

Inflation Monitor

May 2015



State Bank of Pakistan

Statistics & DWH Department

ISSN 1992-8327 (print)

ISSN 1992-8335 (online)

The analysis in this document is based on data

- Provided by Pakistan Bureau of Statistics (PBS), for domestic inflation analysis
- Retrieved from IMF & World Bank websites for global inflation analysis

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

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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 May 2015 as compared to 2.1 percent in the previous month and 8.3 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.8 percent in May 2015 as compared to 1.3 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 1.1 percent in May 2015 compared to 0.5 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis increased to 3.9 percent in May 2015 as compared to 3.1 percent in the previous month and 8.3 percent during the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) recorded at 0.1 percent in May 2015 as compared to 0.6 percent in the previous and 0.3 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 4.9 percent in May 2015 as compared to 5.4 percent in the previous month. It was 8.7 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis showed slight increase in May 2015 as compared to 1.4 percent in the previous month. A 0.5 percent increase in Core NFNE index was observed in May 2014.
7. WPI inflation on year-on-year basis increased to -1.8 percent in May 2015 when compared to -2.9 percent a month earlier. During May 2014, WPI inflation was recorded at 7.3%.

8. WPI inflation on month-on-month basis recorded at 1.1 percent in May 2015 as compared to 0.9 percent in the previous and -0.1 percent in the corresponding month of last year.
9. SPI inflation on year-on-year basis increased to 0.8 percent in May 2015 as compared to -1.6 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 1.5 percent in May 2015 as compared to 0.7 percent in the previous and -0.9 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 May 2015 are described below:

- Core inflation based on new measure RSC on year-on-year basis is recorded at 5.1 percent in May 2015 compared to 5.6 percent in the previous month and 8.8 percent in the corresponding month of last year.
- Core RSC inflation on month-on-month basis is recorded at 0.2 percent in May 2015 compared to 1.1 percent in the previous month and 0.6 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
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
Mar-15	2.5	0.2	0.5	0.5	3.9	0.0	5.9	0.0	3.8	0.0	6.2	0.1	-3.7	0.0	-2.4	0.0
Apr-15	2.1	1.3	0.0	1.4	3.7	1.3	5.4	1.4	3.1	0.6	5.6	1.1	-2.9	0.9	-1.6	0.7
May-15	3.2	0.8	3.0	1.8	3.3	0.0	4.9	0.0	3.9	0.1	5.1	0.2	-1.8	1.1	0.8	1.5
* NFNE is Non-food non-energy ** Relatively Stable Component of CPI *** SPI for all income groups combined																

