

Inflation Monitor

February 2014



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) remained at the level of 7.9 percent on year-on-year basis in February 2014 as in the previous month while it was 7.4 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at -0.3 percent in February 2014 as compared to 0.5 percent in the previous month and -0.3 percent during the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation is recorded at 0.4 percent in February 2014 compared to 0.1 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 8.1 percent in February 2014 compared to 8.2 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) is recorded at 0.2 percent in February 2014 as compared to 0.6 percent in the previous month and remained 0.2 percent during 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 February 2014 compared to 8.1 percent in the previous month. It was 9.6 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis decreased to 0.2 percent in February 2014 as compared to 1.0 percent in the previous month. A 0.4 percent increase in Core NFNE index was observed in February 2013.
7. WPI inflation on year-on-year basis decreased to 7.6 percent in February 2014 when compared to 8.1 percent a month earlier. During February 2013, WPI inflation was recorded at 8.3%.

8. WPI inflation on month-on-month basis is recorded at -0.1 percent in February 2014 as compared to 0.5 percent in the previous month and 0.3 percent in the corresponding month of last year.
9. SPI inflation on year-on-year basis decreased to 9.3 percent in February 2014 as compared to 9.5 percent in the previous month. It was 6.8 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis is recorded at -0.2 percent in February 2014 as compared to -0.8 percent in the previous month and -0.1 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 February 2014 are described below:

- Core inflation based on new measure RSC on year-on-year basis is recorded at 8.0 percent in February 2014 compared to 8.1 percent in the previous month and 7.4 percent in the corresponding month of last year.
- Core RSC inflation on month-on-month basis is recorded at 0.3 percent in February 2014 compared to 0.8 percent in the previous month and 0.4 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
Feb-13	7.4	-0.3	7.4	-1.3	7.4	0.4	9.6	0.4	9.2	0.2	7.4	0.4	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	6.8	0.5	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	6.4	1.0	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	5.9	0.4	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	5.5	0.7	5.2	1.0	4.6	2.5
Jul-13	8.3	2.0	9.2	3.0	7.6	1.3	8.2	1.5	7.8	1.2	8.2	1.6	6.5	1.6	9.1	2.1
Aug-13	8.5	1.2	10.3	2.0	7.3	0.6	8.5	0.6	7.9	0.6	8.4	0.6	8.3	2.6	9.0	1.2
Sep-13	7.4	-0.3	7.9	-1.5	7.0	0.6	8.7	0.6	7.6	0.6	8.5	0.5	8.7	0.7	7.9	-0.1
Oct-13	9.1	2.0	9.8	1.7	8.6	2.2	8.4	0.9	9.0	0.8	8.4	0.8	9.8	1.1	10.9	2.3
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

* NFNE is Non-food non-energy

** Relatively Stable Component of CPI

*** SPI for all income groups combined

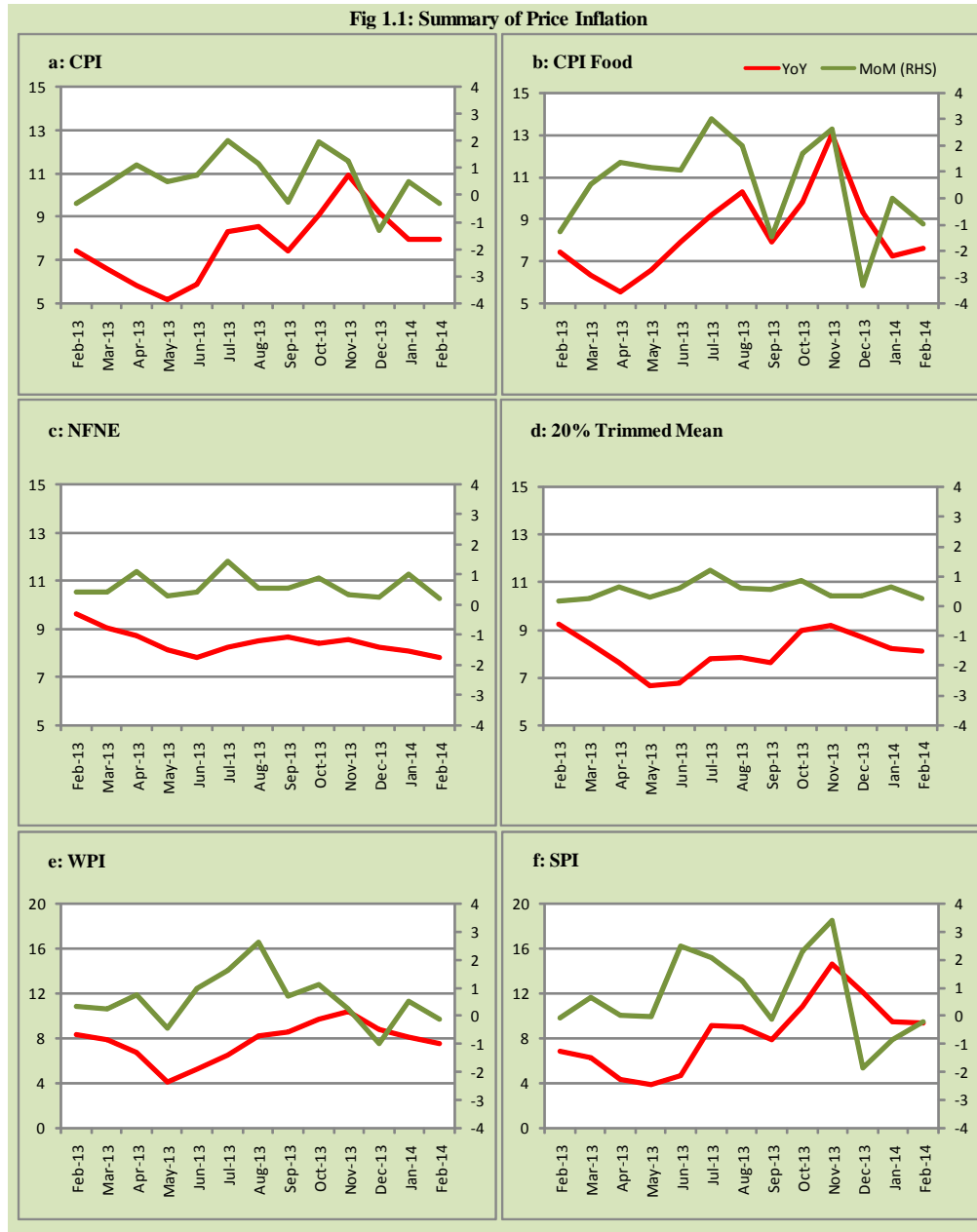


Fig 1.2: Movements in Price Indices (percent)

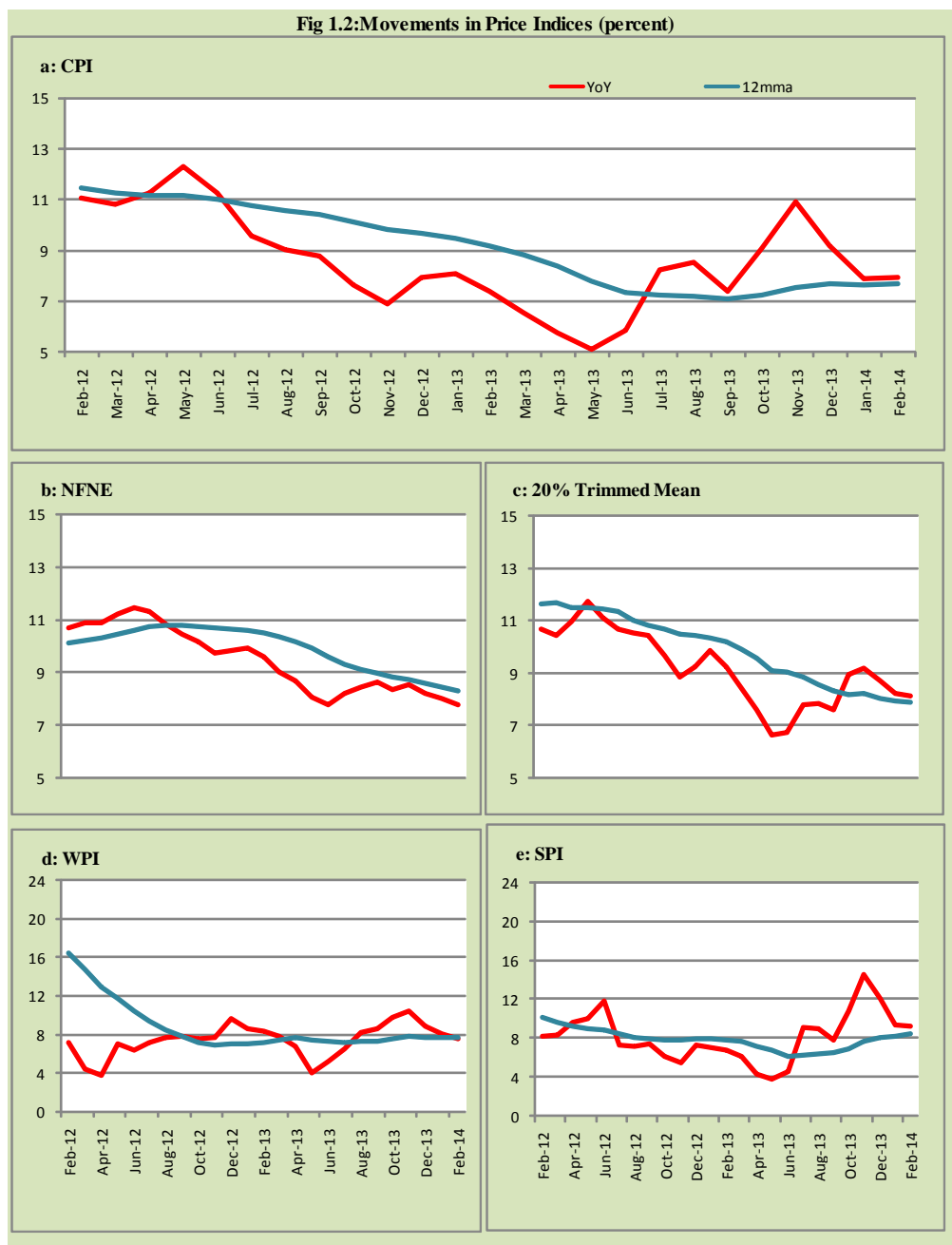


Fig 1.3: Movements in Price Indices -MoM (percent)

