

Inflation Monitor

February 2015



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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 3.2 percent on year-on-year basis in February 2015 as compared to 3.9 percent in the previous month and 7.9 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at -0.9 percent in February 2015 as compared to 0.1 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 -0.1 percent in February 2015 compared to -0.3 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 4.2 percent in February 2015 as compared to 4.8 percent in the previous month and 8.1 percent during the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) recorded at -0.2 percent in February 2015 as compared to 0.3 percent in the previous and 0.2 percent in the corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis decreased to 6.2 percent in February 2015 as compared to 6.4 percent in the previous month. It was 7.8 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis decreased by negligible change in February 2015 as compared to 0.7 percent in the previous month. A 0.2 percent increase in Core NFNE index was observed in February 2014.
7. WPI inflation on year-on-year basis decreased to -3.4 percent in February 2015 when compared to -2.4 percent a month earlier. During February 2014, WPI inflation was recorded at 7.6%.

8. WPI inflation on month-on-month basis recorded at -1.1 percent in February 2015 as compared to -1.0 percent in the previous and -0.1 percent in the corresponding month of last year.
9. SPI inflation on year-on-year basis decreased to -0.7 percent in February 2015 as compared to 0.4 percent in the previous month. It was 9.3 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis recorded at -1.4 percent in February 2015 as compared to -0.9 percent in the previous month and -0.2 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 2015 are described below:

- Core inflation based on new measure RSC on year-on-year basis is recorded at 6.4 percent in February 2015 compared to 6.7 percent in the previous month and 8.0 percent in the corresponding month of last year.
- Core RSC inflation on month-on-month basis is recorded at almost zero percent in February 2015 compared to 0.5 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
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
Dec-14	4.3	-1.0	3.4	-2.1	4.9	-0.2	6.7	0.1	5.2	0.0	7.0	0.2	-0.9	-1.9	0.5	-1.3
Jan-15	3.9	0.1	3.0	-0.5	4.5	0.5	6.4	0.7	4.8	0.3	6.7	0.5	-2.4	-1.0	0.4	-0.9
Feb-15	3.2	-0.9	2.1	-1.8	4.0	-0.3	6.2	0.0 ⁺	4.2	-0.2	6.4	0.0 ⁺⁺	-3.4	-1.1	-0.7	-1.4
* NFNE is Non-food non-energy ** Relatively Stable Component of CPI *** SPI for all income groups combined +: -0.02 ++:0.002																

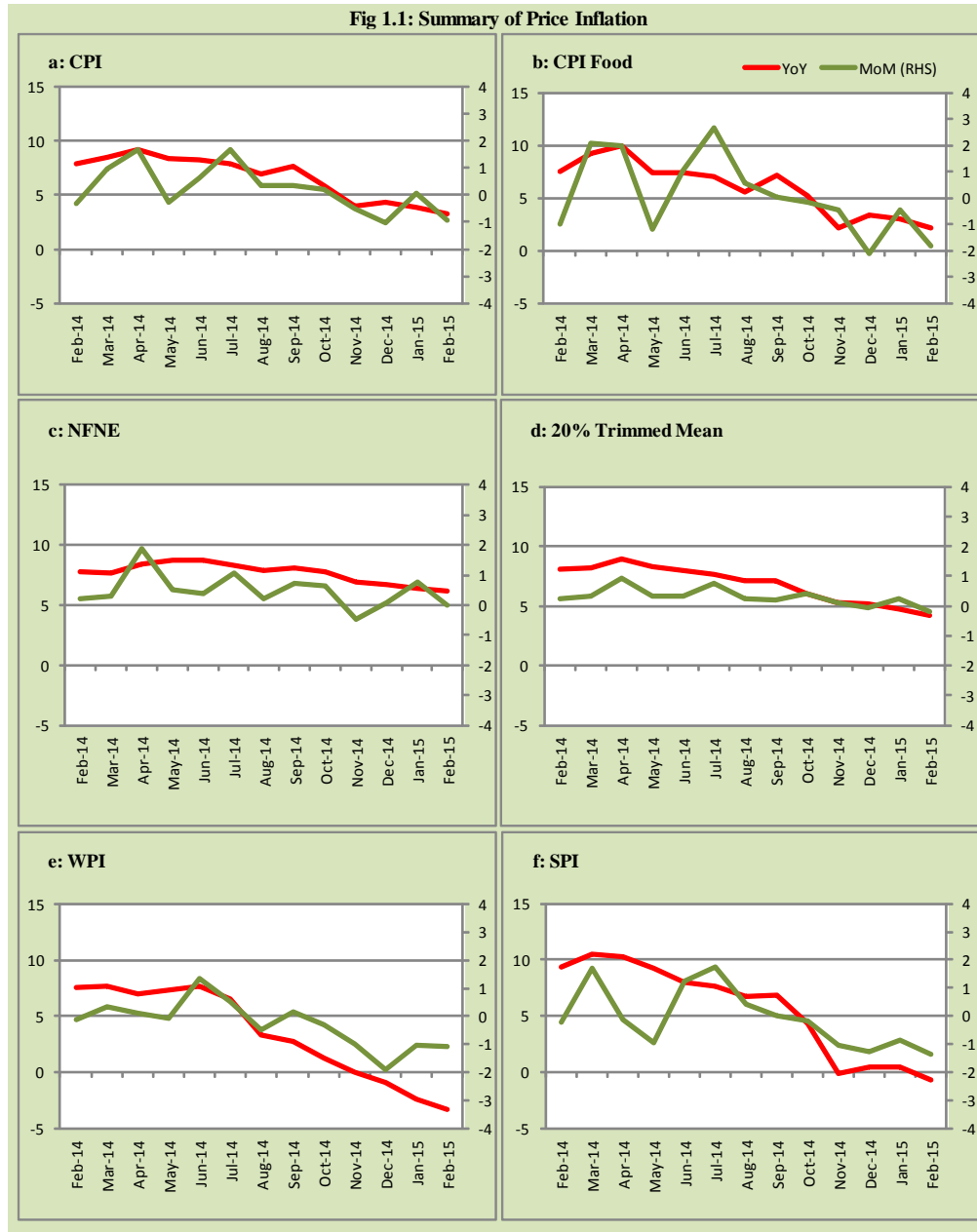
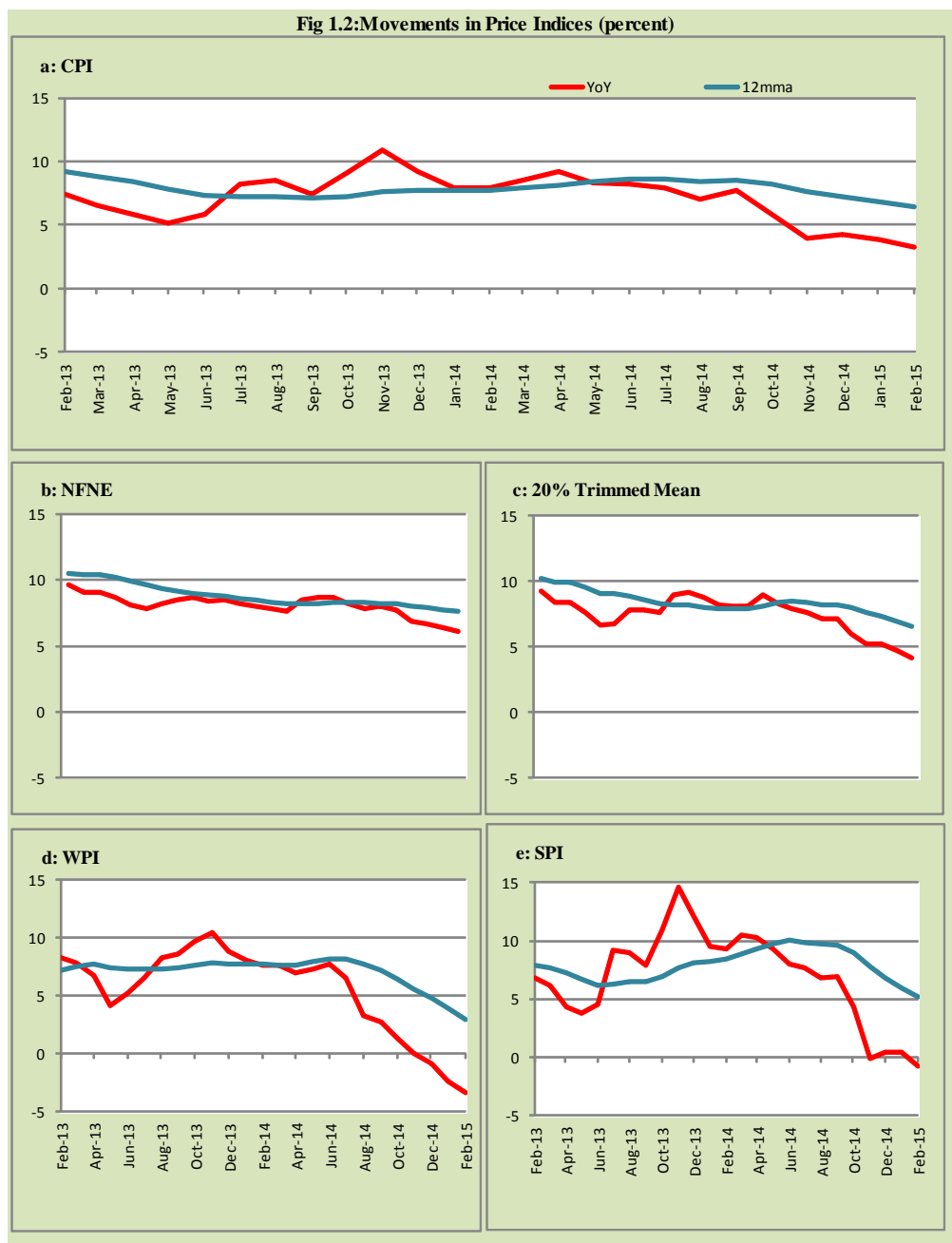


Fig 1.2: Movements in Price Indices (percent)



