

# **Inflation Monitor**

**June 2013**



**State Bank of Pakistan**

**Statistics & DWH Department**

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## **Review**

### **Inflation in Brief**

1. Headline CPI inflation (2007-08=100) is recorded at 5.9 percent on year-on-year basis in June 2013 as compared to 5.1 percent in the previous month and 11.3 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.7 percent in June 2013 as compared to 0.5 percent in the previous and a negligible inflation during the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation remained same at 0.8 percent in June 2013 as in the previous month.
3. Core inflation (trimmed) on year-on-year basis slightly increased to 6.8 percent in June 2013 as compared to 6.7 percent in the previous month and 11.1 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) increased to 0.6 percent in June 2013 as compared to 0.3 percent in the previous month and was 0.5 percent in the corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis decreased to 7.8 percent in June 2013 as compared to 8.1 percent in the previous month. It was 11.5 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis increased to 0.4 percent in June 2013 as compared to 0.3 percent in the previous month. A 0.7 percent rate of change in Core NFNE was observed in June 2012.
7. WPI inflation on year-on-year basis increased to 5.2 percent in June 2013 when compared to 4.1 percent a month earlier. During June 2012, WPI inflation was recorded at 6.4%.

8. WPI inflation on month-on-month basis recorded at 1.0 percent in June 2013 as compared to -0.4 percent in the previous month and a negligible decrease in inflation during June 2012.
9. SPI inflation on year-on-year basis increased to 4.6 percent in June 2013 as compared to 3.8 percent in the previous month. It was 11.9 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis recorded at 2.5 percent in June 2013 as compared to negligible decrease in previous month and it was 1.8 percent in June 2012.

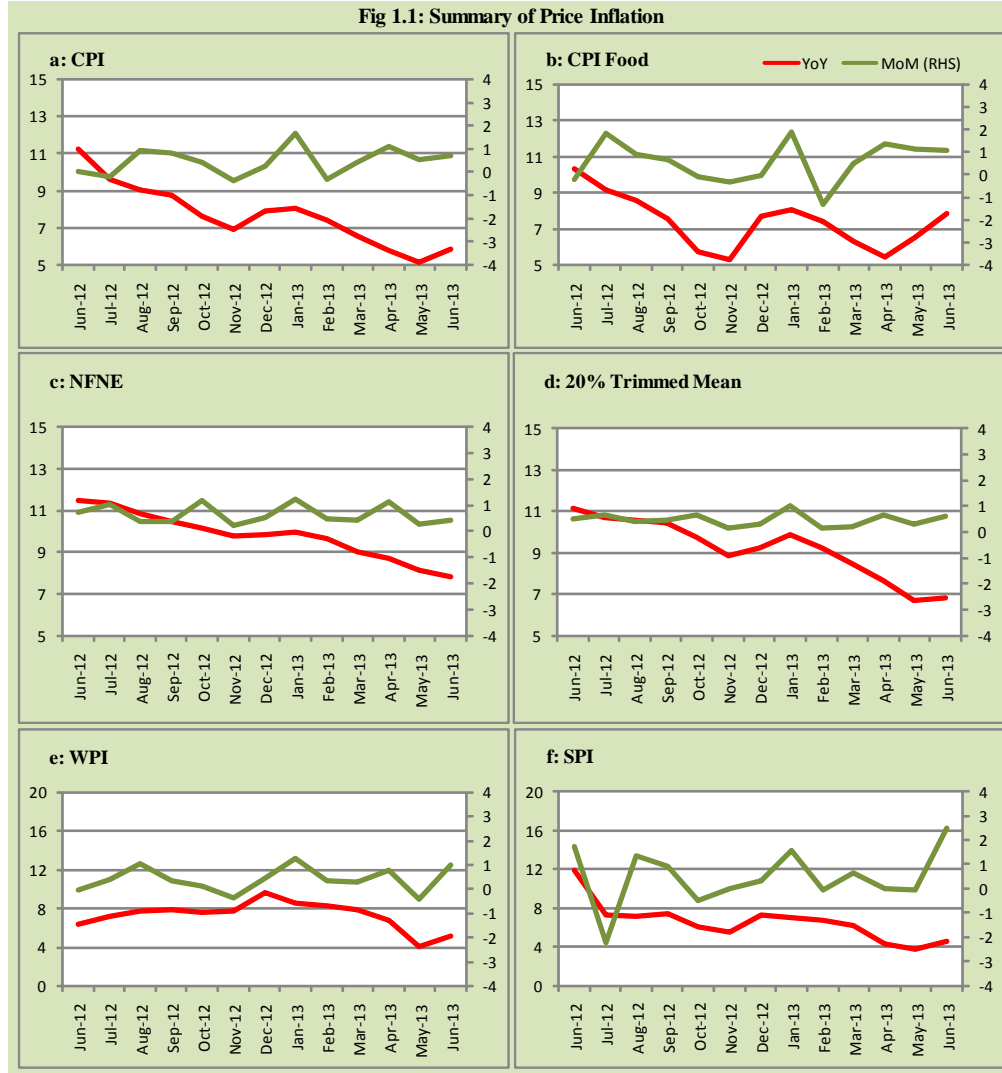
**Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)**

Period	CPI Inflation						Core Inflation				WPI Inflation		SPI** Inflation	
	General		Food		Non-food		NFNE*		Trimmed					
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
Jun-12	11.3	0.0	10.3	-0.2	12.0	0.2	11.5	0.7	11.1	0.5	6.4	0.0	11.9	1.8
Jul-12	9.6	-0.2	9.1	1.8	10.0	-1.7	11.3	1.0	10.7	0.7	7.2	0.4	7.3	-2.2
Aug-12	9.1	0.9	8.5	0.9	9.4	0.9	10.8	0.3	10.6	0.4	7.7	1.0	7.3	1.4
Sep-12	8.8	0.8	7.6	0.7	9.7	0.9	10.5	0.4	10.4	0.5	7.8	0.3	7.5	0.9
Oct-12	7.7	0.4	5.8	-0.1	9.0	0.7	10.2	1.2	9.7	0.7	7.5	0.1	6.2	-0.5
Nov-12	6.9	-0.4	5.3	-0.3	8.1	-0.4	9.8	0.2	8.8	0.2	7.7	-0.4	5.5	0.0
Dec-12	7.9	0.2	7.7	0.0	8.1	0.4	9.8	0.5	9.2	0.3	9.6	0.4	7.4	0.3
Jan-13	8.1	1.7	8.1	1.9	8.1	1.5	10.0	1.2	9.9	1.0	8.6	1.2	7.1	1.6
Feb-13	7.4	-0.3	7.4	-1.3	7.4	0.4	9.6	0.4	9.2	0.2	8.3	0.3	6.8	-0.1
Mar-13	6.6	0.4	6.3	0.5	6.7	0.3	9.0	0.4	8.4	0.2	7.9	0.3	6.2	0.6
Apr-13	5.8	1.1	5.5	1.4	6.0	0.9	8.7	1.1	7.6	0.7	6.8	0.8	4.3	0.0
May-13	5.1	0.5	6.5	1.1	4.1	0.1	8.1	0.3	6.7	0.3	4.1	-0.4	3.8	0.0
Jun-13	5.9	0.7	7.9	1.1	4.4	0.5	7.8	0.4	6.8	0.6	5.2	1.0	4.6	2.5

\* NFNE is Non-food non-energy

\*\* SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



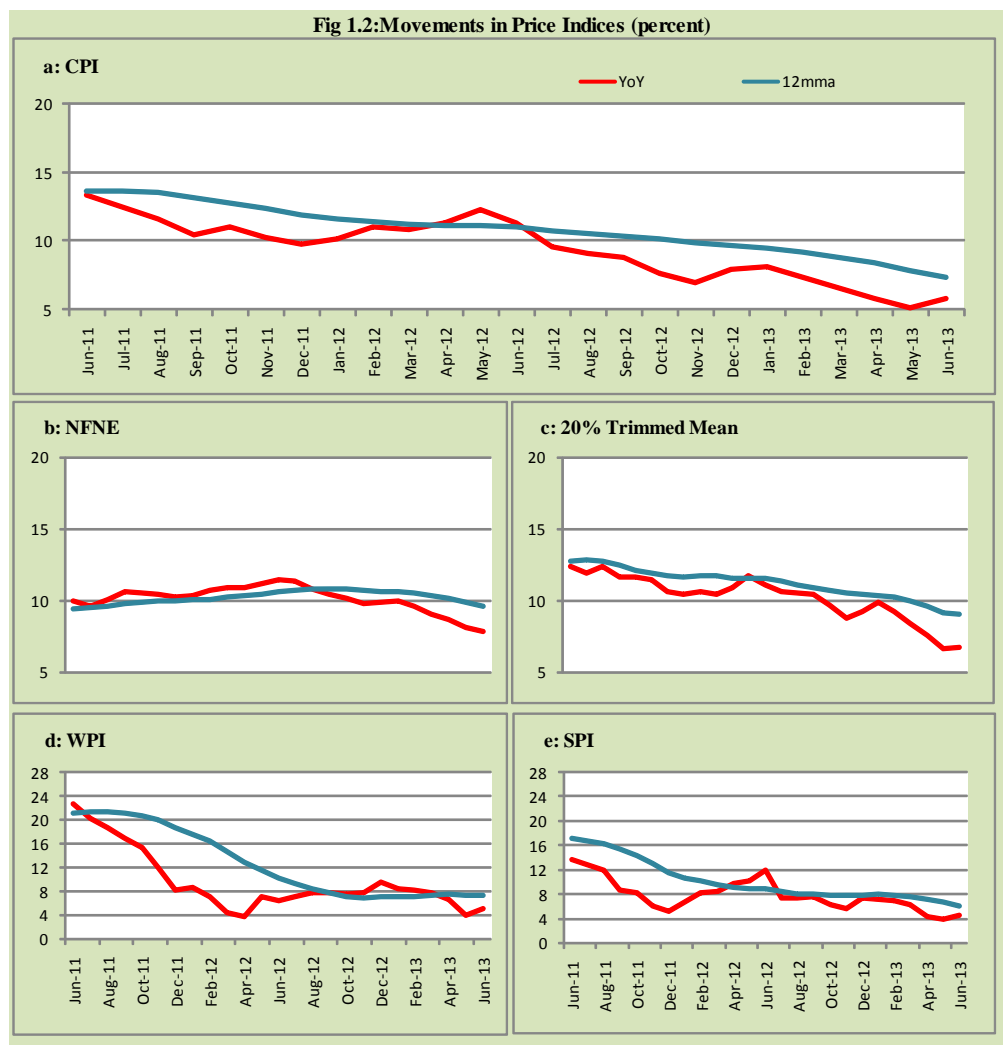
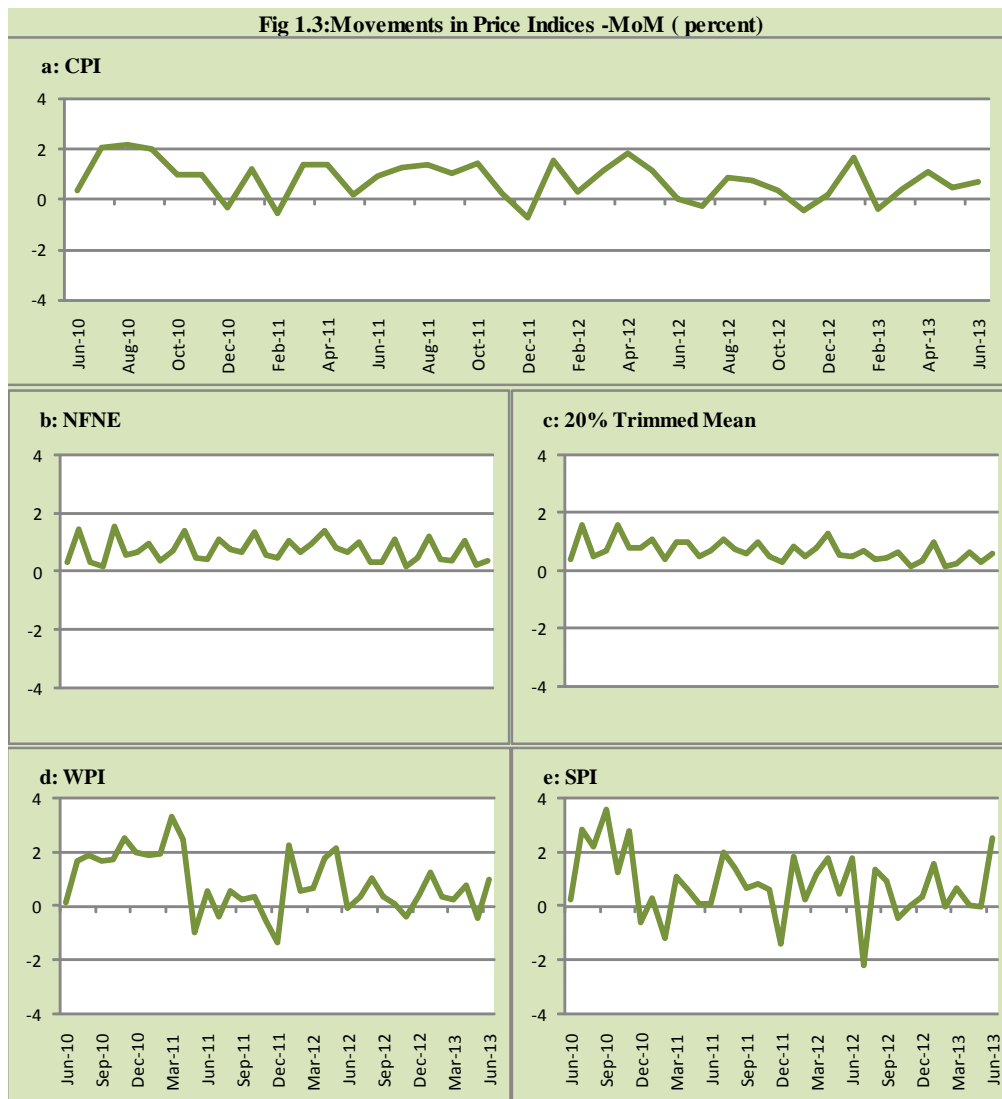
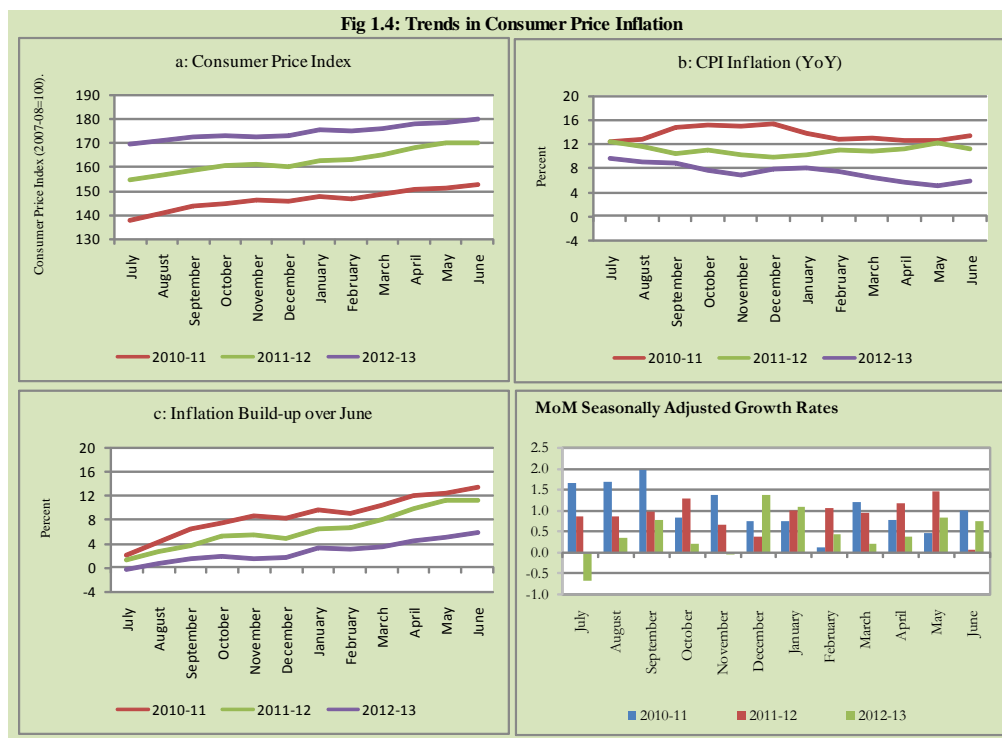




Fig 1.3: Movements in Price Indices -MoM ( percent)



**Fig 1.4: Trends in Consumer Price Inflation**



## 2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan was lower than overall inflation during June 2013 except Peshawar. Among these five cities, the lowest inflation was observed in Karachi at 4.7 percent while the highest inflation was observed in Peshawar at 7.4 percent (Table A6 of annexure-A).