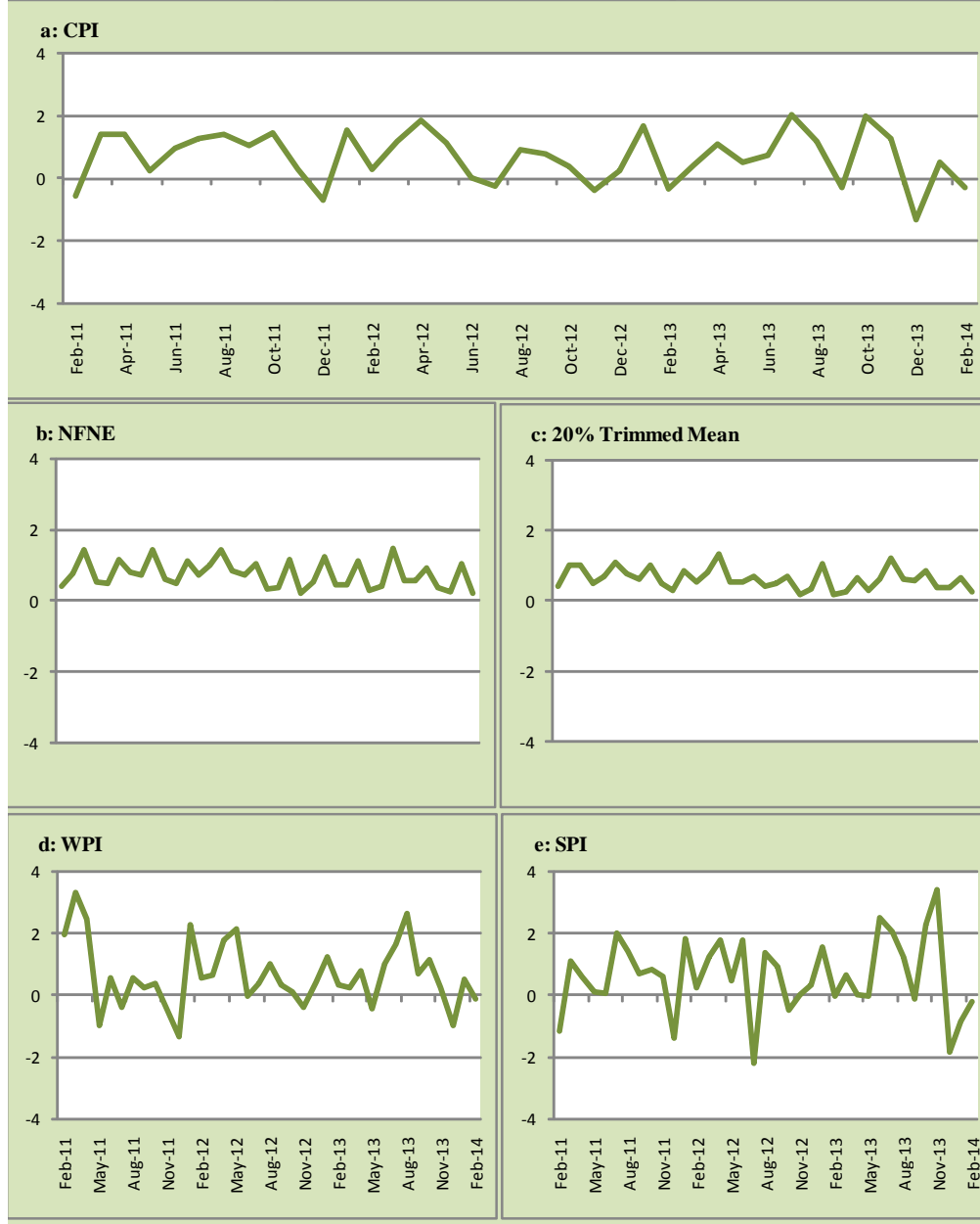
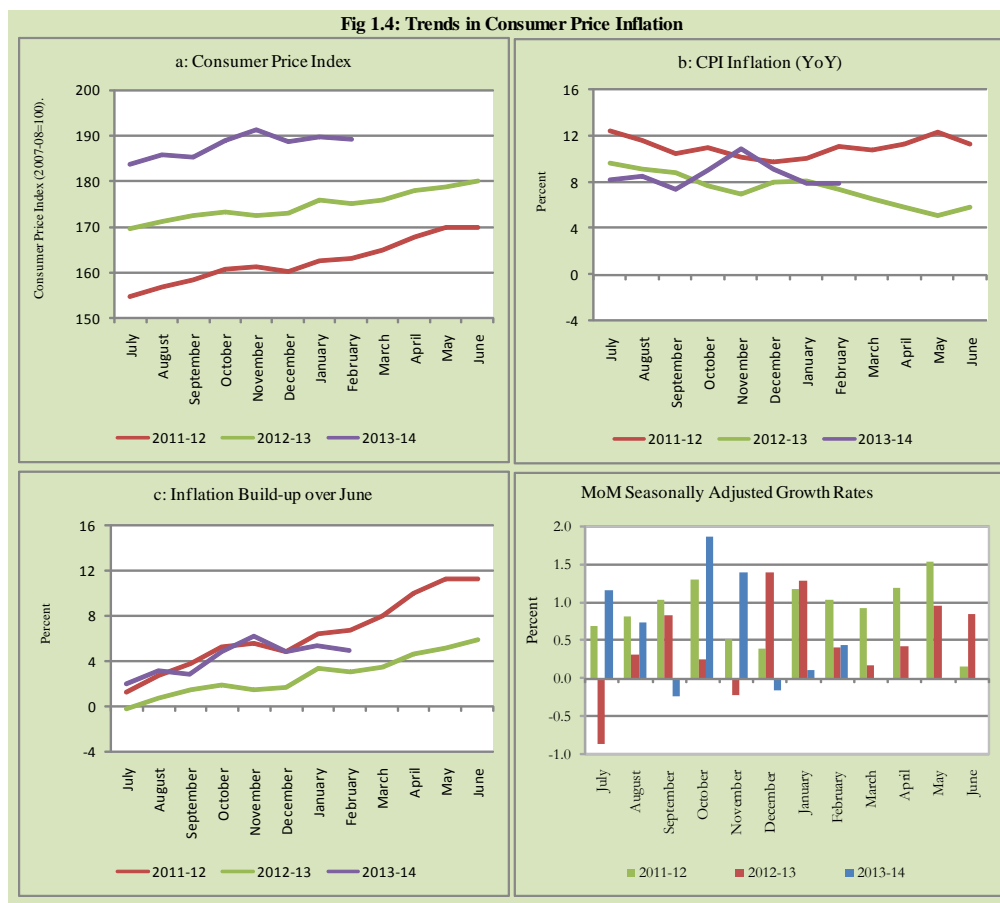


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan showed a mixed trend during February 2014. Among these five cities, the lowest inflation was observed in Karachi at 7.7 percent while the highest inflation was observed in Islamabad at 14.0 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)						
	Feb-13		Jan-14		Feb-14	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	-0.3	7.4	0.5	7.9	-0.3	7.9
Islamabad	-0.5	7.1	0.6	13.6	-0.2	14.0
Karachi	-0.2	6.3	1.5	7.6	-0.2	7.7
Lahore	-1.0	6.3	0.7	7.4	-0.3	8.2
Peshawar	-0.5	7.5	-0.2	9.5	-0.3	9.7
Quetta	-0.3	7.1	-1.0	8.1	-0.6	7.8

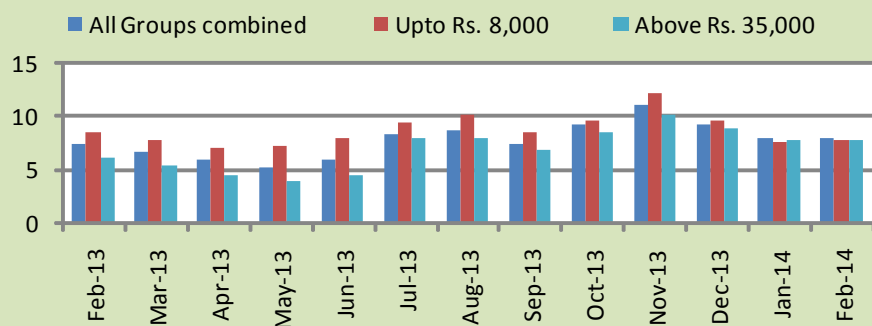
3. Income Group wise Inflation

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

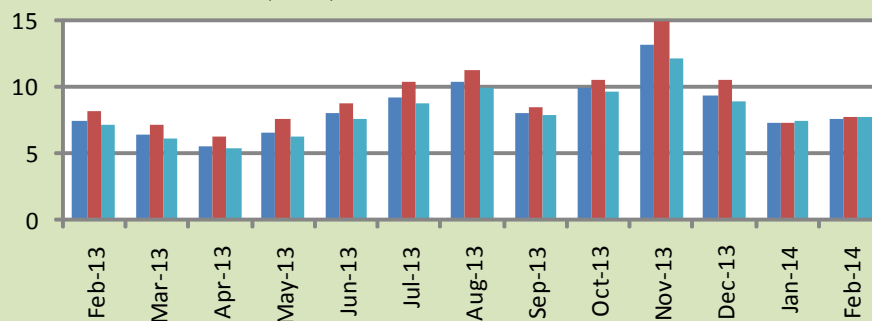
Table 3.1 Income Group- wise Inflation (YoY)									
Income Groups	General			Food			Non-food		
	Feb-13	Jan-14	Feb-14	Feb-13	Jan-14	Feb-14	Feb-13	Jan-14	Feb-14
All Groups Combined	7.4	7.9	7.9	7.4	7.2	7.6	7.4	8.4	8.2
Up to Rs. 8,000	8.5	7.5	7.6	8.0	7.2	7.7	9.1	7.8	7.5
Rs. 8,001- 12,000	9.3	7.3	7.4	7.8	7.2	7.5	10.9	7.4	7.2
Rs. 12,001- 18,000	8.9	8.3	8.4	7.6	7.2	7.5	10.2	9.5	9.3
Rs. 18,001- 35,000	6.9	8.4	8.4	7.4	7.2	7.5	6.5	9.4	9.1
Above Rs. 35,000	6.1	7.7	7.7	7.0	7.3	7.6	5.6	7.9	7.8

Fig 3.1: Income Group- wise Inflation

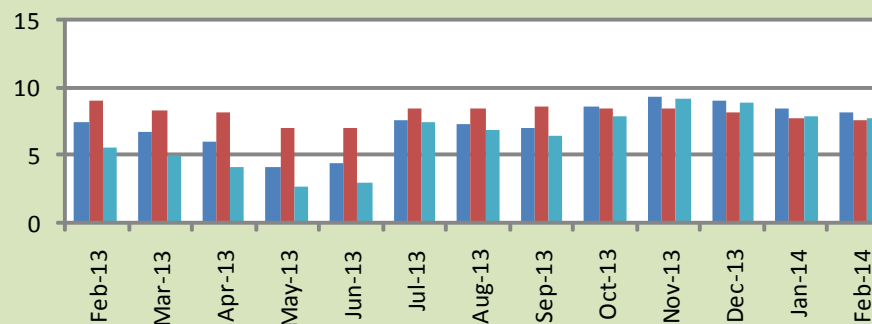
a: CPI Overall Inflation (YoY)



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 39.62 percent during February 2014 from 38.35 percent in January 2014. It was 41.59 percent in February 2013.

The weighted contribution of non-food group showed decrease to touch 60.38 percent in February 2014 from 61.65 percent in January 2014.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Jul-13	46.72	13.37	20.20	5.27	3.25	11.19
Aug-13	50.74	13.02	19.40	1.98	3.35	11.51
Sep-13	44.97	14.90	22.53	0.16	3.91	13.52
Oct-13	45.18	11.62	26.61	2.68	3.37	10.55
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

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change

	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
General	37.9	39.1	40.9	44.5	48.4	58.0	53.5	51.4	53.9	49.7	50.0	43.6	43.6
Food & Non-Alcoholic Beverages	15.2	22.5	23.9	34.6	50.4	53.5	39.8	36.3	57.4	49.6	41.1	29.2	38.4
Alcoholic Beverages & Tobacco	0.0	0.0	0.0	33.3	100.0	100.0	16.7	66.7	50.0	-33.3	66.7	50.0	0.0
Clothing & Footwear	84.7	59.3	67.8	67.8	55.9	76.3	76.3	83.1	78.0	83.1	76.3	78.0	71.2
Housing, Water, Elect, Gas & other Fuels	22.2	33.3	58.3	16.7	50.0	66.7	41.7	33.3	61.1	44.4	25.0	55.6	25.0
Furnishing & Household Equip. Maintenance etc	53.6	68.1	69.6	78.3	76.8	78.3	85.5	78.3	82.6	85.5	89.9	76.8	81.2
Health	17.9	15.4	23.1	20.5	10.3	17.9	28.2	10.3	17.9	15.4	20.5	5.1	10.3
Transport	46.5	27.9	14.0	27.9	32.6	53.5	39.5	53.5	48.8	30.2	34.9	32.6	37.2
Communication	16.7	8.3	16.7	33.3	16.7	58.3	33.3	16.7	16.7	25.0	16.7	0.0	16.7
Recreation & Culture	25.6	25.6	35.9	30.8	28.2	33.3	41.0	33.3	23.1	20.5	33.3	20.5	15.4
Education	25.0	75.0	25.0	43.8	43.8	50.0	68.8	56.3	25.0	0.0	37.5	25.0	0.0
Restaurant & Hotels	100.0	66.7	50.0	83.3	66.7	100.0	100.0	100.0	83.3	83.3	100.0	100.0	100.0
Miscellaneous	51.4	57.1	54.3	60.0	57.1	60.0	65.7	74.3	40.0	62.9	57.1	48.6	62.9
NFNE	45.9	45.6	49.1	49.4	47.9	58.6	58.6	55.9	51.8	52.4	53.3	48.5	46.7

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	Feb-13		Jan-14		Feb-14	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	22.40	0.67	17.83	0.23	18.17	0.96
2	Wheat Flour Bag	10 Kg	20.05	-0.71	14.34	-0.07	15.55	0.35
3	Rice Basmati Sup. Qlty.	Kg	27.81	1.93	11.86	-0.12	10.51	0.70
4	Pulse Masoor (Washed)	Kg	-1.18	1.54	18.96	2.42	19.86	2.31
5	Pulse Moong (Washed)	Kg	-5.20	0.47	16.14	1.57	18.15	2.21
6	Pulse Mash (Washed)	Kg	-8.26	-0.29	0.18	0.46	0.84	0.37
7	Pulse Gram	Kg	43.16	-0.98	-30.66	-1.09	-26.04	5.63
8	Vegetable Ghee (Loose)	Kg	-0.18	0.31	0.14	-0.11	0.03	0.19
9	Sugar Refined	Kg	4.92	-2.05	-2.50	-4.06	-2.25	-1.80
10	Milk Fresh (Unboiled)	Ltr	11.50	0.29	6.48	0.00	7.07	0.85
11	Tea- Tapal Danedar	200 Gm	14.42	4.03	15.47	-5.45	8.60	-2.16
12	Beef With Bone Av. Qlty.	Kg	5.99	0.05	5.06	1.33	5.83	0.78
13	Mutton Av. Qlty.	Kg	5.80	0.18	6.79	0.40	7.31	0.67
14	Chicken Farm Broiler (Live)	Kg	-5.93	-4.90	16.45	20.25	5.49	-13.85
15	Eggs Farm	Doz	-11.55	-28.20	-14.00	-8.78	14.57	-4.35
16	Potatoes	Kg	16.95	-8.47	28.28	-26.32	35.38	-3.40
17	Onion	Kg	-25.97	13.66	46.79	-23.92	15.37	-10.67
18	Tomatoes	Kg	16.09	-13.19	-19.72	-11.99	-40.10	-35.23
19	Ginger	Kg	12.93	8.75	77.48	14.30	68.16	3.04
20	Garlic	Kg	22.12	3.10	5.39	-3.88	3.32	1.07

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Feb-13		Jan-14		Feb-14	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-2.6	1.7	-3.8	-2.1	-3.8	1.7
Food	7.5	0.5	-5.5	-1.0	-3.4	2.7
Metals	-0.9	1.4	-12.8	-1.5	-16.2	-2.5
Energy	-4.8	2.2	-2.7	-2.7	-2.9	2.0
Agricultural Raw Material	-2.8	-0.3	5.6	-0.8	6.4	0.5
Cotton	-11.0	4.9	6.4	4.0	4.8	3.4

