

Inflation Monitor

November 2014



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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 4.0 percent on year-on-year basis in November 2014 as compared to 5.8 percent in the previous month and 10.9 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at -0.5 percent in November 2014 as compared to 0.2 percent in the previous month and 1.3 percent during the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation is recorded at -0.3 percent in November 2014 compared to 0.2 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 5.3 percent in November 2014 as compared to 6.0 percent in the previous month and 9.2 percent during the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) decreased to 0.1 percent in November 2014 as compared to 0.4 percent in the previous and corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis decreased to 6.9 percent in November 2014 as compared to 7.8 percent in the previous month. It was 8.5 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis decreased to -0.5 percent in November 2014 as compared to 0.6 percent in the previous month. A 0.4 percent increase in Core NFNE index was observed in November 2013.
7. WPI inflation on year-on-year basis decreased to almost zero percent in November 2014 when compared to 1.3 percent a month earlier. During November 2013, WPI inflation was recorded at 10.4%.

8. WPI inflation on month-on-month basis recorded at -1.0 percent in November 2014 as compared to -0.3 percent in the previous month and 0.2 percent during the corresponding month of last year.
9. SPI inflation on year-on-year basis decreased to -0.1 percent in November 2014 as compared to 4.3 percent in the previous month. It was 14.6 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis recorded at -0.1 percent in November 2014 as compared to -0.2 percent in the previous month and 3.4 percent in the corresponding month of last year.

1.1 A New Measure of Core Inflation

A new method of permanently excluding relatively volatile commodities from CPI basket in Pakistan has been developed by SBP. This is achieved by making use of trimming approach on past data on monthly CPI changes to isolate a Relatively Stable Component of CPI (RSC-CPI) as a new measure of core inflation. This method ensures inclusion of both food and non-food commodities that show persistent price behavior in Pakistan (see technical notes for details). Developments in core inflation measured by RSC- CPI for the month of November 2014 are described below:

- Core inflation based on new measure RSC on year-on-year basis is recorded at 7.2 percent in November 2014 compared to 7.9 percent in the previous month and 8.5 percent in the corresponding month of last year.
- Core RSC inflation on month-on-month basis is recorded at the level of -0.3 percent in November 2014 compared to 0.6 percent in the previous month and 0.3 percent in the corresponding month of last year.

Monthly CPI, WPI and SPI data is summarized in the following table.

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		RSC**					
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
Nov-13	10.9	1.3	13.0	2.6	9.4	0.3	8.5	0.4	9.2	0.4	8.5	0.3	10.4	0.2	14.6	3.4
Dec-13	9.2	-1.3	9.3	-3.3	9.1	0.2	8.2	0.2	8.7	0.4	8.4	0.3	8.9	-1.0	12.1	-1.9
Jan-14	7.9	0.5	7.2	0.0	8.4	0.9	8.1	1.0	8.2	0.6	8.1	0.8	8.1	0.5	9.5	-0.8
Feb-14	7.9	-0.3	7.6	-1.0	8.2	0.2	7.8	0.2	8.1	0.2	8.0	0.3	7.6	-0.1	9.3	-0.2
Mar-14	8.5	1.0	9.3	2.1	8.0	0.2	7.6	0.3	8.1	0.3	7.8	0.2	7.7	0.3	10.5	1.7
Apr-14	9.2	1.7	9.9	2.0	8.7	1.5	8.5	1.9	9.0	0.9	8.5	1.7	7.0	0.1	10.3	-0.1
May-14	8.3	-0.3	7.4	-1.2	9.0	0.4	8.7	0.5	8.3	0.3	8.8	0.6	7.3	-0.1	9.3	-0.9
Jun-14	8.2	0.6	7.4	1.0	8.9	0.3	8.7	0.4	7.9	0.3	9.1	0.9	7.7	1.4	8.0	1.2
Jul-14	7.9	1.7	7.0	2.7	8.5	1.0	8.3	1.1	7.6	0.8	8.4	1.0	6.6	0.5	7.6	1.8
Aug-14	7.0	0.3	5.6	0.6	8.1	0.2	7.8	0.2	7.1	0.2	8.0	0.2	3.3	-0.5	6.8	0.4
Sep-14	7.7	0.4	7.2	0.0	8.0	0.6	8.0	0.7	7.1	0.2	8.2	0.6	2.7	0.2	6.9	0.0
Oct-14	5.8	0.2	5.2	-0.2	6.2	0.5	7.8	0.6	6.0	0.4	7.9	0.6	1.3	-0.3	4.3	-0.2
Nov-14	4.0	-0.5	2.1	-0.4	5.4	-0.6	6.9	-0.5	5.3	0.1	7.2	-0.3	0.0	-1.0	-0.1	-1.0
* NFNE is Non-food non-energy ** Relatively Stable Component of CPI *** SPI for all income groups combined																

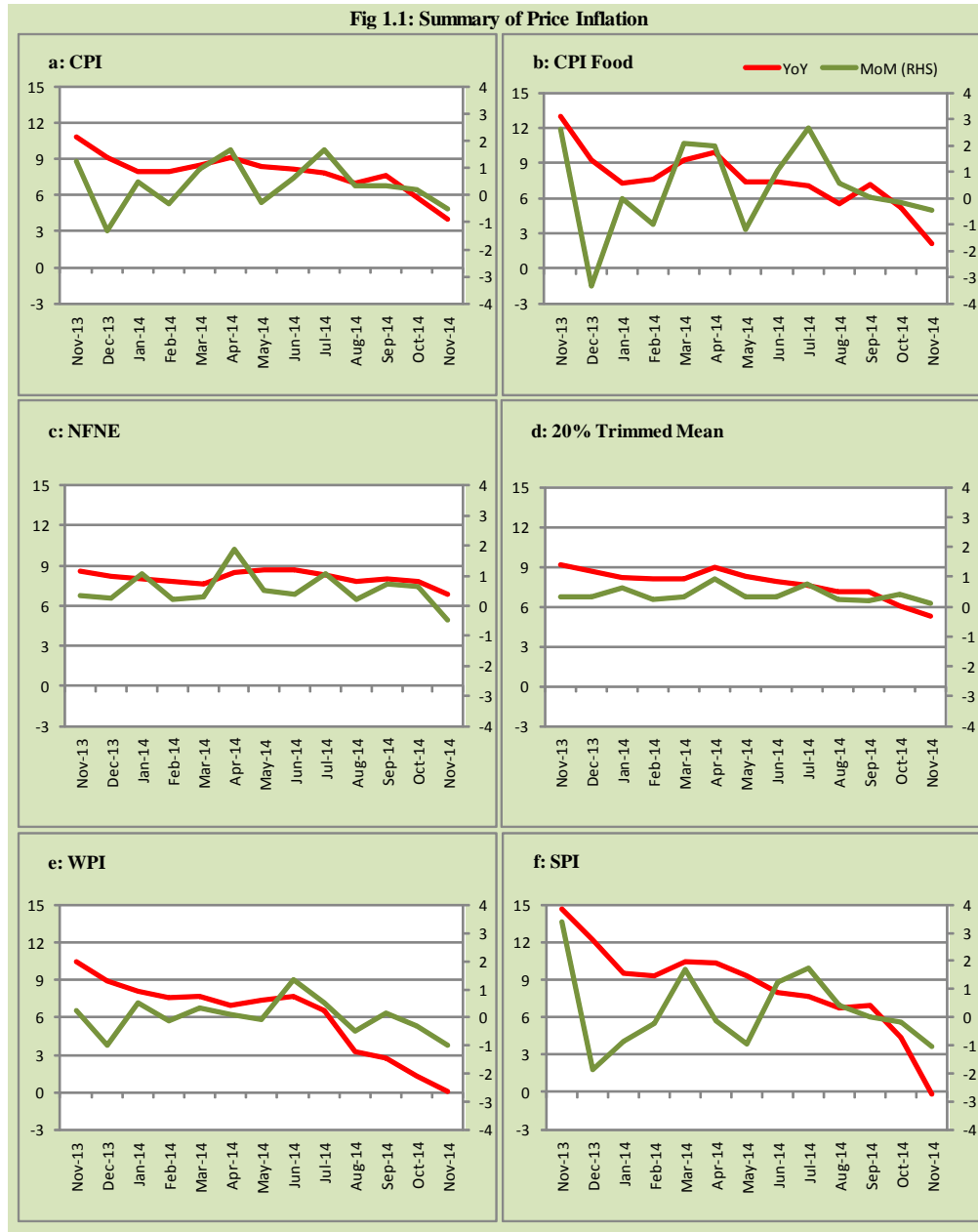
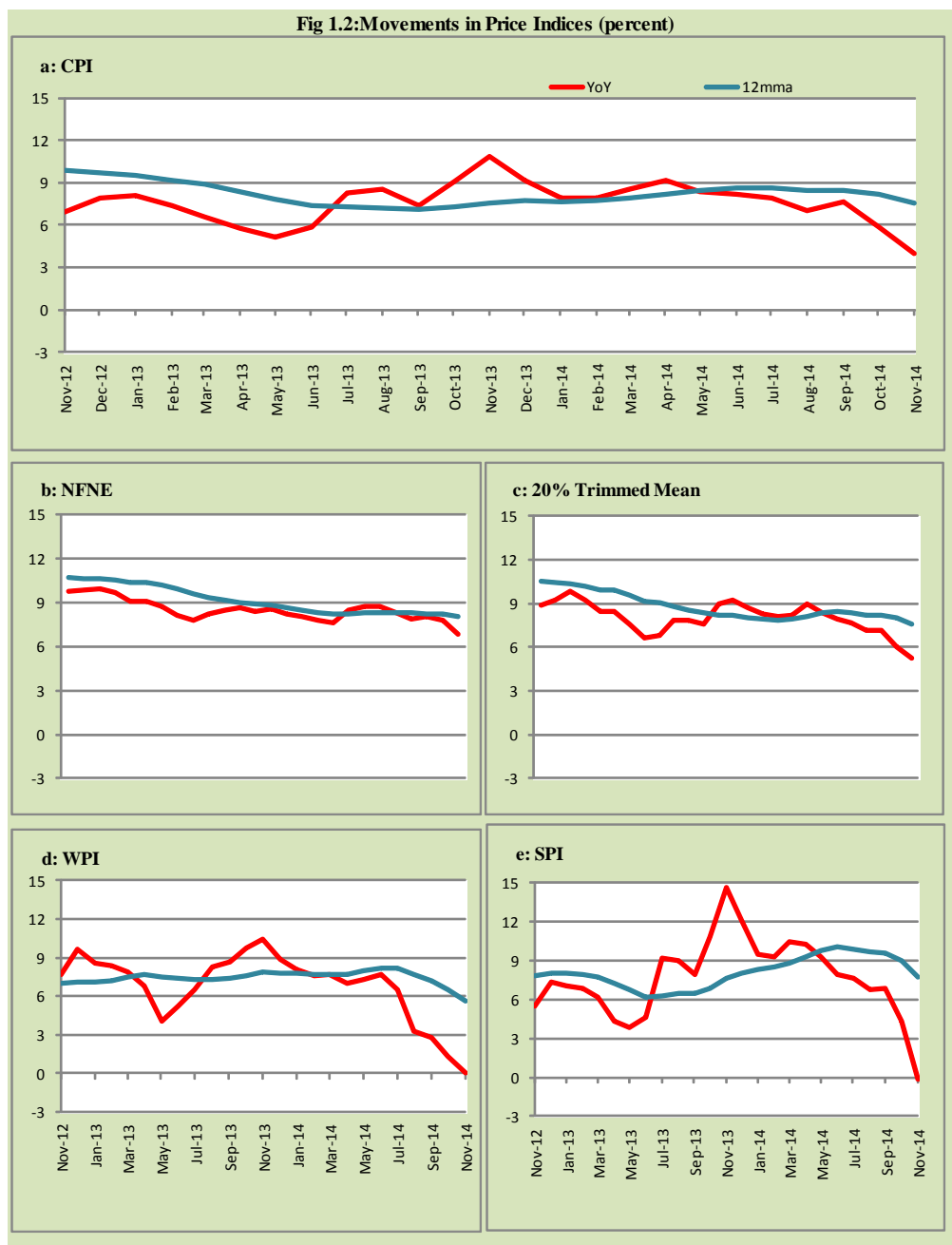


Fig 1.2: Movements in Price Indices (percent)



