 Ct, Toothpaste Macklines 70 Grm, Toothpowder Dentonic 90 Grm, Lipstick S. Miss/Medora	Toilet Soap Lux 95 Grams	Washing Soap Nylon (135-160Gms), Wrist Watch Gents Citizen, Haircut Charges For Men, Washing Charges (Kamiz-Shalwar)	Gold Tezabi 24 Ct, Washing Powder 1000 Grm, Brylcreem 210 Ml. Hair-Oil Amla/Chambeli
Medicare	Ventolin Tab. 2mg, Entox Tab., Brufen Tabs 200-mg.	O.R.S. (Nimcol), Septran Tablets, Flagyl Tab. 200 Mg.	Doctor (MBBS) Clinic Fee	Cotton Bandage 2" - 4", Cac. 1000 Tab, Thermometer China

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

	Upto Rs:3000						Rs 3001-5000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Lahore	1.7	10.6	2.4	11.6	1.0	9.7	1.9	11.3	3.0	11.5	1.0	11.2
2 Faisalabad	1.9	13.0	3.1	15.1	0.9	11.2	2.2	13.6	3.6	15.2	1.0	12.2
3 Rawalpindi	1.6	13.4	2.5	16.4	0.8	10.9	1.5	13.5	2.4	15.5	0.7	11.9
4 Multan	1.6	11.5	2.4	11.8	1.0	11.3	1.7	11.6	2.6	11.6	1.0	11.6
5 Gujranwala	2.3	10.9	3.6	12.7	1.2	9.4	2.2	11.6	3.5	12.7	1.2	10.8
6 Islamabad	1.1	11.6	2.0	12.3	0.5	11.0	1.1	12.1	1.9	13.2	0.5	11.3
7 Sargodha	3.0	14.9	4.2	15.4	2.0	14.6	2.7	14.9	3.9	15.4	1.8	14.5
8 Sialkot	1.9	11.4	2.5	12.6	1.3	10.3	1.7	12.7	2.5	13.1	1.0	12.3
9 Bahawalpur	2.0	10.0	3.0	10.8	1.2	9.3	2.0	10.5	3.0	10.8	1.2	10.3
10 Karachi	1.4	8.0	1.8	8.1	1.1	8.0	1.6	8.2	2.4	7.1	1.0	9.2
11 Hyderabad	1.9	11.0	2.9	9.4	1.1	12.3	1.9	10.8	3.0	9.3	1.0	12.0
12 Sukkur	0.5	9.8	0.1	5.7	0.9	13.5	1.0	9.0	1.2	5.0	0.9	12.4
13 Larkana	1.7	10.1	2.3	7.9	1.2	11.9	1.7	9.3	2.5	7.0	1.1	11.3
14 Peshawar	2.0	9.7	3.1	9.2	1.1	10.1	2.5	10.4	3.9	9.4	1.4	11.2
15 Bannu	1.9	8.3	2.4	7.4	1.6	8.9	1.9	8.3	2.4	6.5	1.6	9.8
16 Quetta	0.5	7.6	0.0	5.0	1.0	9.9	0.9	8.9	0.8	6.6	0.9	11.0
17 Khuacdar	-0.5	7.1	-1.2	6.3	0.0	7.8	0.4	8.4	0.4	7.4	0.5	9.1
	Rs 5001-12000						above Rs 12000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Lahore	1.8	11.2	2.9	11.3	0.8	11.2	1.5	9.3	2.2	10.8	0.9	7.9
2 Faisalabad	2.1	13.4	3.4	15.0	0.9	12.0	1.7	12.2	2.6	14.6	0.8	10.1
3 Rawalpindi	1.4	13.4	2.3	15.0	0.7	12.0	1.5	10.8	2.0	13.8	1.0	8.5
4 Multan	1.6	11.3	2.3	11.7	0.9	10.9	1.3	9.6	1.2	11.4	1.3	8.1
5 Gujranwala	2.2	11.7	3.6	12.9	1.1	10.8	2.1	11.2	3.6	13.4	0.8	9.3
6 Islamabad	1.1	11.9	1.8	12.7	0.5	11.2	1.2	9.2	1.5	11.7	1.0	7.2
7 Sargodha	2.7	14.2	3.7	14.9	1.9	13.6	2.7	11.3	3.7	13.2	1.9	9.7
8 Siarkot	1.9	12.3	2.7	12.9	1.1	11.9	1.8	11.2	2.6	12.8	1.1	9.8
9 Bahawalpur	2.1	10.1	3.3	9.8	1.1	10.5	2.1	8.3	3.3	8.8	1.0	7.8
10 Kararhi	1.6	8.8	2.3	7.5	1.0	9.8	1.5	9.1	1.7	8.1	1.3	10.0
11 Hyderabad	1.8	10.8	2.8	9.1	1.0	12.3	1.6	10.5	2.3	9.7	1.0	11.1
12 Sukkur	1.0	9.3	1.1	5.1	0.8	12.7	0.8	8.5	0.8	4.4	0.8	11.9
13 Larkana	1.7	9.6	2.5	7.5	1.0	11.5	1.6	8.3	2.4	6.4	1.0	10.0
14 Peshawar	2.2	11.0	3.9	9.7	0.9	12.0	2.2	10.1	4.0	10.4	0.7	9.9
15 Bannu	1.9	8.0	2.3	6.0	1.6	9.7	1.7	8.2	2.1	6.0	1.4	10.0
16 Quetta	1.1	9.7	1.1	7.1	1.0	12.0	1.2	9.4	1.0	8.3	1.4	10.3
17 Khuzdar	0.8	9.9	0.9	8.1	0.7	11.4	0.8	12.3	0.4	11.5	1.2	13.0