Source: IMF

8. Seasonal Adjustment in CPI

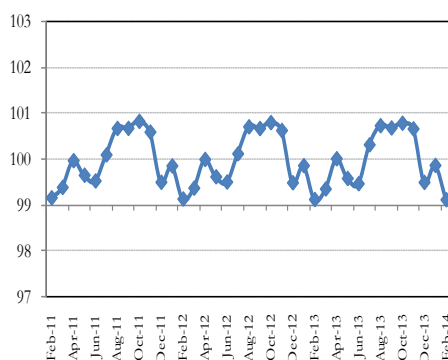
Seasonal adjustment is the process of estimating and removing the seasonal effects from a time series after decomposing it into seasonal, trend, cycle and irregular components. The purpose is to identify the different components of the time series and thus provide a better understanding of its underlying 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 February 2014 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

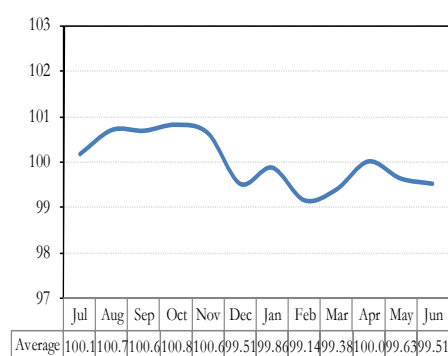
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

Seasonal Factors of CPI



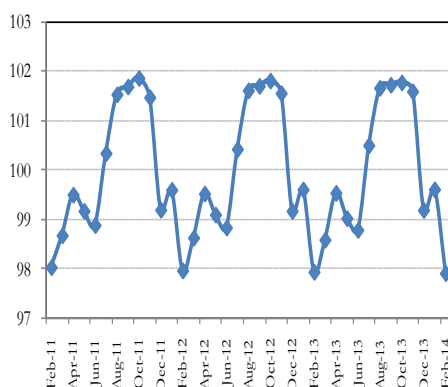
Average Seasonal Factors of CPI



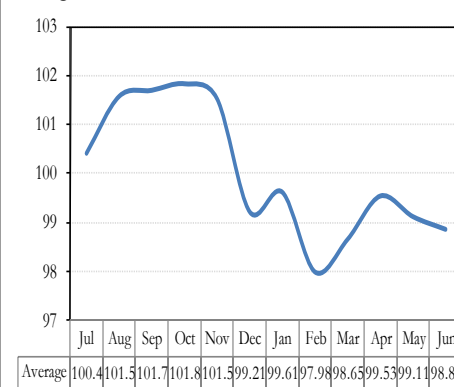
Note: Data Available in Annex Table 16.

Fig. 8.2 Seasonal Factors of CPI Food

Seasonal Factors of CPI Food



Average 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

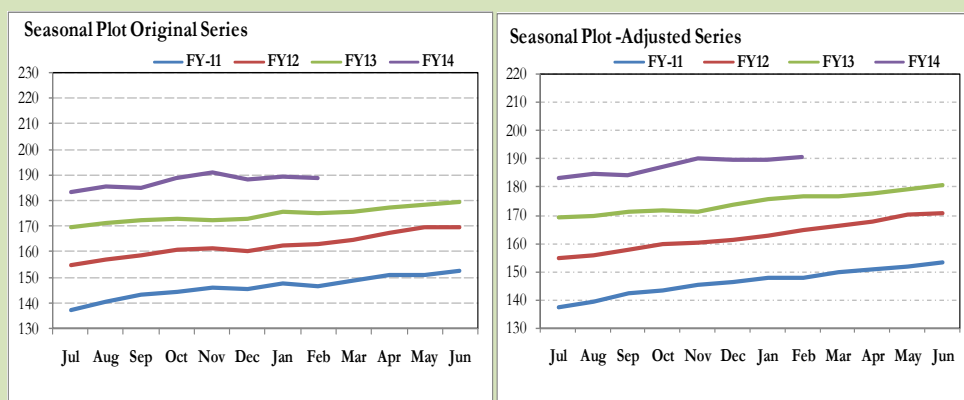
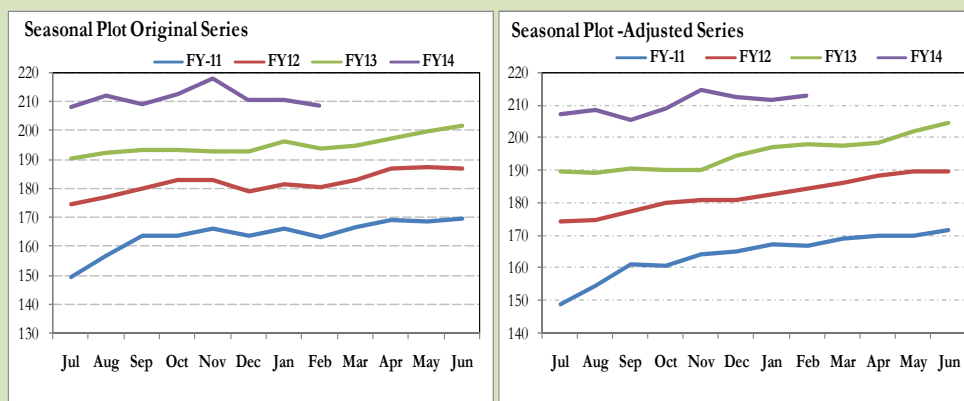


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for February 2014 stood at 190.67 against 189.00 in original series showing an increase of 1.67 on account of adjustment of downward seasonality in February 2014.

Seasonally adjusted CPI food group for February 2014 stood at 213.16 against 208.74 in original series showing an increase of 4.42 on account of adjustment of downward seasonality in February 2014.

Month-on-month change of seasonally adjusted CPI series stood at 0.44% reflecting increase during February 2014 over January 2014 and a decrease of 0.32% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 0.73% reflecting increase during February 2014 over January 2014 and a decrease of 0.98% 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 February 2014 (corresponding to the seasonally adjusted month-on-month rate) is 5.43 percent.

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

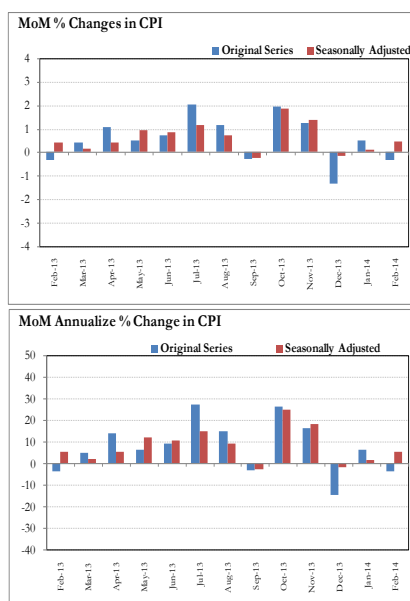
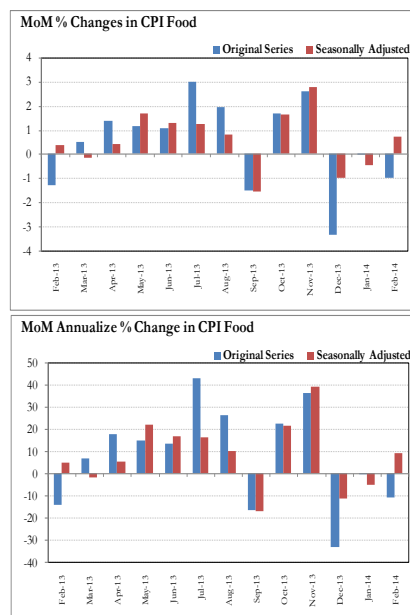


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		Feb-13	Jan-14	Feb-14	Feb-13	Jan-14	Feb-14
I. Food Group	37.5	-1.3	0.0	-1.0	7.4	7.2	7.6
Food & Non-Alcoholic Beverages	34.8	-1.4	-0.1	-1.1	6.9	6.7	7.0
Alcoholic Beverages & Tobacco	1.4	0.0	0.4	0.0	18.5	16.0	16.0
Restaurant & Hotels	1.2	1.4	1.3	0.9	9.8	13.0	12.6
II. Non-Food Group	62.5	0.4	0.9	0.2	7.4	8.4	8.2
Clothing & Footwear	7.6	0.8	0.9	0.4	15.7	12.0	11.6
Housing, Water, Elect, Gas & other Fuels	29.4	0.0	1.5	0.0	3.5	9.3	9.3
Furnishing & Household Equip. Maintenance etc	4.2	0.5	0.5	0.6	9.9	8.7	8.8
Health	2.2	0.3	0.0	0.4	13.2	5.9	6.0
Transport	7.2	0.9	0.1	0.1	7.6	5.6	4.8
Communication	3.2	0.0	0.0	0.0	5.1	0.9	0.9
Recreation & Culture	2.0	0.2	0.1	0.0	17.0	9.8	9.6
Education	3.9	0.5	0.1	0.0	8.4	8.6	8.1
Miscellaneous	2.8	0.5	0.4	0.6	8.6	4.7	4.8
Headline	100.0	-0.3	0.5	-0.3	7.4	7.9	7.9

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)	
		Feb-13	Feb-14	Feb-13	Feb-14	Feb-13	Feb-14	Feb-13	Feb-14	Feb-13	Feb-14
I. Food Group	7.6	124	124	36	22	16	21	30	31	42	50
Food & Non-Alcoholic Beverages	7.0	112	112	36	22	16	20	24	30	36	40
Alcoholic Beverages & Tobacco	16.0	6	6	0	0	0	1	3	1	3	4
Restaurant & Hotels	12.6	6	6	0	0	0	0	3	0	3	6
II. Non-Food Group	8.2	348	348	40	63	46	63	96	110	166	112
Clothing & Footwear	11.6	59	59	0	4	2	1	5	18	52	36
Housing, Water, Elect, Gas & other Fuels	9.3	36	36	7	2	2	7	14	16	13	11
Furnishing & Household Equip. Maintenance etc	8.8	69	69	1	0	12	11	27	31	29	27
Health	6.0	39	39	13	24	2	8	8	4	16	3
Transport	4.8	43	43	3	16	5	9	11	15	24	3
Communication	0.9	12	12	3	4	2	3	5	2	2	3
Recreation & Culture	9.6	39	39	7	8	12	13	5	6	15	12
Education	8.1	16	16	5	2	3	4	4	5	4	5
Miscellaneous	4.8	35	35	1	3	6	7	17	13	11	12
Overall	7.9	472	472	76	85	62	84	126	141	208	162

Note: Prices of 15 seasonal items were not reported during the month.

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in February 2014					
Top 15 Contributors		YoY Change		Weighted Contribution	
Items/ Contributors	Weights	Feb-13	Feb-14		
Ranked by Weighted Contribution					
1	House Rent	21.81	6.86	7.97	17.84
2	Wheat Flour	4.16	19.84	16.41	9.86
3	Electricity	4.40	16.39	15.82	9.84
4	Milk Fresh	6.68	11.52	6.82	7.20
5	Fresh Vegetable	1.66	-11.01	22.58	4.21
6	Education	3.94	8.35	8.12	3.59
7	Cigarette	1.39	18.75	16.20	3.10
8	Cotton Cloth	1.73	11.79	13.10	2.67
9	Meat	2.43	5.92	6.33	2.43
10	Ready Made Food	1.23	9.78	12.56	2.30
11	Motor Fuel	3.03	3.65	5.35	2.14
12	Tailoring	0.88	15.31	13.53	1.82
13	Potatoes	0.48	16.95	35.38	1.75
14	Bakery & Confectionary	1.16	9.05	11.13	1.67
15	Beverages	1.20	6.87	10.91	1.60
Total		56.18			72.02
Bottom 15 Contributors					
1	Tomatoes	0.45	16.08	-40.10	-2.36
2	Pulse Gram	0.24	43.17	-26.04	-1.02
3	Spices	0.54	-12.10	-9.51	-0.90
4	Besan	0.15	42.66	-26.09	-0.67
5	Gram Whole	0.16	9.45	-19.55	-0.51
6	Personal Equipments	0.84	9.92	-2.19	-0.35
7	Sugar	1.04	4.92	-2.25	-0.32
8	Mustard Oil	0.10	5.23	-1.86	-0.02
9	Motor Vehicle Tax	0.11	21.70	0.00	0.00
10	Medical Equipment	0.01	13.95	4.42	0.01
11	Kerosene Oil	0.01	11.14	6.78	0.01
12	Betel Leaves & Nuts	0.02	6.31	3.78	0.01
13	Blades	0.03	6.18	4.62	0.02
14	Pulse Mash (Washed)	0.21	-8.26	0.84	0.02
15	Gur	0.02	-1.00	9.17	0.03
Total		3.94			-6.04