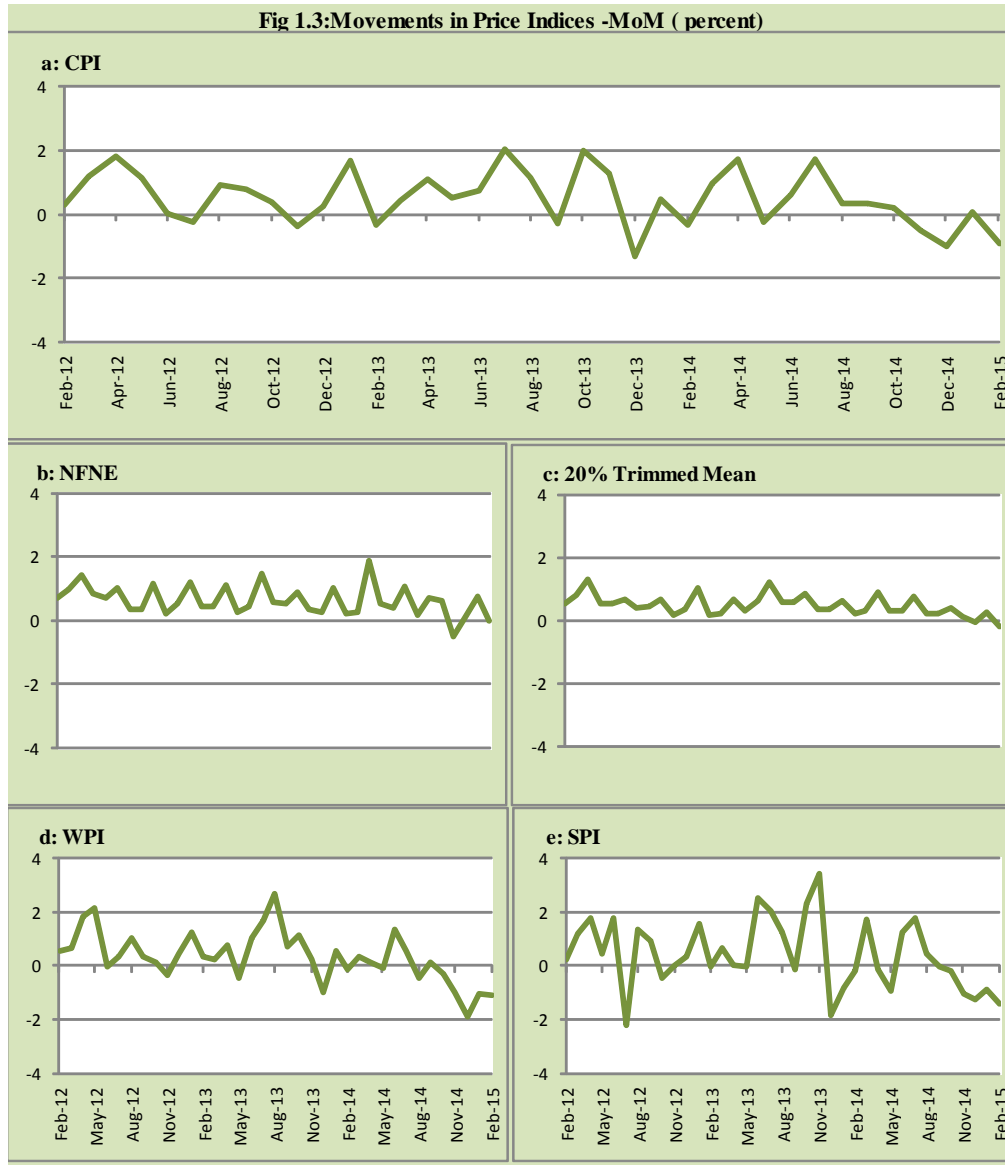
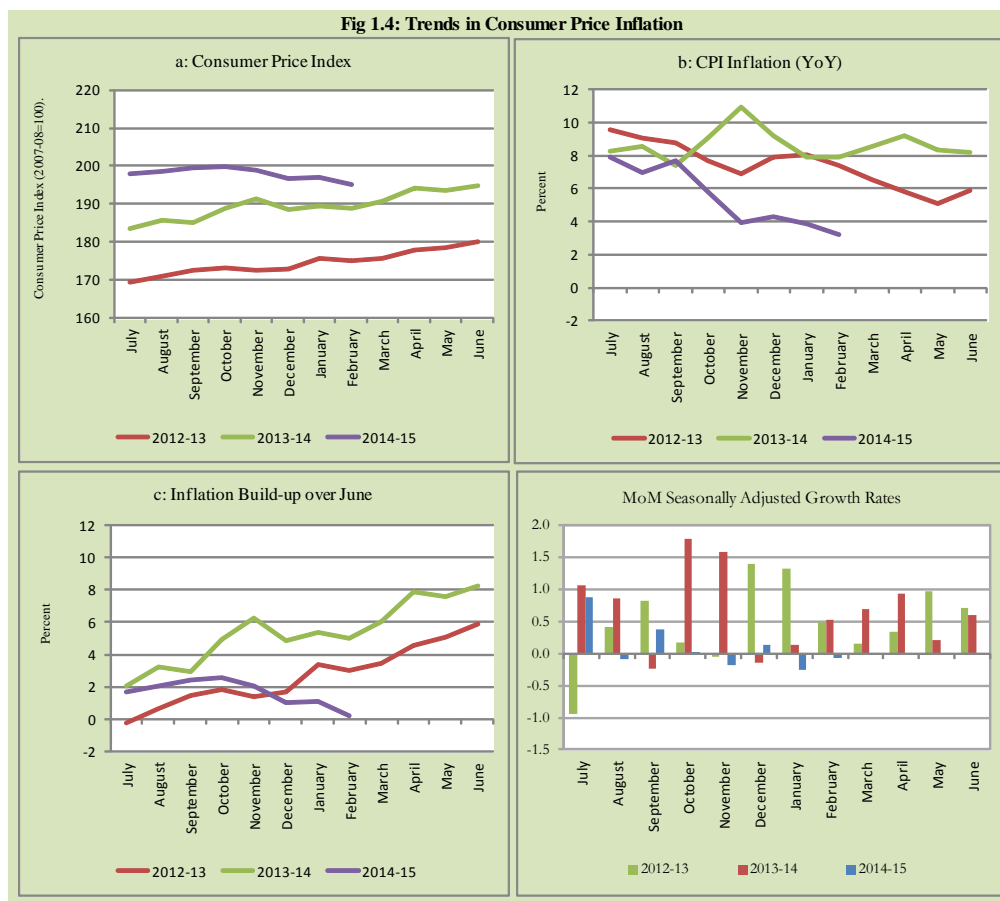


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan was higher than the overall inflation during February 2015 except Quetta. Among these five cities, the lowest inflation was observed in Quetta at 0.8 percent while the highest inflation was observed in Islamabad at 6.0 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)						
	Feb-14		Jan-15		Feb-15	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	-0.3	7.9	0.1	3.9	-0.9	3.2
Islamabad	-0.2	14.0	0.0	6.3	-0.5	6.0
Karachi	-0.2	7.7	0.5	4.5	-0.5	4.2
Lahore	-0.3	8.2	-0.7	6.6	-1.1	5.8
Peshawar	-0.3	9.7	0.8	5.2	-0.8	4.7
Quetta	-0.6	7.8	-1.3	0.6	-0.5	0.8

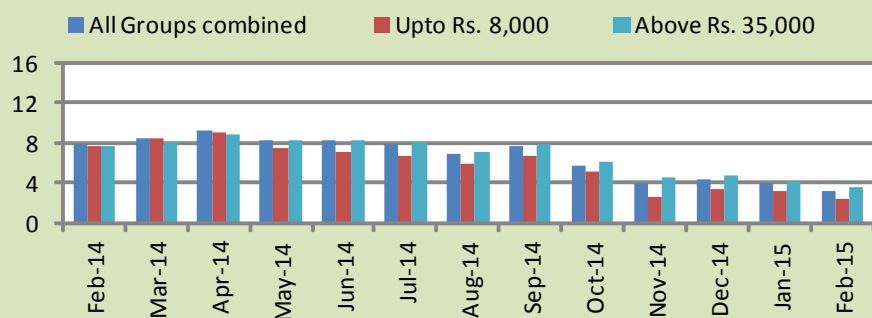
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 witnessed higher inflation than the overall inflation in CPI basket during February 2015 except in non-food group. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in general and food groups and highest inflation in non-food group among the income groups during the month of February 2015 (Table A7 of annexure-A).

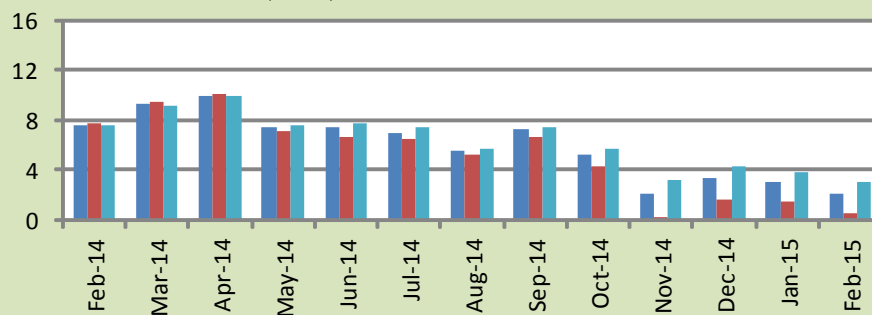
Table 3.1 Income Group- wise Inflation (YoY)									
Income Groups	General			Food			Non-food		
	Feb-14	Jan-15	Feb-15	Feb-14	Jan-15	Feb-15	Feb-14	Jan-15	Feb-15
All Groups Combined	7.9	3.9	3.2	7.6	3.0	2.1	8.2	4.5	4.0
Up to Rs. 8,000	7.6	3.2	2.5	7.7	1.5	0.5	7.5	5.4	5.0
Rs. 8,001- 12,000	7.4	3.4	2.7	7.5	2.0	1.1	7.2	5.0	4.6
Rs. 12,001- 18,000	8.4	3.6	3.0	7.5	2.5	1.6	9.3	4.8	4.3
Rs. 18,001- 35,000	8.4	3.7	3.0	7.5	3.0	2.1	9.1	4.3	3.8
Above Rs. 35,000	7.7	4.2	3.6	7.6	3.8	3.0	7.8	4.4	3.9

Fig 3.1: Income Group- wise Inflation

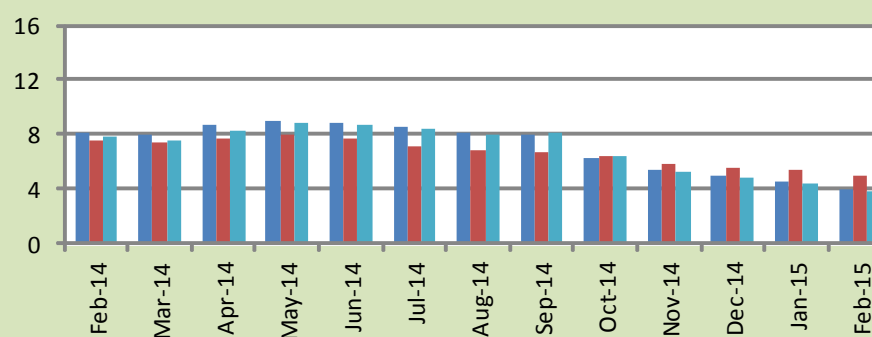
a: CPI Overall Inflation (YoY)



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 26.97 percent during February 2015 from 32.11 percent in January 2015. It was 39.62 percent in February 2014.

The weighted contribution of non-food group increased to 73.03 percent in February 2015 from 67.89 percent in January 2015.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)						
Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Dec-14	33.26	16.16	34.82	-10.53	11.70	14.59
Jan-15	32.11	16.52	38.34	-15.65	12.84	15.84
Feb-15	26.97	18.93	45.83	-25.78	15.39	18.66

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change

	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
General	43.6	45.9	41.2	46.5	38.9	42.8	41.2	46.2	30.9	33.7	25.4	23.0	18.2
Food & Non-Alcoholic Beverages	38.4	59.5	23.9	33.6	25.7	43.0	39.8	43.0	38.3	35.7	2.7	18.6	-3.6
Alcoholic Beverages & Tobacco	0.0	0.0	33.3	83.3	66.7	66.7	50.0	0.0	33.3	33.3	-33.3	-33.3	33.3
Clothing & Footwear	71.2	52.5	67.8	67.8	57.6	64.4	50.8	71.2	32.2	67.8	55.9	49.2	23.7
Housing, Water, Elect, Gas & other Fuels	25.0	27.8	38.9	27.8	33.3	36.1	33.3	33.3	30.6	25.0	11.1	27.8	0.0
Furnishing & Household Equip. Maintenance etc	81.2	75.4	82.6	89.9	69.6	69.6	75.4	76.8	43.5	65.2	56.5	56.5	59.4
Health	10.3	28.2	25.6	25.6	17.9	23.1	12.8	20.5	12.8	17.9	25.6	23.1	20.5
Transport	37.2	25.6	16.3	9.3	18.6	23.3	23.3	44.2	4.7	-7.0	4.7	-39.5	-16.3
Communication	16.7	16.7	-8.3	16.7	8.3	16.7	16.7	25.0	8.3	16.7	33.3	8.3	33.3
Recreation & Culture	15.4	7.7	30.8	23.1	20.5	0.0	17.9	20.5	12.8	10.3	15.4	7.7	10.3
Education	0.0	12.5	31.3	62.5	68.8	37.5	25.0	18.8	18.8	0.0	0.0	0.0	0.0
Restaurant & Hotels	100.0	100.0	66.7	100.0	50.0	50.0	66.7	83.3	66.7	0.0	100.0	33.3	66.7
Miscellaneous	62.9	62.9	48.6	65.7	54.3	60.0	60.0	48.6	60.0	37.1	42.9	40.0	57.1
NFNE	46.7	42.6	48.5	51.2	43.5	43.5	42.0	49.7	29.6	34.3	34.3	26.9	25.7

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-14		Jan-15		Feb-15	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	18.17	0.96	-11.10	-0.16	-11.96	-0.01
2	Wheat Flour Bag	10 Kg	15.55	0.35	-5.45	-1.18	-6.27	-0.53
3	Rice Basmati Sup. Qlty.	Kg	10.51	0.70	-2.98	-1.21	-5.47	-1.89
4	Pulse Masoor (Washed)	Kg	19.86	2.31	11.37	1.01	8.84	-0.01
5	Pulse Moong (Washed)	Kg	18.15	2.21	21.83	1.81	19.65	0.38
6	Pulse Mash (Washed)	Kg	0.84	0.37	18.21	-0.16	18.49	0.60
7	Pulse Gram	Kg	-26.04	5.63	11.20	3.96	4.94	-0.32
8	Vegetable Ghee (Loose)	Kg	0.03	0.19	-5.56	-1.33	-7.82	-2.20
9	Sugar Refined	Kg	-2.25	-1.80	3.02	-1.52	5.61	0.66
10	Milk Fresh (Unboiled)	Ltr	7.07	0.85	6.94	0.01	6.05	0.00
11	Tea- Tapal Danedar	200 Gm	8.60	-2.16	-13.73	1.27	-10.80	1.17
12	Beef With Bone Av. Qlty.	Kg	5.83	0.78	5.29	0.03	4.66	0.18
13	Mutton Av. Qlty.	Kg	7.31	0.67	5.29	0.03	5.43	0.81
14	Chicken Farm Broiler (Live)	Kg	5.49	-13.85	-8.47	5.00	-12.83	-17.95
15	Eggs Farm	Doz	14.57	-4.35	10.42	3.92	-0.56	-13.85
16	Potatoes	Kg	35.38	-3.40	-1.91	-25.37	-15.71	-17.00
17	Onion	Kg	15.37	-10.67	-34.17	1.17	-30.64	-5.89
18	Tomatoes	Kg	-40.10	-35.23	1.52	7.31	57.80	0.68
19	Ginger	Kg	68.16	3.04	-5.08	-5.48	-15.44	-8.21
20	Garlic	Kg	3.32	1.07	9.28	5.83	7.71	-0.38