Table A6 : Income Group-wise Inflation						percent
	MoM			YoY		
	Aug-08	Jul-09	Aug-09	Aug-08	Jul-09	Aug-09
<u>Up to Rs. 3000</u>						
General	2.4	1.9	1.9	28.5	11.7	11.1
Food	2.8	2.9	2.6	37.3	11.3	11.2
Non-food	2.1	1.0	1.2	22.0	12.0	11.1
<u>Rs. 3001-5000</u>						
General	2.4	1.8	1.8	28.0	11.8	11.2
Food	2.7	3.0	2.7	37.2	10.5	10.5
Non-food	2.1	0.9	1.1	21.3	12.8	11.7
<u>Rs. 5000-12000</u>						
General	2.3	1.7	1.7	26.4	11.8	11.1
Food	2.6	3.0	2.6	35.2	10.5	10.5
Non-food	2.1	0.7	1.0	19.8	12.9	11.7
<u>Above Rs. 12000</u>						
General	1.9	1.3	1.6	23.7	10.3	10.0
Food	2.5	3.0	2.4	31.4	10.9	10.8
Non-food	1.4	-0.1	1.0	17.8	9.8	9.4
<u>All income groups</u>						
General	2.1	1.5	1.7	25.3	11.2	10.7
Food	2.6	3.0	2.5	34.1	10.7	10.6
Non-food	1.8	0.3	1.0	18.7	11.6	10.8

Table A7: Distribution of Price Change (YoY) - WPI Items: August 2009				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Bajra, Rice, Gram Split, Besan, Vegetable Ghee, Maize, Mustard & Rapeseed Oil, Cotton Seed Oil, Cooking Oil	Sugar, Confectionary, Masoor, Jowar, Beans, Beverages	Fresh Fruits, Moong, Eggs, Fruit Prepared/Preserved, Milk Food	Fresh Milk, Mineral Water, Spices, Onions, Oil Cakes, Potatoes, Tea, Salt, Gram Whole, Meat, Vegetables, Prepared/Preserved, Wheat, Dry Fruits, Tomatoes, Powdered Milk, Maida, Condiments, Fish, Wheat Flour, Chicken, Mash, Vegetables, Sugar Refined, Gur
Raw material	Mustard/Rapeseeds, Cotton, Hides, Skins	Wool		Cotton Seeds, Tobacco, Pig Iron, Sugar Cane
Fuel & lighting	Furnace Oil, Coke, Motor Sprit, Natural Gas	Coal, Kerosine Oil	Elec. Agriculture Tariff-D	Diesel Oil, Fire Wood, Mobil Oil, Electricity Ind. Supply Tariff-B
Manufactures	Chemicals, Fertilizers, Cotton Yarn, Chrome Leather, Dying Materials, Matches	Transports, Paper, Blended Yarn, Jute Manufactures, Sole Leather, Foot Wear, Silk & Reyon Textiles	Hosiery, Nylon Yarn, Cotton Textiles, Ready Made Garments, Soaps, Mattresses, Cosmetics, Drugs & Medicines, Utensils, Machinery Tyres	Tubes, Cigarettes, Audio-Visual Instruments, Pesticides & Insecticides, Plastic Products, Woolen Textiles, Other Electrical Goods, Glass Products
Building material	Iron Bars & Sheets, Bricks	Tiles, Pipe Fittings, Cement Blocks	Timber, Sanitary Wares	Paints & Varnishes, Wires And Cables, Cement, Glass Sheets

Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Price Aug 09	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	25.0	15.0	2.8
2	Wheat flour average qlt.	Kg.	28.6	19.0	3.1
3	Rice basmti.broken	Kg.	44.6	-17.1	1.7
4	Rice irri-6	Kg.	35.5	-25.5	1.5
5	Masur pulse washed	Kg.	122.3	0.2	1.6
6	Moong pulse washed	Kg.	56.3	1.3	4.5
7	Mash pulse washed	Kg.	108.4	45.0	6.9
8	Gram pulse washed	Kg.	50.9	-19.7	1.1
9	Beef	Kg.	162.3	20.0	2.3
10	Mutton	Kg.	289.9	15.4	1.5
11	Egg hen (farm)	Doz.	59.2	0.8	4.3
12	Bread plain	Each	25.7	14.0	0.2
13	Sugar	Kg.	51.8	61.9	11.0
14	Gur	Kg.	69.0	100.4	6.9
15	Milk fresh	Litr	41.0	16.5	0.3
16	Milk powdered nido	400g	180.0	12.1	0.0
17	Curd	Kg.	47.9	14.2	0.5
18	Veg.ghee tin	2.5k	348.0	-11.9	0.0
19	Veg.ghee loose	Kg.	108.9	-17.8	1.2
20	Mustard oil	Kg.	132.1	-12.6	1.0
21	Cooking oil	2.5l	361.0	-9.3	0.0
22	Potatoes	Kg.	27.8	9.3	-3.1
23	Onions	Kg.	23.3	-4.3	-0.7
24	Tomatoes	Kg.	28.4	-20.4	-11.7
25	Bananas	Doz.	42.8	1.6	0.4
26	Salt powdered	Kg.	6.6	17.3	1.0
27	Red chillies(powd)	Kg.	125.1	-30.1	-1.0
28	Garlic	Kg.	96.1	126.0	50.0
29	Tea packet	250g	105.0	16.3	0.3
30	Tea (prepared)	Cup	9.1	14.5	1.6
31	Cooked beef plate	Each	42.5	10.7	2.1
32	Cooked dal plate	Each	26.6	7.5	-0.1
33	Cigarettes k-2	10's	10.0	13.4	-0.1
34	Coarse latha	Mtr.	45.8	4.9	1.5
35	Lawn (avg.+s.qlty)	Mtr.	94.2	4.2	-0.8
36	Voil printed	Mtr.	48.1	6.0	-0.2
37	Shirting	Mtr.	79.3	5.0	-0.4
38	Sandel gents bata	Pair	499.0	0.0	0.0
39	Sandel ladies bata	Pair	379.0	0.0	0.0
40	Chappal spng. Bata	Pair	129.0	0.0	0.0
41	Kerosene	Litr	67.7	-5.7	-1.6
42	Firewood	40kg	279.7	11.9	0.4
43	Elec. Bulb 60-wats	Each	18.0	34.8	1.2
44	Match box	Each	1.0	0.0	0.0
45	Washing soap	Cake	12.6	2.5	0.5
46	Bath soap lifebuoy	Cake	22.0	9.0	0.0
47	Chicken (farm)	Kg.	129.0	24.1	11.4
48	Gas chrg. All clb. Comb	D.mmbt	286.3	4.6	-1.6
49	L.P.G.(cylinder 11kg.)	Each	743.9	-17.4	-2.8
50	Elec.chrg.all slabs comb	Bd. Unit	6.8	23.1	0.0
51	Petrol	Litr	61.3	-29.5	-2.5
52	Diesel	Litr	62.1	-4.3	-1.9
53	Telephone local	Call	2.4	4.8	0.0
Maximum				126.0	50.0
Median				4.9	0.3
Minimum				-30.1	-11.7

Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item and Specification	Weights	Index		
		Aug-08	Jul-09	Aug-09
GENERAL	100.0009	186.29	202.77	206.21
FOOD & BEVERAGES.	40.3415	212.21	228.93	234.69
1 WHEAT	0.4830	256.02	282.69	293.08
2 WHEAT FLOUR	5.1122	250.94	281.63	291.42
3 MAIDA	0.1059	238.72	273.75	278.38
4 BESAN	0.1320	220.30	189.55	191.52
5 RICE	1.3369	354.45	278.31	280.90
6 PULSE MASOOR	0.2214	336.99	329.58	336.18
7 PULSE MOONG	0.2230	184.93	180.22	188.25
8 PULSE MASH	0.2017	162.67	216.91	238.92
9 PULSE GRAM	0.4272	214.70	175.91	179.89
10 GRAM WHOLE	0.1491	170.09	185.98	193.63
11 MUSTARD OIL	0.0456	273.46	240.35	239.25
12 COOKING OIL	0.6858	250.00	226.76	226.76
13 VEGETABLE GHEE	2.6672	277.14	233.39	234.97
14 SUGAR	1.9467	115.56	166.51	195.96
15 GUR	0.0735	130.07	243.40	270.75
16 TEA	1.2559	148.51	166.02	169.15
17 MILK FRESH	6.6615	205.00	232.13	233.84
18 MILK POWDER	0.1105	193.39	208.14	208.33
19 MILK PRODUCTS	0.5607	188.10	215.23	215.59
20 HONEY	0.0358	146.37	190.22	190.50
21 CEREALS	0.0878	201.03	235.76	238.95
22 JAM,TOMATO,PICKLES & VINEGAR	0.2472	150.69	171.72	172.17
23 BEVERAGES	0.7286	167.68	178.58	179.85
24 CONDIMENTS	0.3392	214.89	242.28	242.60
25 SPICES	0.6008	203.96	199.55	185.14
26 DRY FRUIT	0.2760	265.43	319.89	325.76
27 BAKERY & CONFECTIONARY	2.9837	137.17	145.48	145.68
28 CIGARETTES	0.9527	170.77	197.92	202.14
29 BETEL LEAVES & NUTS	0.1851	163.48	170.72	169.64
30 READYMADE FOOD	1.6833	204.52	233.23	234.91
31 SWEETMEAT & NIMCO	0.3846	210.11	233.57	238.79
32 FISH	0.2703	155.90	179.50	184.39
33 MEAT	2.6981	245.67	280.09	286.84
34 CHICKEN FARM	0.9158	199.05	215.13	249.49
35 EGGS	0.4119	217.82	217.55	222.04
36 POTATOES	0.5806	261.04	311.44	302.10
37 ONIONS	0.6237	234.55	243.74	218.86
38 TOMATOES	0.4833	213.70	248.91	175.46
39 VEGETABLES	1.8377	190.70	218.59	260.15
40 FRESH FRUITS	1.6155	196.10	229.54	234.06
APPAREL, TEXTILE & FOOTWEAR.	6.0977	148.78	156.96	157.79
41 COTTON CLOTH	1.6197	153.02	159.73	159.76
42 SILK,LINEN,WOOLEN/CLOTH	0.5766	146.41	155.13	157.84
43 TAILORING CHARGES	0.8636	148.96	165.74	168.32
44 HOSIERY	0.1528	156.28	169.24	170.29
45 READYMADE GARMENTS	1.2038	134.76	143.70	144.52
46 WOOLEN READYMADE GARMENTS	0.1485	159.73	178.25	178.72
47 FOOTWEAR	1.5327	154.27	156.92	156.91
HOUSE RENT.	23.4298	169.02	196.70	198.69
48 HOUSE RENT INDEX (Combined)	23.4298	169.02	196.70	198.69

(continued)

(continued)

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

Item and Specification	Weights	Index		
		Aug-08	Jul-09	Aug-09
FUEL AND LIGHTING.	7.2912	183.62	206.77	207.84
49 KEROSENE	0.1366	434.77	411.20	425.77
50 FIREWOOD	0.4778	273.63	313.12	317.43
51 MATCH BOX	0.1301	200.00	200.00	200.00
52 BULB & TUBE	0.1311	97.10	118.54	118.54
53 ELECTRICITY	4.3698	127.23	159.77	159.77
54 NATURAL GAS	2.0458	270.77	274.78	276.60
H.HOLD.FURNITURE & EQUIPMENT ETC.	3.2862	153.45	164.83	165.37
55 UTENSILS	0.3690	138.56	152.66	153.90
56 PLASTIC PRODUCTS	0.1055	173.65	195.55	197.82
57 SUITCASE	0.0470	140.85	157.66	159.36
58 HOUSE HOLD EQUIPMENTS	0.0953	141.66	152.47	153.62
59 FURNITURE (Ready Made)	0.3054	164.21	177.31	177.50
60 FURNISHING	0.6362	146.56	157.37	158.36
61 ELECT.IRON FANS & WASHING MACHINE	0.1889	148.49	160.03	160.98
62 SEWING MACHINE,CLOCK AND NEEDLES	0.1270	130.63	142.60	142.68
63 REFRIGERATOR & AIRCONDITIONER	0.1756	116.80	132.23	132.12
64 MARRIAGE HALL	0.0445	175.28	193.71	194.61
65 HOUSE HOLD SERVANT	1.1918	166.43	174.79	174.79
TRANSPORT & COMMUNICATION.	7.3222	205.95	189.66	194.45
66 PETROL	1.7253	283.74	199.02	215.09
67 DIESEL	0.2070	408.36	390.53	419.76
68 CNG. FILLING CHARGES	0.1649	200.49	205.28	206.19
69 SERVICE CHARGES	0.3835	155.88	168.97	169.54
70 VEHICLES	0.2596	114.33	132.59	129.51
71 TYRE & TUBE	0.2831	137.58	159.63	160.47
72 TRANSPORT FARE/CHARGES	2.1236	250.13	253.47	254.18
73 TRAIN FARE	0.1514	253.24	253.24	253.24
74 AIR FARE	0.0983	342.93	342.93	342.93
75 COMMUNICATION	1.9255	87.89	91.36	91.37
RECREATION & ENTERTAINMENT.	0.8259	118.27	121.62	121.65
76 RECREATION	0.3399	128.36	131.89	131.89
77 ENTERTAINMENT	0.4860	111.21	114.44	114.49
EDUCATION.	3.4548	159.46	178.57	181.06
78 TUTION FEES	2.3629	162.19	175.82	176.21
79 STATIONERY	0.3500	154.86	176.40	177.34
80 TEXT BOOKS	0.6894	158.36	196.29	206.92
81 COMPUTER & ALLIED PRODUCTS	0.0525	82.29	84.57	84.57
CLEANING LAUNDRY & PER.APPEARANCE.	5.8788	154.34	171.56	172.64
82 WASHING SOAP & DETERGENT	1.5535	145.32	164.30	164.80
83 TOILET SOAP	0.7436	174.00	186.50	186.50
84 TOOTH PASTE	0.4036	111.77	114.15	114.37
85 SHAVING ARTICLES	0.3480	134.86	150.20	150.55
86 COSMETICS	1.4272	136.33	157.30	158.11
87 WATCHES	0.0552	130.25	138.77	138.77
88 JEWELLERY	0.3936	292.68	335.16	344.18
89 LAUNDRY CHARGES	0.2207	170.10	180.02	181.01
90 HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	144.03	153.38	153.95
MEDICARE.	2.0728	142.06	150.64	150.64
91 DRUGS & MEDICARES	1.0752	112.77	118.73	118.73
92 DOCTOR'S FEE	0.9976	173.63	185.03	185.03