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

<u>Top 15 Contributors</u>		<u>MoM Change</u>			Weighted Contribution
Items/ Contributors	Weights	Jan-14	Feb-14		
Ranked by Weighted Contribution					
1	Milk Fresh	6.68	0.00	0.82	21.15
2	Wheat Flour	4.16	-0.08	0.58	9.37
3	Meat	2.43	1.01	0.74	6.97
4	Ready Made Food	1.23	1.29	0.96	4.53
5	Pulse Gram	0.24	-1.09	5.62	3.58
6	Personal Care	1.49	0.55	0.71	3.44
7	Cotton Cloth	1.73	0.61	0.61	3.23
8	Transport Services	2.70	0.06	0.27	2.57
9	Pulse Moong	0.23	1.57	2.21	2.21
10	Household Servant	1.04	0.46	0.58	2.10
11	Doctor (MBBS) Clinic Fee	0.59	0.00	0.96	2.07
12	Washing Soap & Detergent	0.79	0.23	0.62	1.75
13	Spices	0.54	0.42	0.87	1.70
14	Condiments	0.27	0.83	1.68	1.70
15	Bakery & Confectionary	1.16	0.67	0.43	1.66
Total		25.29			68.02
Bottom 15 Contributors					
1	Chicken	1.36	20.25	-13.85	-69.79
2	Tomatoes	0.45	-12.00	-35.23	-44.29
3	Onion	0.54	-23.92	-10.67	-21.76
4	Fresh Vegetable	1.66	8.37	-3.66	-20.11
5	Fresh Fruits	1.86	3.38	-2.43	-13.61
6	Egg	0.46	-8.77	-4.35	-7.13
7	Sugar	1.04	-4.06	-1.80	-5.90
8	Potatoes	0.48	-26.32	-3.40	-5.45
9	Tea	0.84	-3.58	-1.44	-4.79
10	Motor Fuel	3.03	-0.12	-0.20	-1.92
11	Fish	0.30	0.52	-0.71	-0.75
12	Gur	0.02	-2.91	-1.33	-0.12
13	Dry Fruits	0.25	1.43	-0.11	-0.11
14	Mustard Oil	0.10	-0.14	-0.32	-0.08
15	Betel Leaves & Nuts	0.02	-0.08	-0.83	-0.06
Total		12.41			-195.87

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in February 2014					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-13	Feb-14	
A. Ranked by Percentage Change					
1	Potatoes	0.48	16.95	35.38	1.75
2	Postal Services	0.07	4.61	23.66	0.20
3	Fresh Vegetable	1.66	-11.01	22.58	4.21
4	Pulse Masoor	0.27	-3.06	19.20	0.55
5	Cosmetics	0.39	3.17	19.14	0.79
6	Wheat	0.35	22.40	18.18	0.91
7	Pulse Moong	0.23	-5.21	18.15	0.68
8	Wheat Product	0.10	16.40	17.67	0.23
9	Wheat Flour	4.16	19.84	16.41	9.86
10	Cigarette	1.39	18.75	16.20	3.10
11	Electricity	4.40	16.39	15.82	9.84
12	Sewing Needle & Dry Cell	0.15	8.38	15.78	0.26
13	Text Books	0.57	40.53	15.60	1.48
14	Onion	0.54	-25.96	15.37	1.05
15	Egg	0.46	-11.55	14.57	0.86
Total		15.21			35.77
B. Ranked by Weights					
1	House Rent	21.81	6.86	7.97	17.84
2	Milk Fresh	6.68	11.52	6.82	7.20
3	Electricity	4.40	16.39	15.82	9.84
4	Wheat Flour	4.16	19.84	16.41	9.86
5	Education	3.94	8.35	8.12	3.59
6	Communication & Apparatus	3.15	5.15	0.27	0.08
7	Motor Fuel	3.03	3.65	5.35	2.14
8	Transport Services	2.70	11.13	3.67	1.44
9	Meat	2.43	5.92	6.33	2.43
10	Vegetable Ghee	2.07	1.00	0.60	0.14
11	Fresh Fruits	1.86	-2.19	0.62	0.15
12	Cooking Oil	1.75	10.80	0.33	0.07
13	Cotton Cloth	1.73	11.79	13.10	2.67
14	Fresh Vegetable	1.66	-11.01	22.58	4.21
15	Rice	1.58	19.19	6.96	1.44
Total		62.97			63.09
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 7.9 percent in February, 2014.					

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

A. Ranked by Weighted Contribution					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-13	Feb-14	
1	Wheat Flour	4.16	19.84	16.41	9.86
2	Milk Fresh	6.68	11.52	6.82	7.20
3	Fresh Vegetable	1.66	-11.01	22.58	4.21
4	Cigarette	1.39	18.75	16.20	3.10
5	Meat	2.43	5.92	6.33	2.43
6	Ready Made Food	1.23	9.78	12.56	2.30
7	Potatoes	0.48	16.95	35.38	1.75
8	Bakery & Confectionary	1.16	9.05	11.13	1.67
9	Beverages	1.20	6.87	10.91	1.60
10	Rice	1.58	19.19	6.96	1.44
Total		21.97			35.56
B. Ranked by Percentage Change					
1	Potatoes	0.48	16.95	35.38	1.75
2	Fresh Vegetable	1.66	-11.01	22.58	4.21
3	Pulse Masoor	0.27	-3.06	19.20	0.55
4	Wheat	0.35	22.40	18.18	0.91
5	Pulse Moong	0.23	-5.21	18.15	0.68
6	Wheat Product	0.10	16.40	17.67	0.23
7	Wheat Flour	4.16	19.84	16.41	9.86
8	Cigarette	1.39	18.75	16.20	3.10
9	Onion	0.54	-25.96	15.37	1.05
10	Egg	0.46	-11.55	14.57	0.86
Total		9.64			23.20
C. Ranked by Weights					
1	Milk Fresh	6.68	11.52	6.82	7.20
2	Wheat Flour	4.16	19.84	16.41	9.86
3	Meat	2.43	5.92	6.33	2.43
4	Vegetable Ghee	2.07	1.00	0.60	0.14
5	Fresh Fruits	1.86	-2.19	0.62	0.15
6	Cooking Oil	1.75	10.80	0.33	0.07
7	Fresh Vegetable	1.66	-11.01	22.58	4.21
8	Rice	1.58	19.19	6.96	1.44
9	Cigarette	1.39	18.75	16.20	3.10
10	Chicken	1.36	-5.93	5.49	0.98
Total		24.95			29.57

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 7.6 percent in February, 2014.

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in February 2014					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-13	Feb-14	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	6.86	7.97	17.84
2	Electricity	4.40	16.39	15.82	9.84
3	Education	3.94	8.35	8.12	3.59
4	Cotton Cloth	1.73	11.79	13.10	2.67
5	Motor Fuel	3.03	3.65	5.35	2.14
6	Tailoring	0.88	15.31	13.53	1.82
7	Footwear	1.55	20.84	9.13	1.52
8	Ready Made Garment	0.97	15.52	12.00	1.49
9	Text Books	0.57	40.53	15.60	1.48
10	Personal Care	1.49	8.78	7.53	1.47
Total		40.38			43.86
B. Ranked by Percentage Change					
1	Postal Services	0.07	4.61	23.66	0.20
2	Cosmetics	0.39	3.17	19.14	0.79
3	Electricity	4.40	16.39	15.82	9.84
4	Sewing Needle & Dry Cell	0.15	8.38	15.78	0.26
5	Text Books	0.57	40.53	15.60	1.48
6	Tailoring	0.88	15.31	13.53	1.82
7	Cotton Cloth	1.73	11.79	13.10	2.67
8	Woolen Readymade Garments	0.40	19.07	12.96	0.72
9	Doctor (MBBS) Clinic Fee	0.59	17.03	12.76	1.06
10	Ready Made Garment	0.97	15.52	12.00	1.49
Total		10.14			20.33
C. Ranked by Weights					
1	House Rent	21.81	6.86	7.97	17.84
2	Electricity	4.40	16.39	15.82	9.84
3	Education	3.94	8.35	8.12	3.59
4	Communication & Apparatus	3.15	5.15	0.27	0.08
5	Motor Fuel	3.03	3.65	5.35	2.14
6	Transport Services	2.70	11.13	3.67	1.44
7	Cotton Cloth	1.73	11.79	13.10	2.67
8	Gas	1.58	-46.08	0.86	0.14
9	Footwear	1.55	20.84	9.13	1.52
10	Personal Care	1.49	8.78	7.53	1.47
Total		45.39			40.73
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 8.2 percent in February, 2014.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: February 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, Chillies Powd.National 200 Gm, Besan Av. Qlty., Pulse Gram, Gram Whole Black Av Qlty.	Fish-Rahu Medium Size, Cabbage, Rice Basmati Broken Av.Qlty, Squash- Mitchelles, Pickles Ahmed/Mitchelles, Lemon	Cloves Loose Av.Qlty, Powder Milk Nido 400Gm., Gur Av.Qlty, Coffee-Nescafe 75 Gm, Tapal Danedar Tea 200 Gm	Ginger, Peas, Chillies Green, Ice Cream Walls, Potatoes, Pistachio Av.Qlty., Radish, Coriander Seed (Loose), Maida, Pulse Masoor (Washed), Wheat, Pulse Moong (Washed), Cucumber (Kheera), Pastry Av.Qlty.
Alcoholic Beverages & Tobacco		Betel Leaves	Betel Nuts	Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Cigarettes Capstan 20,S, Cigarettes Morven Gold 20,S
Clothing & Footwear	Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Ladies Sandal Bata, Child Shoe Power Lite Bata	Shoe Repair Half Sole	Dopatta Cotton Av. Qlty, Sewing Thread/Reel, School Uni. Kameez,Shal.Girls, Vest For Men Av.Qlty., School Uni. Pant,Shirt Boys, Handkerchief Sup. Qlty Pak	Gents Shoes Paul Bata, Secondhand Winter Jacket, Frock W/Wear Girls, Shirt Boy 24"/26" Length, Gents Sandal Bata, Shirting Av.Qlty., Tailoring Suit (Female), Shoe Polish Charges Avg, Pullover (Gents) Others Av.Qlty, Brassier Av.Qlty, Pant Boy 24"/26" Length
Housing, Water, Elect, Gas & other Fuels	Elect. Charges Upto 50 Units, Elect. Charges 01 - 100 Units	Bajree, Gas Chrg Over 200 - 300 Mmbtu, Gas Chrg Over 100 - 200 Mmbtu, Gas Chrg Overall/ Combined, Gas Chrg Over 300 - 500 Mmbtu	Unskilled Labour Wage Rat, Plumber Wage Rate, Carpenter Wage Rate, Electrician Wage Rate(P/Day), Firewood Whole, House Rent For Q-I	Elect. Charges 301 - 1000 Units, Elect. Charges 101 - 300 Units, Elect. Charges Overall/ Combined, Elect. Charges Above 1000 Units, Electrician Wage Rate(P/Pnt), Timber Shesham Log, Synthetic Enemal Robialac
Furnishing & Household Equip. Maintenance etc		Air Cooler Super Asia, Washing Machine (Singer), Carpet Plain Av. Qlty, Gizer Large Size 30 Gallon, Toilet Paper Roll (R.Petal)	Bucket (Balti) Plastic Med, Marriage Hall Charges Without Refreshment, Phenyl Typhoon/Finis/Carr 3 Ltr, Table Spoon S. Steel Sup. Qlty	Match Box (Small), Cleanser Powder Vim 1000 Gms, Finis 500 ML Robin Blue (35 Gms), Washing Powder (Wheel/ Bonus), Boot Polish Cherry/Kiwi 50 ML, Tea Set Pak. China Wear 21 Pcs, Chair Shesham Wood
Health	Hydryllin Syrup 120 ML, Polyfax Eye Ointment, Flagyl Tab. 200 Mg., Betnovate-N Ointment 5 Gm	Blood Test (Cp) Charges, Cotton Bandage 2" - 4", Thermometer China, ECG Charges, Dettol (Medium), Sugar Test (Random/Fasting)	X-Ray (Chest) Charges, Glaxose-D (450 Gm), Urine Test (Dr) Charges, Ear Drops (Cardisorpine)	Jouhar Joshanda, Saniplast (1 Putty), Doctor (MBBS) Clinic Fee
Transport	Train Fare A/C Slp.101- 500, Train Fare A/C Slp > 500K, Train Fare A/C Slp. 1-100, Train Fare Eco. 1- 100 Km.	Bus Fare Outside City (A/C), Tyre Motor Cycle Without Tube, Car Toyota 1300 CC, Motorcycle Yamaha 100 CC, Tyre Car W/O Tube	Petrol Super, Car Service Charges, Tyre Puncture Charges, Suzuki Fare Min.Within City, Tyre Car With Tube General	Bus Fare Outside City (Non A/C), Cycle Overhauling Charges, Minibus Fare Min.Within City
Communication	Postal Envelope Domestic, Mobile Cell Charges, Telephone Charges Local Call	Internet Charges, Mobile Set Nokia/Sony/Ericsson Av.Qlty, Postal Envelope For Saudi Arabia	Fax Charges (Local), Telephone Set Av. Qlty	U.M.S. Reg Charges Min., T.C.S. Ch. Min.Within Zone, Postal Registration Charges
Recreation & Culture	English Book BA/B.Sc., Maths Book Ist. Year (T.B. Board), T.V. 20" Colored Sony, V.C.P. Panasonic/LG/National, TV License Fee Domestic	Photostat Paper 70 Gm, Video Cassette Blank. Tdk/Sony, Cinema A/C High Class, Cable Charges, Maths Book Class IX or X, T.V 20" Color China/Korea	Urdu Book Ist Year/ Inter, Exercise Book Lined 80/10, Ball Pen (Local), Personnel Computer (Branded), Fountain Pen Hero/Wings/China, Paper Fool Scape (27"X17")	Maths Book Calss V (T.B.Board), Urdu Book Class V (T.B.Board), English Book Class IX or X, Daily "Jang", Daily "Nawa-e-Waqt", Pakistan Studies Book BA/B.Sc, Eng. Book Ist. Yr Complete Set, English Book Class V1, Pen Ink Dollor 57 ML Bottle
Education	Coaching Charges For Class XI/ XII Commerce Group, Govt. Engg. Coll. Fee Ist Year	Coaching Fee For Class IX/ X, I.T. Tuition Fees, Govt. Med. College Fee MBBS Ist Year	MBA Tuition Fee, Pvt School Fee Eng. Med (Class-V), Pvt School Fee Eng. Med (Class- VI)	Govt. University Fee MSc/ MA, Govt. College Fee Ist. Year, Pvt Eng. College Fee (Ist Year), Pvt Med. College Fee MBBS (Ist Year), Govt. College Fee 4th. Year
Restaurant & Hotels				Bread Tandoori St. Size, Cooked Mutton (Av. Hotel), Cooked Beef (Av. Hotel), Tea Prepared (Ordinary), Cooked Dal (Av. Hotel)
Miscellaneous	Toothpaste Med Size Colgate 70Gms, Silver Tezabi 24 Ct, Gold Tezabi 24 Ct	Disposable Razor Gillette-II, Gel Medium Size, Face Cream Ponds (Medium), Shaving Cream Touch-Me/Admiral	Hair Oil Amla/Chambeli, Beauty Parlor Hair Style Charges, Toothpowder Dentonic 90 Gms	Perfume Med. Size Medora/Broche, Toilet Soap Lux 95 Gms, Purse Ladies (Leather) Av. Qlty, Beauty Cream (Fair & Lovely), Shaving Charges, Artificial Jewellery Set