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Feb-14		Jan-15		Feb-15	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-3.9	1.7	-36.2	-12.1	-33.8	5.5
Food	-3.4	2.7	-10.6	-2.9	-16.1	-3.7
Metals	-16.2	-2.5	-20.5	-5.7	-20.2	-2.2
Energy	-2.9	2.0	-48.7	-18.7	-43.6	12.3
Agricultural Raw Material	5.2	0.7	-5.9	-0.5	-5.8	0.9
Cotton	4.8	3.4	-26.0	-1.4	-25.7	3.7

Source: IMF

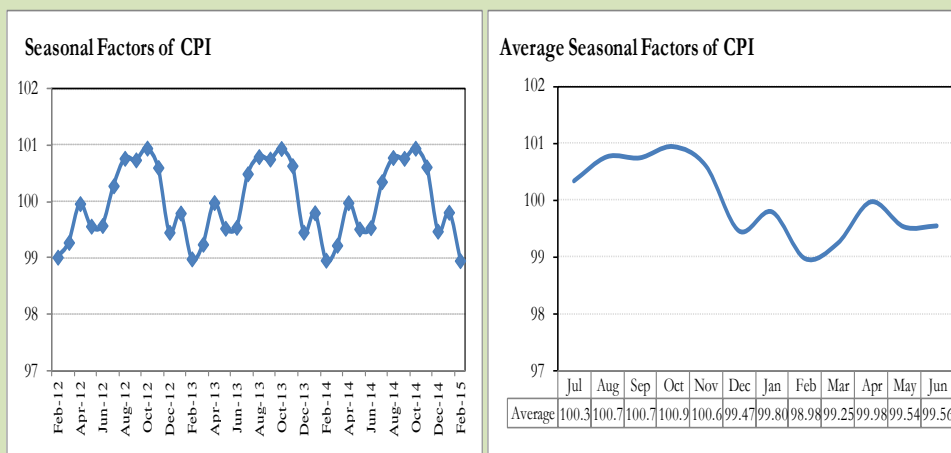
8. Seasonal Adjustment in CPI

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 2015 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

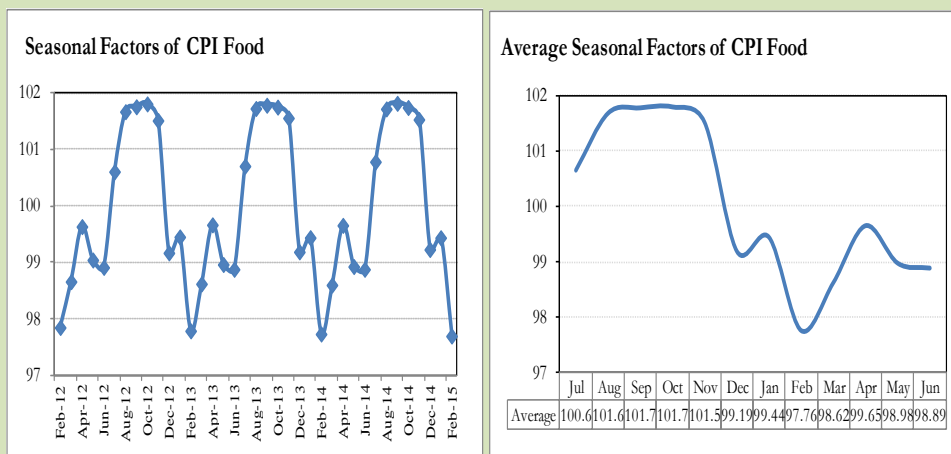
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

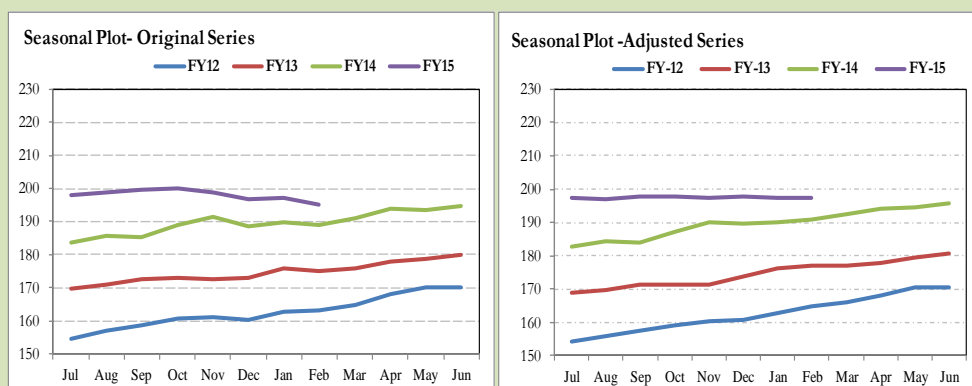
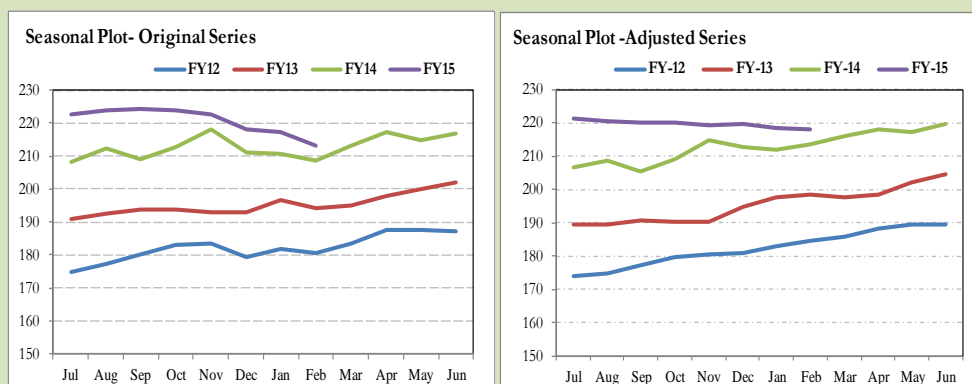


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for February 2015 stood at 197.19 against 195.13 in original series showing an increase of 2.06 on account of adjustment of downward seasonality in February 2015.

Seasonally adjusted CPI food group for February 2015 stood at 218.18 against 213.15 in original series showing an increase of 5.03 on account of adjustment of downward seasonality in February 2015.

Month-on-month change of seasonally adjusted CPI series stood at -0.07% reflecting increase during February 2015 over January 2015 and a decrease of 0.92% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at -0.07% reflecting increase during February 2015 over January 2015 and a decrease of 1.82% 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 2015 (corresponding to the seasonally adjusted month-on-month rate) is -0.79 percent.

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

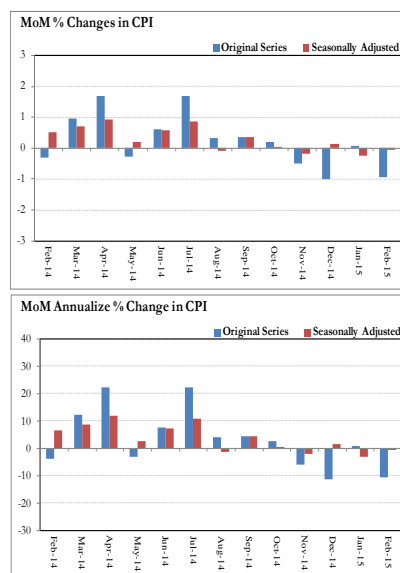
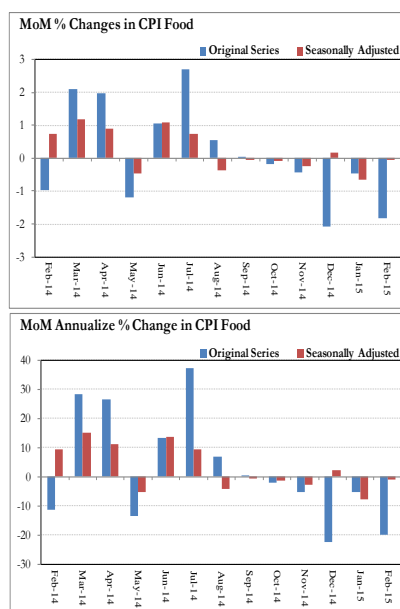


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		Feb-14	Jan-15	Feb-15	Feb-14	Jan-15	Feb-15
I. Food Group	37.5	-1.0	-0.5	-1.8	7.6	3.0	2.1
Food & Non-Alcoholic Beverages	34.8	-1.1	-0.5	-2.0	7.0	2.1	1.2
Alcoholic Beverages & Tobacco	1.4	0.0	0.0	0.0	16.0	20.2	20.2
Restaurant & Hotels	1.2	1.0	0.1	0.5	12.6	6.0	5.5
II. Non-Food Group	62.5	0.2	0.5	-0.3	8.2	4.5	4.0
Clothing & Footwear	7.6	0.4	0.2	0.1	11.6	8.1	7.7
Housing, Water, Elect, Gas & other Fuels	29.4	0.0	1.4	0.0	9.3	5.7	5.7
Furnishing & Household Equip. Maintenance etc	4.2	0.6	0.3	0.2	8.8	6.4	6.0
Health	2.2	0.4	0.4	0.1	6.0	6.1	5.8
Transport	7.2	0.1	-2.1	-3.2	4.8	-8.1	-11.1
Communication	3.2	0.0	0.0	0.1	0.9	0.3	0.3
Recreation & Culture	2.0	0.0	0.0	0.0	9.6	3.4	3.4
Education	3.9	0.0	0.0	0.0	8.1	14.2	14.2
Miscellaneous	2.8	0.6	0.3	0.7	4.8	4.8	4.9
Headline	100.0	-0.3	0.1	-0.9	7.9	3.9	3.2

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-14	Feb-15	Feb-14	Feb-15	Feb-14	Feb-15	Feb-14	Feb-15	Feb-14	Feb-15
I. Food Group	2.1	124	124	22	34	21	33	31	24	50	33
Food & Non-Alcoholic Beverages	1.2	112	112	22	34	20	31	30	19	40	28
Alcoholic Beverages & Tobacco	20.2	6	6	0	0	1	0	1	1	4	5
Restaurant & Hotels	5.5	6	6	0	0	0	2	0	4	6	0
II. Non-Food Group	4.0	348	348	63	80	63	113	110	125	112	30
Clothing & Footwear	7.7	59	59	4	8	1	12	18	32	36	7
Housing, Water, Elect, Gas & other Fuels	5.7	36	36	2	10	7	11	16	15	11	0
Furnishing & Household Equip. Maintenance etc	6.0	69	69	0	2	11	25	31	39	27	3
Health	5.8	39	39	24	16	8	7	4	10	3	6
Transport	-11.1	43	43	16	22	9	15	15	4	3	2
Communication	0.3	12	12	4	5	3	4	2	2	3	1
Recreation & Culture	3.4	39	39	8	12	13	18	6	6	12	3
Education	14.2	16	16	2	0	4	6	5	5	5	5
Miscellaneous	4.9	35	35	3	5	7	15	13	12	12	3
Overall	3.2	472	472	85	114	84	146	141	149	162	63

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 2015					
Top 15 Contributors		YoY Change		Weighted Contribution	
Items/ Contributors	Weights	Feb-14	Feb-15		
Ranked by Weighted Contribution					
1	House Rent	21.81	7.97	7.46	40.82
2	Milk Fresh	6.68	6.82	6.43	16.43
3	Education	3.94	8.12	14.20	15.39
4	Cigarette	1.39	16.20	20.39	10.28
5	Fresh Fruits	1.86	0.62	13.42	7.18
6	Cotton Cloth	1.73	13.10	12.25	6.39
7	Tomatoes	0.45	-40.10	57.80	4.61
8	Meat	2.43	6.33	4.92	4.56
9	Tailoring	0.88	13.53	10.95	3.79
10	Beverages	1.20	10.91	9.68	3.56
11	Household Servant	1.04	7.35	8.87	3.15
12	Electricity	4.40	15.82	1.79	2.93
13	Ready Made Food	1.23	12.56	5.53	2.59
14	Personal Care	1.49	7.53	5.31	2.53
15	Ready Made Garment	0.97	12.00	7.63	2.40
Total		51.52			126.60
Bottom 15 Contributors					
1	Motor Fuel	3.03	5.35	-24.11	-23.04
2	Wheat Flour	4.16	16.41	-6.93	-10.98
3	Onion	0.54	15.37	-30.65	-5.46
4	Chicken	1.36	5.49	-12.83	-5.45
5	Transport Services	2.70	3.67	-5.45	-5.02
6	Rice	1.58	6.96	-6.03	-3.02
7	Vegetable Ghee	2.07	0.60	-5.52	-2.96
8	Cooking Oil	1.75	0.33	-5.49	-2.55
9	Tea	0.84	5.42	-7.67	-2.47
10	Potatoes	0.48	35.38	-15.71	-2.38
11	Wheat	0.35	18.18	-11.96	-1.60
12	Fresh Vegetable	1.66	22.58	-1.33	-0.69
13	Wheat Product	0.10	17.67	-3.31	-0.12
14	Egg	0.46	14.57	-0.56	-0.09
15	Kerosene Oil	0.01	6.78	-29.69	-0.08
Total		21.08			-65.90

Table A3.1: Top and Bottom 15 Contributors to CPI Inflation (MoM) in February 2015