**Table 2.1 City-wise Inflation of Selected Cities (percent)**

	Jun-12		May-13		Jun-13	
	MoM	YoY	MoM	YoY	MoM	YoY
<b>Overall CPI</b>	0.0	11.3	0.5	5.1	0.7	5.9
Islamabad	-0.3	10.8	1.0	5.4	-0.1	5.6
Karachi	0.6	11.4	0.7	3.8	1.4	4.7
Lahore	1.2	10.8	0.9	4.9	1.0	4.8
Peshawar	-1.3	9.6	0.6	5.2	0.8	7.4
Quetta	0.8	11.8	0.9	5.1	1.2	5.6

### 3. Income Group wise Inflation

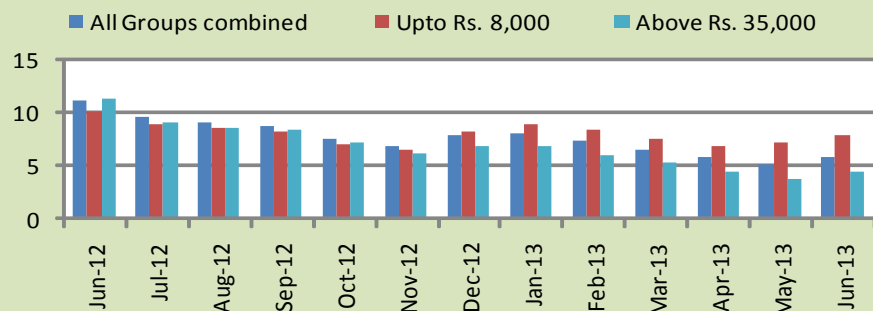
Income group- wise data showed that income group above Rs. 35,000 witnessed lower inflation than the overall inflation in CPI basket during June 2013 for general, food and non-food groups and also lowest among the groups. The lowest income group (Up to Rs. 8, 000) has the highest inflation among the groups during the month of June 2013 (Table A7 of annexure-A).

**Table 3.1 Income Group- wise Inflation (YoY)**

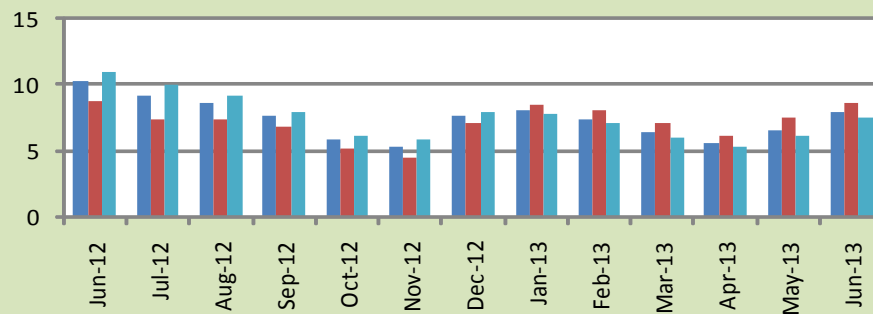
Income Groups	General			Food			Non-food		
	Jun-12	May-13	Jun-13	Jun-12	May-13	Jun-13	Jun-12	May-13	Jun-13
<b>All Groups Combined</b>	11.3	5.1	5.9	10.3	6.5	7.9	12.0	4.1	4.4
Up to Rs. 8,000	10.1	7.2	7.9	8.8	7.4	8.6	11.9	6.9	7.0
Rs. 8,001- 12,000	11.4	6.7	7.5	9.3	7.0	8.3	13.7	6.4	6.6
Rs. 12,001- 18,000	11.1	6.6	7.3	9.8	6.7	8.1	12.3	6.5	6.6
Rs. 18,001- 35,000	11.5	4.8	5.6	10.3	6.5	7.9	12.5	3.4	3.7
Above Rs. 35,000	11.4	3.8	4.5	11.0	6.1	7.5	11.6	2.6	3.0

**Fig 3.1: Income Group- wise Inflation**

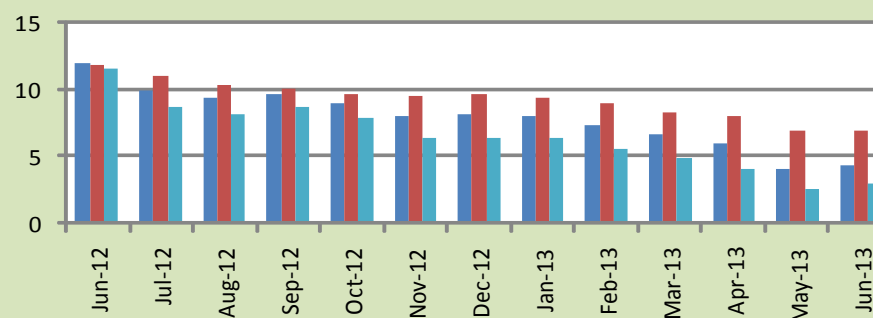
**a: CPI Overall Inflation (YoY)**



**b: CPI Food Inflation (YoY)**



**c: CPI Non-Food Inflation (YoY)**



#### 4. Weighted Contribution

The weighted contribution of food group in the overall inflation increased to 55.58 percent during June 2013 from 52.66 percent in May 2013. It was 38.05 percent in June 2012.

The weighted contribution of non-food group showed decrease to touch 44.42 percent in June 2013 from 47.34 percent in May 2013.

**Table 4.1 Weighted Contribution to CPI Inflation (YoY)**

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
Jun-12	38.05	9.65	25.43	6.22	3.60	17.04
Jul-12	40.17	11.54	15.53	9.68	3.66	19.42
Aug-12	39.99	12.01	12.97	12.64	3.85	18.55
Sep-12	36.69	11.86	13.06	16.16	3.86	18.38
Oct-12	32.26	13.20	14.34	15.11	4.52	20.57
Nov-12	32.78	14.79	15.75	10.05	4.90	21.74
Dec-12	40.58	14.29	13.76	8.43	4.39	18.56
Jan-13	41.94	13.53	11.88	10.07	4.20	18.38
Feb-13	41.59	15.24	12.70	8.00	3.93	18.53
Mar-13	40.11	14.02	14.27	7.14	4.58	19.89
Apr-13	39.66	15.99	16.52	1.30	4.17	22.36
May-13	52.66	17.82	4.28	-0.34	4.91	20.67
Jun-13	55.58	17.03	3.84	3.09	4.46	15.99

## 5. Inflation Diffusion Index

<b>Table 5.1 Inflation Diffusion Index - based on MoM change</b>													
	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13
General	27.0	41.4	41.4	48.6	54.7	39.6	49.6	51.4	37.6	38.8	40.3	42.7	48.4
Food & Non-Alcoholic Beverages	-23.4	25.4	47.8	44.2	38.3	19.1	33.0	49.6	14.2	21.4	21.6	27.4	50.4
Alcoholic Beverages & Tobacco	33.3	100.0	83.3	83.3	33.3	83.3	83.3	33.3	0.0	0.0	0.0	33.3	100.0
Clothing & Footwear	44.1	62.7	76.3	64.4	84.7	79.7	89.8	72.9	84.7	59.3	67.8	67.8	55.9
Housing, Water, Elect, Gas & other Fuels	33.3	33.3	30.6	38.9	50.0	22.2	38.9	66.7	22.2	33.3	58.3	16.7	50.0
Furnishing & Household Equip. Maintenance etc	78.3	68.1	20.3	81.2	79.7	69.6	76.8	63.8	53.6	68.1	69.6	78.3	76.8
Health	41.0	33.3	23.1	41.0	23.1	33.3	23.1	30.8	17.9	15.4	23.1	20.5	10.3
Transport	20.9	39.5	41.9	37.2	48.8	11.6	37.2	44.2	46.5	27.9	14.0	27.9	32.6
Communication	50.0	-25.0	8.3	16.7	50.0	33.3	50.0	66.7	16.7	8.3	16.7	33.3	16.7
Recreation & Culture	17.9	17.9	23.1	10.3	35.9	17.9	20.5	28.2	25.6	25.6	35.9	30.8	28.2
Education	0.0	25.0	43.8	31.3	43.8	12.5	25.0	6.3	25.0	75.0	25.0	43.8	43.8
Restaurant & Hotels	66.7	100.0	33.3	83.3	100.0	66.7	100.0	83.3	100.0	66.7	50.0	83.3	66.7
Miscellaneous	48.6	60.0	60.0	54.3	80.0	65.7	65.7	51.4	51.4	57.1	54.3	60.0	57.1
NFNE	44.7	47.0	38.8	49.1	62.1	46.4	55.3	52.7	45.9	45.6	49.1	49.4	47.9

See annexure B (Technical Notes) for the definition of Inflation Diffusion Index.

## 6. Domestic Commodity Prices

**Table 6.1 Inflation in Domestic CPI Food Commodities**

Sr. No	Item	Unit	Jun-12		May-13		Jun-13	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	8.95	-0.04	15.49	-3.00	18.58	2.63
2	Wheat Flour Bag	10 Kg	7.80	0.17	16.58	0.15	19.52	2.70
3	Rice Basmati Sup. Qlty.	Kg	18.17	-0.42	17.29	1.40	19.83	1.73
4	Pulse Masoor (Washed)	Kg	-7.79	-0.62	3.94	2.54	6.00	1.35
5	Pulse Moong (Washed)	Kg	-13.22	-2.64	-8.05	0.38	-3.41	2.27
6	Pulse Mash (Washed)	Kg	-11.41	-3.29	-8.60	0.17	-4.86	0.67
7	Pulse Gram	Kg	55.75	-0.87	-21.09	-5.14	-21.40	-1.27
8	Vegetable Ghee (Loose)	Kg	4.92	-0.88	-7.88	-0.19	-6.71	0.39
9	Sugar Refined	Kg	-19.55	0.80	-2.83	-0.24	-2.08	1.57
10	Milk Fresh (Unboiled)	Ltr	13.22	2.47	8.87	0.45	7.94	1.59
11	Tea- Tapal Danedar	200 Gm	5.87	5.87	29.52	2.54	23.20	0.70
12	Beef With Bone Av. Qlty.	Kg	13.83	0.25	3.50	0.22	3.39	0.14
13	Mutton Av. Qlty.	Kg	14.69	0.56	5.36	0.81	5.36	0.55
14	Chicken Farm Broiler (Live)	Kg	16.85	-9.70	-15.25	2.53	15.59	23.16
15	Eggs Farm	Doz	6.42	-12.76	-8.19	-3.42	2.47	-2.63
16	Potatoes	Kg	-12.06	4.39	-12.54	8.09	-0.16	19.16
17	Onion	Kg	36.72	-5.57	106.66	-12.00	87.83	-14.17
18	Tomatoes	Kg	-8.53	-2.83	77.52	-6.06	125.05	23.19
19	Ginger	Kg	-30.49	2.54	32.19	1.47	31.78	2.21
20	Garlic	Kg	-45.97	-9.84	33.92	3.14	36.30	-8.23

## 7. Global Commodity Prices

**Table 7.1 Changes in Major Global Indices (percent)**

Item/ Group	Jun-12		May-13		Jun-13	
	YoY	MoM	YoY	MoM	YoY	MoM
<b>Overall</b>	-13.1	-8.2	-3.1	0.2	5.2	-0.3
Food	-6.8	-0.5	8.3	2.4	9.2	0.3
Metals	-21.2	-4.0	-8.8	-3.9	-8.6	-3.8
Energy	-12.3	-11.2	-4.8	0.2	7.2	0.0
Agricultural	-17.8	-3.8	-1.7	1.9	5.1	2.8
Cotton	-48.8	-7.2	4.6	0.1	13.3	0.5

Source: IMF

## **8. Seasonal Adjustment in CPI**

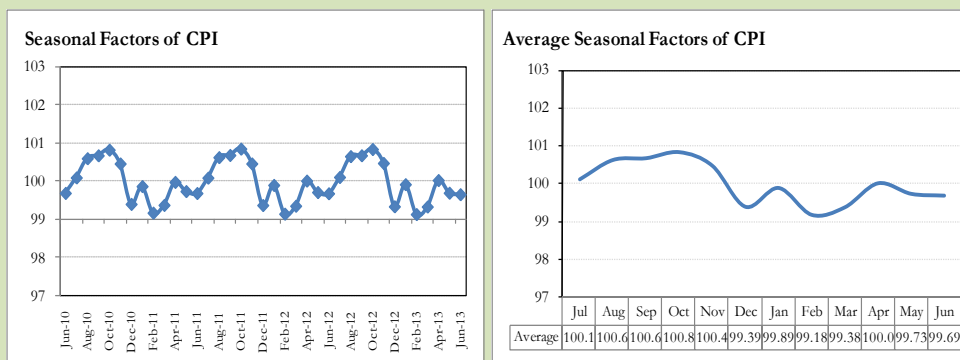
Seasonal adjustment is the process of estimating and removing the seasonal effects from a time series after decomposing it into seasonal, trend, cycle and irregular components. The purpose is to identify the different components of the time series and thus provide a better understanding of its underlying behavior. Seasonally adjusted changes are usually preferred for analyzing general price trends in the economy because they eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year. Various statistical methods can be used to decompose a time series into its constituent components. The State Bank of Pakistan uses X-12- ARIMA Seasonal Adjustment Method for this purpose.