Table A5: City- wise CPI Inflation by Income Groups, February 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	0.1	9.6	-0.1	10.1	0.3	8.9	0.1	9.9	-0.2	10.2	0.3	9.7
2 Islamabad	-0.3	13.5	-1.1	10.1	0.6	17.6	-0.3	13.1	-1.0	10.5	0.4	16.1
3 Lahore	-0.2	8.0	-0.6	9.1	0.3	6.4	-0.3	8.1	-0.7	9.4	0.2	6.6
4 Gujranwala	0.3	6.7	-0.1	5.1	0.8	8.8	0.1	6.6	-0.3	5.0	0.6	8.4
5 Sialkot	-0.4	6.4	-0.7	5.5	0.0	7.7	-0.4	6.4	-0.8	5.0	0.0	7.9
6 Faisalabad	-0.1	9.6	-0.5	7.9	0.3	11.8	-0.2	9.6	-0.5	8.2	0.1	11.1
7 Multan	-0.7	7.5	-1.3	6.9	0.1	8.2	-0.7	7.5	-1.4	6.9	0.1	8.2
8 Sargodha	-0.1	9.4	-0.2	10.6	0.0	8.0	-0.1	9.1	-0.3	10.3	0.0	7.8
9 Bahawalpur	-0.7	8.9	-1.5	8.5	0.3	9.3	-0.6	8.5	-1.5	7.9	0.3	9.1
10 Karachi	-0.5	7.8	-1.2	10.0	0.7	4.8	-0.4	7.7	-1.2	9.8	0.6	5.4
11 Hyderabad	-0.5	4.9	-0.9	5.2	0.1	4.4	-0.4	4.9	-0.9	5.1	0.1	4.7
12 Sukkur	-0.9	7.7	-1.5	7.9	-0.1	7.5	-0.8	7.9	-1.4	8.1	-0.1	7.8
13 Larkana	-0.8	10.3	-1.7	8.0	0.1	13.0	-1.0	10.7	-2.0	8.7	0.1	12.7
14 Peshawar	-0.4	9.2	-1.1	7.6	0.3	11.1	-0.4	9.2	-1.1	7.7	0.3	10.8
15 Bannu	-1.3	5.8	-2.4	6.0	-0.1	5.6	-1.0	5.9	-2.3	6.3	0.3	5.6
16 Quetta	-0.6	9.0	-1.1	10.2	-0.1	7.4	-0.6	8.2	-1.1	9.5	0.0	6.9
17 Khuzdar	0.4	4.8	0.5	5.7	0.2	3.6	0.3	4.9	0.4	6.1	0.1	3.8
	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	0.0	10.0	-0.4	10.2	0.4	9.9	-0.1	9.9	-0.6	10.2	0.4	9.6
2 Islamabad	-0.4	14.3	-1.1	10.7	0.3	18.0	-0.3	15.9	-1.2	10.6	0.4	20.5
3 Lahore	-0.3	8.2	-0.7	9.5	0.1	6.7	-0.3	8.4	-0.8	9.7	0.1	7.2
4 Gujranwala	0.1	6.0	-0.3	4.5	0.5	7.5	0.0	6.2	-0.4	4.5	0.4	7.8
5 Sialkot	-0.5	6.6	-0.9	5.8	-0.1	7.4	-0.5	7.1	-1.0	6.0	-0.1	8.1
6 Faisalabad	-0.2	9.9	-0.6	8.3	0.1	11.5	-0.3	9.9	-0.7	8.5	0.0	11.2
7 Multan	-0.8	7.5	-1.6	6.7	0.0	8.3	-0.9	7.8	-1.9	6.9	0.0	8.6
8 Sargodha	-0.1	8.8	-0.3	10.3	0.0	7.4	-0.2	8.6	-0.4	10.4	0.0	7.2
9 Bahawalpur	-0.7	8.3	-1.8	7.5	0.3	9.0	-0.6	7.6	-2.0	7.3	0.4	7.8
10 Karachi	-0.4	7.7	-1.3	9.6	0.6	5.8	-0.4	7.9	-1.5	9.7	0.6	6.3
11 Hyderabad	-0.4	4.8	-0.9	5.3	0.0	4.3	-0.4	5.3	-0.9	5.6	0.0	5.0
12 Sukkur	-0.8	7.8	-1.4	8.2	-0.2	7.4	-0.8	7.4	-1.5	7.6	-0.2	7.3
13 Larkana	-0.9	11.2	-1.9	9.4	0.0	12.8	-0.9	11.6	-2.0	10.2	0.0	12.8
14 Peshawar	-0.4	9.2	-1.2	7.6	0.3	10.7	-0.4	9.4	-1.3	7.4	0.3	11.0
15 Bannu	-1.3	6.1	-2.6	6.5	-0.1	5.8	-0.6	6.7	-2.0	6.6	0.5	6.8
16 Quetta	-0.6	7.8	-1.2	8.6	0.0	7.1	-0.7	7.6	-1.5	7.8	0.0	7.4
17 Khuzdar	0.3	5.1	0.4	6.5	0.2	3.8	0.3	5.4	0.3	6.3	0.2	4.6
	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	9.7	-0.8	10.6	0.3	9.3	-0.1	9.7	-0.7	10.3	0.4	9.3
2 Islamabad	-0.1	14.0	-1.1	10.6	0.3	15.8	-0.2	14.0	-1.1	10.5	0.5	16.6
3 Lahore	-0.3	8.2	-1.0	9.9	0.0	7.3	-0.3	8.2	-0.9	9.7	0.1	7.0
4 Gujranwala	0.0	5.7	-0.4	4.2	0.2	6.4	0.1	6.1	-0.3	4.6	0.4	7.3
5 Sialkot	-0.4	7.5	-1.0	6.7	-0.1	7.8	-0.4	7.0	-0.9	6.1	-0.1	7.7
6 Faisalabad	-0.3	10.1	-0.9	8.7	0.0	10.8	-0.2	9.9	-0.6	8.4	0.0	11.0
7 Multan	-0.7	7.3	-2.1	6.8	0.0	7.5	-0.7	7.5	-1.8	6.8	0.0	7.9
8 Sargodha	0.2	9.1	-0.3	10.4	0.4	8.5	-0.1	8.9	-0.3	10.5	0.1	8.0
9 Bahawalpur	-0.4	7.5	-2.1	7.2	0.4	7.6	-0.5	8.1	-1.8	7.7	0.2	8.3
10 Karachi	0.0	7.7	-1.5	9.6	0.8	6.7	-0.2	7.7	-1.5	9.6	0.9	6.2
11 Hyderabad	-0.5	4.9	-1.3	6.0	0.0	4.3	-0.4	5.0	-1.0	5.6	0.0	4.6
12 Sukkur	-0.7	6.8	-1.3	7.2	-0.3	6.7	-0.8	7.5	-1.4	7.8	-0.3	7.3
13 Larkana	-0.8	11.3	-2.2	10.1	-0.1	11.8	-0.9	11.1	-1.9	9.3	-0.2	12.2
14 Peshawar	-0.2	10.2	-1.4	7.7	0.3	11.4	-0.3	9.7	-1.2	7.7	0.3	11.0
15 Bannu	-0.3	5.0	-1.3	7.2	0.2	4.0	-0.9	6.1	-2.0	6.7	-0.1	5.7
16 Quetta	-0.6	7.4	-1.5	7.8	-0.2	7.2	-0.6	7.8	-1.3	8.4	-0.1	7.3
17 Khuzdar	0.2	3.3	0.3	5.3	0.2	2.4	0.3	5.0	0.4	6.0	0.2	4.4

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

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Islamabad	14.0	10.5	16.6	Muzaffargarh	7.8	7.0	8.4
Mianwali	13.6	10.7	15.6	Quetta	7.8	8.4	7.3
Mardan	11.6	9.2	13.1	Karachi	7.7	9.6	6.2
Jhang	11.5	11.0	11.8	Rahim Yar Khan	7.6	6.4	8.5
Larkana	11.1	9.3	12.2	D. I. Khan	7.6	9.3	6.4
D.G. Khan	10.4	12.6	9.0	Turbat	7.6	6.0	8.6
Faisalabad	9.9	8.4	11.0	Sukkur	7.5	7.8	7.3
Peshawar	9.7	7.7	11.0	Multan	7.5	6.8	7.9
Rawalpindi	9.7	10.3	9.3	Sialkot	7.0	6.1	7.7
Mithi	9.7	5.8	12.2	Nawabshah	6.4	3.8	8.3
Dera Mrd.Jamali	9.5	8.8	9.9	Bahawalnagar	6.4	8.4	5.2
Mingora	9.4	6.9	11.0	Gujranwala	6.1	4.6	7.3
Sargodha	8.9	10.5	8.0	Bannu	6.1	6.7	5.7
Wazirabad	8.6	7.4	9.5	Loralai & Cantt	5.7	5.9	5.5
Sahiwal	8.6	6.8	9.8	Mir Pur Khas	5.6	6.4	5.1
Attock	8.6	11.3	6.7	Gawadar	5.6	5.9	5.3
Abbotabad	8.3	9.6	7.5	Khuzdar	5.0	6.0	4.4
Lahore	8.2	9.7	7.0	Hyderabad	5.0	5.6	4.6
Bahawalpur	8.1	7.7	8.3	Dadu	4.9	5.7	4.4
Jehlum	8.0	8.3	7.9	Vehari	4.8	5.6	4.3

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		
	Feb-13	Jan-14	Feb-14	Feb-13	Jan-14	Feb-14
<u>Up to Rs. 8000</u>						
General	-0.5	0.0	-0.3	8.5	7.5	7.6
Food	-1.1	-0.8	-0.8	8.0	7.2	7.7
Non-food	0.4	1.0	0.2	9.1	7.8	7.5
<u>Rs. 8001- 12000</u>						
General	-0.5	0.2	-0.4	9.3	7.3	7.4
Food	-1.2	-0.5	-0.8	7.8	7.2	7.5
Non-food	0.3	0.9	0.2	10.9	7.4	7.2
<u>Rs. 12001- 18000</u>						
General	-0.4	0.3	-0.4	8.9	8.3	8.4
Food	-1.2	-0.3	-0.9	7.6	7.2	7.5
Non-food	0.4	0.9	0.2	10.2	9.5	9.3
<u>Rs. 18001- 35000</u>						
General	-0.4	0.4	-0.4	6.9	8.4	8.4
Food	-1.3	0.0	-1.0	7.4	7.2	7.5
Non-food	0.4	0.8	0.2	6.5	9.4	9.1
<u>Above Rs. 35000</u>						
General	-0.3	0.7	-0.3	6.1	7.7	7.7
Food	-1.4	0.3	-1.1	7.0	7.3	7.6
Non-food	0.3	0.8	0.2	5.6	7.9	7.8
<u>All income groups</u>						
General	-0.3	0.5	-0.3	7.4	7.9	7.9
Food	-1.3	0.0	-1.0	7.4	7.2	7.6
Non-food	0.4	0.9	0.2	7.4	8.4	8.2