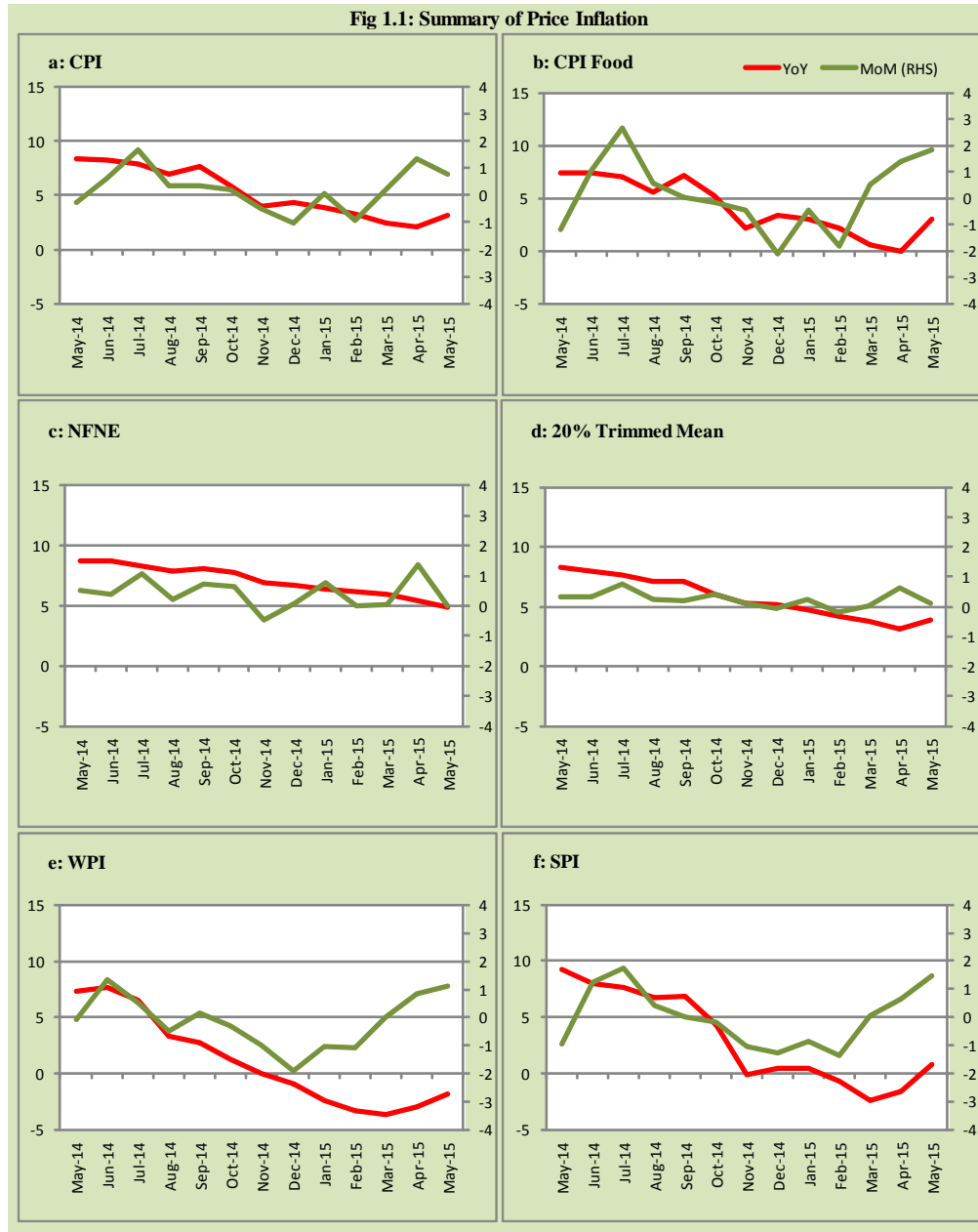