Table A10: Wholesale Price Index Numbers by major Groups and Selected Commodities

Item and Specifications	Index		
	Aug-08	Jul-09	Aug-09
GENERAL	211.60	207.57	212.16
FOOD	211.91	224.31	229.52
1 WHEAT	252.84	283.44	298.19
2 WHEAT FLOUR	234.77	279.01	292.51
3 MAIDA	242.36	287.10	292.10
4 BESAN	206.84	161.96	166.35
5 RICE	431.01	323.02	324.61
6 MAIZE	250.98	214.54	210.63
7 JOWAR	224.47	219.78	229.69
8 BAJRA	270.58	187.99	184.59
9 BEANS	241.64	252.23	247.78
10 GRAM WHOLE	176.09	183.46	202.06
11 GRAM SPLIT	204.35	145.94	154.26
12 MASOOR	352.27	343.78	357.24
13 MASH	148.54	200.55	223.28
14 MOONG	176.67	181.22	192.45
15 POTATOES	238.75	270.20	270.02
16 ONIONS	212.03	249.14	238.13
17 TOMATOES	145.80	247.58	175.34
18 VEGETABLES	151.62	217.26	233.30
19 FRESH FRUITS	163.83	170.96	175.79
20 DRY FRUITS	191.70	227.90	228.51
21 FRESH MILK	176.66	193.35	194.61
22 POWDERED MILK	184.26	221.71	221.74
23 MILK FOOD	154.35	168.67	169.30
24 VEGETABLE GHEE	302.92	248.75	253.46
25 MUSTARD & RAPESEED OIL	313.05	262.37	263.54
26 COTTON SEED OIL	302.40	260.39	264.68
27 COOKING OIL	225.05	218.95	219.31
28 OIL CAKES	284.48	335.07	320.71
29 GUR	110.56	223.82	247.80
30 SUGAR REFINED	116.26	170.10	191.84
31 CHICKEN	184.58	213.37	256.96
32 EGGS	220.15	225.69	240.01
33 FISH	105.76	124.68	128.92
34 MEAT	228.86	266.65	268.91
35 SPICES	174.68	198.13	195.67
36 CONDIMENTS	235.20	285.60	285.65
37 SALT	146.01	166.45	167.44
38 TEA	127.58	142.99	144.72
39 BEVERAGES	135.38	140.72	140.76
40 MINERAL WATER	113.61	125.71	125.87
41 FRUIT PREPARED/PRESERVED	152.30	166.76	166.91
42 VEGETABLES PREPARED/PRESERVED	143.32	167.87	168.53
43 SUGAR CONFECTIONARY	99.85	100.48	100.51
RAW MATERIAL	189.96	193.88	197.76
44 COTTON	180.71	148.77	150.65
45 COTTON SEEDS	244.75	272.67	286.62
46 MUSTARD/RAPESEEDS	332.80	274.21	275.66
47 TOBACCO	181.61	204.91	216.41
48 SUGAR CANE	167.93	280.70	280.70
49 WOOL	140.81	139.48	140.99
50 HIDES	154.96	138.51	137.45
51 SKINS	112.16	105.26	106.46
52 PIG IRON	255.93	324.02	324.02

(continued)

(continued)

Table A10: Wholesale Price Index Numbers by major Groups and Selected Commodities