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Feb-14	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	399.8	19.0	0.6
2	Wheat Flour Bag	10Kg.	428.0	16.2	0.9
3	Rice Basmati Broken	Kg.	73.8	5.7	0.1
4	Rice Irri-6	Kg.	54.4	7.7	0.1
5	Bread Plain Med. Size (340-400 Gm.)	Each	40.3	13.8	0.0
6	Beef	Kg.	287.1	6.9	0.9
7	Mutton	Kg.	565.3	9.8	1.4
8	Chicken Live (Farm)	Kg.	162.4	10.7	-11.1
9	Milk Fresh	Litr	69.3	5.7	0.2
10	Curd	Kg.	81.6	8.0	0.5
11	Milk Powdered Nido	500G	324.7	12.0	3.7
12	Egg Hen (Farm)	Doz.	106.7	23.0	0.1
13	Mustard Oil	Kg.	186.4	0.0	0.2
14	Cooking Oil (Tin)	2.5Ltr	539.7	2.4	0.2
15	Veg. Ghee (Tin)	2.5Kg.	513.9	1.4	0.0
16	Veg. Ghee Loose	Kg.	162.0	1.8	-0.1
17	Bananas	Doz.	59.5	-0.4	9.5
18	Masoor Pulse Washed	Kg.	126.7	25.8	3.1
19	Moong Pulse Washed	Kg.	140.6	21.8	2.2
20	Mash Pulse Washed	Kg.	134.5	2.1	0.2
21	Gram Pulse Washed	Kg.	76.9	-25.4	3.9
22	Potatoes	Kg.	29.6	36.4	2.6
23	Onions	Kg.	33.8	12.6	-7.2
24	Tomatoes	Kg.	36.7	-30.6	-16.3
25	Sugar	Kg.	51.3	-1.1	-0.3
26	Gur	Kg.	78.0	7.1	-0.2
27	Salt Powdered Loose (Lahori)	Kg.	9.4	6.0	0.8
28	Red Chilies Powder Loose	Kg.	221.7	-6.0	1.3
29	Garlic	Kg.	133.5	0.6	0.4
30	Tea (Yellow Label)	200Gm.	147.4	2.2	-0.7
31	Cooked Beef Plate	Each	79.5	13.8	0.5
32	Cooked Dal Plate	Each	46.1	14.8	0.7
33	Tea Prepared (Sada)	Cup	17.1	11.5	0.0
34	Cigarettes K-2 (20'S)	20'S	38.7	19.6	0.9
35	Long Cloth (Coarse Latha)	Mtr.	174.3	16.1	0.3
36	Shirting	Mtr.	145.7	15.0	0.8
37	Lawn	Mtr.	191.3	17.1	0.5
38	Georgette (Voil Printed)	Mtr.	111.0	7.1	0.1
39	Sandal Gents Bata	Pair	699.0	16.7	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	0.9	0.0
44	Kerosene	Litr	126.7	6.8	0.0
45	Firewood	40Kg	557.2	10.1	0.7
46	Energy Savor 14 Watts	Each	163.7	6.6	0.2
47	Washing Soap (200-250 Gm.)	Cake	23.7	11.9	0.3
48	Match Box	Each	1.5	37.6	0.0
49	Petrol	Litr	114.1	9.4	0.0
50	Diesel	Litr	118.0	7.0	0.0
51	L.P.G.(11 Kg Cylinder.)	Each	1440.9	-13.8	-3.1
52	Tele. Local Call	Call	3.9	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	36.0	12.5	0.0
Maximum				37.6	9.5
Median				7.1	0.2
Minimum				-30.6	-16.3

Table A9: Distribution of Price Changes (YoY) - WPI Items: February 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	Pulses, Fresh Fruits, Sugar Crops	Poultry, Other Oil Seeds, Milk from Bovine Animals, Millet/Bajra, Maize	Unmanufactured Tobacco, Rice, Hides and Fur Skins-Raw	Stimulant and Spice Crops, Edible Roots/Potatoes, Sorghum/Jowar, Fish Live Fresh or Chilled, Eggs, Wheat, Raw Animal Material/Wool, Cotton Seeds, Fibre Crops, Vegetables, Dry Fruits, Fuel Wood in Logs
Ores & Minerals, Electricity Gas & Water	Natural Gas Liquefied, Coal Not Agglomerated			Salt & Pure Sodium Chloride, Electrical Energy
Food Products, Beverages and Tobacco, Textiles, Apparel and Leather Products	Spices, Other Cereal Flour, Footwear, Other Food Products, Dried Fruits & Nuts, Nylon Yarn, Sugar Refined, Vegetable Ghee, Chocolate, Sugar Confectionary	Meat of Animals, Fruit Juices, Silk and Rayon Fabrics, Vegetables & Fruit Juices, Synthetic Carpets, Processed Liquid Milk, Blended Yarn, Vegetable Oil Refined, Cotton Yarn	Other Fabrics, Mineral Water, Cotton Fabrics, Hosiery Products, Woolen Carpets, Dairy Products N.E.C, Coffee and Tea	Other Leather N.E.C, Leather without Hairs, Ice Cream, Milk and Cream in Solid Form, Oil Cakes, Blankets, Tobacco Products, Wheat Flour, Towels, Bed Sheets, Quilts, Ready Made Garments, Beverages, Woven Fabrics
Other Transportable Goods except Metal Products, Machinery and Equipments	Coke	Printing Paper, Bed Foams, Mobil Oil, Auto Tyres, Fertilizers, Dying Materials, Medicines	Chemicals, Kerosene Oil, Other Glass Articles, Furnace Oil, Glass Sheets, Soaps & Detergent, Matches, Diesel Oil, Plastic Products	Ceramics and Sanitary, Hard Board, Timber, Pesticides, Insecticides, Paints & Varnishes, Cement, Bricks Blocks and Tiles, Motor Sprit
Metal Product Machinery & Equipment	Pig Iron, Engines and Motors, Vacuum Pumps, Concrete Mixer	Air Conditioners, Motor Vehicles, Steel Bars & Sheets, Chuff Cutter, Bicycles, Motor Cycles, Radio and Television	Lighting Equipments, Steel Products	Lathe Machines, Cultivators, Tractors, Pipe Fittings, Refrige,Wash& Sew Mach,Iron,Fan, Electrical Wires

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

Items and specification	Weights	Index		
		Feb-13	Jan-14	Feb-14
General	100.00	175.11	189.60	189.00
Food & Non-Alcoholic Beverages.	34.83	193.70	209.64	207.34
1 Wheat	0.35	199.50	233.51	235.76
2 Wheat Flour	4.16	200.33	231.86	233.21
3 Wheat Product	0.10	189.40	221.40	222.86
4 Besan	0.15	236.32	172.90	174.67
5 Rice	1.58	181.58	193.88	194.21
6 Cereals	0.16	210.83	230.58	232.00
7 Bakery & Confectionary	1.16	180.03	199.21	200.07
8 Nimco	0.46	200.35	220.99	222.25
9 Meat	2.43	219.73	231.91	233.63
10 Chicken	1.36	181.69	222.46	191.66
11 Fish	0.30	202.68	214.11	212.60
12 Milk Fresh	6.68	219.54	232.61	234.51
13 Milk Product	0.63	211.29	227.93	228.79
14 Milk Powder	0.11	185.81	203.41	206.77
15 Egg	0.46	180.37	216.04	206.65
16 Mustard Oil	0.10	162.48	159.97	159.46
17 Cooking Oil	1.75	161.71	161.75	162.25
18 Vegetable Ghee	2.07	157.51	158.24	158.45
19 Dry Fruits	0.25	212.97	231.25	231.00
20 Fresh Fruits	1.86	174.69	180.15	175.77
21 Pulse Masoor	0.27	146.58	171.13	174.73
22 Pulse Moong	0.23	221.94	256.55	262.23
23 Pulse Mash (Washed)	0.21	191.01	191.91	192.61
24 Pulse Gram	0.24	231.09	161.82	170.92
25 Gram Whole	0.16	222.44	176.10	178.96
26 Beans	0.03	216.00	243.84	246.35
27 Potatoes	0.48	143.63	201.30	194.45
28 Onion	0.54	174.91	225.89	201.79
29 Tomatoes	0.45	181.44	167.79	108.68
30 Fresh Vegetable	1.66	156.35	198.94	191.66
31 Sugar	1.04	188.87	188.01	184.62
32 Gur	0.02	220.47	243.92	240.68
33 Honey	0.04	256.16	274.70	276.11
34 Sweet Meet	0.25	207.84	223.94	224.53
35 Beverages	1.20	169.72	188.24	188.24
36 Jam, Tomato Ketchup & Pickle	0.25	180.84	190.94	191.94
37 Condiments	0.27	214.80	228.82	232.66
38 Spices	0.54	241.36	216.53	218.41
39 Tea	0.84	223.16	238.69	235.26
Alcoholic Beverages, Tobacco	1.41	191.17	221.80	221.77
40 Cigarette	1.39	191.31	222.30	222.30
41 Betel Leaves & Nuts	0.02	182.57	191.06	189.48
Clothing & Footwear	7.57	178.43	198.28	199.16
42 Cotton Cloth	1.73	163.61	183.92	185.04
43 Woolen Cloth	0.88	200.18	220.65	221.76
44 Ready Made Garment	0.97	177.09	197.37	198.34
45 Woolen Readymade Garments	0.40	193.46	217.21	218.53
46 Hosiery	0.51	189.09	207.84	209.41
47 Dopatta	0.44	196.66	215.58	216.55
48 Cleaning & Laundering	0.21	198.61	219.82	221.48

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Feb-13	Jan-14	Feb-14
49 Tailoring	0.88	211.32	239.23	239.91
50 Footwear	1.55	149.45	163.02	163.10
Housing,Water,Elect,Gas & Other Fuel	29.41	152.79	166.93	166.96
51 House Rent	21.81	142.46	153.82	153.82
52 Construction Input Item	0.56	204.56	226.10	226.50
53 Construction Wage Rate	0.33	175.62	192.79	193.28
54 Water Supply	0.50	134.90	149.57	149.57
55 Electricity	4.40	196.37	227.44	227.44
56 Gas	1.58	142.58	143.81	143.81
57 Kerosene Oil	0.01	276.25	296.77	294.98
58 Fire Wood Whole	0.23	246.28	265.82	266.95
Furnished H.Hold Equip.& Maint. Etc	4.21	181.91	196.74	197.91
59 Furniture	0.33	171.54	188.50	189.87
60 Household Textile	0.65	177.68	195.40	196.78
61 Household Equipment	0.59	158.68	166.28	166.76
62 Utensils	0.32	179.02	198.04	199.46
63 Plastic Products	0.25	177.32	191.12	191.61
64 Washing Soap & Detergent	0.79	197.96	214.27	215.60
65 Sewing Needle & Dry Cell	0.15	152.30	175.61	176.33
66 Household Servant	1.04	194.31	207.39	208.60
67 Marriage Hall Charges	0.08	193.63	208.57	212.59
Health	2.19	158.02	166.84	167.50
68 Drug Medicine	1.27	139.74	142.28	142.28
69 Medical Equipment	0.01	201.48	209.84	210.38
70 Doctor (MBBS) Clinic Fee	0.59	196.28	219.23	221.33
71 Medical Test	0.32	158.67	166.32	166.95
Transport	7.20	188.35	197.19	197.33
72 Motor Vehicle	0.66	154.73	162.19	162.60
73 Motor Vehicle Accessories	0.24	212.30	222.42	223.06
74 Motor Fuel	3.03	183.71	193.91	193.53
75 Mechanical Service	0.46	185.37	200.52	201.06
76 Motor Vehicle Tax	0.11	153.74	153.74	153.74
77 Transport Services	2.70	201.53	208.36	208.93
Communication	3.22	128.63	129.79	129.82
78 Postal Services	0.07	174.59	215.89	215.89
79 Communication & Apparatus	3.15	127.66	127.98	128.01
Recreation & Culture	2.02	167.30	183.34	183.42
80 Recreation & Culture	0.86	122.45	126.94	126.96
81 Text Books	0.57	231.05	267.10	267.10
82 News Papers	0.19	157.59	172.95	172.95
83 Stationery	0.40	178.01	190.71	191.07
Education	3.94	155.83	168.48	168.48
84 Education	3.94	155.83	168.48	168.48
Restaurants And Hotels	1.23	207.28	231.11	233.32
85 Ready Made Food	1.23	207.28	231.11	233.32
Miscellaneous Goods And Services	2.76	202.74	211.24	212.47
86 Personal Care	1.49	181.67	193.97	195.35
87 Cosmetics	0.39	149.40	176.55	178.00
88 Blades	0.03	174.21	182.08	182.25
89 Personal Equipments	0.84	265.47	258.77	259.66