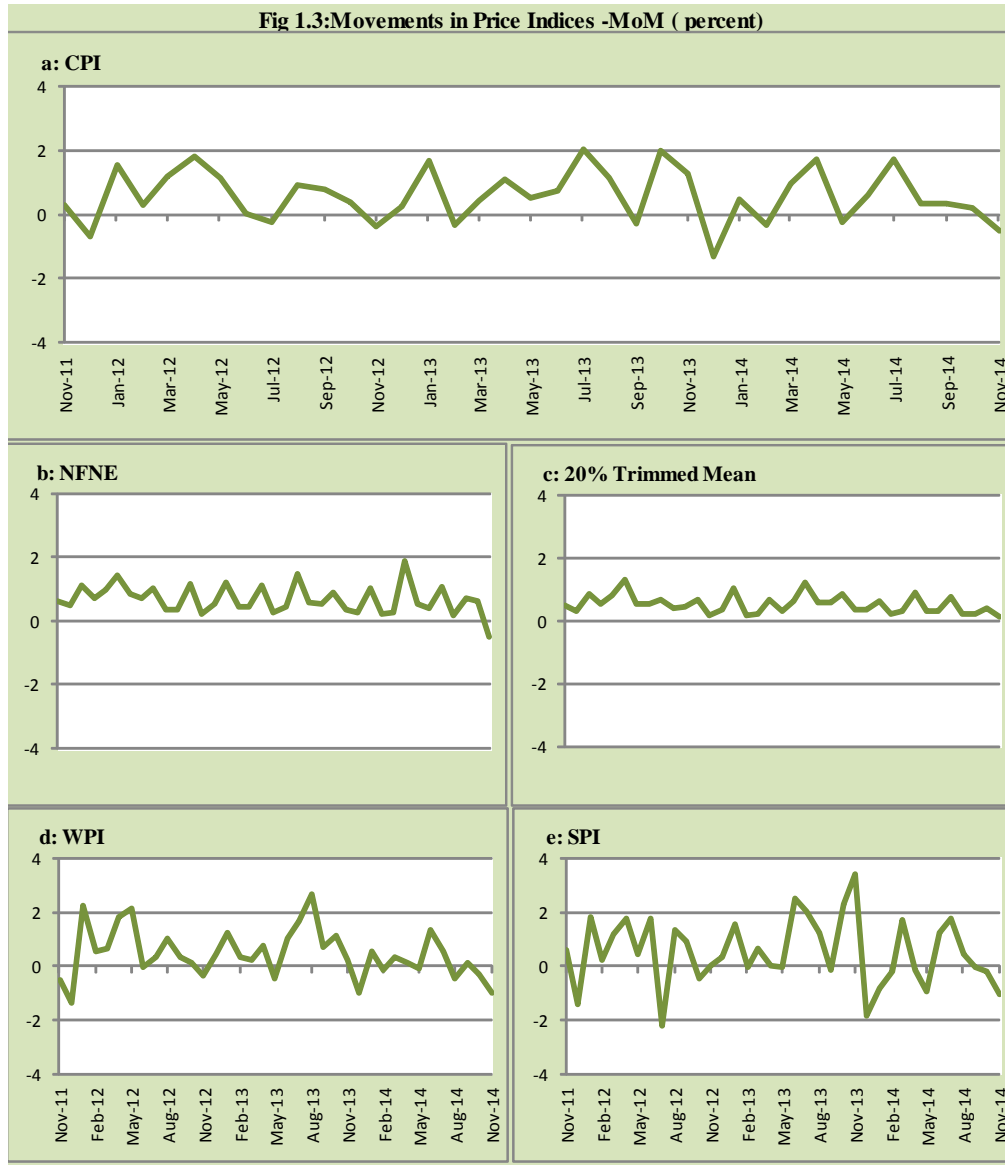
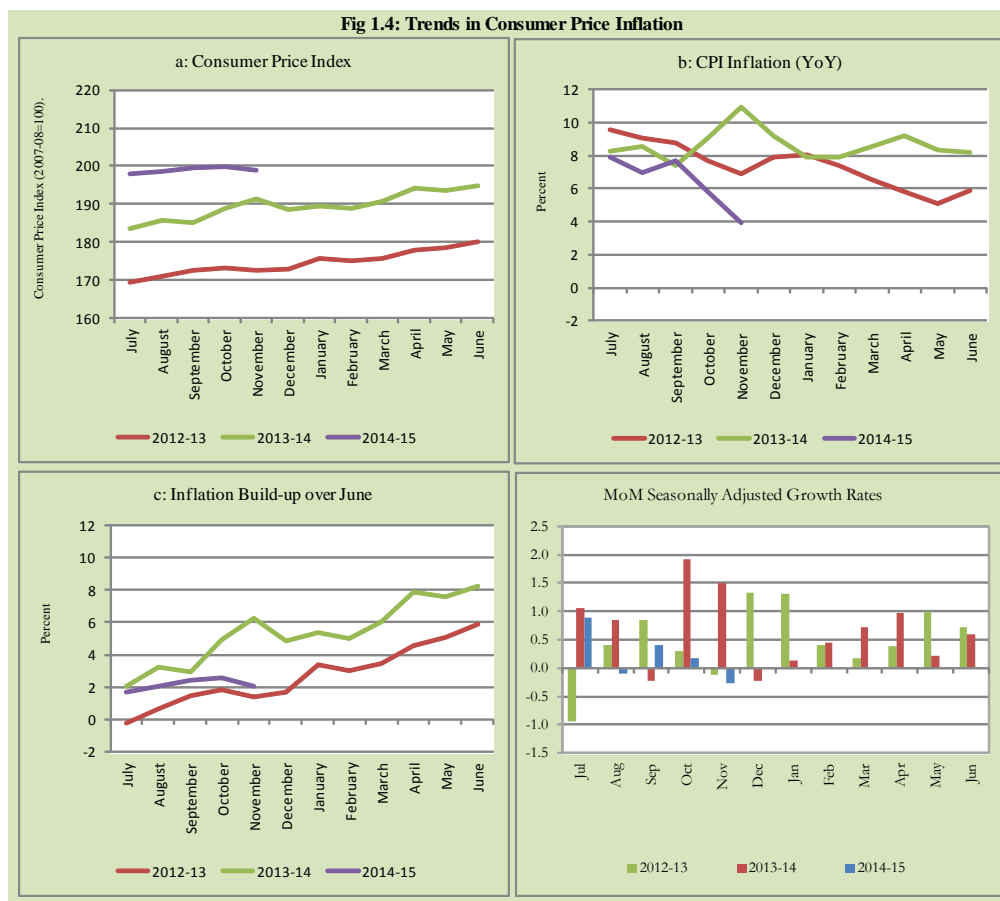


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan was higher than overall inflation during November 2014 except Quetta. Among these five cities, the lowest inflation was observed in Quetta at 2.1 percent while the highest inflation was observed in Lahore at 7.7 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)						
	Nov-13		Oct-14		Nov-14	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.3	10.9	0.2	5.8	-0.5	4.0
Islamabad	0.5	16.0	0.4	7.6	-0.1	6.8
Karachi	1.2	8.5	0.0	6.8	-0.2	5.3
Lahore	0.8	9.9	0.8	8.3	0.3	7.7
Peshawar	1.9	14.1	0.5	6.8	0.1	5.0
Quetta	1.5	9.7	0.3	3.6	0.0	2.1

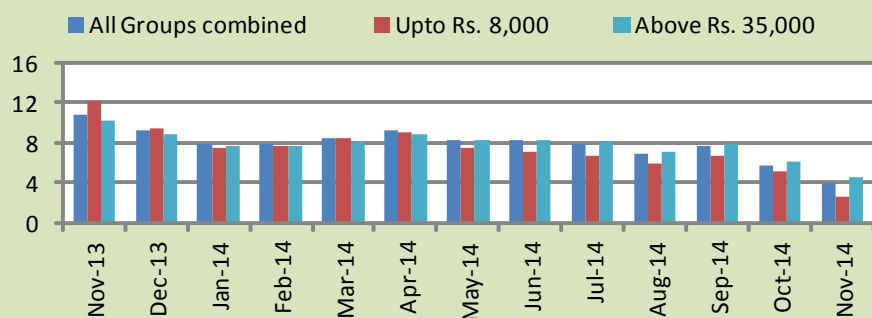
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 witnessed higher inflation than the overall inflation in CPI basket during November 2014 except in non-food group. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in general and food groups among the income groups during the month of November 2014 (Table A7 of annexure-A).

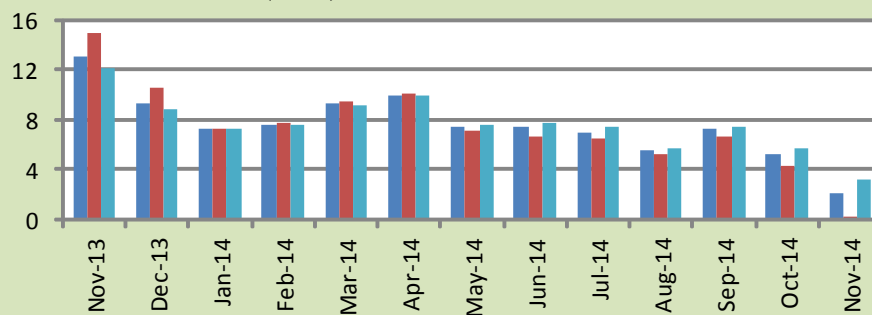
Table 3.1 Income Group- wise Inflation (YoY)									
Income Groups	General			Food			Non-food		
	Nov-13	Oct-14	Nov-14	Nov-13	Oct-14	Nov-14	Nov-13	Oct-14	Nov-14
All Groups Combined	10.9	5.8	4.0	13.0	5.2	2.1	9.4	6.2	5.4
Up to Rs. 8,000	12.1	5.2	2.6	14.9	4.3	0.2	8.5	6.4	5.8
Rs. 8,001- 12,000	11.2	5.3	3.0	14.1	4.6	0.9	8.1	6.2	5.5
Rs. 12,001- 18,000	11.9	5.5	3.4	13.6	4.9	1.4	10.2	6.0	5.5
Rs. 18,001- 35,000	11.5	5.6	3.7	13.1	5.3	2.1	10.2	5.9	5.2
Above Rs. 35,000	10.1	6.2	4.6	12.1	5.7	3.1	9.1	6.4	5.3

Fig 3.1: Income Group- wise Inflation

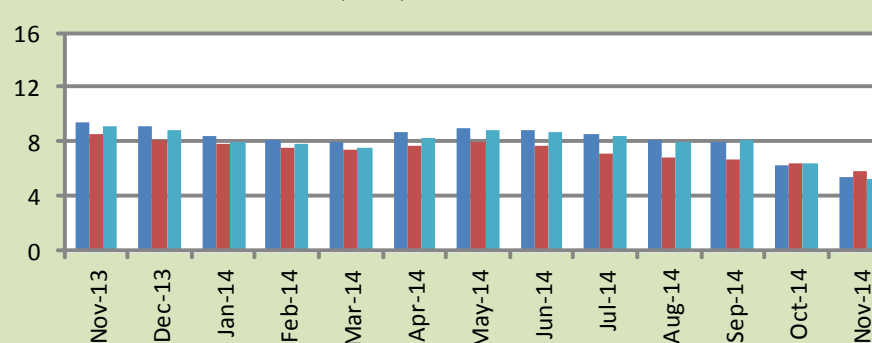
a: CPI Overall Inflation (YoY)



b: CPI Food Inflation (YoY)



c: CPI Non-Food Inflation (YoY)



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 22.63 percent during November 2014 from 37.95 percent in October 2014. It was 50.12 percent in November 2013.

The weighted contribution of non-food group showed increase to touch 77.37 percent in November 2014 from 62.05 percent in October 2014.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)						
Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
Nov-13	50.12	9.70	22.42	6.24	2.76	8.76
Dec-13	42.35	10.02	26.60	7.26	3.33	10.44
Jan-14	38.35	11.56	30.05	5.41	3.80	10.83
Feb-14	39.62	11.30	30.01	4.66	3.59	10.82
Mar-14	45.11	10.53	27.61	3.41	2.85	10.48
Apr-14	44.99	9.50	26.89	3.49	5.60	9.53
May-14	37.10	10.81	29.55	4.60	7.03	10.91
Jun-14	37.67	10.49	29.57	3.90	7.29	11.08
Jul-14	37.86	9.99	28.62	4.75	7.38	11.40
Aug-14	34.01	10.38	31.84	4.47	7.72	11.58
Sep-14	39.62	9.25	28.86	5.35	7.05	9.87
Oct-14	37.95	11.43	24.68	5.10	8.79	12.05
Nov-14	22.63	16.74	37.56	-6.13	12.74	16.45

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change

	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
General	49.7	50.0	43.6	43.6	45.9	41.2	46.5	38.9	42.8	41.2	46.2	30.9	33.7
Food & Non-Alcoholic Beverages	49.6	41.1	29.2	38.4	59.5	23.9	33.6	25.7	43.0	39.8	43.0	38.3	35.7
Alcoholic Beverages & Tobacco	-33.3	66.7	50.0	0.0	0.0	33.3	83.3	66.7	66.7	50.0	0.0	33.3	33.3
Clothing & Footwear	83.1	76.3	78.0	71.2	52.5	67.8	67.8	57.6	64.4	50.8	71.2	32.2	67.8
Housing, Water, Elect, Gas & other Fuels	44.4	25.0	55.6	25.0	27.8	38.9	27.8	33.3	36.1	33.3	33.3	30.6	25.0
Furnishing & Household Equip. Maintenance etc	85.5	89.9	76.8	81.2	75.4	82.6	89.9	69.6	69.6	75.4	76.8	43.5	65.2
Health	15.4	20.5	5.1	10.3	28.2	25.6	25.6	17.9	23.1	12.8	20.5	12.8	17.9
Transport	30.2	34.9	32.6	37.2	25.6	16.3	9.3	18.6	23.3	23.3	44.2	4.7	-7.0
Communication	25.0	16.7	0.0	16.7	16.7	-8.3	16.7	8.3	16.7	16.7	25.0	8.3	16.7
Recreation & Culture	20.5	33.3	20.5	15.4	7.7	30.8	23.1	20.5	0.0	17.9	20.5	12.8	10.3
Education	0.0	37.5	25.0	0.0	12.5	31.3	62.5	68.8	37.5	25.0	18.8	18.8	0.0
Restaurant & Hotels	83.3	100.0	100.0	100.0	100.0	66.7	100.0	50.0	50.0	66.7	83.3	66.7	0.0
Miscellaneous	62.9	57.1	48.6	62.9	62.9	48.6	65.7	54.3	60.0	60.0	48.6	60.0	37.1
NFNE	52.4	53.3	48.5	46.7	42.6	48.5	51.2	43.5	43.5	42.0	49.7	29.6	34.3

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	Nov-13		Oct-14		Nov-14	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	27.35	3.82	-0.87	0.60	-3.97	0.57
2	Wheat Flour Bag	10 Kg	25.32	2.46	0.57	0.49	-2.04	-0.20
3	Rice Basmati Sup. Qlty.	Kg	16.87	0.83	3.84	-0.14	2.80	-0.18
4	Pulse Masoor (Washed)	Kg	13.37	1.37	14.71	1.04	15.96	2.48
5	Pulse Moong (Washed)	Kg	10.56	2.30	20.48	0.33	24.15	5.42
6	Pulse Mash (Washed)	Kg	-2.25	0.80	21.05	1.59	21.59	1.25
7	Pulse Gram	Kg	-30.41	-0.85	3.26	1.01	6.16	1.94
8	Vegetable Ghee (Loose)	Kg	-1.28	1.35	0.07	0.18	-1.71	-0.45
9	Sugar Refined	Kg	10.38	7.42	6.15	-2.45	-4.44	-3.30
10	Milk Fresh (Unboiled)	Ltr	6.77	0.36	6.76	0.57	6.64	0.26
11	Tea- Tapal Danedar	200 Gm	22.75	-0.51	-20.96	2.31	-20.56	0.00
12	Beef With Bone Av. Qlty.	Kg	3.40	0.09	6.80	0.18	6.90	0.19
13	Mutton Av. Qlty.	Kg	6.94	0.00	5.50	0.25	5.95	0.43
14	Chicken Farm Broiler (Live)	Kg	4.56	-5.94	-0.66	-4.22	6.82	1.14
15	Eggs Farm	Doz	-3.68	11.06	8.52	0.69	6.23	8.72
16	Potatoes	Kg	116.89	44.51	57.95	-1.51	1.03	-7.57
17	Onion	Kg	72.83	12.33	-22.43	-2.47	-43.89	-18.75
18	Tomatoes	Kg	216.48	75.81	-15.29	-12.12	-65.82	-29.06
19	Ginger	Kg	63.47	6.89	43.46	-0.59	19.12	-11.24
20	Garlic	Kg	11.93	1.75	2.44	0.42	4.07	3.37