<u>Top 15 Contributors</u>		<u>MoM Change</u>		Weighted Contribution	
Items/ Contributors	Weights	Jan-15	Feb-15		
Ranked by Weighted Contribution					
1	Personal Equipments	0.84	0.09	1.28	1.58
2	Meat	2.43	0.03	0.39	1.27
3	Ready Made Food	1.23	0.13	0.54	0.89
4	Tea	0.84	0.11	0.75	0.74
5	Sugar	1.04	-1.53	0.67	0.74
6	Personal Care	1.49	0.19	0.32	0.54
7	Mechanical Service	0.46	0.00	0.82	0.43
8	Construction Wage Rate	0.33	0.78	1.07	0.41
9	Washing Soap & Detergent	0.79	0.03	0.38	0.36
10	Tailoring	0.88	0.81	0.25	0.33
11	Tomatoes	0.45	7.30	0.68	0.29
12	Spices	0.54	-0.08	0.33	0.23
13	Communication & Apparatus	3.15	0.01	0.09	0.19
14	Beverages	1.20	-0.18	0.14	0.18
15	Cosmetics	0.39	1.07	0.42	0.17
Total		16.07			8.35
<u>Bottom 15 Contributors</u>					
1	Chicken	1.36	5.00	-17.95	-27.30
2	Fresh Vegetable	1.66	-1.18	-11.40	-22.16
3	Motor Fuel	3.03	-4.01	-6.73	-17.63
4	Potatoes	0.48	-25.37	-17.00	-8.81
5	Egg	0.46	3.92	-13.86	-8.27
6	Transport Services	2.70	-1.56	-1.98	-5.93
7	Wheat Flour	4.16	-0.95	-0.99	-4.94
8	Fresh Fruits	1.86	-0.88	-2.09	-4.35
9	Rice	1.58	-1.97	-2.02	-3.27
10	Onion	0.54	1.18	-5.89	-2.61
11	Vegetable Ghee	2.07	-1.13	-1.37	-2.37
12	Cooking Oil	1.75	-2.27	-0.94	-1.41
13	Fish	0.30	1.04	-1.80	-0.66
14	Wheat Product	0.10	-0.52	-1.58	-0.18
15	Fire Wood Whole	0.23	2.99	-0.48	-0.17
Total		22.28			-110.06

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in February 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-14	Feb-15	
A. Ranked by Percentage Change					
1	Tomatoes	0.45	-40.10	57.80	4.61
2	Motor Vehicle Tax	0.11	0.00	36.71	1.01
3	Cigarette	1.39	16.20	20.39	10.28
4	Pulse Moong	0.23	18.15	19.65	1.96
5	Pulse Mash (Washed)	0.21	0.84	18.49	1.22
6	Education	3.94	8.12	14.20	15.39
7	Fresh Fruits	1.86	0.62	13.42	7.18
8	Cotton Cloth	1.73	13.10	12.25	6.39
9	Tailoring	0.88	13.53	10.95	3.79
10	Woolen Readymade Garments	0.40	12.96	10.25	1.45
11	Condiments	0.27	8.31	9.98	1.01
12	Honey	0.04	7.79	9.88	0.20
13	Beverages	1.20	10.91	9.68	3.56
14	Pulse Masoor	0.27	19.20	9.40	0.73
15	Dry Fruits	0.25	8.47	9.28	0.89
Total		13.25			59.67
B. Ranked by Weights					
1	House Rent	21.81	7.97	7.46	40.82
2	Milk Fresh	6.68	6.82	6.43	16.43
3	Electricity	4.40	15.82	1.79	2.93
4	Wheat Flour	4.16	16.41	-6.93	-10.98
5	Education	3.94	8.12	14.20	15.39
6	Communication & Apparatus	3.15	0.27	0.17	0.11
7	Motor Fuel	3.03	5.35	-24.11	-23.04
8	Transport Services	2.70	3.67	-5.45	-5.02
9	Meat	2.43	6.33	4.92	4.56
10	Vegetable Ghee	2.07	0.60	-5.52	-2.96
11	Fresh Fruits	1.86	0.62	13.42	7.18
12	Cooking Oil	1.75	0.33	-5.49	-2.55
13	Cotton Cloth	1.73	13.10	12.25	6.39
14	Fresh Vegetable	1.66	22.58	-1.33	-0.69
15	Rice	1.58	6.96	-6.03	-3.02
Total		62.97			45.56
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 3.2 percent in February, 2015.					

Table A3.3: Top Ten Contributors to CPI Food Inflation (YoY) in February 2015

Table 1: Top 10 Contributors to CPI Food Inflation (2014 and February 2015)					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-14	Feb-15	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	6.82	6.43	16.43
2	Cigarette	1.39	16.20	20.39	10.28
3	Fresh Fruits	1.86	0.62	13.42	7.18
4	Tomatoes	0.45	-40.10	57.80	4.61
5	Meat	2.43	6.33	4.92	4.56
6	Beverages	1.20	10.91	9.68	3.56
7	Ready Made Food	1.23	12.56	5.53	2.59
8	Pulse Moong	0.23	18.15	19.65	1.96
9	Sugar	1.04	-2.25	5.61	1.76
10	Spices	0.54	-9.51	7.53	1.46
Total		17.07			54.39
B. Ranked by Percentage Change					
1	Tomatoes	0.45	-40.10	57.80	4.61
2	Cigarette	1.39	16.20	20.39	10.28
3	Pulse Moong	0.23	18.15	19.65	1.96
4	Pulse Mash (Washed)	0.21	0.84	18.49	1.22
5	Fresh Fruits	1.86	0.62	13.42	7.18
6	Condiments	0.27	8.31	9.98	1.01
7	Honey	0.04	7.79	9.88	0.20
8	Beverages	1.20	10.91	9.68	3.56
9	Pulse Masoor	0.27	19.20	9.40	0.73
10	Dry Fruits	0.25	8.47	9.28	0.89
Total		6.18			31.63
C. Ranked by Weights					
1	Milk Fresh	6.68	6.82	6.43	16.43
2	Wheat Flour	4.16	16.41	-6.93	-10.98
3	Meat	2.43	6.33	4.92	4.56
4	Vegetable Ghee	2.07	0.60	-5.52	-2.96
5	Fresh Fruits	1.86	0.62	13.42	7.18
6	Cooking Oil	1.75	0.33	-5.49	-2.55
7	Fresh Vegetable	1.66	22.58	-1.33	-0.69
8	Rice	1.58	6.96	-6.03	-3.02
9	Cigarette	1.39	16.20	20.39	10.28
10	Chicken	1.36	5.49	-12.83	-5.45
Total		24.95			12.80
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 February, 2015.					

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in February 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Feb-14	Feb-15	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	7.97	7.46	40.82
2	Education	3.94	8.12	14.20	15.39
3	Cotton Cloth	1.73	13.10	12.25	6.39
4	Tailoring	0.88	13.53	10.95	3.79
5	Household Servant	1.04	7.35	8.87	3.15
6	Electricity	4.40	15.82	1.79	2.93
7	Personal Care	1.49	7.53	5.31	2.53
8	Ready Made Garment	0.97	12.00	7.63	2.40
9	Doctor (MBBS) Clinic Fee	0.59	12.76	7.75	1.65
10	Woolen Cloth	0.88	10.78	5.16	1.64
Total		37.75			80.69
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	36.71	1.01
2	Education	3.94	8.12	14.20	15.39
3	Cotton Cloth	1.73	13.10	12.25	6.39
4	Tailoring	0.88	13.53	10.95	3.79
5	Woolen Readymade Garments	0.40	12.96	10.25	1.45
6	Marriage Hall Charges	0.08	9.79	9.05	0.24
7	Household Servant	1.04	7.35	8.87	3.15
8	Construction Wage Rate	0.33	10.06	8.03	0.84
9	Hosiery	0.51	10.75	7.88	1.37
10	Doctor (MBBS) Clinic Fee	0.59	12.76	7.75	1.65
Total		9.61			35.29
C. Ranked by Weights					
1	House Rent	21.81	7.97	7.46	40.82
2	Electricity	4.40	15.82	1.79	2.93
3	Education	3.94	8.12	14.20	15.39
4	Communication & Apparatus	3.15	0.27	0.17	0.11
5	Motor Fuel	3.03	5.35	-24.11	-23.04
6	Transport Services	2.70	3.67	-5.45	-5.02
7	Cotton Cloth	1.73	13.10	12.25	6.39
8	Gas	1.58	0.86	0.00	0.00
9	Footwear	1.55	9.13	0.80	0.33
10	Personal Care	1.49	7.53	5.31	2.53
Total		45.39			40.44
Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI Non-food, which is 4.0 percent in February, 2015.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: February 2015

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	Peas, Onion, Potatoes, Ginger, Chicken Farm Broiler (Live), Wheat, Tea Lipton Yellow Label 200 Gm	Pulse Gram, Rusk (Papay), Saunf, Beef With Bone Av.Qlty., Custard Powder Rafhan 300, Groundnuts (With Shell)	Honey Langanese 500 Gm., Samosa (Vegetable), Pulse Masoor (Washed), Patties (Vegetables), Raisins Av.Qlty., Garlic, Chips	Tomatoes, Coriander Seed (Loose), Coconut Dry Av.Qlty., Salt Powdered (National/Shan), Malta/Mosambi, Pulse Moong (Washed), Almonds Whole Av.Qlty., Carrot, Cardamom Large Loose Av.Qlty, Pulse Mash (Washed)
Alcoholic Beverages & Tobacco			Betel Leaves	Cigarettes Morven Gold 20,S, Cigarettes Capstan 20,S, Cigarettes K-20,S, Betel Nuts, Cigarettes Gold Leaf 20,S
Clothing & Footwear	Gents Shoe, Art 1109 Servis, Child Shoe Power Lite Bata, Gents Shoes Paul Bata, Sports Shoes, Gents Spoung Chappal Bata	Heavy Wt Suiting Law.Pur Sup. Qlty, Dry Cleaning Suit Coat Pant, Pullover Ladies Oxford/Bon, Pullover Gents Oxford/Bon, Azarband Cotton Av.Qlty, Tailoring Shirt	Shirting Av. Qlty., Shoe Repair Half Sole, Chaddar (W/Wear) (2X2.5 Mtr), Long Cloth 57" Gul Ahmed/Al Karam, Handkerchief Av.Qlty Pak	Lawn Printed Gul Ahmed/Al Karam, Vest/Shameez (Women) Av.Qlty, Secondhand Sweater For Men, Tailoring Awami-Suit (Male), Gloves Av.Qlty, Tailoring Suit (Female), Frock W/Wear Girls
Housing, Water, Elect, Gas & other Fuels	Kerosene Oil, Bajree, Elect. Charges Upto 50 Units, Elect. Charges 01 - 100 Units, Gas Chrg Over 100 - 200 Mmbtu	Synthetic Enemal Robialac, Firewood Whole, Bricks (New) Ist Class, Iron Bar (M.S. Bar) 1/2", Elect. Charges 301 - 1000 Units	Mason (Raj) Wage Rate, Unskilled Labour Wage Rat, Cement Blocks (6"X8"X12"), Electrician Wage Rate(P/Pnt), Carpenter Wage Rate	
Furnishing & Household Equip. Maintenance etc	Electric Blub Energy Saver 14 Watt, Surf Excel 400 Gms Poly Bag	Hand Stitching Needle, Mattress Single(4"Thick), Gas Burner Double, Pressure Cooker 4 Ltr., Cleanser Powder Vim 1000 Gms	Chair Shesham Wood, Dining Table 6 Chairs, Thermos Starvac 1 Ltr, Marriage Hall Charges Without Refreshment	Boot Polish Cherry/Kiwi 50 ML, Finis 500 ML, Robin Blue (35 Gms)
Health	Flagyl Tab. 200 Mg., Betnovate-N Ointment 5 Gm, Calcium Syrup Sandoz, Burnol Cream 30 Gm, Lederplex Syrup	Thermometer China, ECG Charges, Galxos-D (450 Gm), Septran Tablets, Saniplast (1 Putty), Vicks Vaporub/ Balm, Polyfax Eye Ointment	Hydriyllin Syrup 120 ML, X-Ray (Chest) Charges, Urine Test (Dr) Charges, Doctor (Mbbs) Clinic Fee, Glycerin Small Bottle	Joulhar Joshanda, Amoxil Capsole 250 Mg., Renitec Tab. 5 Mg., Daonil Tab. 5 Mg., Betnesol Eye Drops, Calpol Syrup 60 ML
Transport	Petrol Super, High Speed Diesel HSD, Bus Fare Outside City (A/C), Bus Fare Min (Within City)	Tyre Car W/O Tube, Suzuki Fare Maximum Within City, Motor Cycle Service Charges, Tyre Car With Tube General, Bicycle With Tyres & Tube	Cycle Overhauling Charges, Tyre Puncture Charges, CNG, Car Service Charges	Car Tax For 800 CC To 1300 CC, Air Fare Economy Class
Communication	Postal Envelope Domestic, Mobile Cell Charges, Telephone Charges Local Call	Fax Charges (Local), Postal Envelope For Saudi Arabia, U.M.S. Reg Charges Min.	Internet Charges, Telephone Set Av. Qlty	T.C.S. Ch. Min. Within Zone
Recreation & Culture	Maths Book Cals V (T.B.Board), T.V. 20" Colored Sony, V.C.P. Panasonic/LG/National, Radio With C.Player National	Exercise Book Lined 80/10, Pen Ink Dollor 57 ML Bottle, Ball Pen (Local), Photostat Paper 70 Gm, Maths Book Ist. Year (T.B. Board), Tape Recorder Cassette (Blank)	Fountain Pen Hero/Wings/China, English Book Class V1, Paper Fool Scape (27"X17"), Pencil Goldfish/Deer, Urdu Book Class V (T.B.Board)	Maths Book Class IX or X, Urdu Book Class IX/X (T.B.Board), Weekly "Akhbar-e-Jahan"
Education		Govt. Engg. Coll. Fee Ist Year, Govt. Med. College Fee Coaching Fee For Class IX/ X, MBBS Ist Year, MBA Tuition Coaching Charges For Class XI/ XII Science Group	Govt. Med. College Fee Fee, I.T. Tuition Fees	Pvt School Fee Eng. Med (Class-V), Pvt School Fee Eng. Med (Class-I), Pvt School Fee Eng. Med (Class-X), Pvt School Fee Eng. Med (Class-VI), Pvt Med. College Fee MBBS (Ist Year)
Restaurant & Hotels		Bread Tandoori St. Size, Chicken Biryani Full/Double	Cooked Mutton (Av. Hotel), Tea Prepared (Ordinary), Cooked Beef (Av. Hotel)	
Miscellaneous	Silver Tezabi 24 Ct, Gold Tezabi 24 Ct, Toilet Soap Lifebuoy 140 Gms, Toilet Soap Lux 95 Gms	Trunk Medium Size, Toothpowder Dentonic 90 Gms, Shaving Cream Touch-Me/Admiral	Toothpaste Med Size Colgate 70Gms, Shaving Charges, Suitcase Rexin (24"X16"X6"), Haircut Charges For Men	Purse Ladies (Leather) Av. Qlty, Perfume Med. Size Medora/Broche, Artificial Jewellery Set