The changes in consumer prices are normally reported in terms of year-on-year and month-on-month basis. Seasonal adjustment is particularly useful for analyzing month-on-month changes. The monthly data series of Consumer Price Index (CPI) from July 2008 to June 2013 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months of the year. Upward and downward seasonality is above and below the trend line respectively. It is important to note that seasonal factors are estimates based on present and past experience and that future data may not necessarily show the same pattern of seasonal factors.

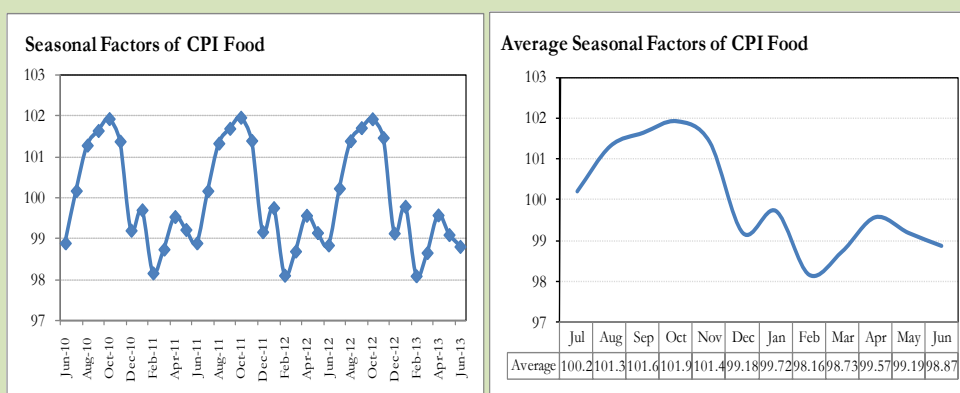


**Fig. 8.1 Seasonal Factors of CPI**



Note: Data Available in Annex Table 16.

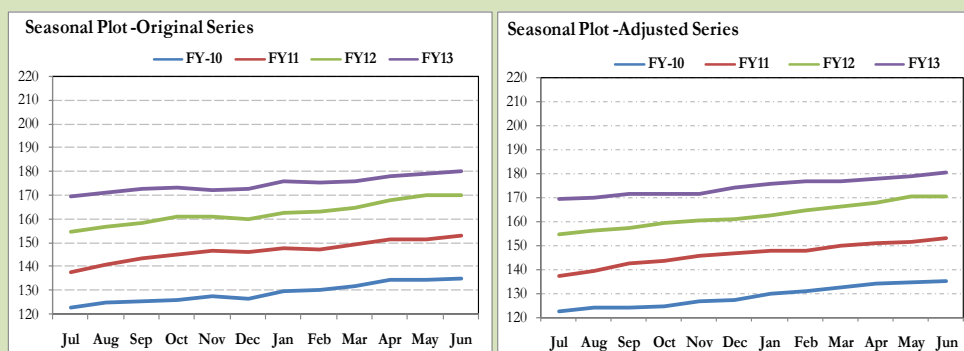
**Fig. 8.2 Seasonal Factors of CPI Food**



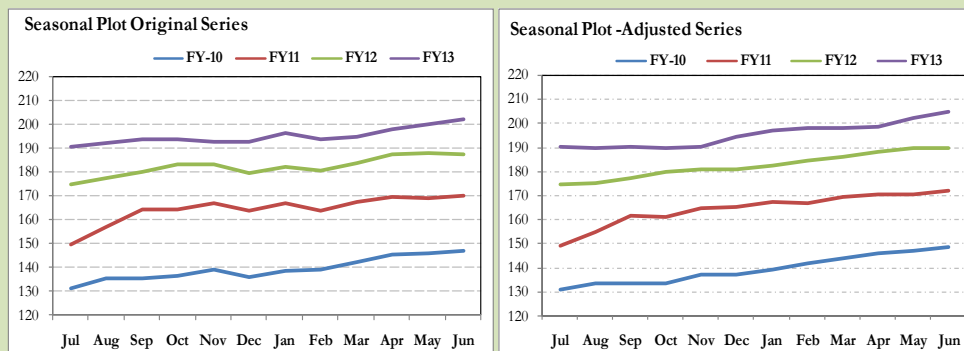
Note: Data Available in Annex Table 17.

Figures 8.3 & 8.4 show that seasonally adjusted series are relatively smoother than the original series due to the removal of the seasonal variations. The trend follows the long-term movement in original series, and is smoother than the original series because some irregular fluctuations have been removed.

**Fig. 8.3 Seasonal Plots of CPI**



**Fig. 8.4 Seasonal Plots of CPI (Food)**



Seasonally adjusted CPI for June 2013 stood at 180.55 against 179.94 in original series showing an increase of 0.61 on account of adjustment of downward seasonality in June 2013.

Seasonally adjusted CPI food group for June 2013 stood at 204.53 against 202.11 in original series showing an increase of 2.42 on account of adjustment of downward seasonality in June 2013.

Month-on-month change of seasonally adjusted CPI series stood at 0.76% reflecting decrease during June 2013 over May 2013 and an increase of 0.72% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 1.35% reflecting decrease during June 2013 over May 2013 and an increase of 1.06% in original series.

It is important to note that inflation rates should be analyzed on the basis of seasonally adjusted rates. This is especially needed for inflation rates on month-on-month basis. The most recent annual rate of inflation is usually indicated by annualizing the seasonally adjusted month-on-month rate. Annualized rate of CPI inflation in June 2013 (corresponding to the seasonally adjusted month-on-month rate) is 9.53 percent.

Fig. 8.5 Month-on-Month Percent Changes in CPI

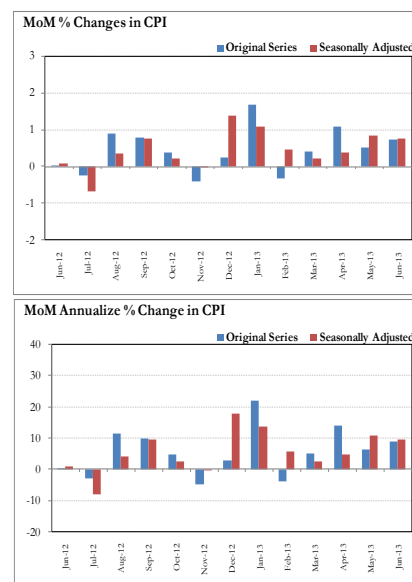
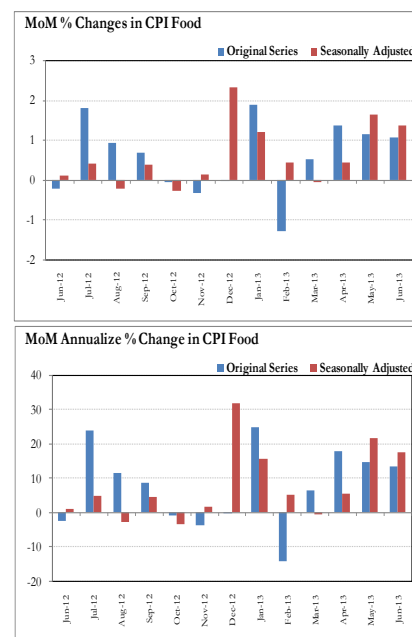


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



## Annexure A

	Weigh	MoM change			YoY change		
		Jun-12	May-13	Jun-13	Jun-12	May-13	Jun-13
<b>I. Food Group</b>	<b>37.5</b>	<b>-0.2</b>	<b>1.1</b>	<b>1.1</b>	<b>10.3</b>	<b>6.5</b>	<b>7.9</b>
Food & Non-Alcoholic	34.8	-0.7	1.2	1.0	9.9	6.2	8.1
Alcoholic Beverages & Tobacco	1.4	11.1	0.0	1.8	18.7	13.0	3.5
Restaurant & Hotels	1.2	0.7	0.6	0.3	11.1	8.3	8.0
<b>II. Non-Food Group</b>	<b>62.5</b>	<b>0.2</b>	<b>0.1</b>	<b>0.5</b>	<b>12.0</b>	<b>4.1</b>	<b>4.4</b>
Clothing & Footwear	7.6	0.5	0.8	1.5	15.4	12.6	13.6
Housing, Water, Elect, Gas &	29.4	0.1	0.0	0.1	10.7	0.8	0.8
Furnishing & Household Equip.	4.2	1.0	0.6	0.6	22.3	7.7	7.3
Health	2.2	2.3	0.6	0.4	14.3	11.2	9.2
Transport	7.2	-1.6	-1.2	0.9	8.8	-0.2	2.3
Communication	3.2	1.0	0.1	0.0	-0.1	5.2	4.1
Recreation & Culture	2.0	0.3	0.5	0.7	18.7	7.7	8.2
Education	3.9	0.6	0.3	0.8	11.5	7.2	7.4
Miscellaneous	2.8	1.3	0.0	-0.1	15.1	7.7	6.2
<b>Headline</b>	<b>100</b>	<b>0.0</b>	<b>0.5</b>	<b>0.7</b>	<b>11.3</b>	<b>5.1</b>	<b>5.9</b>

Groups	% changes	No of items in each inflation range									
		Total number of items		Decrease or no change (0% or less)		Subdued increase (>0% but <5%)		Moderate increase (5% but less than 10%)		Double digit increase (10% or more)	
		Jun-12	Jun-13	Jun-12	Jun-13	Jun-12	Jun-13	Jun-12	Jun-13	Jun-12	Jun-13
<b>I. Food Group</b>	<b>7.9</b>	<b>126</b>	<b>126</b>	<b>18</b>	<b>26</b>	<b>14</b>	<b>21</b>	<b>31</b>	<b>42</b>	<b>63</b>	<b>37</b>
Food & Non-Alcoholic Beverages	8.1	114	114	18	26	14	17	27	35	55	36
Alcoholic Beverages & Tobacco	3.5	6	6	0	0	0	4	2	2	4	0
Restaurant & Hotels	8.0	6	6	0	0	0	0	2	5	4	1
<b>II. Non-Food Group</b>	<b>4.4</b>	<b>348</b>	<b>348</b>	<b>35</b>	<b>58</b>	<b>35</b>	<b>76</b>	<b>57</b>	<b>118</b>	<b>221</b>	<b>96</b>
Clothing & Footwear	13.6	59	59	2	3	2	0	7	13	48	43
Housing, Water, Elect, Gas & other Fuels	0.8	36	36	0	13	1	5	9	15	26	3
Furnishing & Household Equip. Maintenance etc	7.3	69	69	1	3	4	20	9	33	55	13
Health	9.2	39	39	14	16	7	4	2	8	16	11
Transport	2.3	43	43	1	6	4	17	10	17	28	3
Communication	4.1	12	12	6	3	1	5	2	4	3	0
Recreation & Culture	8.2	39	39	6	8	8	15	8	7	17	9
Education	7.4	16	16	4	2	3	4	2	6	7	4
Miscellaneous	6.2	35	35	1	4	5	6	8	15	21	10
<b>Overall</b>	<b>5.9</b>	<b>474</b>	<b>474</b>	<b>53</b>	<b>84</b>	<b>49</b>	<b>97</b>	<b>88</b>	<b>160</b>	<b>284</b>	<b>133</b>

Note: Prices of 13 seasonal items were not reported during the month.

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in June 2013					
Top 15 Contributors		YoY Change			Weighted Contribution
Items/ Contributors	Weights	Jun-12	Jun-13		
Ranked by Weighted Contribution					
1	House Rent	21.81	6.59	7.07	20.94
2	Wheat Flour	4.16	6.70	19.99	13.93
3	Milk Fresh	6.68	13.29	7.79	10.96
4	Fresh Vegetable	1.68	-4.12	29.28	7.85
5	Onion	0.53	36.73	87.82	6.02
6	Education	3.94	11.51	7.39	4.46
7	Tomatoes	0.44	-8.52	125.06	4.42
8	Cotton Cloth	1.73	8.44	14.91	3.98
9	Chicken	1.36	16.85	15.59	3.90
10	Rice	1.58	17.51	12.21	3.23
11	Tea	0.84	6.44	16.92	3.02
12	Footwear	1.55	16.19	11.92	2.64
13	Tailoring	0.88	17.65	13.06	2.24
14	Woolen Cloth	0.88	19.12	13.41	2.15
15	Meat	2.43	14.11	4.04	2.12
Total		50.51			91.85
Bottom 15 Contributors					
1	Gas	1.58	29.41	-45.61	-19.10
2	Fresh Fruits	1.86	30.07	-11.26	-4.90
3	Spices	0.54	14.04	-18.28	-2.68
4	Vegetable Ghee	2.07	5.75	-5.47	-1.88
5	Pulse Gram	0.24	55.75	-21.40	-1.22
6	Gram Whole	0.16	36.84	-15.61	-0.59
7	Besan	0.15	46.53	-13.93	-0.49
8	Sugar	1.04	-19.56	-2.08	-0.43
9	Motor Fuel	3.03	2.14	-0.61	-0.33
10	Pulse Mash (Washed)	0.21	-11.41	-4.86	-0.20
11	Pulse Moong	0.23	-13.22	-3.41	-0.19
12	Potatoes	0.47	-12.06	-0.16	-0.01
13	Mustard Oil	0.10	9.84	-0.07	0.00
14	Electricity	4.40	16.39	0.00	0.00
15	Kerosene Oil	0.01	13.59	5.67	0.01
Total		16.09			-32.02

<b>Table A3.1: Top and Bottom 15 Contributors to CPI Inflation (MoM) in June 2013</b>				
<b>Top 15 Contributors</b>				
<b>Items/ Contributors</b>	<b>Weights</b>	<b>MoM Change</b>		<b>Weighted Contribution</b>
		<b>May-13</b>	<b>Jun-13</b>	
<b>Ranked by Weighted Contribution</b>				
1 Chicken	1.36	2.53	23.16	41.89
2 Milk Fresh	6.68	0.44	1.54	17.71
3 Wheat Flour	4.16	0.43	2.59	16.27
4 Tomatoes	0.44	-6.06	23.19	11.55
5 Footwear	1.55	0.03	6.16	11.08
6 Potatoes	0.47	8.09	19.16	9.90
7 Motor Fuel	3.03	-3.22	2.16	8.87
8 Beverages	1.20	0.87	3.58	5.91
9 Education	3.94	0.32	0.84	4.19
10 Cigarette	1.39	0.00	1.82	3.75
11 Rice	1.58	0.70	1.43	3.23
12 Cosmetics	0.39	0.92	6.96	3.17
13 Sugar	1.04	-0.24	1.56	2.42
14 Cotton Cloth	1.73	1.47	0.87	2.05
15 Tea	0.84	1.82	1.06	1.69
<b>Total</b>	<b>29.80</b>			<b>143.70</b>
<b>Bottom 15 Contributors</b>				
1 Fresh Fruits	1.86	11.99	-10.10	-33.47
2 Onion	0.53	-12.00	-14.18	-16.39
3 Fresh Vegetable	1.68	11.87	-4.21	-11.75
4 Personal Equipments	0.84	-1.73	-2.28	-3.82
5 Egg	0.46	-3.42	-2.62	-1.46
6 Besan	0.15	-4.95	-1.99	-0.47
7 Pulse Gram	0.24	-5.14	-1.27	-0.44
8 Spices	0.54	-0.61	-0.30	-0.28
9 Gram Whole	0.16	-3.18	-0.02	-0.01
10 Woolen Readymade Garments	0.40	0.00	0.00	0.00
11 Electricity	4.40	0.00	0.00	0.00
12 Motor Vehicle Tax	0.11	0.00	0.00	0.00
13 News Papers	0.19	0.00	0.00	0.00
14 House Rent	21.81	0.00	0.00	0.00
15 Honey	0.04	0.08	0.00	0.00
<b>Total</b>	<b>33.43</b>			<b>-68.08</b>

**Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in June 2013**

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jun-12	Jun-13	
<b>A. Ranked by Percentage Change</b>					
1	Tomatoes	0.44	-8.52	125.06	4.42
2	Onion	0.53	36.73	87.82	6.02
3	Fresh Vegetable	1.68	-4.12	29.28	7.85
4	Wheat Flour	4.16	6.70	19.99	13.93
5	Wheat	0.35	8.96	18.58	1.03
6	Woolen Readymade Garments	0.40	17.36	18.47	1.20
7	Tea	0.84	6.44	16.92	3.02
8	Dopatta	0.44	18.99	16.60	1.29
9	Wheat Product	0.10	3.61	16.17	0.25
10	Chicken	1.36	16.85	15.59	3.90
11	Cotton Cloth	1.73	8.44	14.91	3.98
12	Cleaning & Laundering	0.21	18.73	14.55	0.56
13	Gur	0.02	-13.48	14.07	0.07
14	News Papers	0.19	8.94	13.68	0.40
15	Woolen Cloth	0.88	19.12	13.41	2.15
<b>Total</b>		<b>13.33</b>			<b>50.05</b>
<b>B. Ranked by Weights</b>					
1	House Rent	21.81	6.59	7.07	20.94
2	Milk Fresh	6.68	13.29	7.79	10.96
3	Electricity	4.40	16.39	0.00	0.00
4	Wheat Flour	4.16	6.70	19.99	13.93
5	Education	3.94	11.51	7.39	4.46
6	Communication & Apparatus	3.15	-0.24	4.19	1.63
7	Motor Fuel	3.03	2.14	-0.61	-0.33
8	Transport Services	2.70	13.16	3.69	1.96
9	Meat	2.43	14.11	4.04	2.12
10	Vegetable Ghee	2.07	5.75	-5.47	-1.88
11	Fresh Fruits	1.86	30.07	-11.26	-4.90
12	Cooking Oil	1.75	9.30	2.97	0.83
13	Cotton Cloth	1.73	8.44	14.91	3.98
14	Fresh Vegetable	1.68	-4.12	29.28	7.85
15	Rice	1.58	17.51	12.21	3.23
<b>Total</b>		<b>63.00</b>			<b>64.76</b>
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 5.9 percent in June, 2013.					

<b>Table A3.3: Top Ten Contributors to CPI Food Inflation (YoY) in June 2013</b>					
<b>Items/ Contributors</b>		<b>Weights</b>	<b>YoY Change</b>		<b>Weighted Contribution</b>
			<b>Jun-12</b>	<b>Jun-13</b>	
<b>A. Ranked by Weighted Contribution</b>					
1	Wheat Flour	4.16	6.70	19.99	13.93
2	Milk Fresh	6.68	13.29	7.79	10.96
3	Fresh Vegetable	1.68	-4.12	29.28	7.85
4	Onion	0.53	36.73	87.82	6.02
5	Tomatoes	0.44	-8.52	125.06	4.42
6	Chicken	1.36	16.85	15.59	3.90
7	Rice	1.58	17.51	12.21	3.23
8	Tea	0.84	6.44	16.92	3.02
9	Meat	2.43	14.11	4.04	2.12
10	Ready Made Food	1.23	11.09	7.97	1.92
<b>Total</b>		<b>20.94</b>			<b>57.36</b>
<b>B. Ranked by Percentage Change</b>					
1	Tomatoes	0.44	-8.52	125.06	4.42
2	Onion	0.53	36.73	87.82	6.02
3	Fresh Vegetable	1.68	-4.12	29.28	7.85
4	Wheat Flour	4.16	6.70	19.99	13.93
5	Wheat	0.35	8.96	18.58	1.03
6	Tea	0.84	6.44	16.92	3.02
7	Wheat Product	0.10	3.61	16.17	0.25
8	Chicken	1.36	16.85	15.59	3.90
9	Gur	0.02	-13.48	14.07	0.07
10	Rice	1.58	17.51	12.21	3.23
<b>Total</b>		<b>11.07</b>			<b>43.72</b>
<b>C. Ranked by Weights</b>					
1	Milk Fresh	6.68	13.29	7.79	10.96
2	Wheat Flour	4.16	6.70	19.99	13.93
3	Meat	2.43	14.11	4.04	2.12
4	Vegetable Ghee	2.07	5.75	-5.47	-1.88
5	Fresh Fruits	1.86	30.07	-11.26	-4.90
6	Cooking Oil	1.75	9.30	2.97	0.83
7	Fresh Vegetable	1.68	-4.12	29.28	7.85
8	Rice	1.58	17.51	12.21	3.23
9	Cigarette	1.39	18.83	3.47	0.91
10	Chicken	1.36	16.85	15.59	3.90
<b>Total</b>		<b>24.98</b>			<b>36.94</b>
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 Food, which is 7.9 percent in June, 2013.					



**Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in June 2013**

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jun-12	Jun-13	
<b>A. Ranked by Weighted Contribution</b>					
1	House Rent	21.81	6.59	7.07	20.94
2	Education	3.94	11.51	7.39	4.46
3	Cotton Cloth	1.73	8.44	14.91	3.98
4	Footwear	1.55	16.19	11.92	2.64
5	Tailoring	0.88	17.65	13.06	2.24
6	Woolen Cloth	0.88	19.12	13.41	2.15
7	Transport Services	2.70	13.16	3.69	1.96
8	Ready Made Garment	0.97	17.76	11.61	1.85
9	Personal Care	1.49	15.87	6.76	1.77
10	Text Books	0.57	41.15	12.95	1.71
<b>Total</b>		<b>36.54</b>			<b>43.69</b>
<b>B. Ranked by Percentage Change</b>					
1	Woolen Readymade Garments	0.40	17.36	18.47	1.20
2	Dopatta	0.44	18.99	16.60	1.29
3	Cotton Cloth	1.73	8.44	14.91	3.98
4	Cleaning & Laundering	0.21	18.73	14.55	0.56
5	News Papers	0.19	8.94	13.68	0.40
6	Woolen Cloth	0.88	19.12	13.41	2.15
7	Tailoring	0.88	17.65	13.06	2.24
8	Text Books	0.57	41.15	12.95	1.71
9	Hosiery	0.51	15.29	12.79	1.13
10	Doctor (MBBS) Clinic Fee	0.59	22.58	12.75	1.36
<b>Total</b>		<b>6.40</b>			<b>16.01</b>
<b>C. Ranked by Weights</b>					
1	House Rent	21.81	6.59	7.07	20.94
2	Electricity	4.40	16.39	0.00	0.00
3	Education	3.94	11.51	7.39	4.46
4	Communication & Apparatus	3.15	-0.24	4.19	1.63
5	Motor Fuel	3.03	2.14	-0.61	-0.33
6	Transport Services	2.70	13.16	3.69	1.96
7	Cotton Cloth	1.73	8.44	14.91	3.98
8	Gas	1.58	29.41	-45.61	-19.10
9	Footwear	1.55	16.19	11.92	2.64
10	Personal Care	1.49	15.87	6.76	1.77
<b>Total</b>		<b>45.39</b>			<b>17.93</b>

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 Non-food, which is 4.4 percent in June, 2013.

**Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: June 2013**

Groups	Decrease or no change	Subdued increase (Up to 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food & Non-Alcoholic Beverages	Chillies Powd.National 200 Gm, Chillies Powder Loose, Bananas, Pulse Gram, Gram Whole Yellow Av.Qlty, Apple	Rice Irri-6/9 (Sindh/Punj, Cooking Oil (Pakwan), Saunf, Salt-Powdered (Lahori) Loose, Coriander Seed (Loose), Milk Tetra Pack 1/2 Ltr.	Bread Plain Medium Size, Pistachio Av.Qlty., Rice Basmati Broken Av.Ql, Beans (Lal Lobia), Samosa (Vegetable)	Tomatoes, Onion, Lady Finger, Karaila, Chillies Green, Garlic, Cucumber (Kheera), Ice Cream Walls, Brinjal, Ginger, Turai, Ice, Tapal Danedar Tea 200 Gm, Wheat Flour Fine/Superior, Cornflakes Fauji 225 Gm.
Alcoholic Beverages & Tobacco		Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Cigarettes Capstan 20,S	Betel Nuts, Betel Leaves	
Clothing & Footwear	Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Ladies Sandal Bata		Shirt Boy 24"/26" Length, Shoe Repair Half Sole, School Uni. Kameez, Shal. Boys, Child Shoe Power Lite Bata, Tailoring Coat-Pant Suit, School Uni. Pant, Shirt Boys	Gents Shoe, Art 1109 Servis, Gents Shoes Paul Bata, Secondhand Sweater For Men, Washing Charges Paint & Shirt, Brassier Sup.Qlty, Georgette Av.Qlty, Dopatta Cotton Av. Qlty, Lungi/Dhoti(Cotton) Avg.Qlty, Frock W/Wear Girls, Shirting Av.Qlty.
Housing, Water, Elect, Gas & other Fuels	Gas Chrg All Over 500 Mmbtu, Gas Chrg Over 300 - 500 Mmbtu, Gas Chrg Overall/ Combined	Water Charges Per House, Cement (Local), Sand (Black Pit Sand), Bajree, Bricks (New) 1st Class	Unskilled Labour Wage Rat, Synthetic Enemal Robialac, Mason (Raj) Wage Rate, Firewood Whole, Electrician Wage Rate(P/Day)	Electrician Wage Rate(P/Pnt), Plumber Wage Rate, Synthetic Enemal ICI
Furnishing & Household Equip. Maintenance etc	Tawa Iron (Medium Size) Avg. Qlty, Electric Juicer, Carpet Plain Av. Qlty	Electric Blubs "0" Watt, Washing Machine (Singer), Ceiling Fan 56" Super Qlty, Air Cooler Super Asia, Pedestal Fan 22" Super Qlty	Dining Table 6 Chairs, Washing Powder 1000 Grm (Express), Lota Plastic (Med Size) Avg. Qlty, Boot Polish Liquid (Cherry)	Match Box (Small), Boot Polish Cherry/Kiwi 50 MI, Cleanser Powder Vim 1000 Gms, Robin Blue (35 Gms), Washing Powder (Wheel/ Bonus), Tea Set Pak. China Wear 21 Pcs, Elect. Iron Philips, Water Set Jug+6 Glasses, Finis 500 MI
Health	Burnol Cream 30 Gm, Amoxil Capsule 250 Mg., Polyfax Eye Ointment, Daonil Tab. 5 Mg., Calcium Syrup Sandoz	Gripe-Water Woodward's, Sugar Test (Random/Fasting), ECG Charges, Cac. 1000 Tab	Dettol (Medium), X-Ray (Chest) Charges, Blood Test (Cp) Charges, Saniplast (1 Putty), Urine Test (Dr) Charges	Hydryllin Syrup 120 MI. O.R.S. (Nimcol), Trisil Tab., Phenergan Syrup 120 MI., Galxos-D (450 Gm), Sancos Syrup (50 MI.), Doctor (Mbbs) Clinic Fee, Ear Drops (Cardisorpine), Disprin Tab., Glycerin Small Bottle
Transport	CNG, Minibus Fare Min.Within City, Minibus Fare Max. Within City, Suzuki Fare Maximum Within City	Train Fare A/C Slp > 500K, Train Fare A/C Slp.101-500, Train Fare Eco. 1-100 Km., Train Fare Eco. 101-500 K, Train Fare 1st Slp. 1-100	Cycle Overhauling Charges, Tyre Puncture Charges, Motor Cycle Service Charges, Car Suzuki 800 Cc (W/O. Ac), Car Service Charges	Taxi 4 Seater Fare, Bus Fare Outside City (Non A/C), Gas Cylinder S. Size (L.P.G)
Communication	Postal Envelope Domestic, U.M.S. Reg Charges Min., Mobile Cell Charges	Postal Envelope For Saudi Arabia, Postal Registration Charges, Fax Charges (Local), Telephone Set Av. Qlty	Telephone Charges Local Call, Telephone Charges Outside City, Internet Charges, T.C.S. Ch. Min.Within Zone	
Recreation & Culture	V.C.P. Panasonic/LG/National, T.V. 20" Colored Sony, English Book BA/B.Sc, TV License Fee Domestic, Weekly "Mag"	Paper Fool Scape (27"x17"), English Book Class V1, Pencil Goldfish/Deer, Radio With C.Player National, Personnel Computer (Branded), Maths Book Class IX or X	Pen Ink Dollor 57 MI Bottle, Exercise Book Lined 80/10, Maths Book Ist. Year (T.B. Board), Eng. Book Ist. Yr Complete Set, Urdu Book Class IX/X (T.B. Board)	Maths Book Calss V (T.B.Board), Urdu Book Class V (T.B.Board), Daily "Dawn", English Book Class IX or X, Daily "Jang", Daily "Nawa-E-Waqt", Cinema A/C High Class, Monthly "Naunehal Digest", Cinema Non-A/C High Class
Education	Coaching Charges For Class XI/ XII Science Group	I.T. Tuition Fees, Govt. Med. College Fee MBBS 1st Year, Govt. College Fee 1st. Year, Govt. College Fee 4Th. Year	Pvt School Fee Eng. Med (Class-V), Coaching Fee For Class IX/ X, MBA Tuition Fee	Govt. Engg. Coll. Fee 1st Year, Pvt Med. College Fee MBBS(1st Year), Pvt Eng.College Fee (1st Year), Govt. University Fee MSc/ MA
Restaurant & Hotels			Cooked Mutton (Av. Hotel), Chicken Biryani Full/Double, Cooked Dal (Av. Hotel)	Cooked Beef (Av. Hotel)
Miscellaneous	Silver Tezabi 24 Ct, Toothpaste Med Size Colgate 70Gms, Gold Tezabi 24 Ct	Talc Powder Viceroy/ Black Cat, Blade 7-O-Clock Steel (5), Gel Medium Size, Beauty Cream (Fair & Lovely)	Wrist Watch Gents Citizen, Disposable Razor Gillette-II, Toilet Soap Lifebuoy 140 Gms	Perfume Med. Size Medora/Broche, Purse Ladies (Leather) Av. Qlty, Artificial Jewellery Set, Toothpaste Macleans 70 Gms, Shaving Charges, Trunk Medium Size