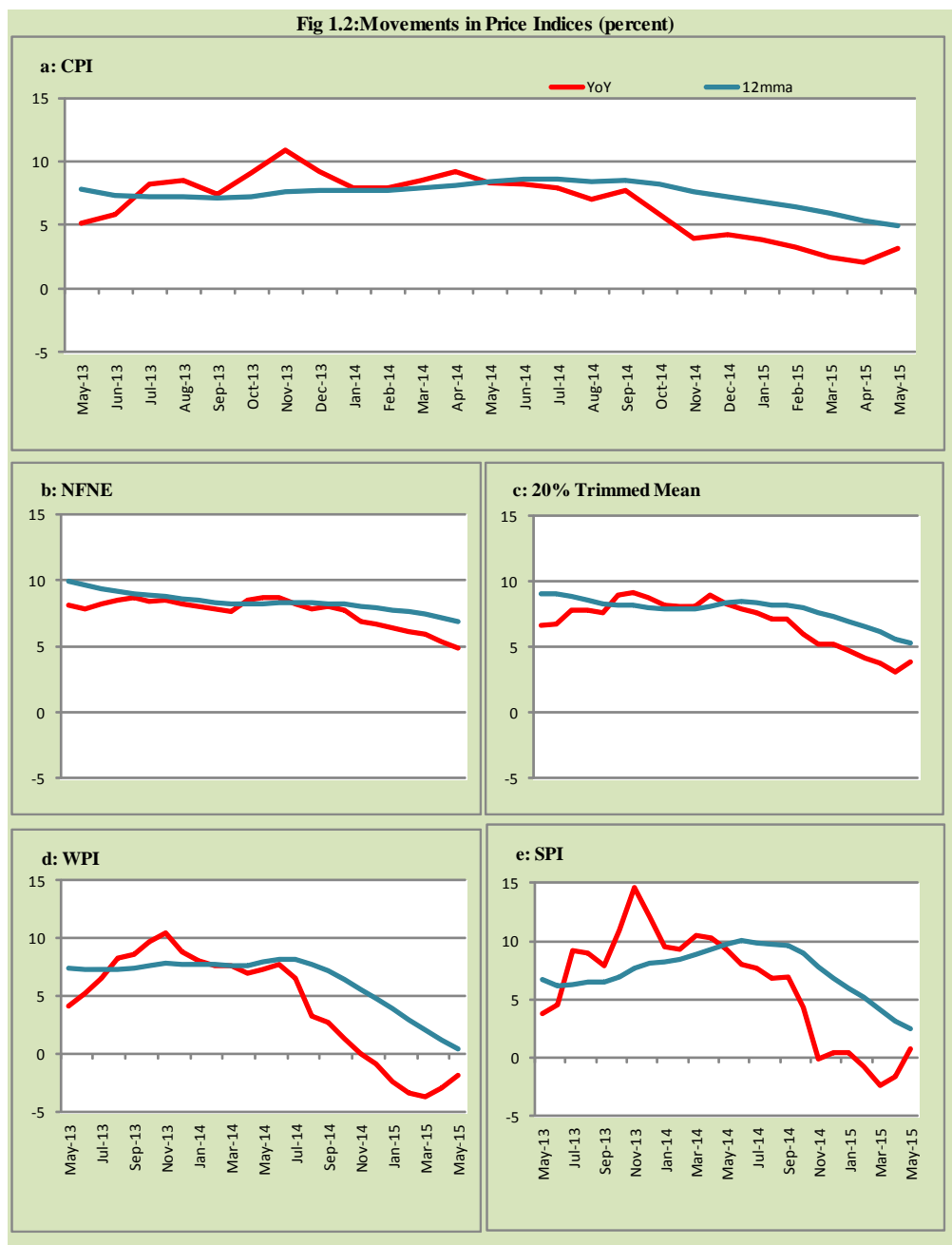