Table A5: City- wise CPI Inflation by Income Groups, February 2015

	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	-0.8	6.0	-1.3	3.9	-0.2	8.7	-0.7	6.8	-1.4	4.3	-0.1	9.5
2 Islamabad	-0.8	3.9	-1.4	2.9	-0.2	5.2	-0.8	4.3	-1.4	3.3	-0.2	5.4
3 Lahore	-1.2	5.7	-2.2	5.2	0.2	6.3	-1.2	5.8	-2.2	5.7	0.1	5.9
4 Gujranwala	-1.1	3.8	-1.9	3.4	-0.1	4.3	-1.2	3.6	-2.0	3.6	-0.3	3.6
5 Sialkot	-1.2	2.8	-2.2	1.3	0.1	4.7	-1.4	2.4	-2.7	1.2	0.0	3.8
6 Faisalabad	-0.9	3.8	-1.7	1.4	0.0	6.8	-1.0	3.9	-1.9	2.0	-0.1	5.9
7 Multan	-1.0	2.8	-1.6	2.4	-0.2	3.3	-1.1	2.9	-1.8	2.9	-0.3	2.9
8 Sargodha	-2.1	0.9	-3.8	-2.6	-0.4	4.8	-2.1	1.1	-3.7	-2.5	-0.6	4.6
9 Bahawalpur	-1.0	2.2	-1.9	-0.2	-0.1	4.9	-1.1	1.8	-2.0	0.0	-0.2	3.6
10 Karachi	-0.6	2.2	-1.1	-1.8	0.2	7.8	-0.5	2.7	-1.0	-0.6	0.2	6.8
11 Hyderabad	-0.7	1.3	-1.2	0.7	0.0	2.1	-0.7	1.6	-1.2	1.3	0.0	2.0
12 Sukkur	-1.7	0.2	-2.9	-3.4	-0.3	4.8	-1.7	0.7	-3.0	-2.7	-0.4	4.4
13 Larkana	-0.6	0.9	-1.1	-0.9	-0.1	3.0	-0.7	1.6	-1.3	-0.1	-0.1	3.3
14 Peshawar	-0.7	3.7	-1.3	1.4	-0.1	6.4	-0.8	4.0	-1.5	1.6	-0.2	6.5
15 Bannu	-1.0	4.0	-1.2	3.3	-0.8	4.8	-1.1	3.9	-1.3	3.4	-1.0	4.4
16 Quetta	-0.4	0.5	-0.6	-0.3	0.0	1.5	-0.3	0.7	-0.5	0.4	-0.1	1.0
17 Khuzdar	0.0	4.0	0.1	5.9	0.0	1.7	-0.2	3.6	0.0	6.1	-0.3	0.9
	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	-0.9	6.9	-1.6	4.5	-0.3	9.3	-0.9	6.8	-1.7	5.0	-0.4	8.2
2 Islamabad	-0.9	4.3	-1.5	3.7	-0.4	4.9	-0.9	4.5	-1.5	4.3	-0.4	4.7
3 Lahore	-1.3	6.0	-2.2	6.4	-0.2	5.5	-1.2	5.5	-2.3	7.0	-0.2	4.1
4 Gujranwala	-1.3	3.6	-1.9	4.2	-0.6	3.1	-1.3	3.1	-2.1	4.3	-0.7	2.1
5 Sialkot	-2.0	2.2	-3.4	1.2	-0.5	3.2	-1.9	2.2	-3.4	2.0	-0.5	2.4
6 Faisalabad	-1.1	4.3	-1.9	2.6	-0.3	6.1	-1.1	4.0	-1.9	3.4	-0.3	4.5
7 Multan	-1.2	3.1	-1.9	3.4	-0.5	2.9	-1.3	3.0	-2.2	3.7	-0.5	2.4
8 Sargodha	-2.2	0.9	-3.6	-2.2	-1.0	3.7	-2.2	0.9	-3.6	-1.7	-1.2	2.9
9 Bahawalpur	-1.2	2.1	-2.1	0.4	-0.4	3.6	-1.1	1.9	-2.2	1.0	-0.2	2.5
10 Karachi	-0.5	3.2	-1.1	0.2	0.1	6.4	-0.5	3.3	-1.1	0.9	0.1	5.4
11 Hyderabad	-0.8	1.5	-1.3	1.9	-0.2	1.2	-0.8	1.6	-1.3	2.8	-0.2	0.5
12 Sukkur	-1.9	0.7	-3.3	-2.4	-0.6	3.7	-1.8	0.5	-3.2	-1.7	-0.7	2.4
13 Larkana	-0.7	2.0	-1.2	0.4	-0.2	3.4	-0.7	2.5	-1.3	0.9	-0.2	3.8
14 Peshawar	-0.8	4.3	-1.7	1.6	-0.1	6.8	-0.9	4.9	-1.9	2.4	-0.1	6.9
15 Bannu	-1.3	4.1	-1.5	3.4	-1.0	4.8	-1.2	4.5	-1.5	3.9	-0.9	5.0
16 Quetta	-0.5	0.5	-0.7	0.8	-0.3	0.2	-0.5	0.8	-0.9	1.5	-0.3	0.2
17 Khuzdar	-0.3	3.1	-0.2	6.5	-0.5	-0.4	-0.3	3.5	-0.2	7.5	-0.3	0.2
	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	-0.7	7.9	-1.6	5.5	-0.3	9.0	-0.8	7.5	-1.6	5.2	-0.2	9.0
2 Islamabad	-0.4	6.2	-1.0	5.5	-0.1	6.6	-0.5	6.0	-1.1	5.2	0.0	6.6
3 Lahore	-1.0	5.9	-2.4	7.5	-0.2	4.9	-1.1	5.8	-2.3	6.9	-0.1	4.8
4 Gujranwala	-1.2	3.1	-2.1	4.7	-0.7	2.3	-1.2	3.3	-2.0	4.2	-0.6	2.6
5 Sialkot	-1.8	1.8	-3.6	1.8	-0.8	1.8	-1.8	2.1	-3.3	1.7	-0.6	2.4
6 Faisalabad	-0.9	4.0	-2.0	4.1	-0.4	4.0	-1.0	4.0	-1.9	3.0	-0.4	4.7
7 Multan	-1.2	2.9	-2.3	4.3	-0.7	2.3	-1.2	2.9	-2.1	3.6	-0.6	2.5
8 Sargodha	-1.8	1.5	-3.5	-0.7	-1.1	2.4	-2.0	1.1	-3.6	-1.8	-1.1	2.9
9 Bahawalpur	-0.9	2.5	-2.5	0.9	-0.3	3.3	-1.0	2.2	-2.1	0.6	-0.3	3.2
10 Karachi	-0.5	4.9	-1.1	2.8	-0.1	5.9	-0.5	4.2	-1.2	1.5	0.0	6.1
11 Hyderabad	-0.9	1.5	-1.7	3.8	-0.5	0.3	-0.8	1.5	-1.4	2.6	-0.3	0.7
12 Sukkur	-1.5	1.1	-2.9	-1.0	-0.8	2.1	-1.7	0.7	-3.1	-2.0	-0.8	2.6
13 Larkana	-0.7	3.4	-1.4	1.4	-0.4	4.3	-0.7	2.1	-1.3	0.4	-0.3	3.2
14 Peshawar	-0.8	5.2	-2.4	2.8	0.0	6.4	-0.8	4.7	-1.9	2.1	-0.1	6.4
15 Bannu	-1.1	3.0	-1.6	4.1	-0.8	2.5	-1.1	3.9	-1.4	3.6	-1.0	4.1
16 Quetta	-0.6	1.0	-1.1	1.8	-0.3	0.6	-0.5	0.8	-0.8	1.1	-0.3	0.5
17 Khuzdar	-0.1	3.0	0.0	8.9	-0.2	0.1	-0.2	3.5	-0.1	7.2	-0.2	1.0

Table A6: City- wise CPI Inflation (YoY) February, 2015

City	High inflation cities			City	Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Rawalpindi	7.5	5.2	9.0	Multan	2.9	3.6	2.5
Nawabshah	6.3	-0.1	10.5	Wazirabad	2.9	2.5	3.1
Islamabad	6.0	5.2	6.6	Muzaffargarh	2.7	2.7	2.7
Lahore	5.8	6.9	4.8	Dadu	2.5	2.2	2.7
Sahiwal	4.8	1.1	7.2	Vehari	2.5	2.6	2.4
Mardan	4.7	0.2	7.3	Jehlum	2.5	2.1	2.8
Peshawar	4.7	2.1	6.4	Mingora	2.2	0.8	3.1
D.G. Khan	4.4	2.6	5.7	Bahawalpur	2.2	0.6	3.2
Karachi	4.2	1.5	6.1	Rahim Yar Khan	2.2	0.8	3.1
Abbotabad	4.1	4.2	4.0	D.I.Khan	2.1	2.8	1.6
Faisalabad	4.0	3.0	4.7	Sialkot	2.1	1.7	2.4
Bannu	3.9	3.6	4.1	Larkana	2.1	0.4	3.2
Khuzdar	3.5	7.2	1.0	Mianwali	2.0	-0.9	3.9
Gujranwala	3.3	4.2	2.6	Attock	2.0	0.5	3.1
				Loralai&Cantt	1.6	-0.6	3.0
				Hyderabad	1.5	2.6	0.7
				Sargodha	1.1	-1.8	2.9
				Turbat	1.0	1.5	0.7
				Mithi	0.9	-0.1	1.6
				Gawadar	0.9	0.5	1.2
				Mir Pur Khas	0.9	0.0	1.5
				Bahawalnagar	0.8	0.3	1.2
				Quetta	0.8	1.1	0.5
				Jhang	0.7	-0.6	1.6
				Sukkur	0.7	-2.0	2.6
				Dera Mrd.Jamali	0.4	-3.2	3.0

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

Table A7: Income Group-wise Inflation (percent)						
	MoM			YoY		
	Feb-14	Jan-15	Feb-15	Feb-14	Jan-15	Feb-15
<u>Up to Rs. 8000</u>						
General	-0.3	-0.1	-1.0	7.6	3.2	2.5
Food	-0.8	-0.8	-1.7	7.7	1.5	0.5
Non-food	0.2	0.8	-0.1	7.5	5.4	5.0
<u>Rs. 8001- 12000</u>						
General	-0.4	-0.1	-1.0	7.4	3.4	2.7
Food	-0.8	-0.7	-1.8	7.5	2.0	1.1
Non-food	0.2	0.7	-0.2	7.2	5.0	4.6
<u>Rs. 12001- 18000</u>						
General	-0.4	0.0	-1.0	8.4	3.6	3.0
Food	-0.9	-0.6	-1.8	7.5	2.5	1.6
Non-food	0.2	0.5	-0.3	9.3	4.8	4.3
<u>Rs. 18001- 35000</u>						
General	-0.4	0.0	-1.0	8.4	3.7	3.0
Food	-1.0	-0.5	-1.9	7.5	3.0	2.1
Non-food	0.2	0.4	-0.3	9.1	4.3	3.8
<u>Above Rs. 35000</u>						
General	-0.3	0.2	-0.8	7.7	4.2	3.6
Food	-1.1	-0.2	-1.8	7.6	3.8	3.0
Non-food	0.2	0.4	-0.3	7.8	4.4	3.9
<u>All income groups</u>						
General	-0.3	0.1	-0.9	7.9	3.9	3.2
Food	-1.0	-0.5	-1.8	7.6	3.0	2.1
Non-food	0.2	0.5	-0.3	8.2	4.5	4.0