Item and Specifications	Index		
	Aug-08	Jul-09	Aug-09
FUEL & LIGHT	306.21	267.47	275.45
53 COAL	137.00	141.00	141.00
54 COKE	832.77	624.58	624.58
55 DIESEL OIL	378.88	385.74	417.17
56 MOTOR SPRIT	282.33	196.90	213.14
57 MOBIL OIL	172.88	199.47	198.10
58 FURNACE OIL	464.98	312.14	312.14
59 KEROSENE OIL	396.12	392.99	411.29
60 NATURAL GAS	218.73	217.12	217.12
61 ELECTRICITY IND. SUPPLY TARIFF-B	131.82	162.36	162.36
62 ELEC. AGRICULTURE TARIFF-D	168.86	177.78	177.78
63 FIRE WOOD	234.28	260.16	263.61
MANUFACTURE	144.00	141.07	143.57
64 SOLE LEATHER	128.74	131.99	131.99
65 CHROME LEATHER	194.84	194.84	194.84
66 COTTON YARN	118.28	102.08	109.66
67 BLENDED YARN	136.37	131.60	137.50
68 NYLON YARN	105.19	109.59	110.98
69 COTTON TEXTILES	137.48	146.56	145.74
70 HOSIERY	147.39	154.38	155.41
71 SILK & REYON TEXTILES	139.67	144.28	144.89
72 WOOLEN TEXTILES	121.73	137.37	137.53
73 JUTE MANUFACTURES	121.17	123.97	123.97
74 MATTRESSES	127.28	135.78	135.78
75 READY MADE GARMENTS	111.08	116.07	118.27
76 UTENSILS	136.71	146.64	146.64
77 PLASTIC PRODUCTS	124.10	138.47	139.15
78 GLASS PRODUCTS	104.74	168.15	179.65
79 CHEMICALS	219.92	162.04	169.10
80 DYING MATERIALS	88.36	88.36	88.36
81 SOAPS	170.63	180.62	181.78
82 COSMETICS	112.04	119.58	119.58
83 DRUGS & MEDICINES	105.90	110.29	113.17
84 FERTILIZERS	321.10	291.55	291.90
85 PESTICIDES & INSECTICISED	131.58	146.74	146.74
86 MACHINERY	162.98	175.23	175.23
87 TRANSPORTS	123.79	124.15	124.15
88 TYRES	193.61	208.67	208.67
89 TUBES	168.93	184.79	185.99
90 AUDIO-VISUAL INSTRUMENTS	82.90	92.25	92.25
91 OTHER ELECTRICAL GOODS	110.35	130.55	130.55
92 CIGARETTES	155.73	171.57	171.57
93 PAPER	105.27	105.98	105.98
94 MATCHES	124.26	124.26	124.26
95 FOOT WEAR	172.91	177.36	177.36
BUILDING MATERIAL	229.47	201.15	198.98
96 CEMENT	119.96	141.82	140.75
97 BRICKS	232.92	232.92	232.92
98 CEMENT BLOCKS	158.93	166.63	166.63
99 TILES	99.17	99.67	99.67
100 IRON BARS & SHEETS	322.11	248.46	244.93
101 PIPE FITTINGS	175.47	180.51	181.03
102 TIMBER	194.33	209.88	209.87
103 GLASS SHEETS	137.23	168.78	168.78
104 PAINTS & VARNISHES	128.15	146.05	146.05
105 SANITARY WARES	133.68	145.77	146.94
106 WIRES AND CABLES	222.57	259.37	259.37

Table A11: Price Indices - Base 2000-01=100

Period	CPI			WPI			SPI *
	Overall	Food	Non-food	Overall	Food	Non-food	
2004-05	121.98	125.69	119.47	124.14	125.03	123.50	126.52
2005-06	131.64	134.39	129.78	136.68	133.78	138.78	136.43
2006-07	141.87	148.21	137.59	146.18	145.67	146.53	149.29
2007-08	158.90	174.36	148.44	170.15	173.27	167.88	170.55
2008-09	191.90	215.69	175.82	201.10	213.54	192.04	209.29
2007 Aug.	148.64	158.26	142.13	155.90	158.78	153.80	158.45
Sep.	151.80	164.83	142.99	158.42	163.56	154.68	161.67
Oct.	153.66	168.18	143.84	161.30	165.61	158.16	163.71
Nov.	153.87	167.22	144.84	163.93	167.14	161.59	163.89
Dec.	154.77	167.85	145.93	163.83	168.26	160.61	165.41
2008 Jan.	157.73	172.96	147.43	166.75	172.50	162.57	168.24
Feb.	158.50	172.16	149.26	168.81	172.40	166.20	166.94
Mar.	163.38	180.52	151.79	175.55	177.57	174.08	173.96
Apr.	168.34	188.37	154.80	183.09	184.07	182.38	183.29
May.	172.87	196.28	157.04	192.19	194.26	190.68	191.49
Jun.	176.50	201.12	159.85	197.92	199.39	196.85	194.10
Jul.	182.39	206.85	165.85	206.53	206.37	206.65	202.94
Aug.	186.29	212.21	168.76	211.60	211.91	211.37	208.85
Sep.	188.10	214.13	170.50	211.02	213.63	209.12	209.52
Oct.	192.08	221.44	172.23	207.08	219.58	197.98	213.37
Nov.	191.85	218.12	174.09	196.50	215.97	182.33	211.03
Dec.	190.90	214.71	174.80	192.62	210.77	179.41	207.99
2009 Jan.	190.09	210.33	176.40	192.91	208.80	181.35	204.02
Feb.	191.90	211.58	178.59	194.19	210.31	182.46	206.78
Mar.	194.53	216.13	179.92	195.00	212.16	182.51	208.40
Apr.	197.28	220.46	181.61	198.28	215.69	185.61	210.85
May.	197.74	220.04	182.66	201.29	217.50	189.49	212.62
Jun.	199.69	222.23	184.45	206.13	219.81	196.17	215.09
Jul.	202.77	228.93	185.08	207.57	224.31	195.39	222.00
Aug.	206.21	234.69	186.95	212.16	229.52	199.53	225.18