Fig 1.2: Movements in Price Indices (percent)



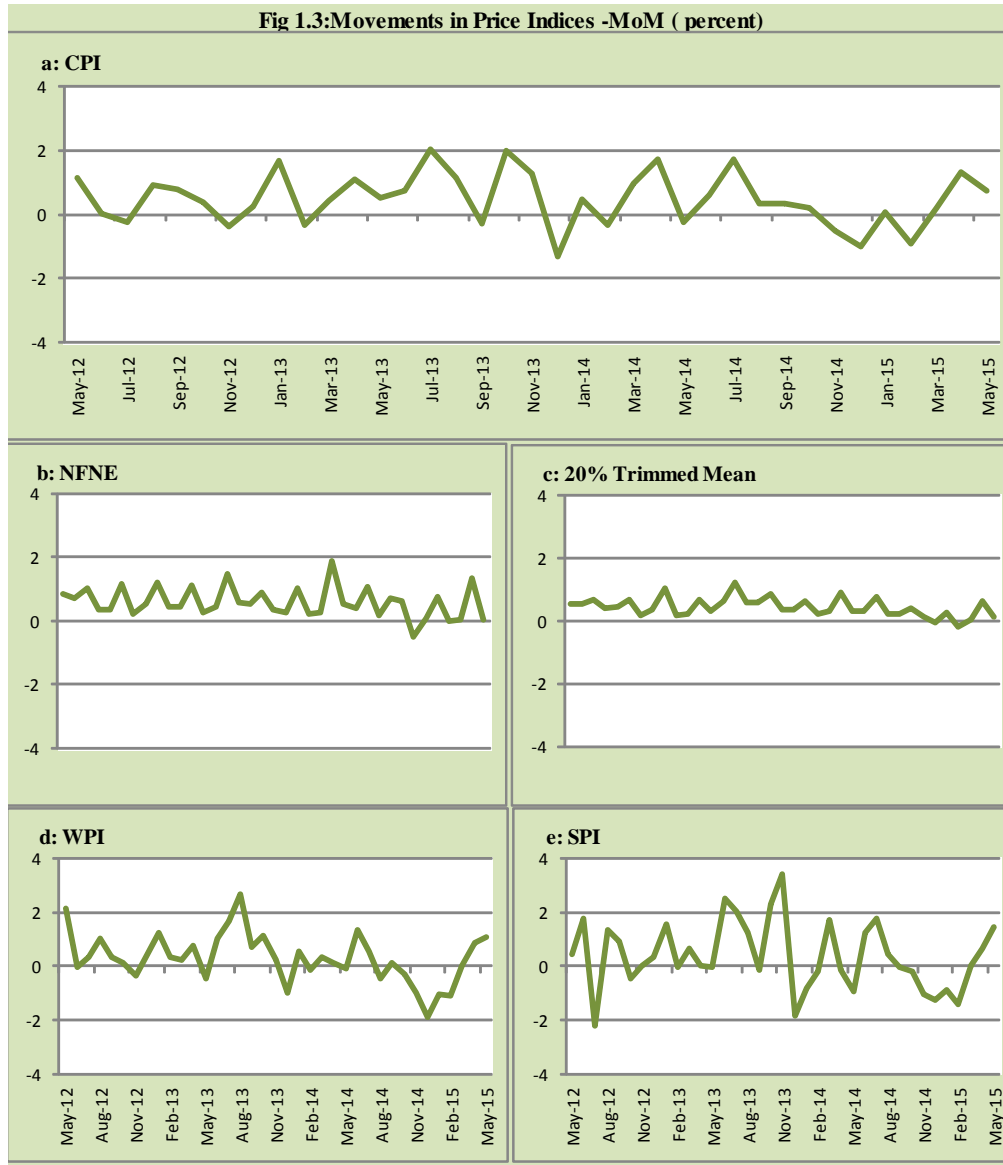
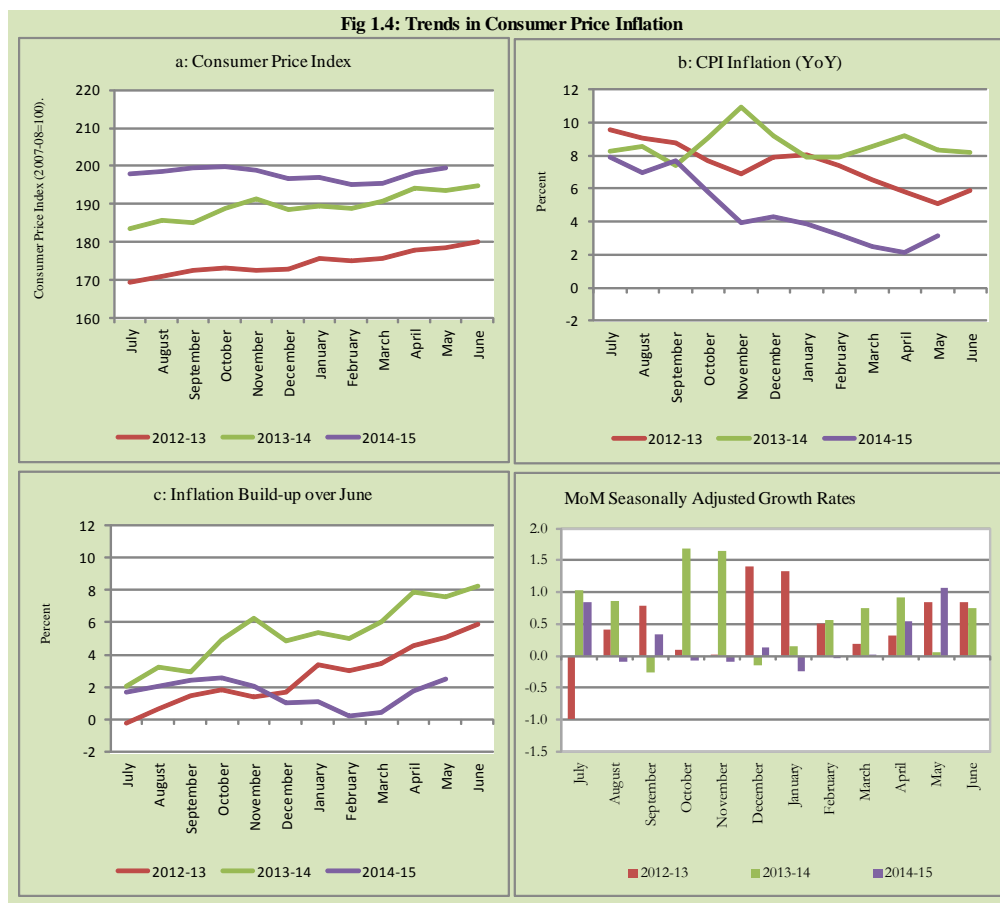