**Table A5: City- wise CPI Inflation by Income Groups, June 2013**

	Up to Rs: 8000						Rs 8001- 12000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.5	9.1	0.7	11.3	0.3	6.4	0.5	8.7	0.6	11.1	0.2	6.1
2 Islamabad	0.3	8.3	0.9	10.0	-0.3	6.1	0.3	7.8	0.7	10.0	-0.2	5.3
3 Lahore	1.2	6.0	1.2	6.4	1.0	5.5	1.3	5.8	1.5	6.3	1.1	5.1
4 Gujranwala	0.6	5.0	0.8	5.6	0.3	4.2	0.8	4.4	1.2	5.1	0.4	3.7
5 Sialkot	0.7	7.7	1.1	7.8	0.3	7.6	0.8	6.7	1.2	6.7	0.3	6.7
6 Faisalabad	1.2	7.3	1.9	10.0	0.1	3.8	1.2	6.6	2.0	9.6	0.2	3.4
7 Multan	1.6	7.1	2.4	9.2	0.6	4.5	1.6	6.6	2.4	9.1	0.7	4.0
8 Sargodha	1.2	6.6	1.9	7.2	0.5	5.9	1.4	6.1	2.2	6.8	0.6	5.4
9 Bahawalpur	1.2	5.6	1.8	3.8	0.5	7.6	1.2	5.4	1.7	3.8	0.6	7.0
10 Karachi	1.3	6.0	1.8	8.5	0.7	2.8	1.5	5.4	2.1	8.1	0.8	2.4
11 Hyderabad	1.3	7.0	2.0	10.0	0.4	3.0	1.3	6.4	2.0	9.7	0.5	2.6
12 Sukkur	0.1	8.1	0.1	8.9	0.3	7.2	0.2	7.4	0.2	8.3	0.3	6.4
13 Larkana	2.4	9.7	3.5	7.0	1.2	13.2	2.0	10.3	3.0	8.3	1.1	12.5
14 Peshawar	0.9	9.6	1.0	9.9	0.9	9.3	1.0	9.0	1.1	9.3	0.9	8.7
15 Bannu	0.1	6.5	-0.1	6.4	0.2	6.5	0.1	6.2	-0.1	5.9	0.2	6.6
16 Quetta	1.5	7.5	2.3	7.5	0.6	7.4	1.5	6.9	2.4	7.3	0.6	6.5
17 Khuzdar	0.0	3.8	0.0	2.8	0.1	4.9	-0.1	3.9	-0.1	2.8	0.0	5.1
	Rs 12001-18000						Rs 18001-35000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.4	8.7	0.5	11.1	0.3	6.4	0.2	8.0	0.0	11.0	0.3	5.6
2 Islamabad	0.3	7.6	0.6	9.7	-0.1	5.4	0.1	6.8	0.3	9.4	0.0	4.5
3 Lahore	1.3	5.5	1.5	6.2	1.0	4.7	1.1	4.9	1.6	6.1	0.8	3.7
4 Gujranwala	0.7	4.0	1.1	4.9	0.4	3.1	0.8	3.3	1.2	4.4	0.4	2.4
5 Sialkot	0.8	6.9	1.1	7.2	0.5	6.5	0.8	5.7	1.1	6.5	0.5	5.1
6 Faisalabad	1.2	6.1	2.0	9.2	0.3	3.0	1.1	5.0	2.0	8.6	0.3	1.9
7 Multan	1.7	6.7	2.5	9.1	0.9	4.3	1.7	6.1	2.7	9.4	0.8	3.4
8 Sargodha	1.2	5.7	1.6	6.2	0.8	5.4	1.3	5.3	1.7	6.0	0.9	4.7
9 Bahawalpur	1.2	5.6	1.7	4.0	0.8	7.0	1.0	5.1	1.6	3.7	0.6	6.3
10 Karachi	1.7	5.0	2.4	7.8	1.0	2.2	1.6	4.5	2.4	7.6	0.8	1.8
11 Hyderabad	1.2	6.2	1.7	9.6	0.6	2.6	1.0	5.3	1.5	9.3	0.5	1.8
12 Sukkur	0.2	7.1	0.1	8.2	0.3	6.0	0.1	7.0	-0.1	8.9	0.3	5.5
13 Larkana	2.1	10.3	3.1	8.3	1.2	12.2	1.8	10.3	2.7	9.5	1.1	10.9
14 Peshawar	0.9	8.6	1.0	9.1	0.9	8.0	0.8	7.6	0.7	8.5	0.8	6.9
15 Bannu	0.1	6.8	-0.1	6.4	0.2	7.2	0.0	6.3	-0.1	5.8	0.2	6.8
16 Quetta	1.4	6.0	2.1	6.5	0.7	5.4	1.2	5.6	1.9	6.3	0.5	4.9
17 Khuzdar	0.1	4.5	0.3	3.1	0.0	5.7	0.1	4.4	0.3	2.9	0.0	5.6
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.1	7.1	-0.2	10.7	0.2	5.4	0.2	7.6	0.0	10.9	0.3	5.4
2 Islamabad	-0.2	5.2	0.0	8.8	-0.2	3.3	-0.1	5.6	0.1	9.0	-0.2	3.1
3 Lahore	0.8	4.4	1.2	5.8	0.6	3.6	1.0	4.8	1.4	6.0	0.7	3.8
4 Gujranwala	0.6	2.3	1.1	3.3	0.3	1.8	0.7	3.2	1.1	4.4	0.4	2.4
5 Sialkot	0.7	4.9	1.3	6.3	0.4	4.2	0.8	5.6	1.2	6.6	0.4	4.9
6 Faisalabad	0.7	3.4	1.6	8.2	0.1	1.0	1.0	4.9	1.9	8.9	0.3	2.1
7 Multan	1.2	5.3	2.3	9.9	0.7	3.0	1.5	5.8	2.4	9.5	0.8	3.3
8 Sargodha	0.6	5.2	0.8	5.9	0.6	4.8	1.1	5.4	1.6	6.3	0.8	4.8
9 Bahawalpur	0.9	5.2	1.4	4.1	0.7	5.7	1.0	5.2	1.6	3.9	0.7	6.0
10 Karachi	1.3	4.5	2.3	7.0	0.8	3.2	1.4	4.7	2.3	7.4	0.7	2.7
11 Hyderabad	0.5	4.3	1.1	9.4	0.2	1.9	0.9	5.2	1.5	9.5	0.5	2.1
12 Sukkur	0.1	6.3	-0.1	9.6	0.2	4.7	0.1	6.8	0.0	8.8	0.2	5.4
13 Larkana	1.7	9.4	2.6	9.4	1.2	9.4	2.0	9.8	2.9	8.5	1.4	10.7
14 Peshawar	0.6	6.5	0.6	8.3	0.6	5.7	0.8	7.4	0.8	8.9	0.7	6.5
15 Bannu	0.1	5.4	0.0	5.8	0.2	5.1	0.1	6.2	-0.1	6.1	0.2	6.3
16 Quetta	1.0	5.1	1.8	6.5	0.5	4.5	1.2	5.6	2.0	6.7	0.7	4.8
17 Khuzdar	-0.1	4.0	-0.1	2.7	-0.1	4.6	0.0	4.0	0.1	2.9	0.0	4.8

<b>Table A6: City- wise CPI Inflation (YoY) June, 2013</b>							
	<b>High inflation cities</b>				<b>Low inflation cities</b>		
	<b>General</b>	<b>Food</b>	<b>Non-food</b>		<b>General</b>	<b>Food</b>	<b>Non-food</b>
Mithi	12.1	9.1	14.1	Multan	5.8	9.5	3.3
D.I.Khan	10.9	12.6	9.8	Sialkot	5.6	6.6	4.9
Mianwali	10.7	9.9	11.2	Islamabad	5.6	9.0	3.1
Dera Mrd.Jamali	10.3	13.2	8.3	Mir Pur Khas	5.6	6.4	5.1
Rahim Yar Khan	10.2	12.6	8.4	Quetta	5.6	6.7	4.8
Mardan	9.8	11.9	8.6	Sargodha	5.4	6.3	4.8
Larkana	9.8	8.5	10.7	Attock	5.2	6.6	4.2
D.G. Khan	9.4	7.8	10.6	Bahawalpur	5.2	3.9	6.0
Mingora	9.3	7.5	10.5	Hyderabad	5.2	9.5	2.1
Vehari	8.9	10.8	7.6	Jhang	5.0	1.8	7.1
Loralai&Cantt	7.9	11.0	5.9	Faisalabad	4.9	8.9	2.1
Muzaffargarh	7.9	8.9	7.1	Lahore	4.8	6.0	3.8
Sahiwal	7.7	8.6	7.1	Abbotabad	4.7	7.1	3.2
Rawalpindi	7.6	10.9	5.4	Karachi	4.7	7.4	2.7
Bahawalnagar	7.6	9.0	6.6	Khuzdar	4.0	2.9	4.8
Nawabshah	7.5	9.8	6.1	Gujranwala	3.2	4.4	2.4
Dadu	7.5	11.5	4.7				
Peshawar	7.4	8.9	6.5				
Sukkur	6.8	8.8	5.4				
Turbat	6.3	6.8	6.1				
Wazirabad	6.2	8.8	4.4				
Bannu	6.2	6.1	6.3				
Jehlum	6.0	7.0	5.4				
Gawadar	5.9	7.3	5.0				
Note: High inflation refers to equal or above average inflation, and low inflation refers to below average							

**Table A7: Income Group-wise Inflation ( percent)**

	MoM			YoY		
	Jun-12	May-13	Jun-13	Jun-12	May-13	Jun-13
<b><u>Up to Rs. 8000</u></b>						
General	0.3	0.6	0.9	10.1	7.2	7.9
Food	0.2	0.8	1.3	8.8	7.4	8.6
Non-food	0.5	0.2	0.5	11.9	6.9	7.0
<b><u>Rs. 8001- 12000</u></b>						
General	0.2	0.6	0.9	11.4	6.7	7.5
Food	0.0	0.9	1.2	9.3	7.0	8.3
Non-food	0.4	0.2	0.6	13.7	6.4	6.6
<b><u>Rs. 12001- 18000</u></b>						
General	0.2	0.6	0.9	11.1	6.6	7.3
Food	-0.1	1.0	1.2	9.8	6.7	8.1
Non-food	0.4	0.2	0.5	12.3	6.5	6.6
<b><u>Rs. 18001- 35000</u></b>						
General	0.1	0.6	0.8	11.5	4.8	5.6
Food	-0.1	1.1	1.1	10.3	6.5	7.9
Non-food	0.3	0.1	0.5	12.5	3.4	3.7
<b><u>Above Rs. 35000</u></b>						
General	-0.1	0.4	0.6	11.4	3.8	4.5
Food	-0.4	1.3	0.9	11.0	6.1	7.5
Non-food	0.1	0.0	0.4	11.6	2.6	3.0
<b><u>All income groups</u></b>						
General	0.0	0.5	0.7	11.3	5.1	5.9
Food	-0.2	1.1	1.1	10.3	6.5	7.9
Non-food	0.2	0.1	0.5	12.0	4.1	4.4

**Table A8: SPI Item-wise Price Movements**

Sr.No.	Items	Unit	Prices Jun-13	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	319.9	18.4	4.2
2	Wheat Flour Bag	10Kg.	369.3	19.5	4.3
3	Rice Basmati Broken	Kg.	72.1	10.3	1.2
4	Rice Irri-6	Kg.	51.7	7.3	0.8
5	Bread Plain Med. Size (340-400 Gm.)	Each	35.6	9.2	0.2
6	Beef	Kg.	273.6	4.0	0.4
7	Mutton	Kg.	540.2	7.1	0.7
8	Chicken Live (Farm)	Kg.	176.8	14.6	24.5
9	Milk Fresh	Litr	67.4	7.7	1.4
10	Curd	Kg.	78.6	6.7	1.9
11	Milk Powdered Nido	500G	290.0	5.1	0.0
12	Egg Hen (Farm)	Doz.	77.5	8.1	6.5
13	Mustard Oil	Kg.	182.7	-1.1	-0.1
14	Cooking Oil (Tin)	2.5Ltr	537.4	-0.7	0.8
15	Veg. Ghee (Tin)	2.5Kg.	505.0	-5.4	0.0
16	Veg. Ghee Loose	Kg.	157.4	-7.8	1.5
17	Bananas	Doz.	74.6	-27.4	11.1
18	Masoor Pulse Washed	Kg.	107.0	6.3	1.4
19	Moong Pulse Washed	Kg.	119.1	-2.5	2.3
20	Mash Pulse Washed	Kg.	130.7	-6.0	0.5
21	Gram Pulse Washed	Kg.	83.5	-23.3	-1.1
22	Potatoes	Kg.	25.1	-5.1	14.0
23	Onions	Kg.	37.9	76.3	-12.9
24	Tomatoes	Kg.	59.6	151.6	28.6
25	Sugar	Kg.	54.2	-1.2	1.7
26	Gur	Kg.	83.5	15.0	7.4
27	Salt Powdered Loose (Lahori)	Kg.	9.0	6.4	0.6
28	Red Chilies Powder Loose	Kg.	215.2	-29.0	-1.1
29	Garlic	Kg.	118.7	23.5	-11.5
30	Tea (Yellow Label )	200Gm.	169.8	20.5	2.6
31	Cooked Beef Plate	Each	71.3	9.7	0.6
32	Cooked Dal Plate	Each	41.9	6.8	0.6
33	Tea Prepared (Sada)	Cup	15.8	6.0	0.5
34	Cigarettes K-2 (20'S)	20'S	33.9	7.7	4.8
35	Long Cloth (Coarse Latha)	Mtr.	169.0	21.2	1.1
36	Shirting	Mtr.	136.9	19.8	2.2
37	Lawn	Mtr.	183.3	15.6	2.1
38	Georgette (Voil Printed)	Mtr.	108.7	13.4	0.8
39	Sandal Gents Bata	Pair	599.0	20.0	0.0
40	Chappal Spong. Bata (Gents)	Pair	179.0	0.0	0.0
41	Sandal Ladies Bata	Pair	499.0	25.1	0.0
42	Electric Charges 1-50	Unit	2.0	0.0	0.0
43	Gas Charges upto 3.3719	Mmbtu	123.4	-13.5	0.2
44	Kerosene	Litr	114.8	4.8	0.0
45	Firewood	40Kg	506.0	6.5	0.4
46	Energy Savor 14 Watts	Each	158.7	8.8	0.2
47	Washing Soap (200-250 Gm.)	Cake	22.2	12.2	3.6
48	Match Box	Each	1.2	5.5	0.0
49	Petrol	Litr	101.4	5.8	2.7
50	Diesel	Litr	106.1	2.4	-0.9
51	L.P.G.( 11 Kg Cylinder.)	Each	1464.3	13.1	14.7
52	Tele. Local Call	Call	3.9	9.7	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	34.3	7.0	3.0
<b>Maximum</b>				<b>151.6</b>	<b>28.6</b>
<b>Median</b>				<b>7.0</b>	<b>0.8</b>
<b>Minimum</b>				<b>-29.0</b>	<b>-12.9</b>