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Nov-13		Oct-14		Nov-14	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-0.6	-1.5	-13.6	-6.4	-17.4	-5.9
Food	-5.4	-0.9	-8.0	-1.2	-5.8	1.4
Metals	-2.4	-0.6	-12.3	-2.9	-12.0	-0.3
Energy	0.6	-2.1	-17.1	-9.0	-23.2	-9.3
Agricultural Raw Material	6.4	2.1	-1.3	-0.9	-3.5	-0.2
Cotton	4.7	-5.3	-21.3	-4.1	-20.2	-4.0

Source: IMF

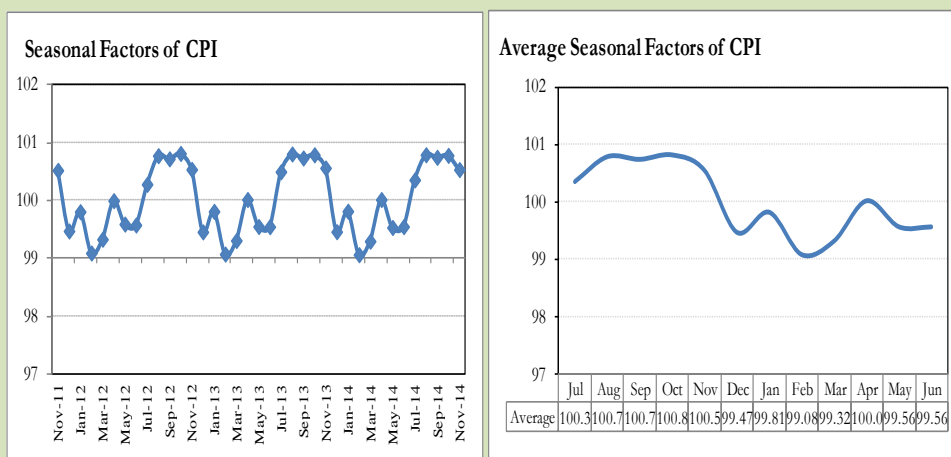
8. Seasonal Adjustment in CPI

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 November 2014 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

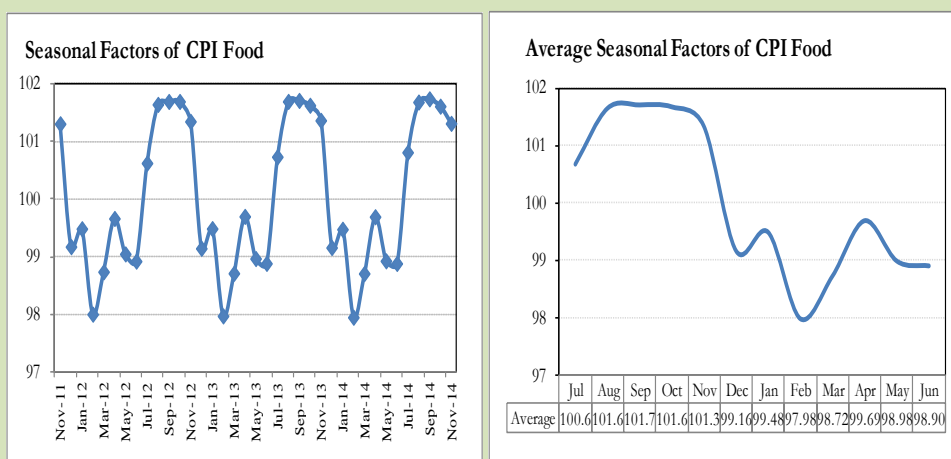
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months 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

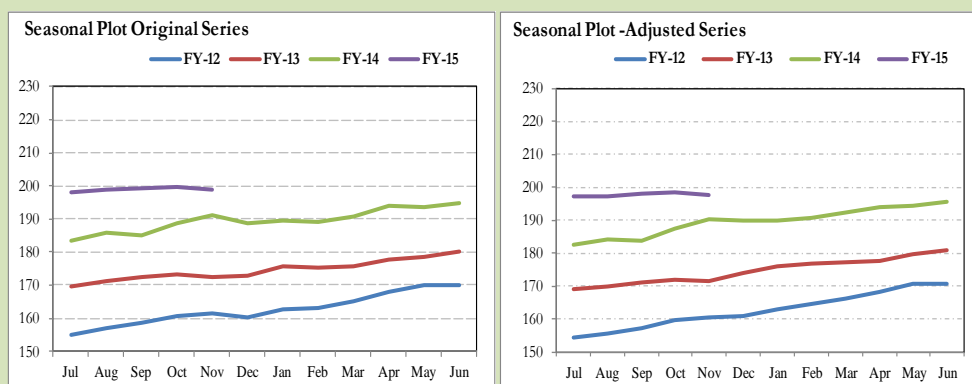
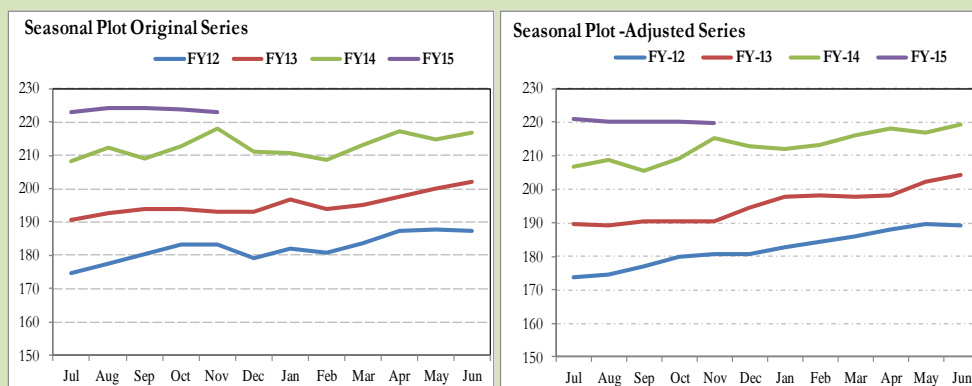


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for November 2014 stood at 197.73 against 198.79 in original series showing a decrease of 1.06 on account of adjustment of upward seasonality in November 2014.

Seasonally adjusted CPI food group for November 2014 stood at 219.85 against 222.74 in original series showing a decrease of 2.89 on account of adjustment of upward seasonality in November 2014.

Month-on-month change of seasonally adjusted CPI series stood at -0.27% reflecting decrease during November 2014 over October 2014 and a decrease of 0.51% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at -0.15% reflecting decrease during November 2014 over October 2014 and a decrease of 0.45% 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 November 2014 (corresponding to the seasonally adjusted month-on-month rate) is -3.17 percent.

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

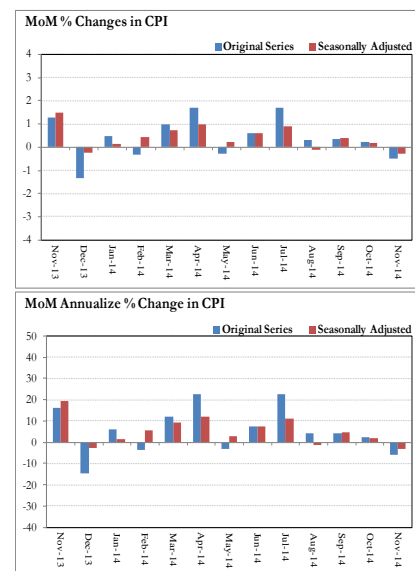
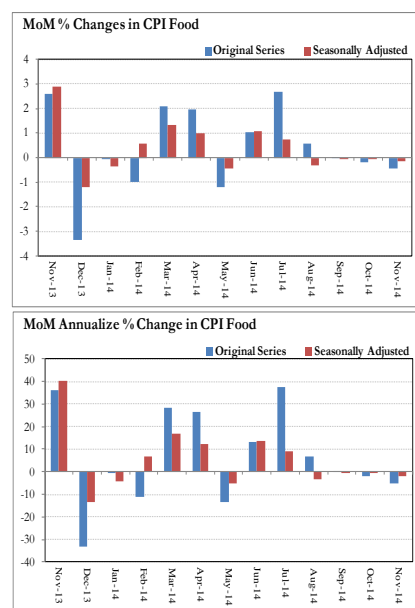


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		Nov-13	Oct-14	Nov-14	Nov-13	Oct-14	Nov-14
I. Food Group	37.5	2.6	-0.2	-0.4	13.0	5.2	2.1
Food & Non-Alcoholic Beverages	34.8	2.8	-0.2	-0.5	13.0	4.4	1.1
Alcoholic Beverages & Tobacco	1.4	0.0	0.0	0.0	14.4	22.2	22.2
Restaurant & Hotels	1.2	0.9	0.3	0.0	12.3	8.5	7.5
II. Non-Food Group	62.5	0.3	0.5	-0.6	9.4	6.2	5.4
Clothing & Footwear	7.6	0.9	0.1	0.9	14.0	8.5	8.5
Housing, Water, Elect, Gas & other Fuels	29.4	0.1	1.0	0.4	9.5	5.6	5.9
Furnishing & Household Equip. Maintenance etc	4.2	0.9	0.1	0.4	8.7	7.8	7.3
Health	2.2	0.4	0.3	0.2	6.2	5.9	5.8
Transport	7.2	0.0	-0.1	-6.9	9.0	3.9	-3.2
Communication	3.2	0.0	0.0	0.1	4.8	0.1	0.2
Recreation & Culture	2.0	0.3	0.0	0.1	9.9	4.0	3.8
Education	3.9	0.0	0.3	0.0	8.5	14.6	14.6
Miscellaneous	2.8	0.6	0.4	0.0	4.6	5.8	5.1
Headline	100.0	1.3	0.2	-0.5	10.9	5.8	4.0

Table A2: Distribution of Price changes (YoY) of CPI basket											
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)	
		Nov-13	Nov-14	Nov-13	Nov-14	Nov-13	Nov-14	Nov-13	Nov-14	Nov-13	Nov-14
I. Food Group	2.1	129	129	23	30	19	29	27	31	60	39
Food & Non-Alcoholic Beverages	1.1	117	117	23	30	18	28	25	26	51	33
Alcoholic Beverages & Tobacco	22.2	6	6	0	0	1	0	1	1	4	5
Restaurant & Hotels	7.5	6	6	0	0	0	1	1	4	5	1
II. Non-Food Group	5.4	348	348	54	79	53	97	118	122	123	50
Clothing & Footwear	8.5	59	59	3	8	2	4	13	31	41	16
Housing, Water, Elect, Gas & other Fuels	5.9	36	36	2	9	2	9	17	17	15	1
Furnishing & Household Equip. Maintenance etc	7.3	69	69	1	1	8	19	41	39	19	10
Health	5.8	39	39	22	18	7	9	3	6	7	6
Transport	-3.2	43	43	12	19	6	15	20	6	5	3
Communication	0.2	12	12	2	6	2	5	4	1	4	0
Recreation & Culture	3.8	39	39	8	13	14	17	4	6	13	3
Education	14.6	16	16	1	0	6	5	4	6	5	5
Miscellaneous	5.1	35	35	3	5	6	14	12	10	14	6
Overall	4.0	477	477	77	109	72	126	145	153	183	89

Note: Prices of 10 seasonal items were not reported during the month.