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

Items and Specifications	Index		
	Feb-13	Jan-14	Feb-14
General	196.06	211.23	210.94
Agriculture Forestry & Fishery	198.37	216.41	214.62
1 Wheat	207.60	243.48	246.93
2 Maize	178.29	176.18	178.62
3 Rice	165.57	177.05	177.64
4 Sorghum/Jowar	209.43	276.14	277.39
5 Millet/Bajra	170.25	174.47	171.25
6 Vegetables	165.61	215.08	183.62
7 Fresh Fruits	210.65	187.74	195.94
8 Dry Fruits	185.34	203.14	205.28
9 Cotton Seeds	166.82	188.10	191.11
10 Other Oil Seeds	178.37	184.14	183.54
11 Edible Roots/ Potatoes	138.83	217.35	227.80
12 Stimulant And Spice Crops	188.76	329.72	343.03
13 Pulses	204.49	187.07	189.21
14 Sugar Crops	267.92	267.92	267.92
15 Fibre Crops	199.23	226.32	224.80
16 Unmanufactured Tobacco	174.04	188.70	189.53
17 Poultry	188.11	238.28	193.61
18 Milk From Bovine Animals	220.40	224.04	224.56
19 Eggs	168.53	218.04	207.17
20 Raw Animal Material/Wool	137.58	156.85	158.40
21 Hides And Fur Skins, Raw	139.48	147.80	146.68
22 Fuel Wood In Logs	219.44	239.54	241.73
23 Fishes Live Fresh Or Chilled	189.26	243.95	244.62
Ores/Minerals, Gas & Elect.	215.52	243.68	243.36
24 Coal Not Agglomerated	223.53	223.53	223.53
25 Natural Gas Liquefied	204.82	204.61	203.90
26 Salt & Pure Sodium Chloride	170.30	228.23	231.42
27 Electrical Energy	226.10	287.44	287.44
Food, Beverages, Tobacco, Textiles	190.68	201.47	201.73
28 Meat Of Animals	229.40	239.95	240.41
29 Vegetables & Fruit Juices	189.33	193.91	193.91
30 Dried Fruits & Nuts	224.68	222.32	218.89
31 Fruit Juices	158.79	166.02	166.02
32 Vegetable Oil Refined	160.11	161.86	161.68
33 Vegetable Ghee	141.86	142.28	140.94
34 Oil Cakes	163.45	191.76	193.86
35 Processed Liquid Milk	208.43	210.94	210.94
36 Milk And Cream In Solid Form	171.59	202.00	207.03
37 Ice Cream	173.49	209.79	209.79
38 Dairy Products N.E.C	206.31	218.81	218.81
39 Wheat Flour	186.10	214.41	214.84
40 Other Cereal Flour	198.50	133.04	141.77
41 Sugar Refined	194.64	196.44	192.80
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	102.28	102.28	102.28
44 Coffee And Tea	201.59	214.63	213.04
45 Spices	273.41	190.97	191.33
46 Other Food Products	318.46	308.48	308.48
47 Mineral Water	168.32	181.84	181.84
48 Beverages	137.86	152.12	152.12
49 Tobacco Products	208.80	242.41	242.41
50 Cotton Yarn	216.35	217.06	218.02
51 Nylon Yarn	183.22	180.95	179.07
52 Blended Yarn	199.23	201.89	201.29
53 Woven Fabrics	206.00	226.82	226.82
54 Cotton Fabrics	174.17	187.77	187.77
55 Other Fabrics	165.62	179.06	179.06

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities				
Items and Specifications		Index		
		Feb-13	Jan-14	Feb-14
56	Silk And Rayon Fabrics	154.21	161.09	161.09
57	Towels	203.06	234.25	234.25
58	Blankets	185.21	219.66	219.66
59	Bed Sheets	207.04	236.05	236.05
60	Quilts	153.32	172.42	172.42
61	Woolen Carpets	106.55	113.69	113.69
62	Synthetic Carpets	114.41	116.10	116.10
63	Hosiery Products	181.47	195.18	195.18
64	Ready Made Garments	138.19	153.12	153.12
65	Leather With Out Hairs	109.83	161.61	167.71
66	Other Leather N.E.C	122.57	341.85	370.13
67	Footwear's	139.49	134.22	134.22
Other Transportable Goods		204.80	217.85	218.22
68	Timber	148.59	174.55	174.55
69	Printing Paper	161.68	169.75	169.75
70	Hard Board	193.06	229.17	229.17
71	Coke	163.45	163.45	163.45
72	Motor Sprit	172.73	190.50	190.50
73	Diesel Oil	261.36	279.46	279.46
74	Kerosene Oil	264.94	288.01	288.01
75	Furnace Oil	168.81	183.45	182.18
76	Mobil Oil	184.85	193.09	193.09
77	Chemicals	157.85	171.72	171.72
78	Dying Materials	106.24	107.55	107.55
79	Fertilizers	263.38	264.18	267.25
80	Pesticides	197.49	225.48	225.62
81	Insecticides	120.46	133.78	136.69
82	Paints & Varnishes	238.30	267.31	268.31
83	Medicines	139.32	139.69	139.69
84	Soaps & Detergent	168.27	181.22	181.22
85	Auto Tyres	180.99	185.73	185.73
86	Plastic Products	192.40	202.31	202.33
87	Glass Sheets	192.74	207.75	207.75
88	Other Glass Articles	197.87	214.09	214.09
89	Ceramics And Sanitary	160.55	192.64	192.64
90	Bricks Blocks And Tiles	177.53	197.12	195.96
91	Cement	187.79	205.56	207.30
92	Bed Foams	142.83	149.67	149.67
93	Matches	133.50	143.20	143.20
Metal Product Machinery & Equip		159.08	168.90	169.45
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	132.81	140.23	139.12
96	Pipe Fittings	141.47	168.33	168.33
97	Steel Products	161.94	170.19	170.19
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	172.67	181.12	181.12
101	Cultivators	189.23	226.90	226.90
102	Chuff Cutter	138.54	144.94	144.94
103	Tractors	161.96	193.29	193.29
104	Lathe Machines	147.68	208.81	208.81
105	Concrete Mixer	138.83	138.83	138.83
106	Refrige,Wash& Sew Mach, Iron,Fan	166.47	192.24	192.33
107	Electrical Wires	159.57	178.73	178.73
108	Lighting Equipments	148.26	162.86	162.86
109	Radio And Television	126.46	126.49	126.49
110	Motor Vehicles	173.75	182.16	182.16
111	Motor Cycles	125.07	125.58	125.69
112	Bicycles	177.87	180.99	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
2011	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
	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	209.86	212.10	208.99
	Feb	189.00	208.74	177.17	210.94	208.67	212.38	208.54

*: all groups combined

Table A13: International Commodity Prices/ Indices				
	Nov-13	Dec-13	Jan-14	Feb-14
Energy				
Crude Oil (US\$ per barrel) *	102.6	105.5	102.3	104.8
IMF Energy Index (2005 = 100)	188.9	194.3	189.1	192.9
WB Energy Index (2010 = 100) @	125.4	129.5	125.7	128.8
Food				
Rice (\$/MT)	448.8	447.5	441.0	447.0
Wheat (\$/MT)	306.8	291.6	275.5	292.3
Sugar (US cent/ pound)	17.7	16.5	15.6	16.7
Palm Oil (\$/MT)	810.3	795.3	769.3	811.2
Soybean Oil (\$/MT)	897.3	872.5	831.4	873.7
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	84.6	87.5	91.0	94.1
IMF Metal Price Index (2005 = 100)	177.8	179.1	176.4	172.0
Copper (\$/MT)	7,070.7	7,214.9	7,291.5	7,149.2
Aluminum (\$/MT)	1,748.0	1,739.8	1,727.4	1,695.2
Iron Ore (\$ cents/dry MT)	136.3	135.8	128.1	121.4
Tin (\$/MT)	22,826.9	22,762.1	22,063.9	22,820.7
Nickle (\$/MT)	13,684.0	13,924.6	14,101.3	14,203.6
Zinc (\$/MT)	1,866.4	1,975.0	2,036.9	2,034.5
Lead (\$/MT)	2,089.6	2,136.7	2,143.2	2,108.0
Uranium (\$/MT)	35.0	34.6	35.1	35.5
DAP (\$/MT)	351.3	369.9	438.3	490.6
Urea (\$/MT)	312.4	330.1	352.6	344.1
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	FY11	FY12	FY13	FY14
Jul	137.62	154.72	169.57	183.58
Aug	140.63	156.88	171.09	185.71
Sep	143.49	158.50	172.44	185.18
Oct	144.90	160.79	173.10	188.82
Nov	146.34	161.25	172.42	191.21
Dec	145.90	160.12	172.82	188.68
Jan	147.67	162.58	175.70	189.60
Feb	146.85	163.07	175.11	189.00
Mar	148.91	164.98	175.82	
Apr	150.99	168.00	177.74	
May	151.33	169.93	178.65	
Jun	152.78	169.99	179.94	
Seasonally Adjusted Series				
Jul	137.48	154.56	169.35	182.98
Aug	139.71	155.81	169.87	184.33
Sep	142.53	157.42	171.27	183.90
Oct	143.71	159.45	171.70	187.32
Nov	145.49	160.28	171.32	189.93
Dec	146.61	160.91	173.70	189.62
Jan	147.90	162.80	175.93	189.83
Feb	148.08	164.48	176.65	190.67
Mar	149.82	166.01	176.95	
Apr	151.02	167.99	177.70	
May	151.85	170.57	179.39	
Jun	153.49	170.82	180.89	

Table 15. CPI Food Data Series Original and Seasonally Adjusted				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	149.33	174.80	190.72	208.19
Aug	156.70	177.32	192.47	212.27
Sep	163.96	180.16	193.80	209.09
Oct	163.91	183.07	193.66	212.61
Nov	166.59	183.26	193.03	218.16
Dec	163.69	179.21	192.97	210.89
Jan	166.52	181.90	196.58	210.81
Feb	163.56	180.69	194.05	208.74
Mar	167.10	183.46	195.06	
Apr	169.25	187.43	197.74	
May	168.77	187.75	200.00	
Jun	169.88	187.35	202.11	
Seasonally Adjusted Series				
Jul	148.85	174.19	189.90	207.13
Aug	154.45	174.63	189.40	208.78
Sep	161.31	177.16	190.54	205.53
Oct	160.92	179.71	190.20	208.89
Nov	164.21	180.59	190.06	214.72
Dec	164.95	180.64	194.56	212.58
Jan	167.21	182.61	197.34	211.61
Feb	166.82	184.42	198.11	213.16
Mar	169.31	185.98	197.83	
Apr	170.08	188.31	198.64	
May	170.15	189.44	201.94	
Jun	171.77	189.53	204.57	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY11	FY12	FY13	FY14	Average
Jul	100.10	100.11	100.13	100.33	100.17
Aug	100.66	100.69	100.72	100.75	100.70
Sep	100.67	100.69	100.68	100.70	100.68
Oct	100.83	100.84	100.81	100.80	100.82
Nov	100.59	100.61	100.64	100.68	100.63
Dec	99.52	99.51	99.49	99.50	99.51
Jan	99.85	99.86	99.87	99.88	99.86
Feb	99.17	99.14	99.13	99.12	99.14
Mar	99.39	99.38	99.36		99.38
Apr	99.98	100.01	100.02		100.00
May	99.66	99.63	99.59		99.63
Jun	99.53	99.51	99.47		99.51

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY11	FY12	FY13	FY14	Average
Jul	100.33	100.35	100.43	100.51	100.41
Aug	101.46	101.54	101.62	101.67	101.57
Sep	101.64	101.70	101.71	101.73	101.70
Oct	101.85	101.87	101.82	101.78	101.83
Nov	101.45	101.48	101.56	101.60	101.52
Dec	99.24	99.21	99.18	99.20	99.21
Jan	99.59	99.61	99.62	99.62	99.61
Feb	98.05	97.98	97.95	97.93	97.98
Mar	98.69	98.64	98.60		98.65
Apr	99.51	99.53	99.55		99.53
May	99.18	99.11	99.04		99.11
Jun	98.90	98.85	98.80		98.85

Table 18: CPI Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	2.07	1.27	-0.25	2.02
Aug	2.19	1.40	0.90	1.16
Sep	2.03	1.03	0.79	-0.29
Oct	0.98	1.44	0.38	1.97
Nov	0.99	0.29	-0.39	1.27
Dec	-0.30	-0.70	0.23	-1.32
Jan	1.21	1.54	1.67	0.49
Feb	-0.56	0.30	-0.34	-0.32
Mar	1.40	1.17	0.41	
Apr	1.40	1.83	1.09	
May	0.23	1.15	0.51	
Jun	0.96	0.04	0.72	
Seasonally Adjusted Series				
Jul		0.69	-0.86	1.16
Aug	1.62	0.81	0.30	0.74
Sep	2.02	1.03	0.83	-0.24
Oct	0.83	1.29	0.25	1.86
Nov	1.24	0.52	-0.22	1.39
Dec	0.77	0.40	1.39	-0.16
Jan	0.88	1.17	1.28	0.11
Feb	0.13	1.03	0.41	0.44
Mar	1.17	0.93	0.17	
Apr	0.80	1.19	0.42	
May	0.55	1.53	0.95	
Jun	1.09	0.15	0.84	

Table 19: CPI Food Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	1.84	2.90	1.80	3.01
Aug	4.93	1.44	0.92	1.96
Sep	4.64	1.60	0.69	-1.50
Oct	-0.04	1.62	-0.07	1.68
Nov	1.64	0.10	-0.33	2.61
Dec	-1.74	-2.21	-0.03	-3.33
Jan	1.73	1.50	1.87	-0.04
Feb	-1.77	-0.66	-1.29	-0.98
Mar	2.16	1.53	0.52	
Apr	1.28	2.16	1.37	
May	-0.28	0.17	1.14	
Jun	0.66	-0.21	1.06	
Seasonally Adjusted Series				
Jul		1.41	0.19	1.25
Aug	3.77	0.25	-0.26	0.80
Sep	4.44	1.44	0.60	-1.56
Oct	-0.24	1.44	-0.18	1.64
Nov	2.05	0.49	-0.08	2.79
Dec	0.45	0.03	2.37	-1.00
Jan	1.37	1.09	1.43	-0.46
Feb	-0.23	0.99	0.39	0.73
Mar	1.50	0.85	-0.14	
Apr	0.45	1.25	0.41	
May	0.04	0.60	1.66	
Jun	0.95	0.05	1.30	