*: all groups combined

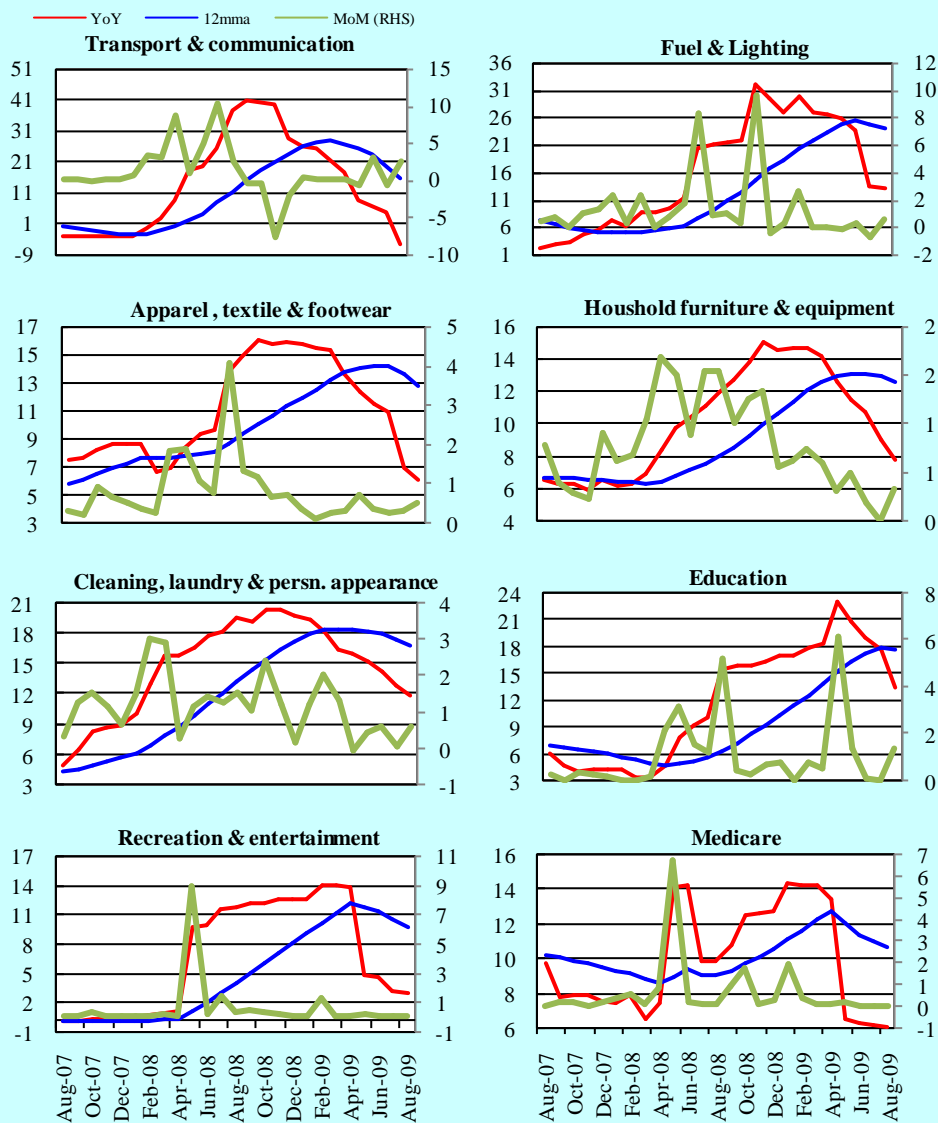
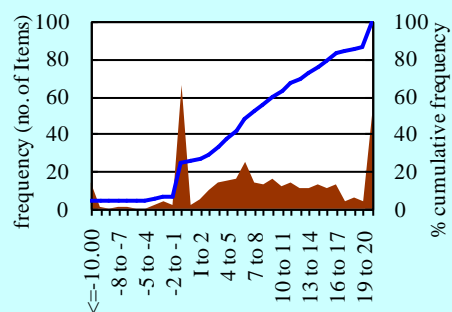
Figure A1: CPI Non-food Inflation (percent)