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in November 2014					
Top 15 Contributors		YoY Change		Weighted Contribution	
Items/ Contributors	Weights	Nov-13	Nov-14		
Ranked by Weighted Contribution					
1	House Rent	21.81	7.86	7.62	33.01
2	Milk Fresh	6.68	6.54	6.98	14.25
3	Education	3.94	8.48	14.59	12.74
4	Fresh Fruits	1.86	-0.31	20.08	8.99
5	Cigarette	1.39	14.61	22.38	8.98
6	Cotton Cloth	1.73	14.05	13.85	5.75
7	Meat	2.43	4.57	6.58	4.83
8	Tailoring	0.88	14.87	11.46	3.15
9	Household Servant	1.04	8.59	10.00	2.83
10	Ready Made Food	1.23	12.26	7.54	2.76
11	Beverages	1.20	12.59	9.04	2.71
12	Personal Care	1.49	6.78	6.84	2.58
13	Ready Made Garment	0.97	12.27	9.65	2.41
14	Electricity	4.40	15.82	1.79	2.37
15	Chicken	1.36	4.56	6.82	1.99
Total		52.43			109.34
Bottom 15 Contributors					
1	Tomatoes	0.41	216.49	-65.82	-14.83
2	Onion	0.51	72.83	-43.89	-10.61
3	Motor Fuel	3.03	12.83	-9.83	-7.65
4	Tea	0.84	16.68	-15.14	-4.23
5	Wheat Flour	4.16	26.48	-2.13	-2.66
6	Fresh Vegetable	1.77	31.55	-4.32	-2.66
7	Sugar	1.04	10.38	-4.44	-1.32
8	Footwear	1.55	18.44	-3.12	-1.08
9	Transport Services	2.70	6.55	-0.73	-0.54
10	Vegetable Ghee	2.07	-2.13	-1.17	-0.50
11	Wheat	0.35	27.35	-3.97	-0.40
12	Cooking Oil	1.75	-0.97	-0.66	-0.25
13	Gur	0.02	23.11	-5.67	-0.05
14	Kerosene Oil	0.01	7.80	-12.25	-0.03
15	Gas	1.58	7.05	0.00	0.00
Total		21.79			-46.82

Table A3.1: Top and Bottom 15 Contributors to CPI Inflation (MoM) in November 2014

<u>Top 15 Contributors</u>		<u>MoM Change</u>		Weighted Contribution	
Items/ Contributors	Weights	Oct-14	Nov-14		
Ranked by Weighted Contribution					
1	Fresh Vegetable	1.77	-3.33	4.41	18.50
2	Electricity	4.40	0.00	1.79	17.59
3	Egg	0.46	0.69	8.71	8.40
4	Woolen Readymade Garments	0.40	0.45	6.89	5.88
5	Milk Fresh	6.68	0.61	0.30	4.85
6	Pulse Moong	0.23	0.34	5.42	3.48
7	Tailoring	0.88	0.00	1.44	3.22
8	Chicken	1.36	-4.22	1.14	2.61
9	Tea	0.84	1.07	1.25	2.18
10	Meat	2.43	0.20	0.27	1.57
11	Dopatta	0.44	0.00	1.32	1.29
12	Household Textile	0.65	0.08	0.98	1.27
13	Dry Fruits	0.25	1.83	2.10	1.26
14	Woolen Cloth	0.88	0.05	0.62	1.23
15	Hosiery	0.51	0.05	1.09	1.21
Total		22.17			74.57
Bottom 15 Contributors					
1	Transport Services	2.70	0.79	-11.01	-67.69
2	Motor Fuel	3.03	-1.21	-6.12	-33.98
3	Tomatoes	0.41	-12.12	-29.06	-23.45
4	Onion	0.51	-2.47	-18.75	-23.26
5	Potatoes	0.44	-1.51	-7.57	-15.27
6	Fresh Fruits	1.86	3.70	-2.52	-10.35
7	Sugar	1.04	-2.45	-3.30	-7.20
8	Cooking Oil	1.75	0.00	-1.25	-3.47
9	Vegetable Ghee	2.07	0.11	-1.05	-3.35
10	Personal Equipments	0.84	0.76	-0.58	-1.28
11	Beverages	1.20	-0.68	-0.50	-1.21
12	Construction Input Item	0.56	0.17	-0.17	-0.23
13	Gur	0.02	0.39	-1.87	-0.11
14	Kerosene Oil	0.01	-1.36	-5.29	-0.08
15	Wheat Product	0.10	0.62	-0.02	0.00
Total		16.55			-190.93

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in November 2014					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Nov-13	Nov-14	
A. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	1.13	36.71	0.82
2	Pulse Moong	0.23	10.56	24.15	1.77
3	Cigarette	1.39	14.61	22.38	8.98
4	Pulse Mash (Washed)	0.21	-2.25	21.58	1.13
5	Fresh Fruits	1.86	-0.31	20.08	8.99
6	Woolen Readymade Garments	0.40	12.81	17.23	1.80
7	Pulse Masoor	0.27	13.47	15.09	0.87
8	Education	3.94	8.48	14.59	12.74
9	Honey	0.04	3.86	14.51	0.22
10	Cotton Cloth	1.73	14.05	13.85	5.75
11	Milk Powder	0.11	7.81	13.44	0.40
12	Condiments	0.27	4.61	13.29	1.04
13	Marriage Hall Charges	0.08	6.94	11.49	0.24
14	Tailoring	0.88	14.87	11.46	3.15
15	Hosiery	0.51	10.75	10.53	1.44
Total		12.04			49.34
B. Ranked by Weights					
1	House Rent	21.81	7.86	7.62	33.01
2	Milk Fresh	6.68	6.54	6.98	14.25
3	Electricity	4.40	15.82	1.79	2.37
4	Wheat Flour	4.16	26.48	-2.13	-2.66
5	Education	3.94	8.48	14.59	12.74
6	Communication & Apparatus	3.15	4.23	0.13	0.07
7	Motor Fuel	3.03	12.83	-9.83	-7.65
8	Transport Services	2.70	6.55	-0.73	-0.54
9	Meat	2.43	4.57	6.58	4.83
10	Vegetable Ghee	2.07	-2.13	-1.17	-0.50
11	Fresh Fruits	1.86	-0.31	20.08	8.99
12	Fresh Vegetable	1.77	31.55	-4.32	-2.66
13	Cooking Oil	1.75	-0.97	-0.66	-0.25
14	Cotton Cloth	1.73	14.05	13.85	5.75
15	Rice	1.58	12.05	1.80	0.72
Total		63.08			68.47
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 4.0 percent in November, 2014.					

Table A3.3: Top Ten Contributors to CPI Food Inflation (YoY) in November 2014

Table 1: Top 10 Contributors to CPI Food Inflation (2013 to November 2014)					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Nov-13	Nov-14	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	6.54	6.98	14.25
2	Fresh Fruits	1.86	-0.31	20.08	8.99
3	Cigarette	1.39	14.61	22.38	8.98
4	Meat	2.43	4.57	6.58	4.83
5	Ready Made Food	1.23	12.26	7.54	2.76
6	Beverages	1.20	12.59	9.04	2.71
7	Chicken	1.36	4.56	6.82	1.99
8	Pulse Moong	0.23	10.56	24.15	1.77
9	Bakery & Confectionary	1.16	12.51	5.57	1.66
10	Spices	0.54	-16.73	9.22	1.42
Total		18.09			49.36
B. Ranked by Percentage Change					
1	Pulse Moong	0.23	10.56	24.15	1.77
2	Cigarette	1.39	14.61	22.38	8.98
3	Pulse Mash (Washed)	0.21	-2.25	21.58	1.13
4	Fresh Fruits	1.86	-0.31	20.08	8.99
5	Pulse Masoor	0.27	13.47	15.09	0.87
6	Honey	0.04	3.86	14.51	0.22
7	Milk Powder	0.11	7.81	13.44	0.40
8	Condiments	0.27	4.61	13.29	1.04
9	Nimco	0.46	9.89	9.80	1.28
10	Dry Fruits	0.25	9.79	9.57	0.72
Total		5.10			25.41
C. Ranked by Weights					
1	Milk Fresh	6.68	6.54	6.98	14.25
2	Wheat Flour	4.16	26.48	-2.13	-2.66
3	Meat	2.43	4.57	6.58	4.83
4	Vegetable Ghee	2.07	-2.13	-1.17	-0.50
5	Fresh Fruits	1.86	-0.31	20.08	8.99
6	Fresh Vegetable	1.77	31.55	-4.32	-2.66
7	Cooking Oil	1.75	-0.97	-0.66	-0.25
8	Rice	1.58	12.05	1.80	0.72
9	Cigarette	1.39	14.61	22.38	8.98
10	Chicken	1.36	4.56	6.82	1.99
Total		25.06			33.69
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 2.1 percent in November, 2014.					

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in November 2014					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Nov-13	Nov-14	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	7.86	7.62	33.01
2	Education	3.94	8.48	14.59	12.74
3	Cotton Cloth	1.73	14.05	13.85	5.75
4	Tailoring	0.88	14.87	11.46	3.15
5	Household Servant	1.04	8.59	10.00	2.83
6	Personal Care	1.49	6.78	6.84	2.58
7	Ready Made Garment	0.97	12.27	9.65	2.41
8	Electricity	4.40	15.82	1.79	2.37
9	Woolen Readymade Garments	0.40	12.81	17.23	1.80
10	Woolen Cloth	0.88	12.01	7.11	1.77
Total		37.55			68.40
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	1.13	36.71	0.82
2	Woolen Readymade Garments	0.40	12.81	17.23	1.80
3	Education	3.94	8.48	14.59	12.74
4	Cotton Cloth	1.73	14.05	13.85	5.75
5	Marriage Hall Charges	0.08	6.94	11.49	0.24
6	Tailoring	0.88	14.87	11.46	3.15
7	Hosiery	0.51	10.75	10.53	1.44
8	Household Servant	1.04	8.59	10.00	2.83
9	Ready Made Garment	0.97	12.27	9.65	2.41
10	Doctor (MBBS) Clinic Fee	0.59	11.79	9.30	1.57
Total		10.26			32.74
C. Ranked by Weights					
1	House Rent	21.81	7.86	7.62	33.01
2	Electricity	4.40	15.82	1.79	2.37
3	Education	3.94	8.48	14.59	12.74
4	Communication & Apparatus	3.15	4.23	0.13	0.07
5	Motor Fuel	3.03	12.83	-9.83	-7.65
6	Transport Services	2.70	6.55	-0.73	-0.54
7	Cotton Cloth	1.73	14.05	13.85	5.75
8	Gas	1.58	7.05	0.00	0.00
9	Footwear	1.55	18.44	-3.12	-1.08
10	Personal Care	1.49	6.78	6.84	2.58
Total		45.39			47.25
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 5.4 percent in November, 2014.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: November 2014

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Food & Non-Alcoholic Beverages	Tomatoes, Onion, Cauliflower, Chillies Green, Tea Lipton Yellow Label 200 Gm, Brinjal	Maida, Sweetmeat (Mixed), Mineral Water Nestle 1.5 Litre, Suji, Rooh Afza, Garlic, Beans (Lal Lobia), Vermicelli, Cumin seed White National	Patties (Vegetables), Turnip, Coffee-Nescafe 75 Gm, Raisins Av.Qlty., Coriander Seed Powd.National., Jam Ahmed/Mitchelles, Ice, Curd	Guava, Coriander Seed (Loose), Coconut Dry Av.Qlty., Cucumber (Kheera), Pulse Moong (Washed), Cardamom Large Loose Av.Qlty, Pepper Black National, Lemon, Pulse Mash (Washed), Salt Powdered (National/Shan)
Alcoholic Beverages & Tobacco			Betel Leaves	Cigarettes Capstan 20,S, Cigarettes Morven Gold 20,S, Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Betel Nuts
Clothing & Footwear	Gents Shoe, Art 1109 Servis, Child Shoe Power Lite Bata, Gents Shoes Paul Bata, Sports Shoes, Gents Spoung Chappal Bata	Tailoring Shirt, Heavy Wt Suiting Law.Pur Av. Qlty, Tailoring Coat-Pant Suit, Shoe Polish Charges Avg	Pant Boy 24"/26" Length, Long Cloth 57" Gul Ahmed/Al Karam, Awami-Suit W&W (Gents)Av.Qlty, Awami-Suit W & W (Boys) 24"/26"	Lawn Printed Gul Ahmed/Al Karam, Secondhand Sweater For Men, Secondhand Winter Jacket, Vest/Shameez (Women) Avg. Qlty, Frock W/Wear Girls, Second-Hand Coat For Men, Shirting Av.Qlty., Tailoring Suit (Female), Brassier Sup. Qlty
Housing, Water, Elect, Gas & other Fuels	Kerosene Oil, Elect. Charges Upto 50 Units, Elect. Charges 01 - 100 Units, Gas Chrg Over 100 - 200 Mmbtu	Firewood Whole, Cement (Local), Bajree, Elect. Charges 301 - 1000 Units, Elect. Charges 101 - 300 Units	Timber Shesham Log, Carpenter Wage Rate, Mason (Raj) Wage Rate, Synthetic Enemal Robialac, Electrician Wage Rate (P/Pnt)	Cement Blocks (6"X8"X12")
Furnishing & Household Equip. Maintenance etc	Surf Excel 400 Gms Poly Bag	D-Freezer Waves 8 Cft., Tissue Paper Perfumed 100, Bucket(Balti) Plastic Med, Ceiling Fan 56" Super Qlty	Household Servant Female (Part Time), Non Stick Cooking Pan, Sofa Set, Wooden With Foam, Bed Sheet Single Bed Sup. Qlty	Boot Polish Cherry/Kiwi 50 MI, Cleanser Powder Vim 1000 Gms, Finis 500 MI, Robin Blue (35 Gms), Chair Shesham Wood, Match Box (Small), Dining Table 6 Chairs, Marriage Hall Charges Without Refreshment
Health	Flagyl Tab. 200 Mg., Betnovate-N Ointment 5 Gm, Calcium Syrup Sandoz, Burnol Cream 30 Gm, Lederplex Syrup	ECG Charges, Galxos-D (450 Gm), Sugar Test (Random/Fasting), Thermometer China, Septran Tablets, Saniplast (1 Putty)	Urine Test (Dr) Charges, Hydryllin Syrup 120 ML., Doctor (MBBS) Clinic Fee, Glycerin Small Bottle, Cotton Bandage 2" - 4"	Amoxil Capsule 250 Mg. Renitec Tab. 5 Mg., Jouhar Joshanda, Daonil Tab. 5 Mg., Betnesol Eye Drops, Calpol Syrup 60 ML
Transport	Petrol Super, High Speed Diesel HSD, Bus Fare Outside City (A/C), Minibus Fare Min.Within City	Tyre Car With Tube General, CNG, Tyre Car W/O Tube, Bicycle With Tyres & Tube, Car Suzuki 800 CC (W/O AC), Auto Rickshaw Fare	Suzuki Fare Maximum Within City, Tyre Puncture Charges, Minibus Fare Max.Within City, Car Service Charges, Motor Cycle Service Charges	Car Tax For 800 CC To 1300 CC, Air Fare Economy Class., Cycle Overhauling Charges
Communication	Postal Envelope Domestic, Mobile Cell Charges, Telephone Charges Local Call	Telephone Set Av. Qlty, Internet Charges, Fax Charges (Local), Postal Envelope For Saudi Arabia	T.C.S. Ch. Min.Within Zone	
Recreation & Culture	Cinema A/C High Class, Maths Book Cals V (T.B.Board), Video Game Sega 16 Byte, T.V. 20" Colored Sony, V.C.P. Panasonic/LG/National	Exercise Book Lined 80/10, Tape Recorder Cassette (Blank), Photostat Paper 70 Gm, Pencil Goldfish/Deer, Pen Ink Dollor 57 MI Bottle, Video Cassette Blank. Tdk/Sony	Fountain Pen Hero/Wings/China, Paper Fool or X, Urdu Book Class IX/X (T.B.Board) Scape (27"X17"), English Book Class V1, Ball Pen (T.B.Board)	Weekly "Akhbar-e-Jahan", Maths Book Class IX
Education		Coaching Fee For Class IX/ X, Govt. Med. College Fee Coaching Charges For Class XI/ XII Science Group, Pvt Eng.College Fee (1st Year)	MBBS 1st Year, MBA Tuition Fee, I.T. Tuition Fees	Pvt School Fee Eng. Med (Class-X), Pvt School Fee Eng. Med (Class-V), Pvt School Fee Eng. Med (Class-I), Pvt School Fee Eng. Med (Class-VI), Pvt Med. College Fee MBBS(1st Year)
Restaurant & Hotels		Chicken Biryani Full/Double	Tea Prepared (Ordinary), Bread Tandoori St. Size, Cooked Beef (Av. Hotel)	Cooked Mutton (Av. Hotel)
Miscellaneous	Silver Tezabi 24 Ct, Gold Tezabi 24 Ct, Toilet Soap Lifebuoy 140 Gms, Toilet Soap Lux 95 Gms	Shaving Cream Touch-Me/Admiral, Hair Removing Cream (EU-Cream), Lipstick S. Miss/Medora	Toothpaste Med Size Colgate 70Gms, Beauty Parlor Hair Style Charges, Wall Clock Quartz Av.Qlty	Purse Ladies (Leather) Av. Qlty, Artificial Jewellery Set, Haircut Charges For Men, Shaving Charges, Suitcase Rixin (24"X16"X6"), Perfume Med. Size Medora/Broche