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Feb-15	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	349.1	-12.7	-0.2
2	Wheat Flour Bag	10Kg.	391.6	-8.5	-0.6
3	Rice Basmati Broken	Kg.	71.6	-3.0	-1.0
4	Rice Irri-6	Kg.	50.8	-6.5	-1.3
5	Bread Plain Med. Size (340-400 Gm.)	Each	40.8	1.2	0.0
6	Beef	Kg.	302.7	5.4	0.0
7	Mutton	Kg.	593.8	5.0	0.1
8	Chicken Live (Farm)	Kg.	131.4	-19.1	-18.9
9	Milk Fresh	Litr	76.4	10.2	0.2
10	Curd	Kg.	89.7	9.9	0.0
11	Milk Powdered Nido	500G	352.7	8.6	0.8
12	Egg Hen (Farm)	Doz.	97.5	-8.6	-17.0
13	Mustard Oil	Kg.	183.3	-1.6	-0.7
14	Cooking Oil (Tin)	2.5Ltr	506.5	-6.1	-1.3
15	Veg. Ghee (Tin)	2.5Kg.	493.5	-4.0	-1.0
16	Veg. Ghee Loose	Kg.	149.2	-7.9	-1.4
17	Bananas	Doz.	66.3	11.4	8.6
18	Masoor Pulse Washed	Kg.	138.2	9.1	-0.4
19	Moong Pulse Washed	Kg.	168.4	19.8	1.3
20	Mash Pulse Washed	Kg.	162.7	20.9	0.4
21	Gram Pulse Washed	Kg.	79.1	2.8	-0.2
22	Potatoes	Kg.	25.0	-15.7	-16.2
23	Onions	Kg.	23.9	-29.2	-0.5
24	Tomatoes	Kg.	53.1	44.7	-2.6
25	Sugar	Kg.	54.2	5.8	0.6
26	Gur	Kg.	81.8	4.8	0.4
27	Salt Powdered Loose (Lahori)	Kg.	10.0	6.6	0.0
28	Red Chilies Powder Loose	Kg.	264.8	19.5	-0.4
29	Garlic	Kg.	147.3	10.3	-1.0
30	Tea (Yellow Label)	200Gm.	134.2	-8.9	4.0
31	Cooked Beef Plate	Each	83.1	4.5	0.0
32	Cooked Dal Plate	Each	48.9	6.1	0.0
33	Tea Prepared (Sada)	Cup	18.9	10.6	0.9
34	Cigarettes K-2 (20'S)	20'S	45.4	17.5	0.0
35	Long Cloth (Coarse Latha)	Mtr.	199.5	14.5	0.0
36	Shirting	Mtr.	158.1	8.5	0.8
37	Lawn	Mtr.	239.2	25.0	0.0
38	Georgette (Voil Printed)	Mtr.	123.1	10.9	0.0
39	Sandal Gents Bata	Pair	699.0	0.0	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	84.7	-33.1	-9.9
45	Firewood	40Kg	577.2	3.6	0.3
46	Energy Savor 14 Watts	Each	165.5	1.1	0.0
47	Washing Soap (200-250 Gm.)	Cake	24.4	3.0	0.0
48	Match Box	Each	1.7	16.0	0.0
49	Petrol	Litr	71.2	-37.6	-9.9
50	Diesel	Litr	81.5	-30.9	-6.3
51	L.P.G.(11 Kg Cylinder.)	Each	1219.6	-15.4	-21.9
52	Tele. Local Call	Call	3.9	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	36.0	0.0	0.0
Maximum				44.7	8.6
Median				2.8	0.0
Minimum				-37.6	-21.9

Table A9: Distribution of Price Changes (YoY) - WPI Items: February 2015				
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	Edible Roots/Potatoes, Fibre Crops, Stimulant and Spice Crops, Poultry, Wheat, Rice, Millet/Bajra, Other Oil Seeds, Vegetables, Eggs	Sorghum/Jowar	Cotton Seeds, Hides and Fur Skins-Raw, Fuel Wood in Logs, Sugar Crops, Maize	Fish Live Fresh or Chilled, Unmanufactured Tobacco, Raw Animal Material/Wool, Pulses, Milk from Bovine Animals, Dry Fruits, Fresh Fruits
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, Cotton Yarn, Nylon Yarn, Coffee and Tea, Vegetable Ghee, Blended Yarn, Wheat Flour, Other Food Products, Vegetable Oil Refined, Spices, Footwear, Sugar Confectionary, Chocolate	Ice Cream, Other Cereal Flour, Dried Fruits & Nuts, Fruit Juices, Mineral Water, Vegetables & Fruit Juices, Oil Cakes	Dairy Products N.E.C, Synthetic Carpets, Meat of Animals, Blankets, Bed Sheets, Cotton Fabrics, Sugar Refined, Milk and Cream in Solid Form	Leather without Hairs, Ready Made Garments, Tobacco Products, Processed Liquid Milk, Other Fabrics, Woolen Carpets, Quilts, Woven Fabrics, Towels, Beverages, Silk and Rayon Fabrics, Hosiery Products
Other Transportable Goods except Metal Products, Machinery and Equipments	Furnace Oil, Kerosene Oil, Motor Sprit, Diesel Oil, Hard Board, Soaps & Detergent, Insecticides, Printing Paper, Coke, Matches	Bed Foams, Mobil Oil, Medicines, Auto Tyres, Fertilizers, Cement	Plastic Products, Paints & Varnishes, Bricks Blocks and Tiles,	Dying Materials, Pesticides, Timber, Chemicals, Other Glass Articles, Ceramics and Sanitary, Glass Sheets
Metal Product Machinery & Equipment	Pig Iron, Engines and Motors, Vacuum Pumps, Concrete Mixer, Radio and Television, Cultivators, Lathe Machines	Lighting Equipments, Refrige,Wash& Sew Mach,Iron,Fan, Chuff Cutter, Steel Products, Motor Cycles, Steel Bars & Sheets, Bicycles, Motor Vehicles	Air Conditioners, Electrical Wires	Pipe Fittings, Tractors

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

Items and specification	Weights	Index		
		Feb-14	Jan-15	Feb-15
General	100.00	189.00	196.95	195.13
Food & Non-Alcoholic Beverages.	34.83	207.34	214.11	209.81
1 Wheat	0.35	235.76	207.59	207.57
2 Wheat Flour	4.16	233.21	219.21	217.05
3 Wheat Product	0.10	222.86	218.94	215.48
4 Besan	0.15	174.67	177.30	178.51
5 Rice	1.58	194.21	186.26	182.50
6 Cereals	0.16	232.00	239.85	239.75
7 Bakery & Confectionary	1.16	200.07	206.87	206.90
8 Nimco	0.46	222.25	238.64	238.91
9 Meat	2.43	233.63	244.17	245.12
10 Chicken	1.36	191.66	203.62	167.07
11 Fish	0.30	212.60	224.92	220.88
12 Milk Fresh	6.68	234.51	249.59	249.59
13 Milk Product	0.63	228.79	242.72	242.74
14 Milk Powder	0.11	206.77	224.95	225.79
15 Egg	0.46	206.65	238.54	205.49
16 Mustard Oil	0.10	159.46	158.89	157.49
17 Cooking Oil	1.75	162.25	154.81	153.35
18 Vegetable Ghee	2.07	158.45	151.78	149.70
19 Dry Fruits	0.25	231.00	252.91	252.44
20 Fresh Fruits	1.86	175.77	203.61	199.36
21 Pulse Masoor	0.27	174.73	190.88	191.16
22 Pulse Moong	0.23	262.23	312.54	313.75
23 Pulse Mash (Washed)	0.21	192.61	226.86	228.22
24 Pulse Gram	0.24	170.92	179.94	179.36
25 Gram Whole	0.16	178.96	181.39	180.95
26 Beans	0.03	246.35	237.78	236.81
27 Potatoes	0.48	194.45	197.47	163.90
28 Onion	0.54	201.79	148.71	139.95
29 Tomatoes	0.45	108.68	170.34	171.50
30 Fresh Vegetable	1.66	191.66	213.45	189.11
31 Sugar	1.04	184.62	193.68	194.97
32 Gur	0.02	240.68	254.72	253.51
33 Honey	0.04	276.11	302.61	303.39
34 Sweet Meet	0.25	224.53	233.27	233.47
35 Beverages	1.20	188.24	206.18	206.46
36 Jam, Tomato Ketchup & Pickle	0.25	191.94	204.39	205.02
37 Condiments	0.27	232.66	255.21	255.89
38 Spices	0.54	218.41	234.07	234.85
39 Tea	0.84	235.26	215.61	217.22
Alcoholic Beverages, Tobacco	1.41	221.77	266.62	266.63
40 Cigarette	1.39	222.30	267.63	267.63
41 Betel Leaves & Nuts	0.02	189.48	205.14	206.10
Clothing & Footwear	7.57	199.16	214.32	214.49
42 Cotton Cloth	1.73	185.04	207.71	207.71
43 Woolen Cloth	0.88	221.76	232.93	233.21
44 Ready Made Garment	0.97	198.34	213.31	213.47
45 Woolen Readymade Garments	0.40	218.53	240.56	240.93
46 Hosiery	0.51	209.41	225.79	225.91
47 Dopatta	0.44	216.55	231.18	231.18
48 Cleaning & Laundering	0.21	221.48	236.18	236.38

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Feb-14	Jan-15	Feb-15
49 Tailoring	0.88	239.91	265.50	266.17
50 Footwear	1.55	163.10	164.37	164.41
Housing,Water,Elect,Gas & Other Fuel	29.41	166.96	176.51	176.51
51 House Rent	21.81	153.82	165.29	165.29
52 Construction Input Item	0.56	226.50	237.26	236.82
53 Construction Wage Rate	0.33	193.28	206.59	208.81
54 Water Supply	0.50	149.57	149.92	149.92
55 Electricity	4.40	227.44	231.52	231.52
56 Gas	1.58	143.81	143.81	143.81
57 Kerosene Oil	0.01	294.98	226.23	207.40
58 Fire Wood Whole	0.23	266.95	277.90	276.56
Furnished H.Hold Equip.& Maint. Etc	4.21	197.91	209.37	209.72
59 Furniture	0.33	189.87	201.28	202.10
60 Household Textile	0.65	196.78	207.52	207.67
61 Household Equipment	0.59	166.76	172.44	172.53
62 Utensils	0.32	199.46	211.44	212.31
63 Plastic Products	0.25	191.61	200.86	201.01
64 Washing Soap & Detergent	0.79	215.60	223.21	224.05
65 Sewing Needle & Dry Cell	0.15	176.33	183.97	184.21
66 Household Servant	1.04	208.60	227.11	227.11
67 Marriage Hall Charges	0.08	212.59	231.30	231.83
Health	2.19	167.50	176.97	177.16
68 Drug Medicine	1.27	142.28	148.00	148.15
69 Medical Equipment	0.01	210.38	222.46	222.66
70 Doctor (MBBS) Clinic Fee	0.59	221.33	238.49	238.49
71 Medical Test	0.32	166.95	177.02	177.69
Transport	7.20	197.33	181.22	175.39
72 Motor Vehicle	0.66	162.60	163.77	163.87
73 Motor Vehicle Accessories	0.24	223.06	230.17	230.17
74 Motor Fuel	3.03	193.53	157.47	146.87
75 Mechanical Service	0.46	201.06	210.62	212.34
76 Motor Vehicle Tax	0.11	153.74	210.18	210.18
77 Transport Services	2.70	208.93	201.54	197.55
Communication	3.22	129.82	130.13	130.27
78 Postal Services	0.07	215.89	226.10	227.44
79 Communication & Apparatus	3.15	128.01	128.12	128.23
Recreation & Culture	2.02	183.42	189.63	189.67
80 Recreation & Culture	0.86	126.96	128.06	128.09
81 Text Books	0.57	267.10	280.89	280.89
82 News Papers	0.19	172.95	175.42	175.42
83 Stationery	0.40	191.07	199.33	199.45
Education	3.94	168.48	192.41	192.41
84 Education	3.94	168.48	192.41	192.41
Restaurants And Hotels	1.23	233.32	244.90	246.22
85 Ready Made Food	1.23	233.32	244.90	246.22
Miscellaneous Goods And Services	2.76	212.47	221.30	222.81
86 Personal Care	1.49	195.35	205.06	205.72
87 Cosmetics	0.39	178.00	189.35	190.14
88 Blades	0.03	182.25	185.62	185.88
89 Personal Equipments	0.84	259.66	265.97	269.38