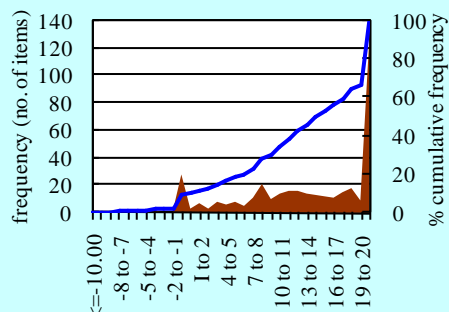
Figure A2: Frequency Distribution of Price Changes of CPI Items, August 2009

Frequency Cumulative frequency %

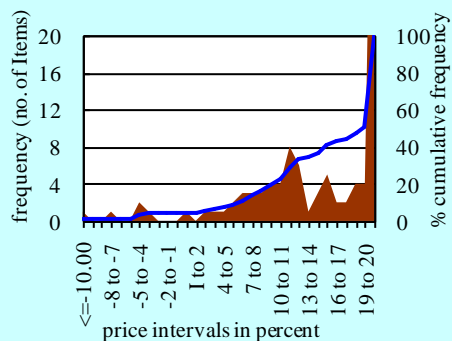
YoY price changes



12-month ma price changes



12-month ma food price changes



12-month ma non-food price changes

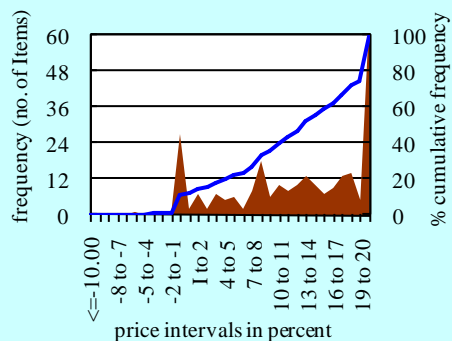
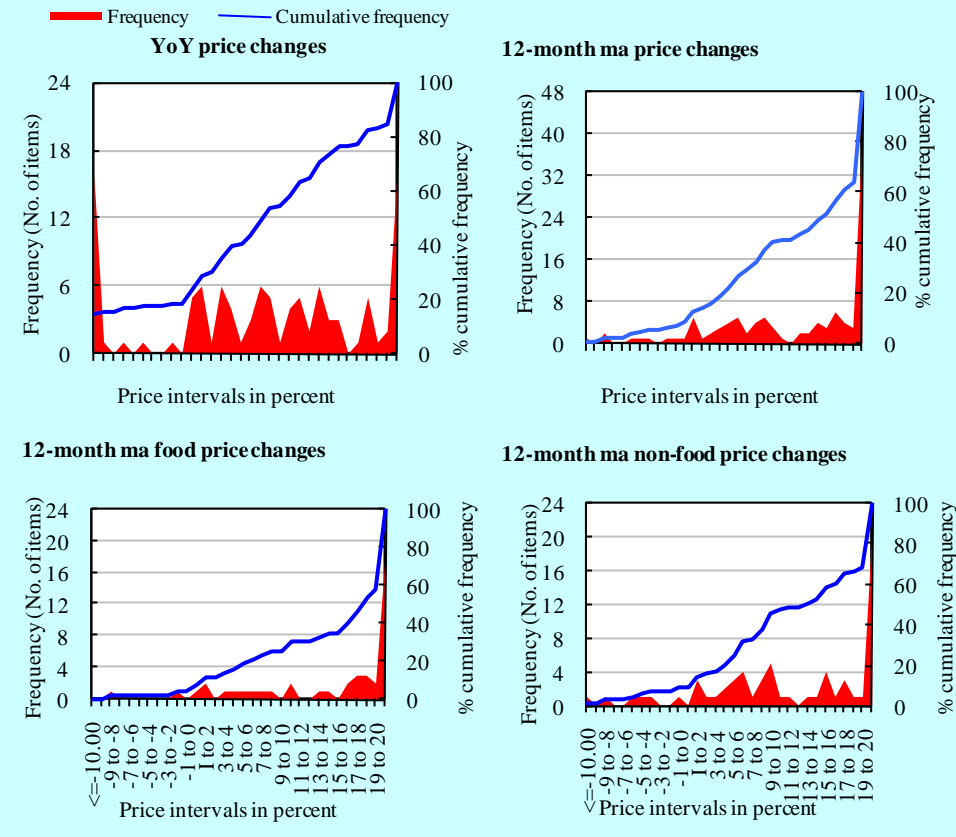


Figure A3: Frequency Distribution of Price Changes of WPI Items, August 2009



Annexure B

Technical Notes

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

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

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

w_i : Weights of i^{th} item

π_{it} : Inflation of i^{th} item

π_t : Overall inflation