Table A5: City- wise CPI Inflation by Income Groups, November 2014

	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	-0.9	5.6	-1.6	3.4	0.0	8.7	-0.7	6.4	-1.6	3.7	0.2	9.5
2 Islamabad	-0.8	4.1	-1.6	0.6	0.2	8.7	-0.7	4.6	-1.4	1.5	0.1	8.2
3 Lahore	0.2	7.0	0.5	6.6	-0.2	7.6	0.2	7.4	0.6	7.3	-0.3	7.5
4 Gujranwala	-0.1	2.9	-0.1	1.7	0.0	4.6	-0.1	3.2	-0.1	2.5	0.0	4.0
5 Sialkot	-0.2	4.9	-0.3	4.8	0.1	5.0	-0.3	4.9	-0.4	5.2	0.0	4.6
6 Faisalabad	-0.5	1.7	-0.9	-2.5	0.0	7.5	-0.4	2.4	-0.6	-1.2	-0.1	6.6
7 Multan	-0.2	2.4	-0.4	0.7	0.0	4.6	-0.2	2.6	-0.3	1.1	-0.1	4.4
8 Sargodha	-0.3	0.4	-0.6	-2.7	0.0	4.2	-0.3	0.8	-0.6	-2.5	-0.1	4.2
9 Bahawalpur	-0.3	2.2	-0.4	-0.3	-0.1	5.0	-0.3	2.5	-0.5	0.6	-0.1	4.5
10 Karachi	-0.4	3.2	-0.9	-0.4	0.3	8.4	-0.4	3.5	-0.8	0.4	0.1	7.5
11 Hyderabad	-1.1	0.0	-1.8	-1.9	-0.1	2.8	-1.0	0.5	-1.7	-1.4	-0.1	2.8
12 Sukkur	-1.3	0.1	-2.4	-2.6	0.2	3.6	-0.9	0.7	-2.0	-1.7	0.3	3.5
13 Larkana	-1.3	0.7	-2.6	-2.6	0.2	4.8	-1.4	1.4	-2.8	-1.8	0.0	4.9
14 Peshawar	0.2	3.6	-0.3	0.9	0.9	6.8	0.3	4.4	-0.3	1.8	0.9	7.1
15 Bannu	-1.4	2.6	-2.2	0.5	-0.4	5.3	-1.2	3.2	-2.0	1.2	-0.5	5.4
16 Quetta	0.1	1.4	0.2	0.6	0.0	2.5	0.0	1.8	0.1	1.3	-0.1	2.3
17 Khuzdar	-0.3	5.1	-0.7	7.6	0.2	2.1	-0.2	5.2	-0.6	8.2	0.3	1.9
	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	-0.8	6.6	-1.5	3.7	-0.2	9.5	-0.6	6.5	-1.3	3.9	0.0	8.7
2 Islamabad	-0.7	4.9	-1.4	2.0	0.0	7.7	-0.5	4.9	-1.4	2.0	0.2	7.3
3 Lahore	0.2	7.9	0.7	8.1	-0.4	7.6	0.2	7.5	0.9	8.8	-0.4	6.2
4 Gujranwala	-0.1	3.2	0.0	3.1	-0.2	3.3	0.0	3.3	0.1	3.7	-0.1	2.8
5 Sialkot	-0.4	5.2	-0.5	5.7	-0.3	4.7	-0.3	5.1	-0.5	6.3	-0.2	4.0
6 Faisalabad	-0.3	3.1	-0.5	-0.2	-0.2	6.7	-0.3	3.6	-0.3	1.2	-0.3	5.8
7 Multan	-0.3	3.0	-0.4	1.6	-0.3	4.4	-0.2	3.2	-0.2	2.1	-0.1	4.1
8 Sargodha	-0.5	0.9	-0.6	-2.1	-0.4	3.8	-0.5	1.1	-0.5	-1.7	-0.4	3.4
9 Bahawalpur	-0.4	3.0	-0.5	1.0	-0.3	4.9	-0.3	3.2	-0.5	1.9	-0.1	4.1
10 Karachi	-0.4	4.1	-0.7	1.1	0.0	7.4	-0.2	4.4	-0.5	2.2	0.0	6.5
11 Hyderabad	-1.1	0.4	-1.7	-1.0	-0.4	2.1	-0.9	0.8	-1.6	-0.2	-0.3	1.7
12 Sukkur	-0.8	0.9	-1.6	-0.9	0.0	2.7	-0.9	1.0	-1.8	-0.1	-0.1	2.0
13 Larkana	-1.4	1.9	-2.6	-1.4	-0.2	5.0	-1.3	2.5	-2.7	-0.8	-0.1	5.3
14 Peshawar	0.2	4.5	-0.5	1.8	0.8	7.2	0.2	5.1	-0.6	2.5	0.8	7.2
15 Bannu	-1.4	3.4	-2.2	1.3	-0.6	5.5	-0.9	4.1	-1.5	2.1	-0.4	5.9
16 Quetta	-0.1	1.9	0.1	1.8	-0.4	2.0	0.0	2.1	0.2	2.3	-0.3	2.0
17 Khuzdar	-0.2	4.9	-0.2	8.7	-0.1	1.2	0.1	5.1	0.0	9.5	0.1	1.5
	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	-0.4	7.7	-1.2	5.1	-0.1	9.1	-0.5	7.3	-1.3	4.5	0.0	9.3
2 Islamabad	-0.1	7.1	-1.1	4.0	0.4	8.8	-0.1	6.8	-1.2	3.5	0.6	9.3
3 Lahore	0.4	7.8	1.3	9.3	-0.2	6.9	0.3	7.7	1.0	8.7	-0.3	6.8
4 Gujranwala	0.1	3.3	0.4	4.6	-0.1	2.5	0.0	3.2	0.1	3.5	-0.1	2.9
5 Sialkot	-0.4	4.9	-0.5	6.6	-0.3	4.0	-0.3	5.0	-0.5	6.1	-0.2	4.1
6 Faisalabad	-0.2	4.4	-0.1	2.6	-0.3	5.3	-0.3	3.4	-0.4	0.5	-0.2	5.6
7 Multan	-0.2	3.9	0.0	3.2	-0.4	4.3	-0.2	3.3	-0.2	2.2	-0.3	4.2
8 Sargodha	-0.5	2.3	-0.4	-1.3	-0.5	4.0	-0.4	1.3	-0.5	-1.9	-0.4	3.4
9 Bahawalpur	-0.2	4.0	-0.5	2.4	-0.1	4.8	-0.3	3.2	-0.5	1.3	-0.1	4.4
10 Karachi	-0.2	6.0	-0.2	4.4	-0.2	6.9	-0.2	5.3	-0.4	2.9	-0.1	7.1
11 Hyderabad	-0.8	1.3	-1.5	1.1	-0.4	1.5	-0.9	0.8	-1.6	-0.3	-0.3	1.7
12 Sukkur	-0.7	1.5	-1.5	0.9	-0.2	1.8	-0.8	1.0	-1.8	-0.6	-0.2	2.1
13 Larkana	-1.0	3.8	-2.4	0.0	-0.3	5.7	-1.3	2.1	-2.6	-1.3	-0.4	4.4
14 Peshawar	0.0	5.6	-0.6	3.2	0.4	6.8	0.1	5.0	-0.5	2.3	0.6	6.8
15 Bannu	-1.2	3.3	-1.6	4.2	-0.9	2.8	-1.2	3.4	-1.9	2.0	-0.7	4.5
16 Quetta	-0.1	2.4	0.2	2.6	-0.2	2.3	0.0	2.1	0.2	2.0	-0.2	2.2
17 Khuzdar	-0.3	3.9	-0.2	10.6	-0.4	0.7	-0.2	5.0	-0.4	9.1	0.0	2.1

Table A6: City- wise CPI Inflation (YoY) November, 2014

City	High inflation cities			City	Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Lahore	7.7	8.7	6.8	Wazirabad	3.6	1.8	4.9
Rawalpindi	7.3	4.5	9.3	Bannu	3.4	2.0	4.5
Islamabad	6.8	3.5	9.3	Muzaffargarh	3.4	2.4	4.2
D.G. Khan	6.6	5.2	7.6	Faisalabad	3.4	0.5	5.6
Mardan	6.2	-1.2	10.8	Multan	3.3	2.2	4.2
Nawabshah	5.7	0.3	9.5	Bahawalpur	3.2	1.3	4.4
Sahiwal	5.6	1.7	8.3	Gujranwala	3.2	3.5	2.9
Karachi	5.3	2.9	7.1	Mir Pur Khas	2.8	3.1	2.5
Peshawar	5.0	2.3	6.8	Jhang	2.6	1.0	3.6
Khuzdar	5.0	9.1	2.1	Mingora	2.4	1.8	2.8
Sialkot	5.0	6.1	4.1	Rahim Yar Khan	2.4	-1.1	5.0
Abbotabad	4.4	3.9	4.7	Mithi	2.4	2.3	2.4
				Quetta	2.1	2.0	2.2
				Jehlum	2.1	-0.9	4.2
				Larkana	2.1	-1.3	4.4
				Mianwali	1.8	-0.7	3.5
				Attock	1.6	-1.7	4.1
				Vehari	1.6	-0.1	2.9
				Bahawalnagar	1.5	-0.6	2.9
				Loralai&Cantt	1.4	1.4	1.4
				Turbat	1.3	1.9	0.9
				Sargodha	1.3	-1.9	3.4
				Dadu	1.3	-0.4	2.5
				Gawadar	1.0	0.7	1.3
				Sukkur	1.0	-0.6	2.1
				Hyderabad	0.8	-0.3	1.7
				D.I.Khan	-0.4	-3.4	1.7
				Dera Mrd.Jamali	-0.6	-5.0	2.7

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		
	Nov-13	Oct-14	Nov-14	Nov-13	Oct-14	Nov-14
<u>Up to Rs. 8000</u>						
General	2.1	0.0	-0.5	12.1	5.2	2.6
Food	3.3	-0.4	-0.7	14.9	4.3	0.2
Non-food	0.4	0.6	-0.1	8.5	6.4	5.8
<u>Rs. 8001- 12000</u>						
General	1.8	0.1	-0.4	11.2	5.3	3.0
Food	3.1	-0.3	-0.6	14.1	4.6	0.9
Non-food	0.3	0.6	-0.3	8.1	6.2	5.5
<u>Rs. 12001- 18000</u>						
General	1.6	0.1	-0.4	11.9	5.5	3.4
Food	2.9	-0.3	-0.5	13.6	4.9	1.4
Non-food	0.3	0.5	-0.2	10.2	6.0	5.5
<u>Rs. 18001- 35000</u>						
General	1.4	0.1	-0.4	11.5	5.6	3.7
Food	2.7	-0.2	-0.5	13.1	5.3	2.1
Non-food	0.3	0.5	-0.4	10.2	5.9	5.2
<u>Above Rs. 35000</u>						
General	0.9	0.3	-0.6	10.1	6.2	4.6
Food	2.2	0.0	-0.3	12.1	5.7	3.1
Non-food	0.3	0.5	-0.8	9.1	6.4	5.3
<u>All income groups</u>						
General	1.3	0.2	-0.5	10.9	5.8	4.0
Food	2.6	-0.2	-0.4	13.0	5.2	2.1
Non-food	0.3	0.5	-0.6	9.4	6.2	5.4