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

Items and Specifications	Index		
	Feb-14	Jan-15	Feb-15
General	210.94	206.11	203.86
Agriculture Forestry & Fishery	214.62	214.90	212.19
1 Wheat	246.93	210.71	210.66
2 Maize	178.62	186.33	189.01
3 Rice	177.64	168.68	166.83
4 Sorghum/Jowar	277.39	287.71	289.98
5 Millet/Bajra	171.25	162.43	162.93
6 Vegetables	183.62	199.24	180.66
7 Fresh Fruits	195.94	211.03	217.00
8 Dry Fruits	205.28	227.77	229.16
9 Cotton Seeds	191.11	199.35	208.28
10 Other Oil Seeds	183.54	186.61	177.61
11 Edible Roots/ Potatoes	227.80	199.26	161.82
12 Stimulant And Spice Crops	343.03	301.52	281.50
13 Pulses	189.21	212.26	212.31
14 Sugar Crops	267.92	287.55	287.55
15 Fibre Crops	224.80	161.74	161.34
16 Unmanufactured Tobacco	189.53	217.23	217.23
17 Poultry	193.61	209.94	163.19
18 Milk From Bovine Animals	224.56	251.69	251.69
19 Eggs	207.17	245.22	205.24
20 Raw Animal Material/Wool	158.40	181.52	178.52
21 Hides And Fur Skins, Raw	146.68	162.19	159.76
22 Fuel Wood In Logs	241.73	256.69	259.53
23 Fishes Live Fresh Or Chilled	244.62	288.90	288.48
Ores/Minerals, Gas & Elect.	243.36	248.30	246.75
24 Coal Not Agglomerated	223.53	223.53	223.53
25 Natural Gas Liquefied	203.90	206.29	203.03
26 Salt & Pure Sodium Chloride	231.42	247.16	247.16
27 Electrical Energy	287.44	295.61	295.61
Food, Beverages, Tobacco, Textiles	201.73	204.71	205.53
28 Meat Of Animals	240.41	257.79	259.95
29 Vegetables & Fruit Juices	193.91	198.31	198.31
30 Dried Fruits & Nuts	218.89	232.57	228.83
31 Fruit Juices	166.02	172.22	173.27
32 Vegetable Oil Refined	161.68	159.94	158.19
33 Vegetable Ghee	140.94	130.81	129.25
34 Oil Cakes	193.86	198.84	197.37
35 Processed Liquid Milk	210.94	245.21	252.28
36 Milk And Cream In Solid Form	207.03	222.86	220.24
37 Ice Cream	209.79	219.91	219.91
38 Dairy Products N.E.C	218.81	238.90	239.22
39 Wheat Flour	214.84	200.35	198.41
40 Other Cereal Flour	141.77	148.21	148.22
41 Sugar Refined	192.80	206.01	205.44
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	102.28	102.28	102.28
44 Coffee And Tea	213.04	189.39	194.48
45 Spices	191.33	189.65	189.66
46 Other Food Products	308.48	298.01	298.34
47 Mineral Water	181.84	187.86	187.86
48 Beverages	152.12	171.52	171.52
49 Tobacco Products	242.41	290.52	290.52
50 Cotton Yarn	218.02	172.44	171.00
51 Nylon Yarn	179.07	156.04	154.23
52 Blended Yarn	201.29	190.28	185.12
53 Woven Fabrics	226.82	258.39	258.39
54 Cotton Fabrics	187.77	200.51	200.51
55 Other Fabrics	179.06	207.48	209.87

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities				
		Index		
Items and Specifications		Feb-14	Jan-15	Feb-15
56 Silk And Rayon Fabrics		161.09	177.28	179.89
57 Towels		234.25	265.62	265.62
58 Blankets		219.66	235.86	235.86
59 Bed Sheets		236.05	253.21	253.21
60 Quilts		172.42	196.84	196.84
61 Woolen Carpets		113.69	132.14	132.14
62 Synthetic Carpets		116.10	126.27	126.27
63 Hosiery Products		195.18	215.35	216.06
64 Ready Made Garments		153.12	186.77	186.77
65 Leather With Out Hairs		167.71	215.02	215.02
66 Other Leather N.E.C		370.13	215.39	213.42
67 Footwear's		134.22	134.22	134.22
Other Transportable Goods		218.22	187.85	180.79
68 Timber		174.55	202.05	202.05
69 Printing Paper		169.75	169.34	167.70
70 Hard Board		229.17	229.17	221.35
71 Coke		163.45	163.45	163.45
72 Motor Sprit		190.50	132.22	118.71
73 Diesel Oil		279.46	195.49	175.03
74 Kerosene Oil		288.01	209.53	178.93
75 Furnace Oil		182.18	101.36	95.56
76 Mobil Oil		193.09	201.53	201.53
77 Chemicals		171.72	199.84	197.65
78 Dying Materials		107.55	145.16	146.55
79 Fertilizers		267.25	274.54	275.65
80 Pesticides		225.62	290.15	290.39
81 Insecticides		136.69	149.54	134.91
82 Paints & Varnishes		268.31	288.63	288.63
83 Medicines		139.69	145.19	145.19
84 Soaps & Detergent		181.22	178.31	178.31
85 Auto Tyres		185.73	192.43	192.43
86 Plastic Products		202.33	221.88	222.47
87 Glass Sheets		207.75	226.39	228.76
88 Other Glass Articles		214.09	242.20	242.89
89 Ceramics And Sanitary		192.64	216.53	216.99
90 Bricks Blocks And Tiles		195.96	204.99	206.92
91 Cement		207.30	208.27	207.84
92 Bed Foams		149.67	156.67	156.67
93 Matches		143.20	143.20	143.20
Metal Product Machinery & Equip		169.45	173.68	173.23
94 Pig Iron		128.97	128.97	128.97
95 Steel Bars & Sheets		139.12	144.48	141.59
96 Pipe Fittings		168.33	191.94	191.94
97 Steel Products		170.19	173.80	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	196.18
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		208.81	208.81	208.81
105 Concrete Mixer		138.83	138.83	138.83
106 Refrige,Wash& Sew Mach, Iron,Fan		192.33	198.06	198.16
107 Electrical Wires		178.73	190.43	190.87
108 Lighting Equipments		162.86	168.19	168.19
109 Radio And Television		126.49	126.49	126.49
110 Motor Vehicles		182.16	183.03	183.03
111 Motor Cycles		125.69	128.20	128.20
112 Bicycles		182.84	185.63	185.63

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	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	205.11	216.67
	Nov	198.79	222.74	184.44	212.26	227.29	202.73	214.45
	Dec	196.79	218.08	184.03	208.25	223.48	198.59	211.76
2015	Jan	196.95	217.10	184.87	206.11	223.48	195.09	209.89
	Feb	195.13	213.15	184.33	203.86	222.26	192.19	206.98

*: all groups combined

Table A13: International Commodity Prices/ Indices				
	Nov-14	Dec-14	Jan-15	Feb-15
Energy				
Crude Oil (US\$ per barrel) *	77.0	60.6	47.5	54.9
IMF Energy Index (2005 = 100)	145.3	119.2	96.9	108.8
WB Energy Index (2010 = 100) @	96.4	78.6	63.0	70.4
Food				
Rice (\$/MT)	419.0	410.7	409.7	409.5
Wheat (\$/MT)	258.7	269.6	248.5	237.2
Sugar (US cent/ pound)	15.9	15.0	15.1	14.5
Palm Oil (\$/MT)	662.4	624.5	641.6	634.4
Soybean Oil (\$/MT)	721.4	705.6	707.9	697.9
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	67.5	68.3	67.4	69.8
IMF Metal Price Index (2005 = 100)	156.4	148.7	140.3	137.3
Copper (\$/MT)	6,712.9	6,446.5	5,830.5	5,729.3
Aluminum (\$/MT)	2,055.6	1,909.5	1,814.7	1,817.8
Iron Ore (\$ cents/dry MT)	73.1	68.8	67.4	62.7
Tin (\$/MT)	20,033.5	19,829.7	19,454.1	18,233.9
Nickle (\$/MT)	15,807.1	15,962.0	14,849.2	14,573.8
Zinc (\$/MT)	2,253.2	2,175.8	2,113.0	2,097.8
Lead (\$/MT)	2,030.2	1,938.1	1,843.1	1,795.7
Uranium (\$/MT)	40.5	37.2	36.0	38.1
DAP (\$/MT)	452.8	459.6	484.3	485.3
Urea (\$/MT)	311.3	312.4	319.2	297.0
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	196.79
Jan	162.58	175.70	189.60	196.95
Feb	163.07	175.11	189.00	195.13
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	154.34	169.09	182.67	197.35
Aug	155.74	169.78	184.23	197.15
Sep	157.33	171.17	183.79	197.87
Oct	159.26	171.47	187.05	197.93
Nov	160.31	171.38	189.99	197.57
Dec	160.96	173.76	189.70	197.82
Jan	162.92	176.05	189.97	197.32
Feb	164.69	176.90	190.98	197.19
Mar	166.18	177.15	192.30	
Apr	168.05	177.76	194.09	
May	170.67	179.49	194.49	
Jun	170.71	180.76	195.64	

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	218.08
Jan	181.90	196.58	210.81	217.10
Feb	180.69	194.05	208.74	213.15
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	173.93	189.57	206.73	221.07
Aug	174.55	189.31	208.67	220.26
Sep	177.09	190.45	205.42	220.12
Oct	179.73	190.22	208.95	219.91
Nov	180.65	190.15	214.81	219.38
Dec	180.67	194.59	212.62	219.78
Jan	182.91	197.67	212.00	218.33
Feb	184.67	198.45	213.59	218.18
Mar	185.96	197.79	216.14	
Apr	188.12	198.41	218.08	
May	189.57	202.10	217.09	
Jun	189.42	204.41	219.45	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.24	100.28	100.50	100.36	100.35
Aug	100.73	100.77	100.80	100.79	100.77
Sep	100.74	100.74	100.76	100.77	100.75
Oct	100.96	100.95	100.95	100.95	100.95
Nov	100.58	100.61	100.64	100.62	100.61
Dec	99.48	99.46	99.46	99.48	99.47
Jan	99.79	99.80	99.81	99.81	99.80
Feb	99.02	98.99	98.96	98.96	98.98
Mar	99.28	99.25	99.23		99.25
Apr	99.97	99.99	99.98		99.98
May	99.57	99.53	99.52		99.54
Jun	99.58	99.55	99.54		99.56

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.50	100.61	100.71	100.78	100.65
Aug	101.59	101.67	101.73	101.72	101.68
Sep	101.73	101.76	101.78	101.82	101.77
Oct	101.86	101.81	101.75	101.74	101.79
Nov	101.45	101.51	101.56	101.53	101.51
Dec	99.19	99.17	99.19	99.23	99.19
Jan	99.45	99.45	99.44	99.44	99.44
Feb	97.85	97.79	97.73	97.69	97.76
Mar	98.66	98.62	98.60		98.62
Apr	99.63	99.66	99.66		99.65
May	99.04	98.96	98.93		98.98
Jun	98.91	98.88	98.88		98.89

Table 18: CPI Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY12	FY13	FY14	FY15
Jul	1.27	-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	-1.01
Jan	1.54	1.67	0.49	0.08
Feb	0.30	-0.34	-0.32	-0.92
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	0.62	-0.95	1.06	0.87
Aug	0.91	0.41	0.86	-0.10
Sep	1.02	0.82	-0.24	0.37
Oct	1.23	0.18	1.78	0.03
Nov	0.66	-0.05	1.57	-0.18
Dec	0.40	1.39	-0.15	0.13
Jan	1.22	1.32	0.14	-0.25
Feb	1.09	0.48	0.53	-0.07
Mar	0.90	0.14	0.69	
Apr	1.13	0.34	0.93	
May	1.55	0.97	0.20	
Jun	0.02	0.71	0.59	

Table 19: CPI Food Month-on-Month % Change Original & Seasonally Adjusted				
Original Series				
Period	FY12	FY13	FY14	FY15
Jul	2.90	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	-2.09
Jan	1.50	1.87	-0.04	-0.45
Feb	-0.66	-1.29	-0.98	-1.82
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	1.30	0.08	1.14	0.74
Aug	0.36	-0.14	0.94	-0.37
Sep	1.46	0.60	-1.55	-0.07
Oct	1.49	-0.12	1.72	-0.10
Nov	0.51	-0.04	2.81	-0.24
Dec	0.01	2.33	-1.02	0.18
Jan	1.24	1.58	-0.29	-0.66
Feb	0.96	0.39	0.75	-0.07
Mar	0.70	-0.33	1.19	
Apr	1.16	0.31	0.90	
May	0.77	1.86	-0.46	
Jun	-0.08	1.14	1.09	