**Table A9: Distribution of Price Changes (YoY) - WPI Items: June 2013**

<b>Groups</b>	<b>Decrease or no change</b>	<b>Subdued increase (Up to 5%)</b>	<b>Moderate increase (5 to 10%)</b>	<b>More than 10% increase</b>
<b>Agriculture Forestry &amp; Fishery Products</b>	Pulses, Fresh Fruits, Cotton Seeds, Edible Roots/Potatoes, Other Oil Seeds, Sugar Crops	Hides and Fur Skins, Raw	Milk from Bovine Animals, Eggs, Unmanufactured Tobacco	Vegetables, Fish Live Fresh or Chilled, Stimulant and Spice Crops, Sorghum/Jowar, Wheat, Poultry, Millet/Bajra, Dry Fruits, Maize, Fuel Wood in Logs, Fibre Crops, Rice, Raw Animal Material/Wool
<b>Ores &amp; Minerals, Electricity Gas &amp; Water</b>	Natural Gas Liquefied, Electrical Energy			Salt & Pure Sodium Chloride, Coal not Agglomerated
<b>Food Products, Beverages and Tobacco, Textiles, Apparel and Leather Products</b>	Spices, Other Cereal Flour, Synthetic Carpets, Vegetable Ghee, Other Food Products, Chocolate, Tobacco Products	Quilts, Dairy Products N.E.C, Processed Liquid Milk, Fruit Juices, Other Fabrics, Cotton Fabrics, Meat of Animals, Beverages, Sugar Refined, Sugar Confectionary, Woolen Carpets, Vegetable Oil Refined	Cotton Yarn, Footwear, Blended Yarn, Vegetables & Fruit Juices, Milk and Cream in Solid Form, Nylon Yarn, Mineral Water	Other Leather N.E.C, Oil Cakes, Woven Fabrics, Wheat Flour, Ice Cream, Bed Sheets, Ready Made Garments, Blankets, Leather without Hairs, Coffee and Tea, Towels, Hosiery Products, Silk and Rayon Fabrics, Dried Fruits & Nuts
<b>Other Transportable Goods except Metal Products, Machinery and Equipments</b>	Furnace Oil, Other Glass Articles, Fertilizers, Coke	Insecticides, Auto Tyres, Mobil Oil, Kerosene Oil, Dying Materials, Diesel Oil	Bed Foams, Bricks Blocks and Tiles, Medicines, Timber, Printing Paper, Cement, Motor Sprit, Plastic Products	Pesticides, Hard Board, Matches, Glass Sheets, Paints & Varnishes, Soaps & Detergent, Ceramics and Sanitary, Chemicals
<b>Metal Product Machinery &amp; Equipment</b>	Tractors, Radio and Television, Electrical Wires, Steel Bars & Sheets, Pig Iron, Engines and Motors, Vacuum Pumps, Concrete Mixer, Lathe Machines	Steel Products, Pipe Fittings, Chuff Cutter, Bicycles, Air Conditioners, Lighting Equipments, Cultivators, Motor Cycles	Motor Vehicles, Refrige,Wash& Sew Mach,Iron,Fan	

<b>Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities</b>				
<b>Items and specification</b>	<b>Weights</b>	<b>Index</b>		
		<b>Jun-12</b>	<b>May-13</b>	<b>Jun-13</b>
<b>General</b>	<b>100.00</b>	<b>169.99</b>	<b>178.65</b>	<b>179.94</b>
<b>Food &amp; Non-Alcoholic Beverages.</b>	<b>34.83</b>	<b>187.05</b>	<b>200.01</b>	<b>202.11</b>
1 Wheat	0.35	158.74	183.40	188.23
2 Wheat Flour	4.16	166.45	194.69	199.73
3 Wheat Product	0.10	162.86	184.94	189.19
4 Besan	0.15	231.58	203.36	199.32
5 Rice	1.58	166.43	184.12	186.75
6 Cereals	0.16	193.80	214.75	216.83
7 Bakery & Confectionary	1.16	169.62	182.58	183.07
8 Nimco	0.46	190.60	203.68	206.43
9 Meat	2.43	214.75	222.80	223.43
10 Chicken	1.36	182.90	171.66	211.41
11 Fish	0.30	187.13	199.39	200.15
12 Milk Fresh	6.68	209.46	222.36	225.78
13 Milk Product	0.63	204.19	213.82	216.57
14 Milk Powder	0.11	175.97	189.99	190.81
15 Egg	0.46	149.61	157.44	153.31
16 Mustard Oil	0.10	158.54	158.01	158.43
17 Cooking Oil	1.75	157.85	162.20	162.54
18 Vegetable Ghee	2.07	164.96	155.64	155.94
19 Dry Fruits	0.25	196.87	213.78	214.95
20 Fresh Fruits	1.86	232.20	229.20	206.05
21 Pulse Masoor	0.27	145.26	151.79	154.35
22 Pulse Moong	0.23	231.97	219.09	224.06
23 Pulse Mash (Washed)	0.21	197.41	186.56	187.81
24 Pulse Gram	0.24	240.97	191.83	189.40
25 Gram Whole	0.16	231.05	195.02	194.98
26 Beans	0.03	202.24	217.45	221.84
27 Potatoes	0.47	169.38	141.92	169.11
28 Onion	0.53	127.62	279.29	239.70
29 Tomatoes	0.44	79.62	145.46	179.19
30 Fresh Vegetable	1.68	158.70	214.19	205.17
31 Sugar	1.04	198.64	191.51	194.50
32 Gur	0.02	219.21	230.64	250.06
33 Honey	0.04	232.36	256.65	256.65
34 Sweet Meet	0.25	200.28	208.64	210.79
35 Beverages	1.20	168.70	177.89	184.25
36 Jam, Tomato Ketchup & Pickle	0.25	172.20	184.90	185.63
37 Condiments	0.27	209.67	216.21	216.64
38 Spices	0.54	268.44	220.03	219.37
39 Tea	0.84	212.34	245.66	248.27
<b>Alcoholic Beverages, Tobacco</b>	<b>1.41</b>	<b>188.05</b>	<b>191.19</b>	<b>194.66</b>
40 Cigarette	1.39	188.26	191.31	194.79
41 Betel Leaves & Nuts	0.02	175.17	183.85	186.64
<b>Clothing &amp; Footwear</b>	<b>7.57</b>	<b>164.08</b>	<b>183.74</b>	<b>186.46</b>
42 Cotton Cloth	1.73	153.57	174.94	176.47
43 Woolen Cloth	0.88	182.08	205.17	206.49
44 Ready Made Garment	0.97	163.15	181.43	182.09
45 Woolen Readymade Garments	0.40	162.45	192.45	192.45
46 Hosiery	0.51	172.27	193.46	194.30
47 Dopatta	0.44	174.75	202.98	203.75
48 Cleaning & Laundering	0.21	180.05	206.24	206.24



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

Items and specification	Weights	Index		
		Jun-12	May-13	Jun-13
49 Tailoring	0.88	193.31	217.30	218.55
50 Footwear	1.55	142.07	149.78	159.00
<b>Housing, Water, Elect, Gas &amp; Other Fuel</b>	<b>29.41</b>	<b>153.35</b>	<b>154.54</b>	<b>154.65</b>
51 House Rent	21.81	135.02	144.57	144.57
52 Construction Input Item	0.56	196.25	209.12	210.12
53 Construction Wage Rate	0.33	166.44	179.47	181.81
54 Water Supply	0.50	133.23	139.65	139.65
55 Electricity	4.40	196.37	196.37	196.37
56 Gas	1.58	264.42	142.58	143.81
57 Kerosene Oil	0.01	253.30	266.68	267.67
58 Fire Wood Whole	0.23	225.29	242.88	243.22
<b>Furnished H.Hold Equip. &amp; Maint. Etc</b>	<b>4.21</b>	<b>173.20</b>	<b>184.71</b>	<b>185.82</b>
59 Furniture	0.33	162.55	174.07	174.82
60 Household Textile	0.65	169.15	179.92	180.81
61 Household Equipment	0.59	154.82	161.74	162.40
62 Utensils	0.32	171.16	184.02	184.55
63 Plastic Products	0.25	172.84	180.43	181.60
64 Washing Soap & Detergent	0.79	189.05	201.05	203.46
65 Sewing Needle & Dry Cell	0.15	148.03	163.49	166.36
66 Household Servant	1.04	180.92	195.10	195.58
67 Marriage Hall Charges	0.08	186.63	197.82	200.04
<b>Health</b>	<b>2.19</b>	<b>147.42</b>	<b>160.24</b>	<b>160.93</b>
68 Drug Medicine	1.27	131.03	140.91	140.94
69 Medical Equipment	0.01	188.56	205.49	205.49
70 Doctor (MBBS) Clinic Fee	0.59	180.36	201.10	203.36
71 Medical Test	0.32	150.49	160.23	160.67
<b>Transport</b>	<b>7.20</b>	<b>182.98</b>	<b>185.52</b>	<b>187.25</b>
72 Motor Vehicle	0.66	148.81	156.00	156.71
73 Motor Vehicle Accessories	0.24	201.80	213.55	213.67
74 Motor Fuel	3.03	180.20	175.32	179.10
75 Mechanical Service	0.46	175.42	188.19	189.24
76 Motor Vehicle Tax	0.11	152.02	153.74	153.74
77 Transport Services	2.70	195.30	202.50	202.50
<b>Communication</b>	<b>3.22</b>	<b>123.62</b>	<b>128.71</b>	<b>128.73</b>
78 Postal Services	0.07	171.37	175.16	175.16
79 Communication & Apparatus	3.15	122.61	127.73	127.75
<b>Recreation &amp; Culture</b>	<b>2.02</b>	<b>164.37</b>	<b>176.58</b>	<b>177.84</b>
80 Recreation & Culture	0.86	121.37	122.42	122.65
81 Text Books	0.57	230.22	256.86	260.03
82 News Papers	0.19	149.97	170.49	170.49
83 Stationery	0.40	170.26	181.96	183.35
<b>Education</b>	<b>3.94</b>	<b>152.28</b>	<b>162.17</b>	<b>163.54</b>
84 Education	3.94	152.28	162.17	163.54
<b>Restaurants And Hotels</b>	<b>1.23</b>	<b>195.10</b>	<b>209.95</b>	<b>210.64</b>
85 Ready Made Food	1.23	195.10	209.95	210.64
<b>Miscellaneous Goods And Services</b>	<b>2.76</b>	<b>190.51</b>	<b>202.61</b>	<b>202.39</b>
86 Personal Care	1.49	174.03	185.67	185.79
87 Cosmetics	0.39	147.22	152.60	163.22
88 Blades	0.03	168.23	174.81	176.40
89 Personal Equipments	0.84	240.29	256.47	250.63

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities			
Items and Specifications	Index		
	Jun-12	May-13	Jun-13
<b>General</b>	<b>189.37</b>	<b>197.23</b>	<b>199.21</b>
<b>Agriculture Forestry &amp; Fishery</b>	<b>189.25</b>	<b>204.69</b>	<b>209.16</b>
1 Wheat	163.58	191.19	198.50
2 Maize	168.35	188.15	189.41
3 Rice	156.72	172.17	174.41
4 Sorghum/Jowar	206.28	243.92	259.71
5 Millet/Bajra	164.48	183.84	191.77
6 Vegetables	149.26	264.84	241.43
7 Fresh Fruits	270.29	211.71	227.05
8 Dry Fruits	171.61	192.74	194.73
9 Cotton Seeds	176.68	167.16	164.31
10 Other Oil Seeds	171.79	171.25	170.04
11 Edible Roots/ Potatoes	159.37	135.38	149.12
12 Stimulant And Spice Crops	166.94	197.49	212.17
13 Pulses	223.78	186.89	186.44
14 Sugar Crops	267.92	267.92	267.92
15 Fibre Crops	185.62	205.61	207.94
16 Unmanufactured Tobacco	166.81	176.41	176.22
17 Poultry	187.34	176.50	224.76
18 Milk From Bovine Animals	202.77	215.36	218.54
19 Eggs	143.95	153.52	153.34
20 Raw Animal Material/Wool	136.50	146.46	150.66
21 Hides And Fur Skins, Raw	137.42	140.56	141.49
22 Fuel Wood In Logs	203.50	228.51	228.51
23 Fishes Live Fresh Or Chilled	156.79	215.28	240.87
<b>Ores/Minerals, Gas &amp; Elect.</b>	<b>215.23</b>	<b>213.53</b>	<b>214.86</b>
24 Coal Not Agglomerated	192.16	223.53	223.53
25 Natural Gas Liquefied	208.33	200.30	203.09
26 Salt & Pure Sodium Chloride	168.19	203.88	203.88
27 Electrical Energy	226.10	226.10	226.10
<b>Food, Beverages, Tobacco, Textiles</b>	<b>180.94</b>	<b>191.52</b>	<b>192.87</b>
28 Meat Of Animals	225.25	232.03	232.03
29 Vegetables & Fruit Juices	179.40	189.97	190.57
30 Dried Fruits & Nuts	201.37	221.30	222.76
31 Fruit Juices	158.11	162.75	163.81
32 Vegetable Oil Refined	157.10	159.34	159.65
33 Vegetable Ghee	145.59	141.08	141.61
34 Oil Cakes	140.07	169.06	171.55
35 Processed Liquid Milk	200.35	208.43	208.15
36 Milk And Cream In Solid Form	167.32	171.72	177.58
37 Ice Cream	161.68	176.81	191.15
38 Dairy Products N.E.C	204.27	212.62	213.25
39 Wheat Flour	153.81	179.64	186.66
40 Other Cereal Flour	215.04	170.46	163.97
41 Sugar Refined	204.92	204.62	208.83
42 Chocolate	100.26	99.19	99.19
43 Sugar Confectionary	100.40	102.28	102.28
44 Coffee And Tea	197.17	219.00	223.78
45 Spices	303.27	238.45	227.90
46 Other Food Products	318.54	314.63	314.63
47 Mineral Water	165.88	171.58	175.01
48 Beverages	135.23	139.24	139.28
49 Tobacco Products	208.80	208.80	208.80
50 Cotton Yarn	191.40	209.33	209.76
51 Nylon Yarn	179.55	189.60	189.67
52 Blended Yarn	185.75	198.67	198.67
53 Woven Fabrics	171.55	208.98	208.98
54 Cotton Fabrics	177.38	182.84	182.84
55 Other Fabrics	166.92	172.31	172.31

**Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities**

Items and Specifications		Index		
		Jun-12	May-13	Jun-13
56	Silk And Rayon Fabrics	142.56	157.86	158.62
57	Towels	189.19	210.01	213.19
58	Blankets	162.38	185.21	185.21
59	Bed Sheets	182.90	212.73	213.18
60	Quilts	147.05	153.32	154.00
61	Woolen Carpets	104.76	106.55	106.55
62	Synthetic Carpets	139.83	114.41	114.41
63	Hosiery Products	164.67	185.14	185.30
64	Ready Made Garments	127.25	145.39	147.20
65	Leather With Out Hairs	109.83	115.62	125.27
66	Other Leather N.E.C	122.57	160.40	179.51
67	Footwear's	128.50	139.49	139.49
<b>Other Transportable Goods</b>		<b>199.83</b>	<b>201.98</b>	<b>202.56</b>
68	Timber	144.55	153.36	154.65
69	Printing Paper	153.92	169.17	164.54
70	Hard Board	166.67	187.50	200.00
71	Coke	163.45	163.45	163.45
72	Motor Sprit	160.04	164.86	169.03
73	Diesel Oil	245.87	249.51	248.72
74	Kerosene Oil	243.74	251.08	250.79
75	Furnace Oil	194.27	169.52	169.52
76	Mobil Oil	179.12	186.04	186.56
77	Chemicals	145.80	159.30	160.39
78	Dying Materials	104.26	107.23	107.23
79	Fertilizers	263.70	260.13	261.32
80	Pesticides	167.27	199.65	203.99
81	Insecticides	118.26	123.02	123.90
82	Paints & Varnishes	215.37	241.85	244.12
83	Medicines	129.55	139.19	138.71
84	Soaps & Detergent	157.37	174.25	176.21
85	Auto Tyres	176.49	181.43	184.54
86	Plastic Products	188.26	196.65	197.98
87	Glass Sheets	177.10	201.02	201.02
88	Other Glass Articles	217.98	206.09	206.09
89	Ceramics And Sanitary	146.66	161.77	161.77
90	Bricks Blocks And Tiles	170.93	184.29	185.87
91	Cement	177.78	189.16	189.49
92	Bed Foams	131.50	144.33	144.33
93	Matches	122.82	142.72	142.72
<b>Metal Product Machinery &amp; Equip</b>		<b>157.22</b>	<b>160.87</b>	<b>162.20</b>
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	139.13	133.53	135.04
96	Pipe Fittings	142.31	148.98	148.98
97	Steel Products	159.73	166.25	167.61
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	172.67	179.78	179.78
101	Cultivators	184.66	189.23	189.23
102	Chuff Cutter	138.54	144.94	144.94
103	Tractors	172.36	161.96	161.96
104	Lathe Machines	147.68	147.68	147.68
105	Concrete Mixer	138.83	138.83	138.83
106	Refrige,Wash& Sew Mach, Iron,Fan	164.93	174.07	177.00
107	Electrical Wires	165.49	160.12	160.12
108	Lighting Equipments	146.79	147.94	151.78
109	Radio And Television	132.73	126.49	126.49
110	Motor Vehicles	160.28	173.75	173.75
111	Motor Cycles	124.02	124.56	124.56
112	Bicycles	171.52	178.81	178.81

<b>Table A12: Price Indices - Base 2007-08 = 100</b>								
<b>Period</b>		<b>CPI</b>			<b>WPI</b>			<b>SPI *</b>
		<b>Overall</b>	<b>Food</b>	<b>Non-food</b>	<b>Overall</b>	<b>Food</b>	<b>Non-Food</b>	
2008-09		117.03	123.12	113.38	118.93	119.68	118.45	123.26
2009-10		128.85	139.05	122.73	135.40	136.85	134.48	139.84
2010-11		146.45	164.10	135.87	164.17	159.26	167.28	164.02
2011-12		162.57	182.20	150.80	181.28	181.32	181.26	178.67
2012-13		174.53	195.18	162.16	194.61	197.21	192.95	189.64
2010	Oct	144.90	163.90	133.51	155.40	156.03	155.00	163.01
	Nov	146.34	166.59	134.20	159.34	157.03	160.81	167.56
	Dec	145.90	163.69	135.24	162.48	155.88	166.67	166.52
2011	Jan	147.67	166.52	136.37	165.58	159.08	169.70	166.96
	Feb	146.85	163.56	136.83	168.82	158.33	175.47	164.99
	Mar	148.91	167.10	138.01	174.41	162.92	181.70	166.81
	Apr	150.99	169.25	140.05	178.69	165.46	187.09	167.83
	May	151.33	168.76	140.88	176.97	167.15	183.20	167.98
	Jun	152.78	169.88	142.53	177.98	172.14	181.68	168.09
	Jul	154.72	174.80	142.68	177.26	175.45	178.41	171.45
	Aug	156.89	177.32	144.65	178.24	178.67	177.97	173.86
	Sep	158.50	180.16	145.52	178.68	181.88	176.65	175.02
	Oct	160.79	183.07	147.44	179.34	182.82	177.13	176.45
	Nov	161.25	183.26	148.06	178.39	181.48	176.43	177.53
	Dec	160.12	179.21	148.67	176.01	178.29	174.57	175.04
2012	Jan	162.58	181.90	151.00	179.99	178.95	180.65	178.25
	Feb	163.07	180.69	152.51	180.99	177.56	183.17	178.63
	Mar	164.98	183.46	153.90	182.20	180.41	183.34	180.79
	Apr	168.00	187.43	156.35	185.48	184.45	186.13	184.03
	May	169.93	187.75	159.25	189.46	186.57	191.29	184.88
	Jun	169.99	187.35	159.58	189.37	189.36	189.37	188.14
	Jul	169.57	190.72	156.89	190.05	193.92	187.59	183.98
	Aug	171.09	192.47	158.27	191.99	195.30	189.89	186.47
	Sep	172.44	193.80	159.64	192.66	195.81	190.66	188.21
	Oct	173.10	193.66	160.77	192.88	196.21	190.77	187.32
	Nov	172.42	193.03	160.07	192.16	193.02	191.61	187.35
	Dec	172.82	192.97	160.74	192.98	195.49	191.39	187.95
2013	Jan	175.70	196.58	163.19	195.39	198.81	193.22	190.89
	Feb	175.11	194.05	163.76	196.06	197.22	195.32	190.79
	Mar	175.82	195.06	164.29	196.57	196.02	196.92	192.01
	Apr	177.74	197.74	165.75	198.09	199.00	197.51	192.02
	May	178.65	200.00	165.85	197.23	201.14	194.75	191.96
	Jun	179.94	202.11	166.65	199.21	204.60	195.79	196.75

\*: all groups combined

**Table A13: International Commodity Prices/ Indices**

	Mar-13	Apr-13	May-13	Jun-13
<b>Energy</b>				
Crude Oil (US\$ per barrel) *	102.6	98.9	99.3	99.7
IMF Energy Index (2005 = 100)	190.6	184.4	184.8	184.9
WB Energy Index (2005 = 100) @	183.9	178.6	178.9	178.7
<b>Food</b>				
Rice (\$/MT)	564.5	553.7	552.1	546.3
Wheat (\$/MT)	309.9	308.7	319.1	313.5
Sugar (US cent/ pound)	18.3	17.7	17.4	16.9
Palm Oil (\$/MT)	771.9	756.5	763.4	763.0
Soybean Oil (\$/MT)	1,102.9	1,086.7	1,082.8	1,058.6
<b>Non-Food Non-Energy</b>				
Cotton Outlook 'A' Index #	94.4	92.5	92.6	93.1
IMF Metal Price Index (2005 = 100)	190.6	183.5	176.4	169.7
Copper (\$/MT)	7,652.4	7,221.2	7,248.7	7,000.2
Aluminum (\$/MT)	1,911.3	1,861.0	1,832.6	1,814.5
Iron Ore (\$ cents/dry MT)	139.9	137.4	124.0	114.8
Tin (\$/MT)	23,302.0	21,589.6	20,781.6	20,267.4
Nickle (\$/MT)	16,731.7	15,629.3	14,948.2	14,280.3
Zinc (\$/MT)	1,929.2	1,855.6	1,831.0	1,839.0
Lead (\$/MT)	2,173.4	2,024.4	2,031.9	2,099.7
Uranium (\$/MT)	42.3	41.4	40.6	39.9
DAP (\$/MT)	507.5	508.3	485.1	478.3
Urea (\$/MT)	385.0	361.5	344.4	321.4

Source: IMF and World Bank

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

\* Crude Oil (Petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai fateh

# Middling 1-3/32 inch staple, Liverpool Index "A", average of the cheapest Cts/lb five of fourteen styles, CIF Liverpool (Cotton Outlook, Liverpool). From January 1968 to May 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16.2/

DAP: Diammonium Phosphate

@ World Bank commodity index for low and middle income countries

**Table 14. CPI Data Series Original and Seasonally Adjusted**

<b>Original Series</b>				
<b>Period</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>
Jul	122.46	137.62	154.72	169.57
Aug	124.68	140.63	156.88	171.09
Sep	124.89	143.49	158.50	172.44
Oct	125.64	144.90	160.79	173.10
Nov	127.30	146.34	161.25	172.42
Dec	126.37	145.90	160.12	172.82
Jan	129.64	147.67	162.58	175.70
Feb	130.13	146.85	163.07	175.11
Mar	131.75	148.91	164.98	175.82
Apr	134.16	150.99	168.00	177.74
May	134.34	151.33	169.93	178.65
Jun	134.83	152.78	169.99	179.94
<b>Seasonally Adjusted Series</b>				
Jul	122.30	137.48	154.57	169.37
Aug	123.97	139.78	155.90	169.97
Sep	124.14	142.52	157.41	171.27
Oct	124.69	143.71	159.42	171.64
Nov	126.72	145.66	160.50	171.59
Dec	127.08	146.77	161.12	173.96
Jan	129.85	147.85	162.73	175.83
Feb	131.11	148.06	164.46	176.62
Mar	132.50	149.83	166.04	176.99
Apr	134.17	151.01	167.97	177.68
May	134.66	151.72	170.41	179.18
Jun	135.24	153.25	170.52	180.55

**Table 15. CPI Food Data Series Original and Seasonally Adjusted**

Original Series				
Period	FY10	FY11	FY12	FY13
Jul	130.97	149.33	174.80	190.72
Aug	134.95	156.70	177.32	192.47
Sep	135.20	163.96	180.16	193.80
Oct	135.98	163.91	183.07	193.66
Nov	138.87	166.59	183.26	193.03
Dec	135.81	163.69	179.21	192.97
Jan	138.54	166.52	181.90	196.58
Feb	139.06	163.56	180.69	194.05
Mar	141.71	167.10	183.46	195.06
Apr	145.24	169.25	187.43	197.74
May	145.69	168.77	187.75	200.00
Jun	146.63	169.88	187.35	202.11
Seasonally Adjusted Series				
Jul	130.67	149.07	174.50	190.27
Aug	133.29	154.71	174.99	189.83
Sep	133.18	161.31	177.16	190.54
Oct	133.48	160.79	179.54	190.00
Nov	136.93	164.32	180.73	190.24
Dec	136.88	165.00	180.71	194.65
Jan	139.06	167.01	182.34	196.99
Feb	141.52	166.61	184.16	197.81
Mar	143.43	169.22	185.88	197.70
Apr	145.85	170.03	188.23	198.57
May	146.77	170.07	189.36	201.81
Jun	148.26	171.77	189.53	204.53

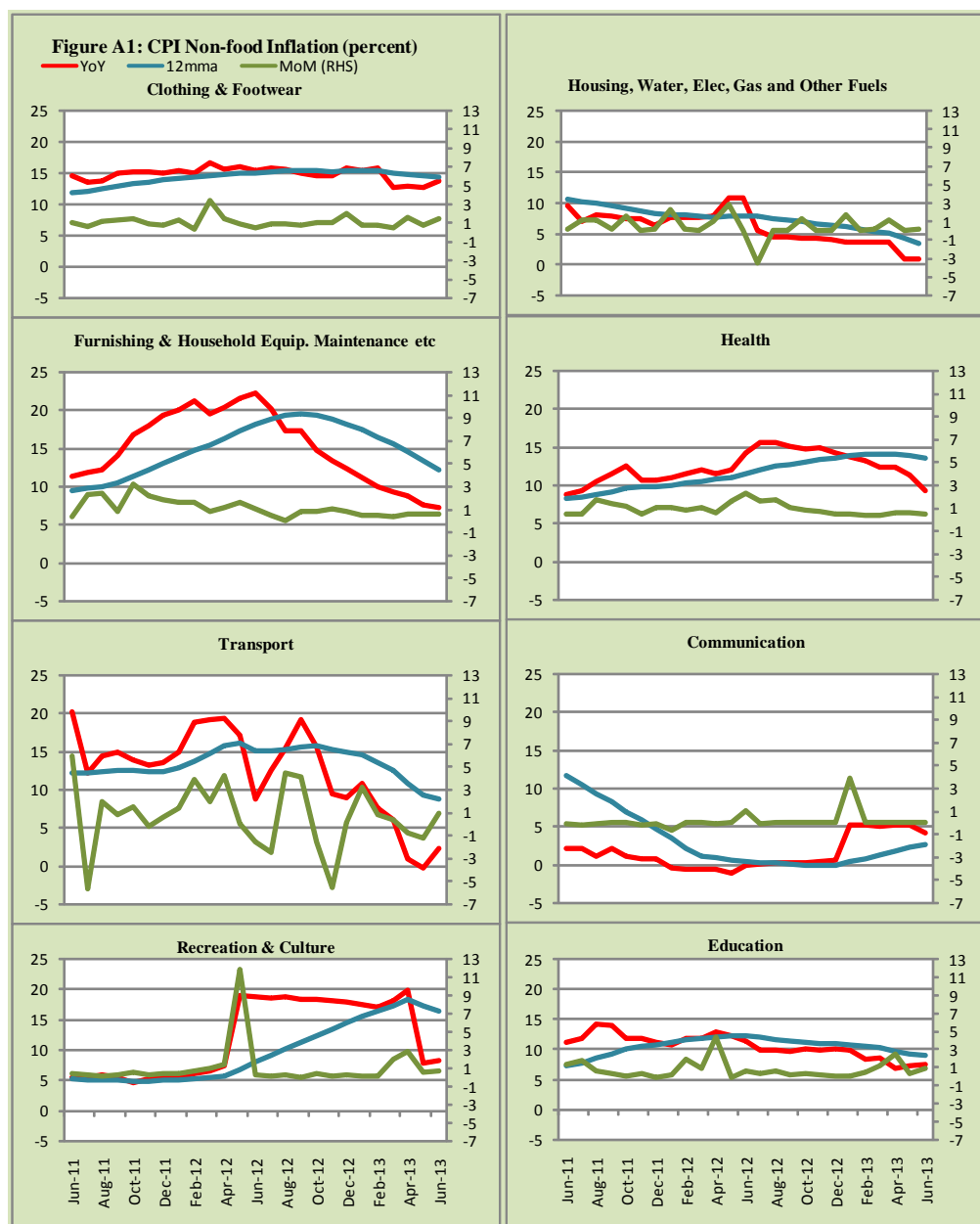
<b>Table 16: CPI Monthly &amp; Average Seasonal Factors</b>					
<b>Period</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>	<b>Average</b>
Jul	100.13	100.10	100.10	100.12	100.11
Aug	100.57	100.61	100.63	100.66	100.62
Sep	100.60	100.68	100.69	100.68	100.67
Oct	100.76	100.83	100.86	100.85	100.82
Nov	100.45	100.47	100.47	100.48	100.47
Dec	99.44	99.41	99.38	99.35	99.39
Jan	99.84	99.88	99.91	99.93	99.89
Feb	99.25	99.18	99.15	99.14	99.18
Mar	99.43	99.38	99.36	99.34	99.38
Apr	99.99	99.99	100.02	100.03	100.01
May	99.76	99.75	99.72	99.70	99.73
Jun	99.70	99.70	99.69	99.66	99.69

<b>Table 17: CPI Food Monthly &amp; Average Seasonal Factors</b>					
<b>Period</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>	<b>Average</b>
Jul	100.23	100.18	100.17	100.24	100.20
Aug	101.24	101.28	101.33	101.39	101.31
Sep	101.52	101.64	101.69	101.71	101.64
Oct	101.87	101.93	101.96	101.93	101.92
Nov	101.41	101.38	101.40	101.47	101.41
Dec	99.22	99.21	99.17	99.14	99.18
Jan	99.63	99.71	99.76	99.79	99.72
Feb	98.26	98.17	98.11	98.10	98.16
Mar	98.80	98.75	98.70	98.67	98.73
Apr	99.58	99.54	99.57	99.58	99.57
May	99.26	99.23	99.15	99.10	99.19
Jun	98.90	98.90	98.85	98.82	98.87