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Nov-14	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	354.3	-7.5	0.7
2	Wheat Flour Bag	10Kg.	402.7	-4.3	-0.3
3	Rice Basmati Broken	Kg.	74.4	-0.8	-0.1
4	Rice Irri-6	Kg.	52.3	-2.2	-0.9
5	Bread Plain Med. Size (340-400 Gm.)	Each	40.8	4.6	0.0
6	Beef	Kg.	302.0	7.0	0.1
7	Mutton	Kg.	592.6	7.0	0.2
8	Chicken Live (Farm)	Kg.	149.0	10.3	10.9
9	Milk Fresh	Litr	76.2	10.8	0.5
10	Curd	Kg.	89.5	10.6	0.2
11	Milk Powdered Nido	500G	350.0	17.3	0.0
12	Egg Hen (Farm)	Doz.	114.8	1.4	8.1
13	Mustard Oil	Kg.	185.5	1.3	0.1
14	Cooking Oil (Tin)	2.5Ltr	536.5	-0.2	-0.1
15	Veg. Ghee (Tin)	2.5Kg.	510.6	0.0	0.0
16	Veg. Ghee Loose	Kg.	158.0	-1.7	-0.5
17	Bananas	Doz.	61.8	15.6	-11.4
18	Masoor Pulse Washed	Kg.	136.0	17.0	3.6
19	Moong Pulse Washed	Kg.	159.0	23.9	5.4
20	Mash Pulse Washed	Kg.	162.9	24.4	1.5
21	Gram Pulse Washed	Kg.	76.6	7.6	1.5
22	Potatoes	Kg.	60.1	0.3	-7.8
23	Onions	Kg.	31.2	-47.1	-22.4
24	Tomatoes	Kg.	46.8	-59.6	-35.3
25	Sugar	Kg.	56.8	-3.5	-4.0
26	Gur	Kg.	84.7	-2.4	-2.0
27	Salt Powdered Loose (Lahori)	Kg.	10.0	8.4	0.0
28	Red Chilies Powder Loose	Kg.	264.9	22.5	1.4
29	Garlic	Kg.	136.1	0.8	1.9
30	Tea (Yellow Label)	200Gm.	127.7	-24.6	0.2
31	Cooked Beef Plate	Each	82.4	7.0	0.0
32	Cooked Dal Plate	Each	47.9	6.0	0.6
33	Tea Prepared (Sada)	Cup	18.6	11.6	0.0
34	Cigarettes K-2 (20'S)	20'S	45.4	20.4	0.0
35	Long Cloth (Coarse Latha)	Mtr.	199.5	15.9	0.0
36	Shirting	Mtr.	156.8	9.9	0.0
37	Lawn	Mtr.	239.2	26.0	0.0
38	Georgette (Voil Printed)	Mtr.	123.1	11.3	0.0
39	Sandal Gents Bata	Pair	699.0	7.7	0.0
40	Chappal Spong. Bata (Gents)	Pair	179.0	0.0	0.0
41	Sandal Ladies Bata	Pair	499.0	0.0	0.0
42	Electric Charges 1-50	Unit	2.0	0.0	0.0
43	Gas Charges upto 3.3719	Mmbtu	124.2	0.0	0.0
44	Kerosene	Litr	109.2	-13.9	-6.3
45	Firewood	40Kg	558.9	5.3	0.6
46	Energy Savor 14 Watts	Each	165.4	2.3	0.0
47	Washing Soap (200-250 Gm.)	Cake	24.4	4.5	0.0
48	Match Box	Each	1.7	23.4	1.2
49	Petrol	Litr	95.2	-16.5	-9.3
50	Diesel	Litr	102.3	-13.3	-5.8
51	L.P.G.(11 Kg Cylinder.)	Each	1513.6	-4.5	-10.3
52	Tele. Local Call	Call	3.9	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	36.0	0.0	0.0
Maximum				26.0	10.9
Median				2.3	0.0
Minimum				-59.6	-35.3

Table A9: Distribution of Price Changes (YoY) - WPI Items: November 2014				
Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Agriculture Forestry & Fishery Products	Fibre Crops, Vegetables, Wheat, Millet/Bajra, Sugar Crops	Eggs, Fish Live Fresh or Chilled, Rice, Edible Roots/Potatoes	Poultry, Fresh Fruits, Hides and Fur Skins- Raw, Maize, Sorghum/Jowar, Fuel Wood in Logs, Other Oil Seeds	Stimulant and Spice Crops, Unmanufactured Tobacco, Pulses, Raw Animal Material/Wool, Dry Fruits, Milk from Bovine Animals, Cotton Seeds
Ores & Minerals, Electricity Gas & Water	Natural Gas Liquefied, Coal not Agglomerated	Electrical Energy		Salt & Pure Sodium Chloride
Food Products, Beverages and Tobacco, Textiles, Apparel and Leather Products	Other Leather N.E.C, Coffee and Tea, Cotton Yarn, Nylon Yarn, Sugar Refined, Footwear, Other Food Products, Blended Yarn, Wheat Flour, Vegetable Ghee, Spices, Sugar Confectionary, Chocolate	Ice Cream, Fruit Juices, Vegetables & Fruit Juices, Mineral Water, Vegetable Oil Refined, Dried Fruits & Nuts	Bed Sheets, Dairy Products N.E.C, Synthetic Carpets, Oil Cakes, Meat of Animals, Cotton Fabrics, Other Cereal Flour, Woven Fabrics	Leather Without Hairs, Ready Made Garments, Woolen Carpets, Tobacco Products, Blankets, Processed Liquid Milk, Quilts, Milk and Cream in Solid Form, Other Fabrics, Beverages, Hosiery Products, Towels, Silk and Rayon Fabrics
Other Transportable Goods except Metal Products, Machinery and Equipments	Motor Sprit, Diesel Oil, Furnace Oil, Kerosene Oil, Soaps & Detergent, Coke, Matches	Medicines, Cement, Mobil Oil, Bed Foams, Fertilizers, Glass Sheets, Printing Paper, Auto Tyres	Other Glass Articles, Plastic Products, Hard Board, Bricks Blocks and Tiles	Insecticides, Dying Materials, Ceramics and Sanitary, Pesticides, Chemicals, Timber, Paints & Varnishes
Metal Product Machinery & Equipment	Pig Iron, Engines and Motors, Vacuum Pumps, Concrete Mixer, Radio and Television, Cultivators	Chuff Cutter, Steel Products, Motor Cycles, Lighting Equipments, Bicycles, Motor Vehicles	Electrical Wires, Air Conditioners, Steel Bars & Sheets, Refrige,Wash& Sew Mach,Iron,Fan	Lathe Machines, Pipe Fittings, Tractors

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

Items and specification	Weights	Index		
		Nov-13	Oct-14	Nov-14
General	100.00	191.21	199.81	198.79
Food & Non-Alcoholic Beverages.	34.83	217.89	221.33	220.25
1 Wheat	0.35	220.58	210.63	211.83
2 Wheat Flour	4.16	227.82	222.81	222.97
3 Wheat Product	0.10	210.03	220.03	219.98
4 Besan	0.15	169.37	171.46	172.67
5 Rice	1.58	192.63	196.10	196.10
6 Cereals	0.16	228.10	238.48	239.07
7 Bakery & Confectionary	1.16	195.75	206.17	206.65
8 Nimco	0.46	217.02	237.62	238.29
9 Meat	2.43	228.77	243.17	243.83
10 Chicken	1.36	162.43	171.55	173.51
11 Fish	0.30	210.55	213.95	217.91
12 Milk Fresh	6.68	231.57	247.00	247.74
13 Milk Product	0.63	226.42	241.78	242.95
14 Milk Powder	0.11	198.67	225.13	225.38
15 Egg	0.46	220.88	215.84	234.65
16 Mustard Oil	0.10	158.69	158.89	158.89
17 Cooking Oil	1.75	161.02	161.97	159.95
18 Vegetable Ghee	2.07	157.09	156.90	155.25
19 Dry Fruits	0.25	225.01	241.48	246.55
20 Fresh Fruits	1.86	181.97	224.17	218.51
21 Pulse Masoor	0.27	161.86	182.76	186.28
22 Pulse Moong	0.23	238.17	280.50	295.69
23 Pulse Mash (Washed)	0.21	188.64	226.52	229.35
24 Pulse Gram	0.24	162.33	169.05	172.33
25 Gram Whole	0.16	175.32	178.73	179.16
26 Beans	0.03	235.84	244.36	245.30
27 Potatoes	0.44	426.51	466.16	430.89
28 Onion	0.51	362.39	250.25	203.33
29 Tomatoes	0.41	412.96	198.97	141.15
30 Fresh Vegetable	1.77	264.46	242.35	253.04
31 Sugar	1.04	215.52	212.99	205.96
32 Gur	0.02	278.99	268.19	263.18
33 Honey	0.04	262.05	299.70	300.07
34 Sweet Meet	0.25	221.10	230.79	231.95
35 Beverages	1.20	189.74	207.93	206.90
36 Jam, Tomato Ketchup & Pickle	0.25	189.16	198.66	202.38
37 Condiments	0.27	222.38	251.20	251.93
38 Spices	0.54	214.54	232.46	234.33
39 Tea	0.84	253.04	212.06	214.72
Alcoholic Beverages, Tobacco	1.41	218.24	266.62	266.65
40 Cigarette	1.39	218.68	267.63	267.63
41 Betel Leaves & Nuts	0.02	191.56	205.62	207.58
Clothing & Footwear	7.57	196.25	211.10	213.01
42 Cotton Cloth	1.73	182.05	206.89	207.27
43 Woolen Cloth	0.88	215.22	229.10	230.53
44 Ready Made Garment	0.97	194.06	212.38	212.79
45 Woolen Readymade Garments	0.40	200.23	219.58	234.72
46 Hosiery	0.51	203.32	222.29	224.72
47 Dopatta	0.44	212.53	226.62	229.61
48 Cleaning & Laundering	0.21	216.66	234.46	235.28

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Nov-13	Oct-14	Nov-14
49 Tailoring	0.88	235.52	258.78	262.50
50 Footwear	1.55	169.58	164.18	164.29
Housing,Water,Elect,Gas & Other Fuel	29.41	164.33	173.39	174.01
51 House Rent	21.81	150.59	162.06	162.06
52 Construction Input Item	0.56	221.73	236.73	236.32
53 Construction Wage Rate	0.33	191.07	204.03	204.38
54 Water Supply	0.50	147.52	149.92	149.92
55 Electricity	4.40	227.44	227.44	231.52
56 Gas	1.58	143.81	143.81	143.81
57 Kerosene Oil	0.01	296.65	274.86	260.32
58 Fire Wood Whole	0.23	256.78	266.60	268.99
Furnished H.Hold Equip.& Maint. Etc	4.21	194.16	207.48	208.26
59 Furniture	0.33	183.52	198.76	200.00
60 Household Textile	0.65	190.35	203.12	205.12
61 Household Equipment	0.59	165.35	171.71	172.08
62 Utensils	0.32	195.29	209.01	209.64
63 Plastic Products	0.25	189.62	198.24	199.79
64 Washing Soap & Detergent	0.79	212.44	222.35	222.79
65 Sewing Needle & Dry Cell	0.15	172.30	183.04	183.61
66 Household Servant	1.04	205.48	225.87	226.02
67 Marriage Hall Charges	0.08	206.52	227.81	230.24
Health	2.19	165.73	174.95	175.37
68 Drug Medicine	1.27	142.19	146.84	147.26
69 Medical Equipment	0.01	209.63	221.31	221.31
70 Doctor (MBBS) Clinic Fee	0.59	216.61	236.75	236.75
71 Medical Test	0.32	163.95	171.03	172.27
Transport	7.20	197.04	204.84	190.59
72 Motor Vehicle	0.66	160.81	163.73	163.75
73 Motor Vehicle Accessories	0.24	221.31	229.28	229.63
74 Motor Fuel	3.03	194.85	187.14	175.69
75 Mechanical Service	0.46	197.52	207.30	209.51
76 Motor Vehicle Tax	0.11	153.74	210.18	210.18
77 Transport Services	2.70	207.87	231.90	206.36
Communication	3.22	129.71	129.85	129.99
78 Postal Services	0.07	215.89	216.26	221.37
79 Communication & Apparatus	3.15	127.90	128.04	128.07
Recreation & Culture	2.02	182.66	189.39	189.55
80 Recreation & Culture	0.86	126.38	127.84	128.04
81 Text Books	0.57	267.10	280.89	280.89
82 News Papers	0.19	170.49	175.42	175.42
83 Stationery	0.40	189.69	198.56	198.96
Education	3.94	167.91	192.41	192.41
84 Education	3.94	167.91	192.41	192.41
Restaurants And Hotels	1.23	225.76	242.78	242.78
85 Ready Made Food	1.23	225.76	242.78	242.78
Miscellaneous Goods And Services	2.76	209.61	220.36	220.35
86 Personal Care	1.49	191.32	204.03	204.40
87 Cosmetics	0.39	174.38	183.89	185.73
88 Blades	0.03	180.83	184.82	185.42
89 Personal Equipments	0.84	259.16	267.26	265.71

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

Items and Specifications	Index		
	Nov-13	Oct-14	Nov-14
General	212.22	214.39	212.26
Agriculture Forestry & Fishery	220.76	222.72	219.26
1 Wheat	231.90	215.03	216.76
2 Maize	178.94	193.55	191.93
3 Rice	176.47	182.99	181.10
4 Sorghum/Jowar	263.55	286.45	280.16
5 Millet/Bajra	179.40	177.35	171.52
6 Vegetables	367.68	302.11	285.84
7 Fresh Fruits	194.51	250.21	210.77
8 Dry Fruits	197.11	220.55	220.92
9 Cotton Seeds	168.77	186.82	188.86
10 Other Oil Seeds	178.95	186.54	188.07
11 Edible Roots/ Potatoes	472.04	535.17	483.87
12 Stimulant And Spice Crops	275.65	397.61	362.38
13 Pulses	178.53	193.91	202.21
14 Sugar Crops	267.92	267.92	267.92
15 Fibre Crops	212.61	170.48	163.54
16 Unmanufactured Tobacco	181.11	208.01	212.62
17 Poultry	159.59	172.75	174.87
18 Milk From Bovine Animals	223.35	248.92	250.31
19 Eggs	230.34	218.07	241.19
20 Raw Animal Material/Wool	153.55	173.82	173.82
21 Hides And Fur Skins, Raw	145.71	154.93	156.37
22 Fuel Wood In Logs	236.04	246.31	250.46
23 Fishes Live Fresh Or Chilled	249.22	247.49	259.83
Ores/Minerals, Gas & Elect.	243.77	244.75	247.62
24 Coal Not Agglomerated	223.53	223.53	223.53
25 Natural Gas Liquefied	204.91	206.65	204.85
26 Salt & Pure Sodium Chloride	217.04	247.16	247.16
27 Electrical Energy	287.44	287.44	295.61
Food, Beverages, Tobacco, Textiles	201.99	208.83	207.90
28 Meat Of Animals	239.95	257.41	257.41
29 Vegetables & Fruit Juices	192.59	196.79	196.79
30 Dried Fruits & Nuts	224.54	222.26	227.45
31 Fruit Juices	165.29	171.93	171.93
32 Vegetable Oil Refined	160.83	163.22	163.13
33 Vegetable Ghee	141.61	137.60	137.39
34 Oil Cakes	181.80	203.69	198.27
35 Processed Liquid Milk	205.54	242.78	242.78
36 Milk And Cream In Solid Form	190.96	221.48	222.04
37 Ice Cream	209.79	219.91	219.91
38 Dairy Products N.E.C	217.26	237.45	237.72
39 Wheat Flour	209.15	202.07	202.78
40 Other Cereal Flour	132.04	138.03	140.16
41 Sugar Refined	229.71	224.22	218.74
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	102.28	102.28	102.28
44 Coffee And Tea	229.47	186.74	188.05
45 Spices	194.28	188.66	188.69
46 Other Food Products	308.23	296.60	296.60
47 Mineral Water	181.84	185.63	185.63
48 Beverages	150.11	171.52	171.52
49 Tobacco Products	242.41	290.52	290.52
50 Cotton Yarn	221.66	190.52	186.79
51 Nylon Yarn	181.73	164.37	161.23
52 Blended Yarn	201.89	193.92	194.74
53 Woven Fabrics	224.64	237.79	237.79
54 Cotton Fabrics	187.77	200.51	200.51
55 Other Fabrics	179.06	206.11	206.11