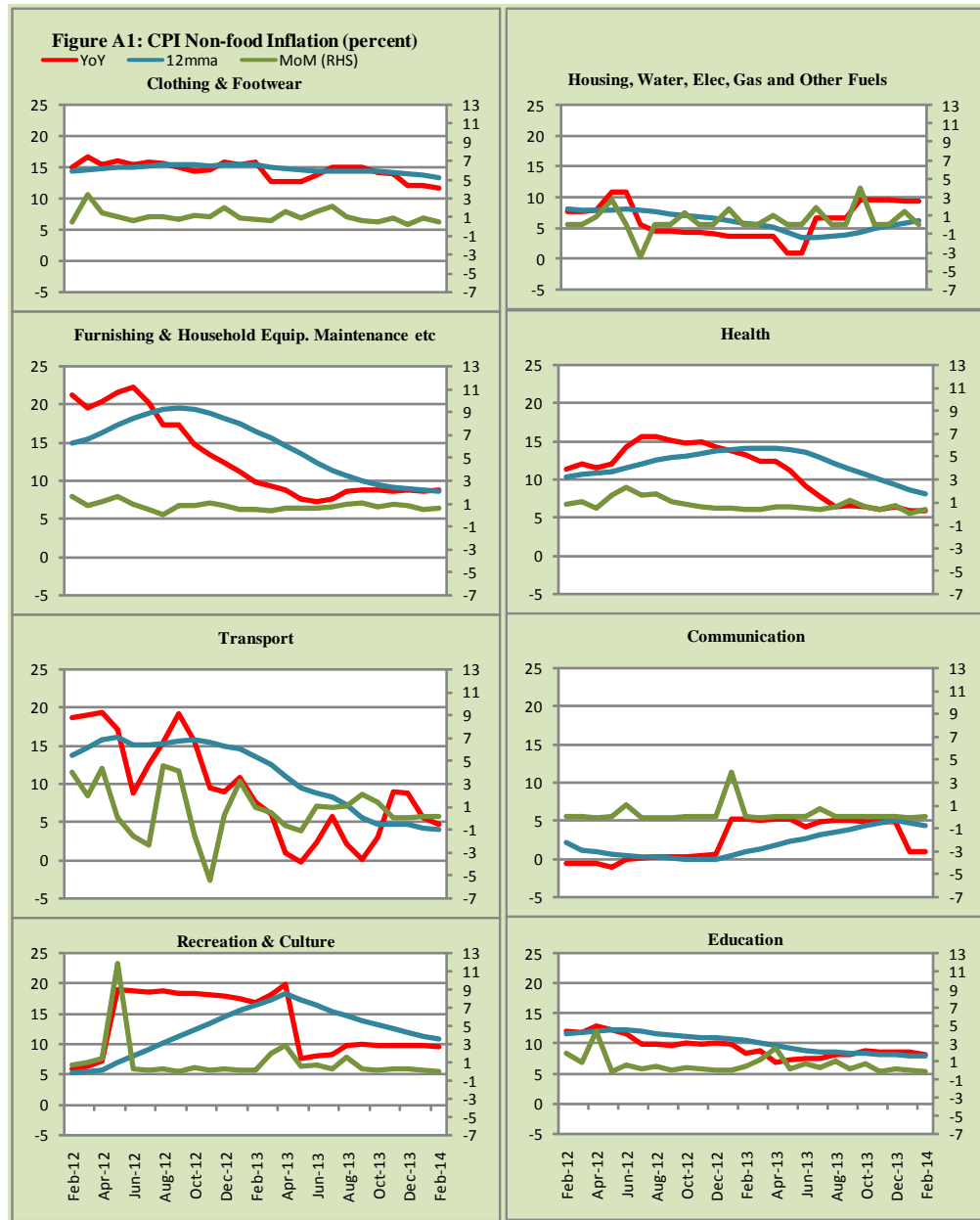


Figure A2: Frequency Distribution of Price Changes of CPI Items, February 2014

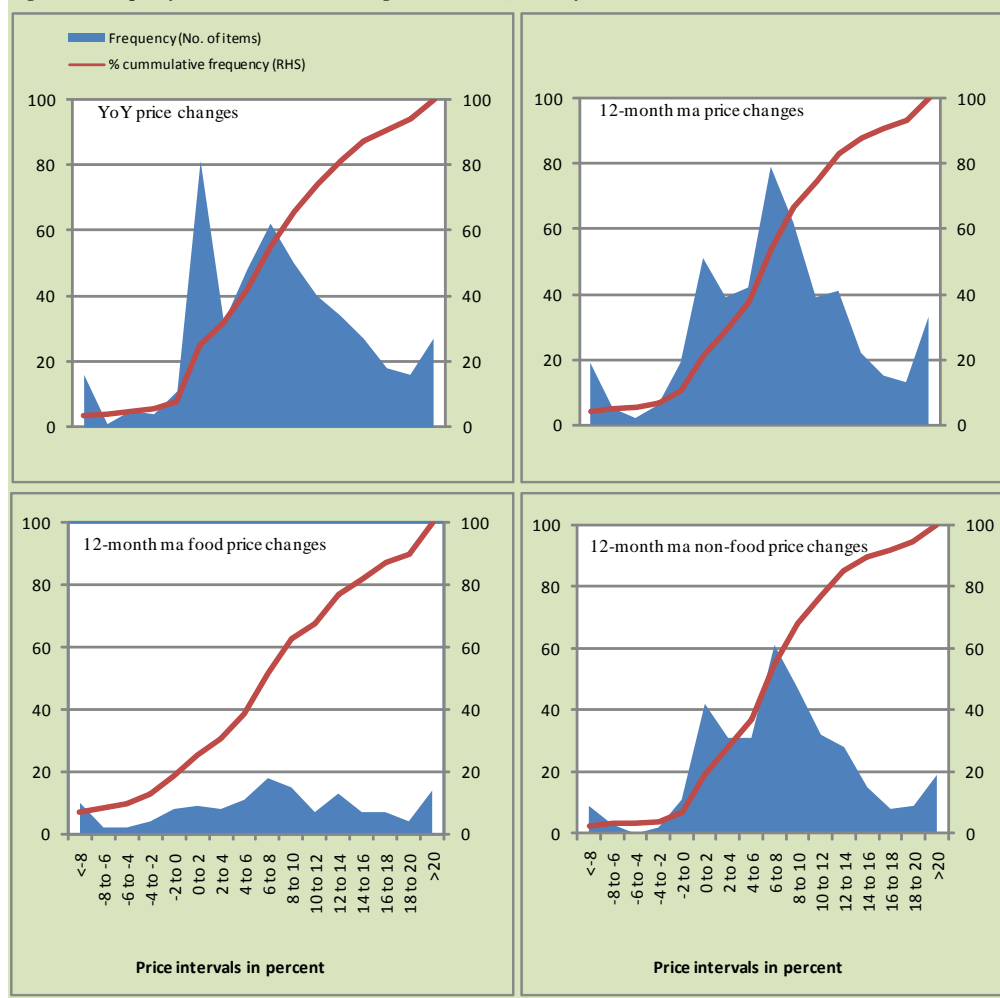


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, February 2014

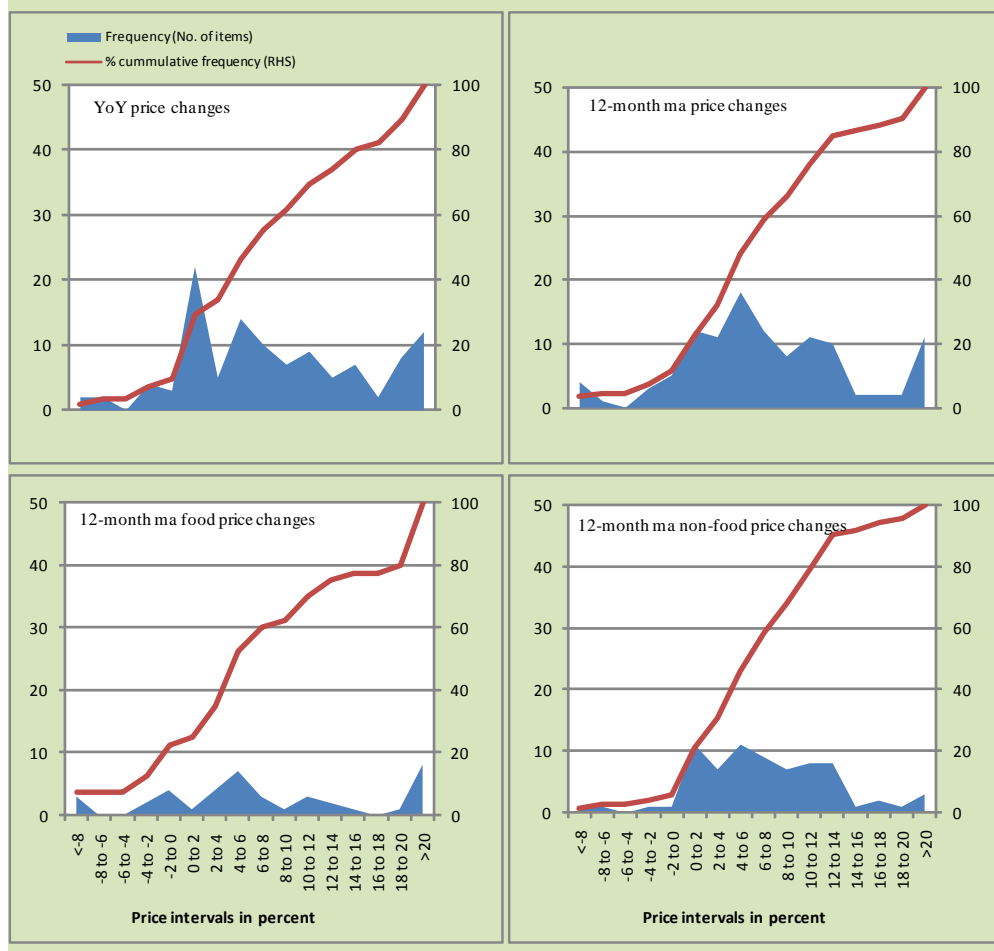
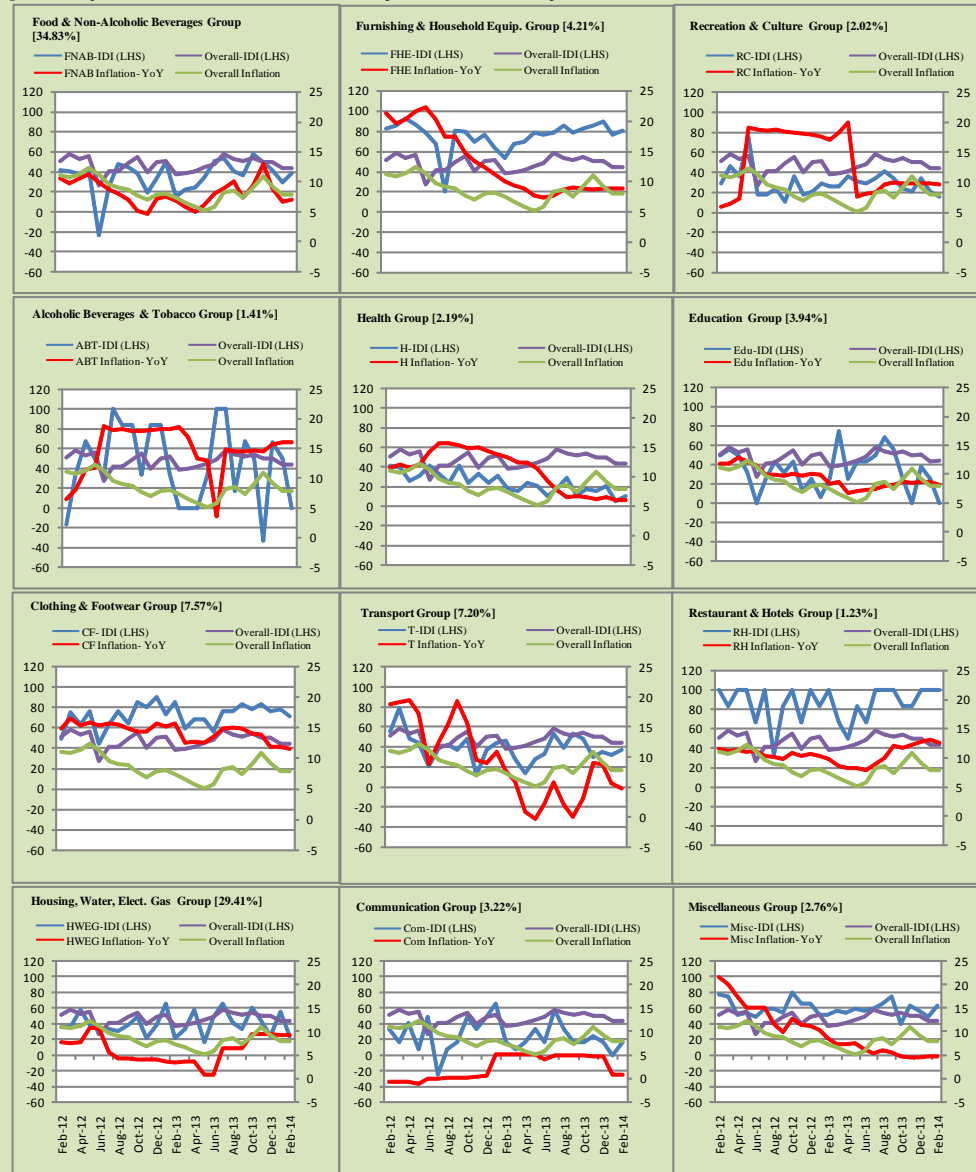


Figure A4: Group-wise/ Overall Inflation Diffusion Index (IDI) and respective/ overall YoY Inflation (percent)



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.