<b>Table 18: CPI Month-on-Month Change Original &amp; Seasonally Adjusted</b>				
<b>Original Series</b>				
<b>Period</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>
Jul		2.07	1.27	-0.25
Aug	1.81	2.19	1.40	0.90
Sep	0.17	2.03	1.03	0.79
Oct	0.60	0.98	1.44	0.38
Nov	1.32	0.99	0.29	-0.39
Dec	-0.73	-0.30	-0.70	0.23
Jan	2.59	1.21	1.54	1.67
Feb	0.38	-0.56	0.30	-0.34
Mar	1.24	1.40	1.17	0.41
Apr	1.83	1.40	1.83	1.09
May	0.13	0.23	1.15	0.51
Jun	0.36	0.96	0.04	0.72
<b>Seasonally Adjusted Series</b>				
Jul		1.66	0.86	-0.67
Aug	1.36	1.68	0.86	0.35
Sep	0.14	1.96	0.97	0.77
Oct	0.44	0.83	1.28	0.22
Nov	1.63	1.36	0.67	-0.03
Dec	0.28	0.76	0.39	1.38
Jan	2.18	0.74	1.00	1.08
Feb	0.97	0.14	1.06	0.45
Mar	1.06	1.20	0.96	0.21
Apr	1.26	0.79	1.16	0.39
May	0.37	0.47	1.45	0.85
Jun	0.43	1.01	0.07	0.76

<b>Table 19: CPI Food Month-on-Month Change Original &amp; Seasonally Adjusted Series</b>				
<b>Original Series</b>				
<b>Period</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12</b>	<b>FY13</b>
Jul		1.84	2.90	1.80
Aug	3.04	4.93	1.44	0.92
Sep	0.19	4.64	1.60	0.69
Oct	0.58	-0.04	1.62	-0.07
Nov	2.12	1.64	0.10	-0.33
Dec	-2.20	-1.74	-2.21	-0.03
Jan	2.01	1.73	1.50	1.87
Feb	0.38	-1.77	-0.66	-1.29
Mar	1.91	2.16	1.53	0.52
Apr	2.49	1.28	2.16	1.37
May	0.31	-0.28	0.17	1.14
Jun	0.65	0.66	-0.21	1.06
<b>Seasonally Adjusted Series</b>				
Jul		0.54	1.59	0.39
Aug	2.00	3.79	0.28	-0.23
Sep	-0.09	4.26	1.24	0.37
Oct	0.23	-0.32	1.35	-0.28
Nov	2.59	2.19	0.66	0.12
Dec	-0.04	0.41	-0.02	2.32
Jan	1.59	1.22	0.90	1.20
Feb	1.77	-0.24	1.00	0.42
Mar	1.35	1.56	0.93	-0.06
Apr	1.69	0.48	1.27	0.44
May	0.63	0.03	0.60	1.63
Jun	1.02	1.00	0.09	1.35



**Figure A2: Frequency Distribution of Price Changes of CPI Items, June 2013**

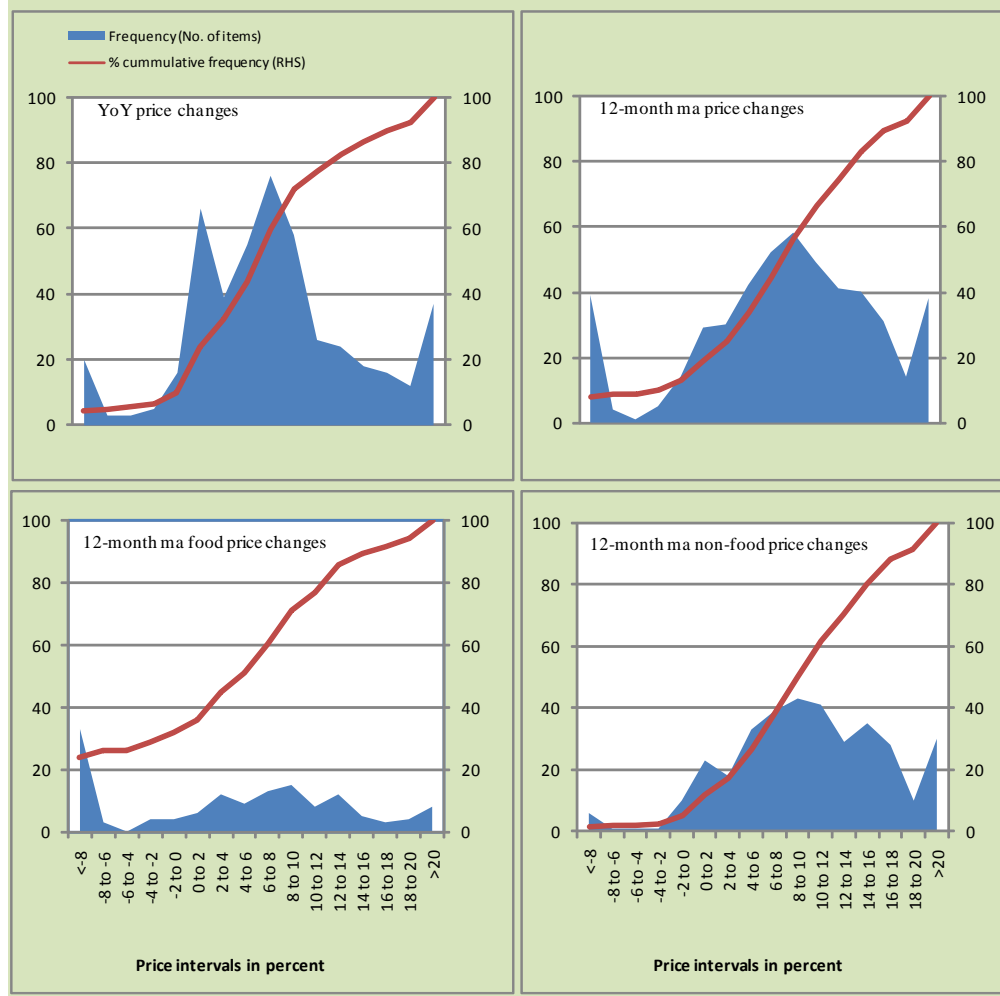
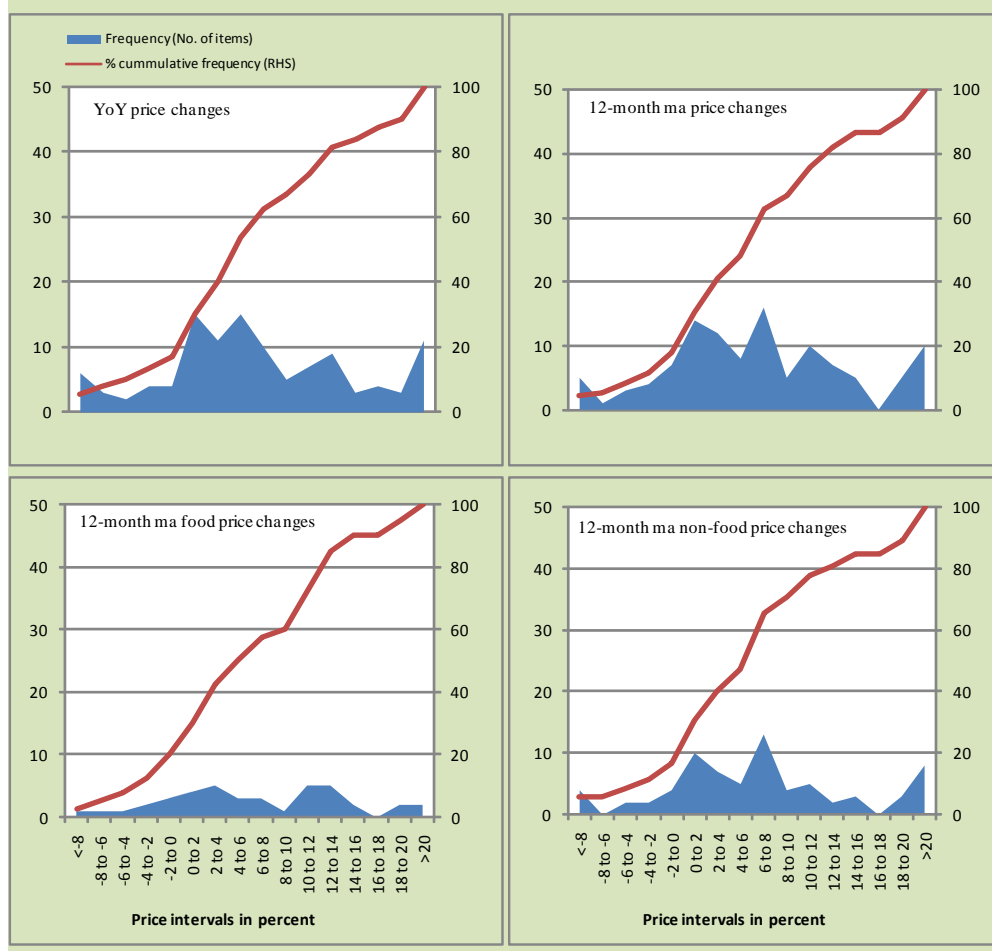
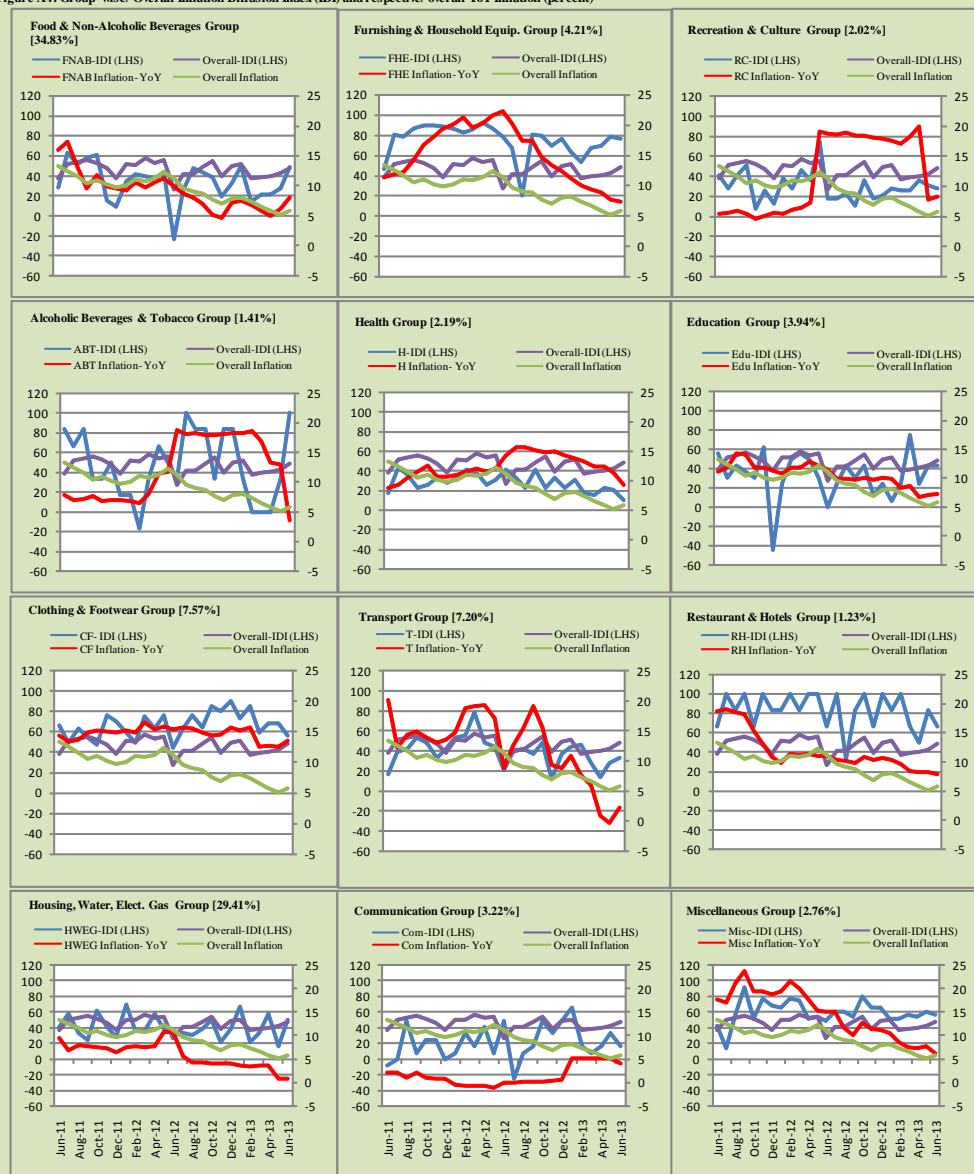


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, June 2013



## Inflation Monitor, June 2013

Figure A4: Group-wise/ Overall Inflation Diffusion Index (IDI) and respective/ overall YoY Inflation (percent)



Numbers in square brackets show the weights of respective groups in the CPI baskets.

## **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 2007-08.
3. CPI basket contains 487 consumers' goods; WPI basket contains 463 items; SPI contains 53 items.
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  $i^{\text{th}}$  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  $i^{\text{th}}$  item

$\pi_{it}$  : Inflation of  $i^{\text{th}}$  item

$\pi_t$  : Overall inflation

10. Annualized rate of inflation (based on a month-on-month rate  $\pi$ ) is computed as follows

$$\text{Annualized } \pi = \left( \left( 1 + \frac{\pi}{100} \right)^{12} - 1 \right) \times 100$$

### **Methodology for Estimating Inflation Diffusion Index for Pakistan**

We constructed an index to measure the spread of inflation in the 487 commodities of the CPI basket. It is based on month-on-month (MoM) change in the prices of these commodities and can be obtained by estimating what is known as an ‘inflation diffusion index’ (IDI) as below:

$$\frac{\text{Number of Commodities with } \uparrow \text{ in MoM change} - \text{Number of Commodities with } \downarrow \text{ in MoM change}}{\text{Number of Commodities for which prices are reported}}$$

Thus, it is the difference between the share of items with increasing prices (i.e. depicting inflation) and the share of items with falling prices (i.e. depicting deflation) in CPI amongst the commodities for which prices have altered or remained constant<sup>1</sup>.

Based upon commodity level price data from July 2001 to February 2011 we computed inflation diffusion indices overall (general) CPI basket and for all groups in CPI basket (except House Rent Index being single item). A simple analysis<sup>2</sup> suggests that IDI is a leading indicator for Pakistan’s YoY inflation.

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<sup>1</sup> We do not observe the prices of certain commodities (like the seasonal items) during certain periods of time. To calculate the inflation diffusion index we consider the commodities for which prices have been reported (irrespective of changed or not) during the month under review.

<sup>2</sup> Formal test shows one way ‘Granger’ causality from IDI to YoY inflation.