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities				
		Index		
Items and Specifications		Nov-13	Oct-14	Nov-14
56 Silk And Rayon Fabrics		161.09	176.47	177.28
57 Towels		233.85	250.33	260.85
58 Blankets		196.10	230.00	232.93
59 Bed Sheets		227.19	247.46	249.35
60 Quilts		160.74	179.47	188.74
61 Woolen Carpets		109.52	132.14	132.14
62 Synthetic Carpets		115.69	126.27	126.27
63 Hosiery Products		187.81	210.35	210.35
64 Ready Made Garments		153.12	186.77	186.77
65 Leather With Out Hairs		144.55	212.86	215.02
66 Other Leather N.E.C		276.28	214.36	215.39
67 Footwear's		139.49	134.22	134.22
Other Transportable Goods		216.87	212.36	206.62
68 Timber		166.37	189.35	190.70
69 Printing Paper		167.02	169.34	169.34
70 Hard Board		214.58	229.17	229.17
71 Coke		163.45	163.45	163.45
72 Motor Sprit		190.50	175.05	159.11
73 Diesel Oil		279.46	254.48	235.67
74 Kerosene Oil		288.01	277.92	254.18
75 Furnace Oil		184.52	159.86	157.65
76 Mobil Oil		193.09	201.53	201.53
77 Chemicals		169.65	196.00	198.36
78 Dying Materials		106.46	143.77	143.77
79 Fertilizers		263.88	270.24	270.69
80 Pesticides		224.99	266.71	266.71
81 Insecticides		131.04	179.64	177.41
82 Paints & Varnishes		249.49	280.05	280.05
83 Medicines		138.77	144.59	144.94
84 Soaps & Detergent		178.85	177.77	177.83
85 Auto Tyres		185.73	188.28	188.28
86 Plastic Products		200.86	210.90	214.92
87 Glass Sheets		206.90	209.86	209.86
88 Other Glass Articles		213.87	227.13	230.45
89 Ceramics And Sanitary		171.02	212.17	212.17
90 Bricks Blocks And Tiles		194.89	204.18	205.47
91 Cement		200.84	210.17	209.76
92 Bed Foams		149.33	150.83	155.17
93 Matches		143.20	143.20	143.20
Metal Product Machinery & Equip		168.01	172.85	172.72
94 Pig Iron		128.97	128.97	128.97
95 Steel Bars & Sheets		140.55	150.97	148.95
96 Pipe Fittings		166.34	191.94	191.94
97 Steel Products		170.08	173.74	173.80
98 Engines And Motors		109.07	109.07	109.07
99 Vacuum Pumps		115.39	115.39	115.39
100 Air Conditioners		181.12	195.53	195.53
101 Cultivators		226.90	226.90	226.90
102 Chuff Cutter		144.94	149.20	149.20
103 Tractors		193.29	214.54	214.54
104 Lathe Machines		174.96	208.81	208.81
105 Concrete Mixer		138.83	138.83	138.83
106 Refrige,Wash& Sew Mach, Iron,Fan		186.98	196.81	197.85
107 Electrical Wires		169.09	184.79	184.79
108 Lighting Equipments		163.43	164.95	165.30
109 Radio And Television		126.49	126.49	126.49
110 Motor Vehicles		181.77	183.03	183.03
111 Motor Cycles		125.41	126.92	126.92
112 Bicycles		180.99	182.84	182.84

Table A12: Price Indices - Base 2007-08 = 100

Period		CPI			WPI			SPI *
		Overall	Food	Non-food	Overall	Food	Non-Food	
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
2013-14		189.58	212.74	175.69	210.48	213.04	208.85	208.66
2012	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
	Jul	183.58	208.19	168.83	202.49	209.34	198.15	200.80
	Aug	185.71	212.27	169.79	207.85	211.45	205.57	203.29
	Sep	185.18	209.09	170.85	209.33	211.29	208.09	203.05
	Oct	188.82	212.61	174.56	211.70	213.26	210.71	207.69
	Nov	191.21	218.16	175.06	212.22	215.77	209.97	214.76
	Dec	188.68	210.89	175.37	210.11	210.28	210.00	210.78
2014	Jan	189.60	210.81	176.89	211.23	209.87	212.10	208.99
	Feb	189.00	208.74	177.17	210.94	208.67	212.38	208.54
	Mar	190.82	213.11	177.46	211.66	212.89	210.88	212.08
	Apr	194.06	217.33	180.11	211.88	216.70	208.82	211.78
	May	193.55	214.75	180.84	211.71	215.95	209.02	209.80
	Jun	194.74	216.98	181.41	214.60	221.06	210.50	212.40
	Jul	198.05	222.80	183.21	215.76	225.52	209.57	216.14
	Aug	198.70	224.05	183.50	214.73	227.26	206.78	217.08
	Sep	199.40	224.12	184.58	215.06	228.41	206.59	217.06
	Oct	199.81	223.74	185.47	214.39	229.02	205.10	216.67
	Nov	198.79	222.74	184.44	212.26	227.29	202.73	214.45

*: all groups combined

Table A13: International Commodity Prices/ Indices				
	Aug-14	Sep-14	Oct-14	Nov-14
Energy				
Crude Oil (US\$ per barrel) *	100.1	95.9	86.1	77.0
IMF Energy Index (2005 = 100)	182.9	175.8	160.0	145.2
WB Energy Index (2010 = 100) @	121.2	116.6	106.2	96.3
Food				
Rice (\$/MT)	440.4	436.5	432.7	419.0
Wheat (\$/MT)	263.4	243.7	245.4	258.7
Sugar (US cent/ pound)	17.7	16.5	16.5	15.9
Palm Oil (\$/MT)	677.9	657.0	673.1	662.4
Soybean Oil (\$/MT)	745.8	711.7	721.4	721.4
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	74.0	73.4	70.3	67.5
IMF Metal Price Index (2005 = 100)	168.2	161.4	156.8	156.4
Copper (\$/MT)	7,001.8	6,872.2	6,737.5	6,712.9
Aluminum (\$/MT)	2,030.5	1,990.4	1,946.2	2,055.6
Iron Ore (\$ cents/dry MT)	92.6	82.3	80.1	73.1
Tin (\$/MT)	22,231.1	21,090.5	19,830.4	20,033.5
Nickle (\$/MT)	18,600.2	18,034.8	15,812.4	15,807.1
Zinc (\$/MT)	2,327.0	2,294.6	2,276.8	2,253.2
Lead (\$/MT)	2,236.8	2,117.2	2,034.3	2,030.2
Uranium (\$/MT)	30.6	34.2	35.6	40.5
DAP (\$/MT)	505.0	481.6	466.5	452.8
Urea (\$/MT)	321.9	325.6	321.1	311.3
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

Original Series				
Period	FY12	FY13	FY14	FY15
Jul	154.72	169.57	183.58	198.05
Aug	156.88	171.09	185.71	198.70
Sep	158.50	172.44	185.18	199.40
Oct	160.79	173.10	188.82	199.81
Nov	161.25	172.42	191.21	198.79
Dec	160.12	172.82	188.68	
Jan	162.58	175.70	189.60	
Feb	163.07	175.11	189.00	
Mar	164.98	175.82	190.82	
Apr	168.00	177.74	194.06	
May	169.93	178.65	193.55	
Jun	169.99	179.94	194.74	
Seasonally Adjusted Series				
Jul	154.35	169.09	182.67	197.34
Aug	155.73	169.77	184.23	197.14
Sep	157.37	171.20	183.83	197.92
Oct	159.44	171.70	187.34	198.26
Nov	160.41	171.49	190.14	197.73
Dec	160.96	173.76	189.70	
Jan	162.89	176.03	189.94	
Feb	164.56	176.74	190.78	
Mar	166.09	177.04	192.17	
Apr	168.00	177.70	194.02	
May	170.62	179.45	194.45	
Jun	170.71	180.75	195.62	

Table 15. CPI Food Data Series Original and Seasonally Adjusted				
Original Series				
Period	FY12	FY13	FY14	FY15
Jul	174.80	190.72	208.19	222.80
Aug	177.32	192.47	212.27	224.05
Sep	180.16	193.80	209.09	224.12
Oct	183.07	193.66	212.61	223.74
Nov	183.26	193.03	218.16	222.74
Dec	179.21	192.97	210.89	
Jan	181.90	196.58	210.81	
Feb	180.69	194.05	208.74	
Mar	183.46	195.06	213.11	
Apr	187.43	197.74	217.33	
May	187.75	200.00	214.75	
Jun	187.35	202.11	216.98	
Seasonally Adjusted Series				
Jul	173.91	189.53	206.67	221.01
Aug	174.59	189.36	208.73	220.34
Sep	177.19	190.57	205.57	220.29
Oct	179.91	190.43	209.21	220.19
Nov	180.90	190.46	215.22	219.85
Dec	180.70	194.63	212.68	
Jan	182.84	197.59	211.92	
Feb	184.37	198.06	213.10	
Mar	185.80	197.60	215.89	
Apr	188.06	198.33	218.00	
May	189.55	202.08	217.07	
Jun	189.39	204.39	219.43	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.24	100.28	100.50	100.36	100.34
Aug	100.74	100.78	100.81	100.79	100.78
Sep	100.72	100.72	100.74	100.75	100.73
Oct	100.85	100.81	100.79	100.78	100.81
Nov	100.52	100.54	100.56	100.54	100.54
Dec	99.48	99.46	99.46		99.47
Jan	99.81	99.82	99.82		99.81
Feb	99.10	99.08	99.07		99.08
Mar	99.33	99.31	99.30		99.32
Apr	100.00	100.02	100.02		100.01
May	99.60	99.55	99.54		99.56
Jun	99.58	99.55	99.55		99.56

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.52	100.63	100.74	100.81	100.67
Aug	101.56	101.64	101.70	101.68	101.65
Sep	101.68	101.69	101.71	101.74	101.71
Oct	101.76	101.69	101.63	101.61	101.67
Nov	101.31	101.35	101.37	101.31	101.33
Dec	99.18	99.15	99.16		99.16
Jan	99.49	99.49	99.48		99.48
Feb	98.01	97.98	97.95		97.98
Mar	98.74	98.72	98.71		98.72
Apr	99.67	99.70	99.70		99.69
May	99.05	98.97	98.93		98.98
Jun	98.93	98.89	98.89		98.90

Table 18: CPI Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY12	FY13	FY14	FY15
Jul		-0.25	2.02	1.70
Aug	1.40	0.90	1.16	0.33
Sep	1.03	0.79	-0.29	0.35
Oct	1.44	0.38	1.97	0.21
Nov	0.29	-0.39	1.27	-0.51
Dec	-0.70	0.23	-1.32	
Jan	1.54	1.67	0.49	
Feb	0.30	-0.34	-0.32	
Mar	1.17	0.41	0.96	
Apr	1.83	1.09	1.70	
May	1.15	0.51	-0.26	
Jun	0.04	0.72	0.61	
Seasonally Adjusted Series				
Jul		-0.95	1.06	0.88
Aug	0.90	0.40	0.85	-0.10
Sep	1.05	0.84	-0.22	0.40
Oct	1.32	0.29	1.91	0.17
Nov	0.61	-0.12	1.49	-0.27
Dec	0.34	1.32	-0.23	
Jan	1.20	1.31	0.13	
Feb	1.02	0.41	0.44	
Mar	0.93	0.17	0.73	
Apr	1.15	0.38	0.97	
May	1.56	0.98	0.22	
Jun	0.05	0.72	0.60	

Table 19: CPI Food Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY12	FY13	FY14	FY15
Jul		1.80	3.01	2.68
Aug	1.44	0.92	1.96	0.56
Sep	1.60	0.69	-1.50	0.03
Oct	1.62	-0.07	1.68	-0.17
Nov	0.10	-0.33	2.61	-0.45
Dec	-2.21	-0.03	-3.33	
Jan	1.50	1.87	-0.04	
Feb	-0.66	-1.29	-0.98	
Mar	1.53	0.52	2.10	
Apr	2.16	1.37	1.98	
May	0.17	1.15	-1.19	
Jun	-0.21	1.05	1.04	
Seasonally Adjusted Series				
Jul		0.08	1.12	0.72
Aug	0.40	-0.09	1.00	-0.30
Sep	1.49	0.64	-1.51	-0.02
Oct	1.54	-0.07	1.77	-0.04
Nov	0.55	0.01	2.88	-0.15
Dec	-0.11	2.19	-1.18	
Jan	1.18	1.52	-0.36	
Feb	0.84	0.24	0.56	
Mar	0.78	-0.23	1.31	
Apr	1.22	0.37	0.97	
May	0.79	1.89	-0.42	
Jun	-0.09	1.14	1.08	