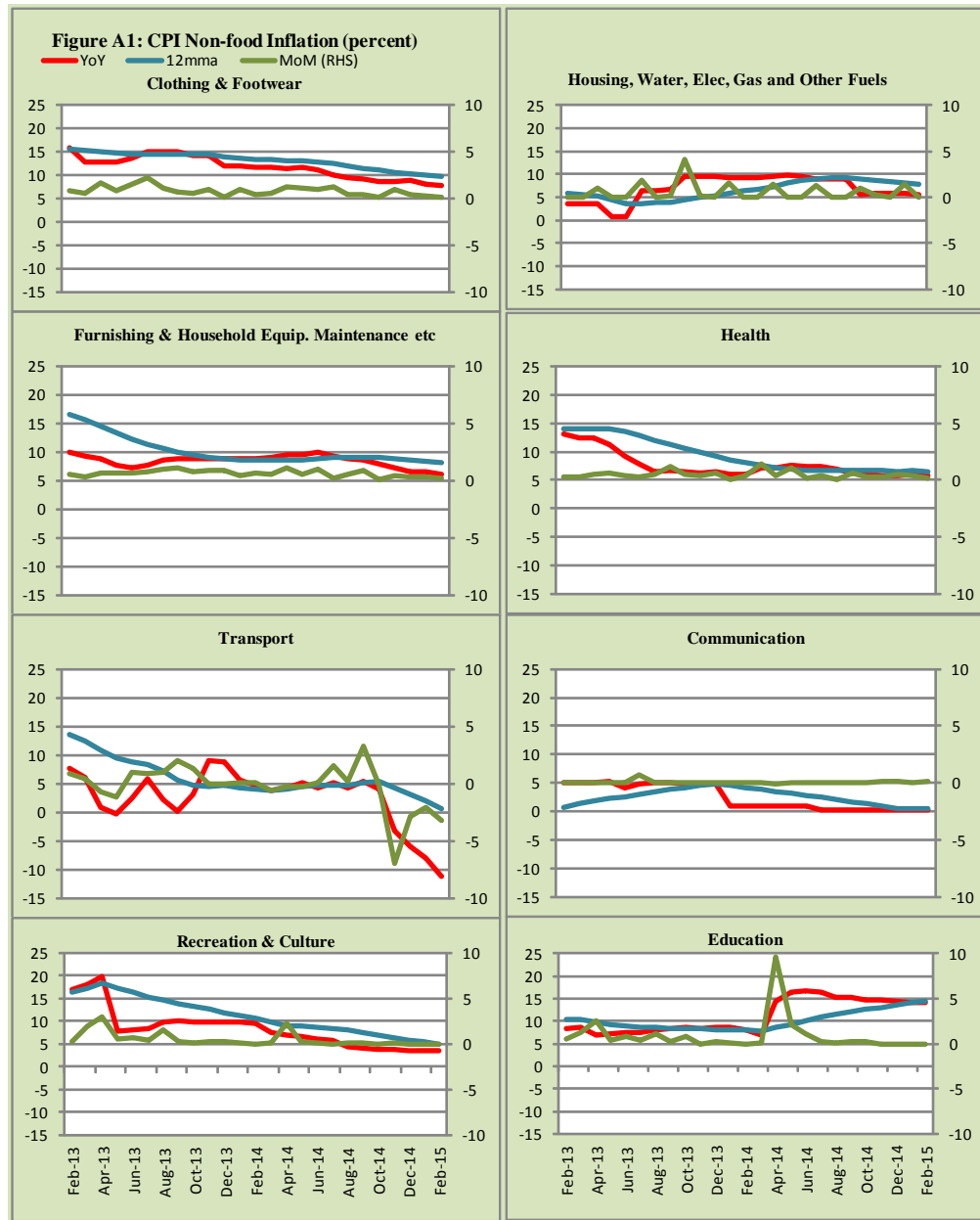


Figure A2: Frequency Distribution of Price Changes of CPI Items, February 2015

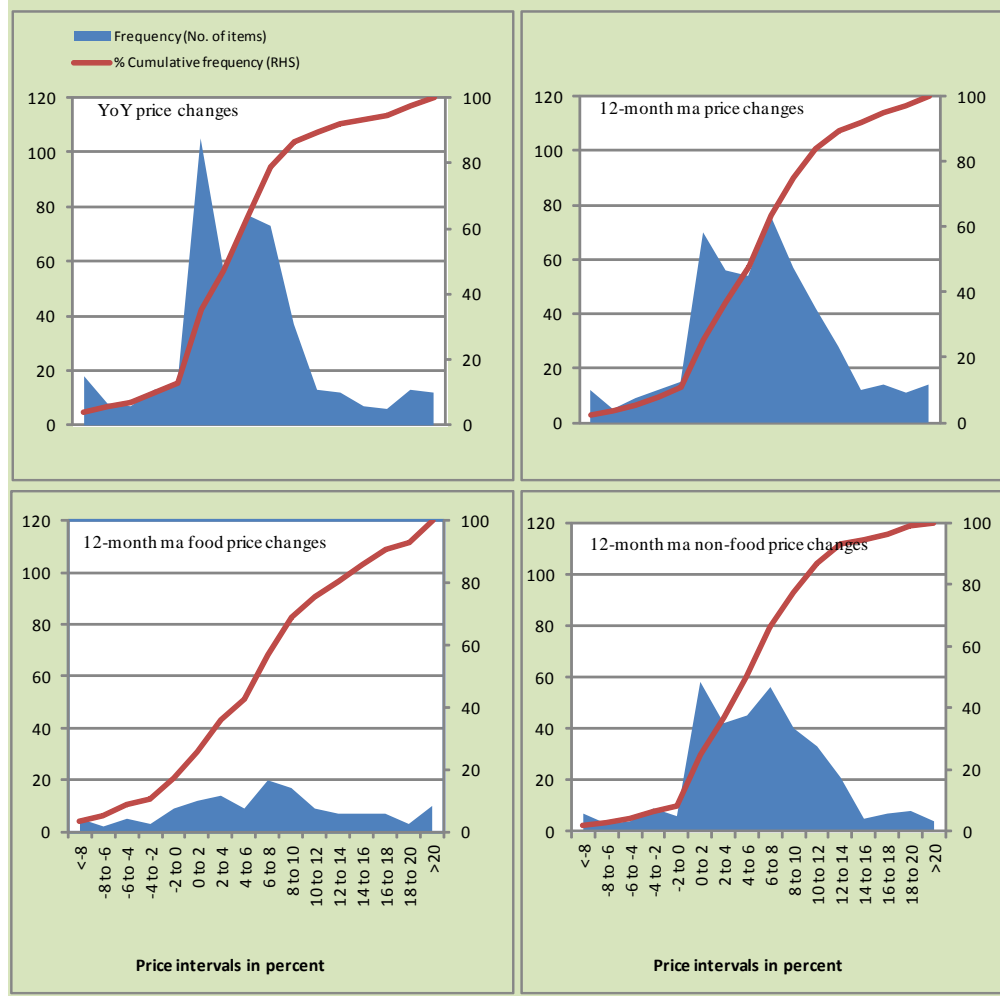


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, February 2015

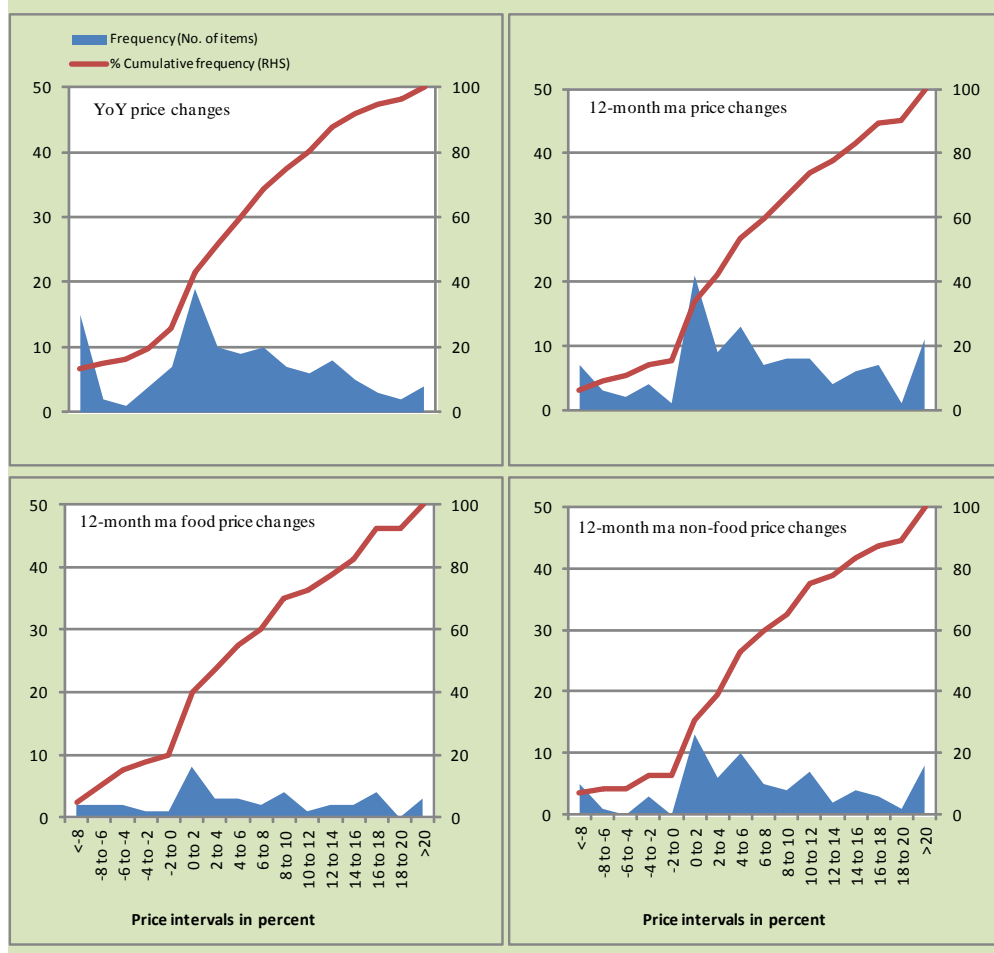
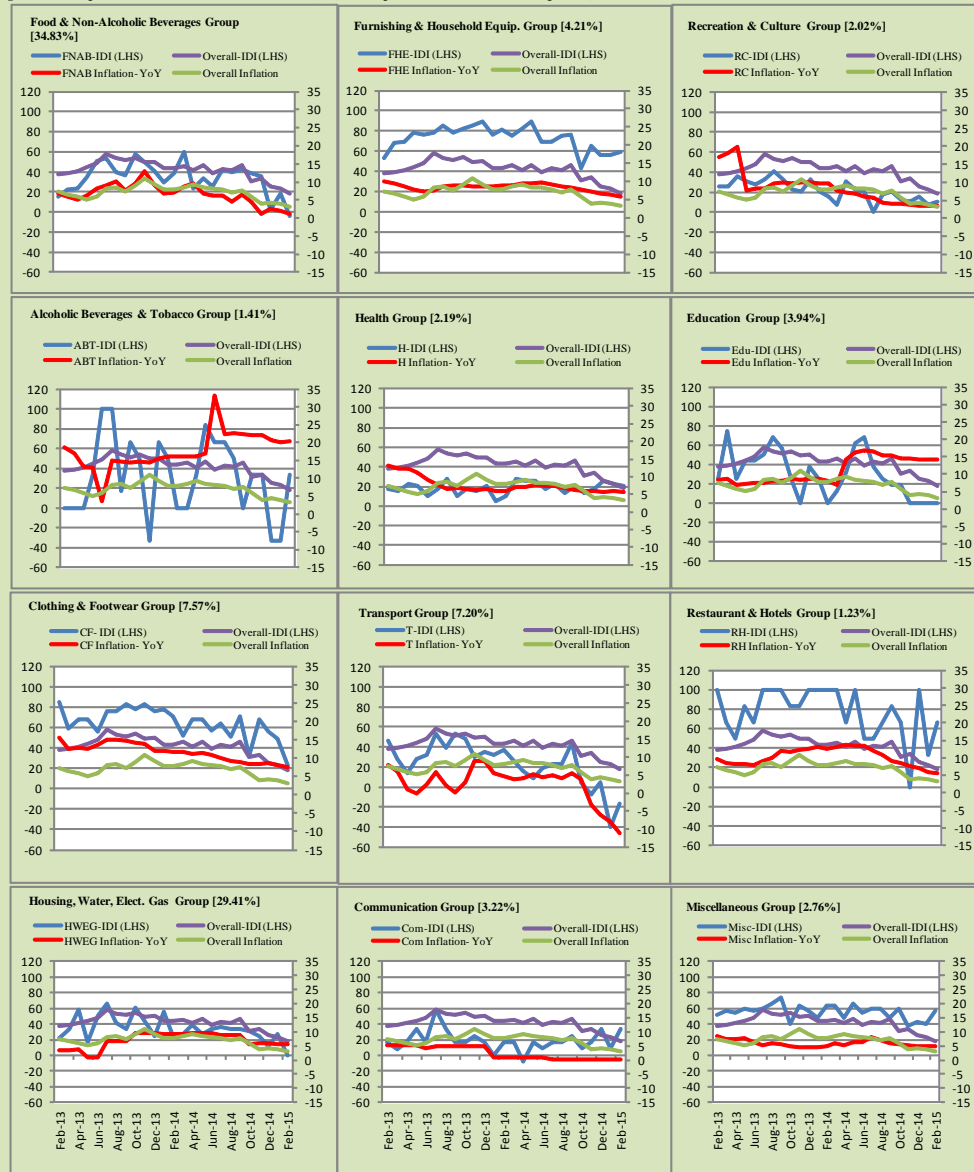


Figure A4: Group-wise/Overall Inflation Diffusion Index (IDI) and respective/overall YoY Inflation (percent)



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:

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.