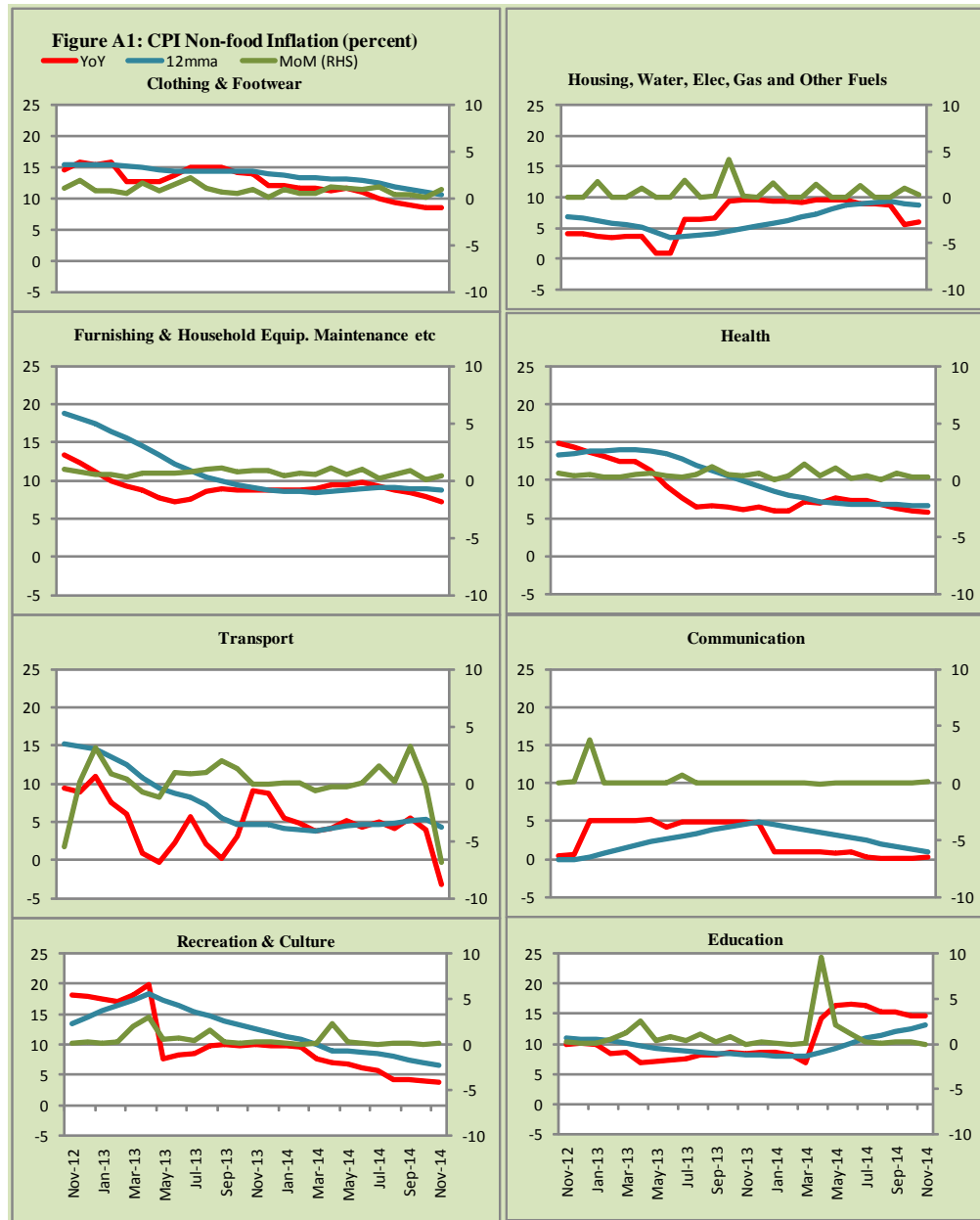


Figure A2: Frequency Distribution of Price Changes of CPI Items, November 2014

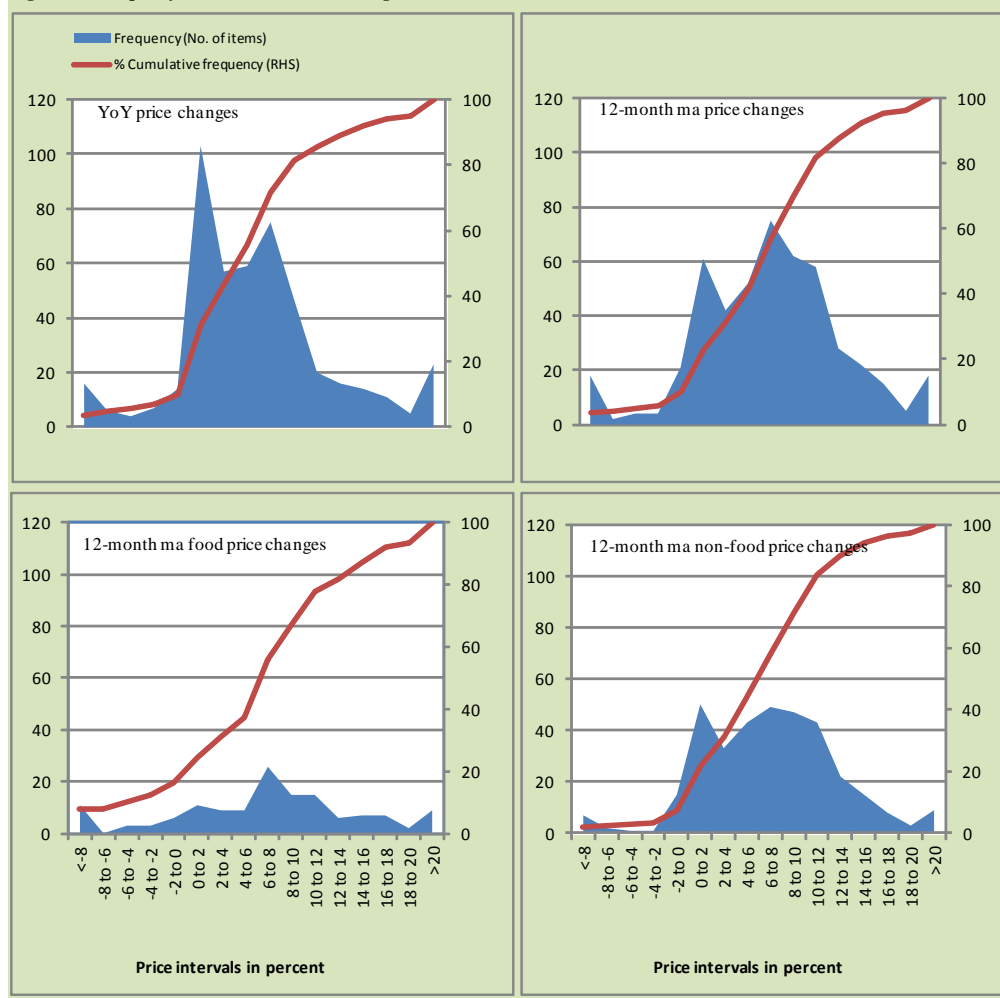


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, November 2014

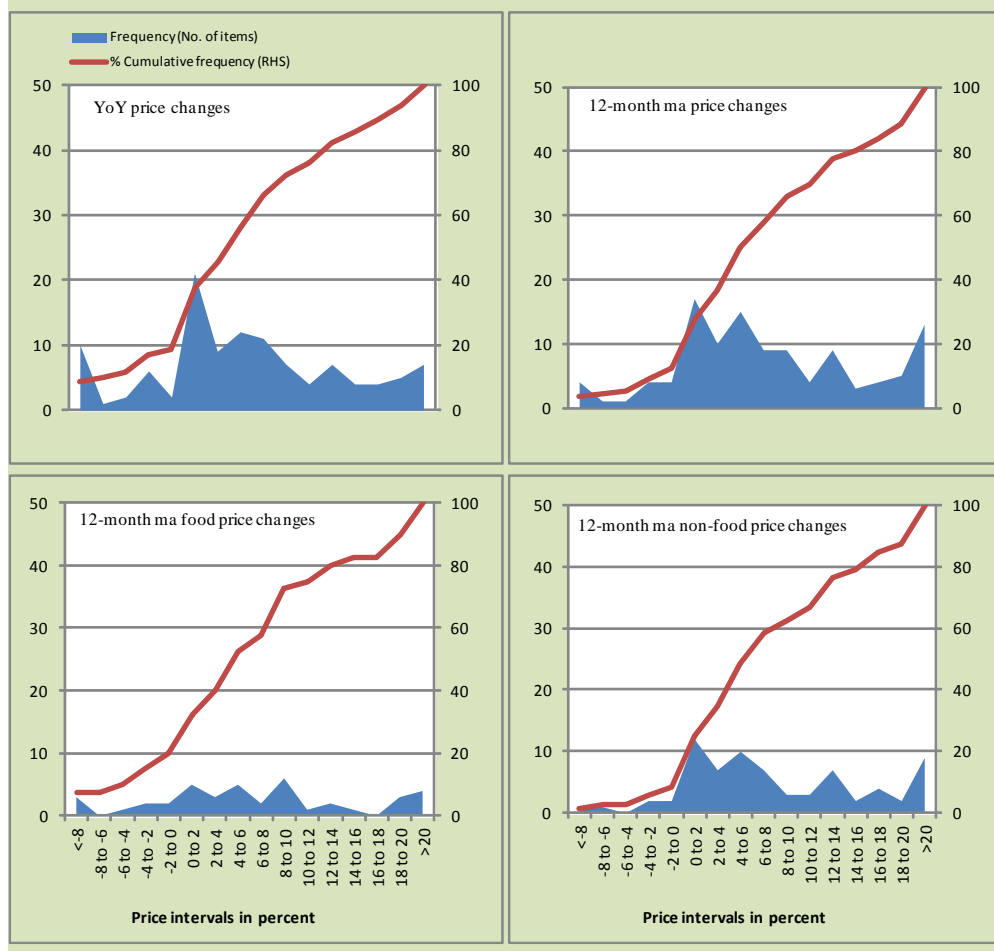
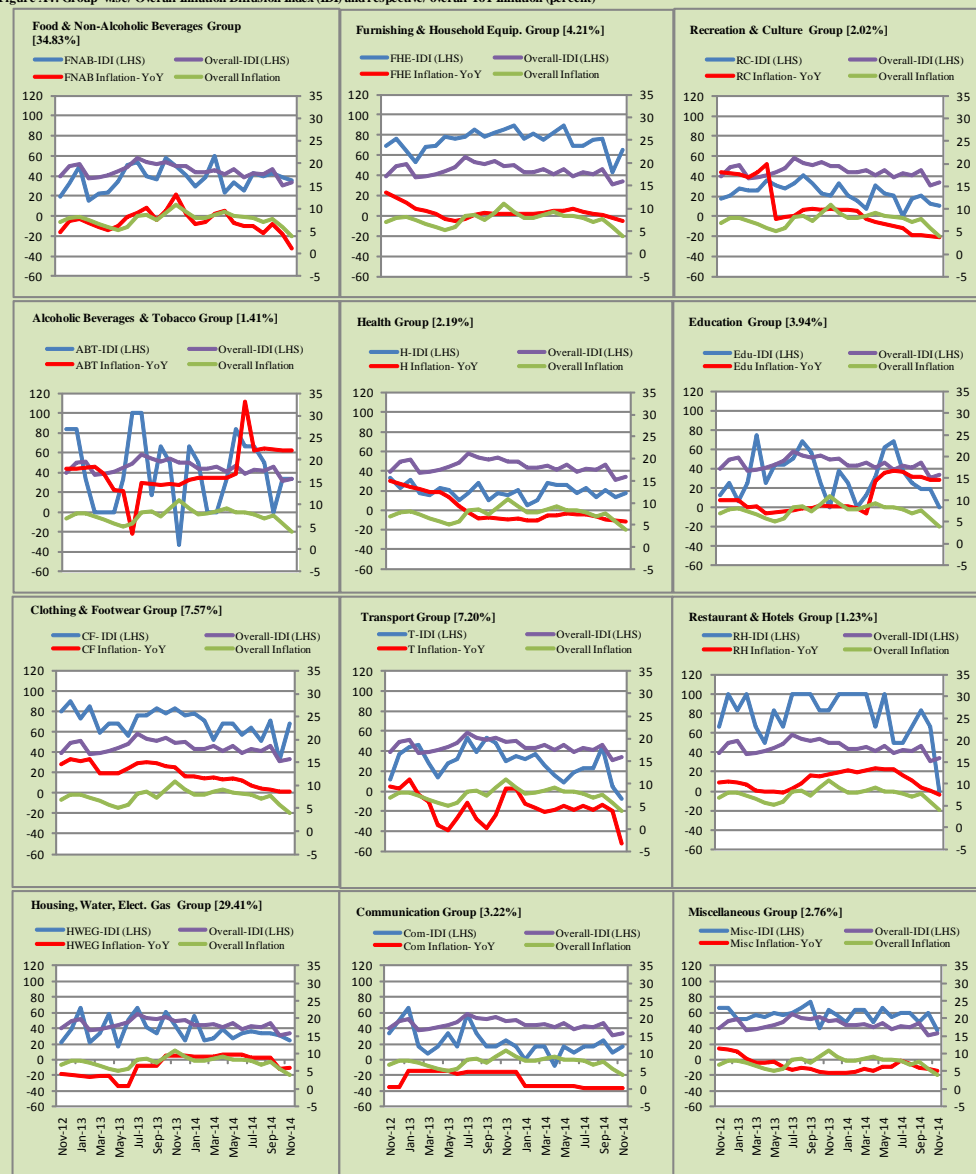


Figure A4: Group-wise/ Overall Inflation Diffusion Index (IDI) and respective/ overall YoY Inflation (percent)



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 three 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.
- c) Relatively Stable Component of CPI (RSC-CPI) developed by State Bank of Pakistan is a hybrid method based on permanent exclusion criteria. Volatile price items, to be excluded in the newly proposed

measure RSC-CPI, are identified by analyzing the list and frequency of commodities that have been trimmed frequently in the past while computing monthly weighted trimmed mean measure. Commodities that were trimmed out 13 and above times since July 2008 to February 2013 are selected for permanently excluding from the CPI basket. This newly developed component includes a mix of both food and non-food commodities that show persistent price behavior. Fifty Commodities included comprise relatively stable component (RSC-CPI) with a weight of 67.69. The detailed methodology of RSC-CPI and group wise items along their weights can be viewed at the following link;

<http://www.sbp.org.pk/publications/wpapers/2013/wp66.pdf>

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

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

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

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

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

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

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

reference month

w_i : Weights of i^{th} item

π_{it} : Inflation of i^{th} item

π_t : Overall inflation

10. Annualized rate of inflation (based on a month-on-month rate π) 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 constant¹.

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 analysis² suggests that IDI is a leading indicator for Pakistan’s YoY inflation.

¹ 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.

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