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan was higher than the overall inflation during May 2015 except Quetta which is 1.8 percent. Among these five cities, the highest inflation was observed in Islamabad at 4.7 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)						
	May-14		Apr-15		May-15	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	-0.3	8.3	1.3	2.1	0.8	3.2
Islamabad	-0.1	14.2	1.1	4.0	0.6	4.7
Karachi	0.0	8.9	1.1	3.5	0.6	4.1
Lahore	-0.4	9.8	1.2	3.1	0.6	4.2
Peshawar	-0.9	10.3	0.8	1.6	1.4	3.9
Quetta	-0.8	7.1	1.2	-0.1	1.2	1.8

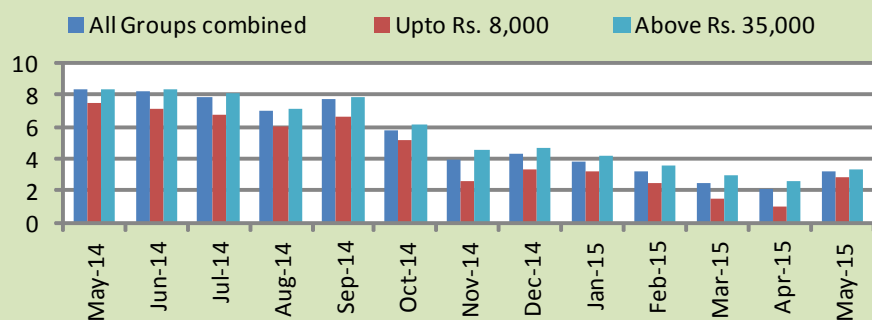
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 witnessed higher inflation than the overall inflation in CPI basket during May 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 May 2015 (Table A7 of annexure-A).

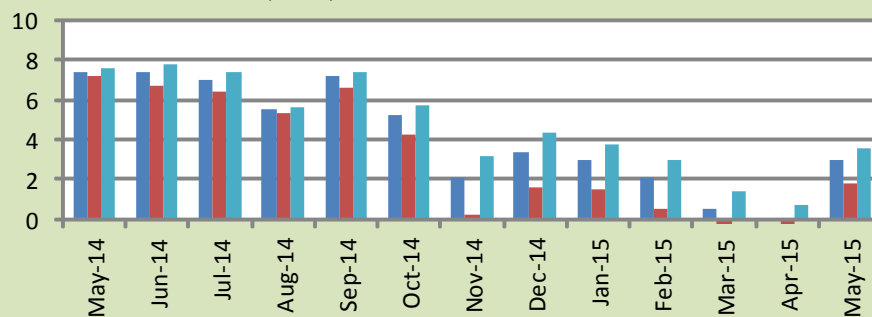
Table 3.1 Income Group- wise Inflation (YoY)									
Income Groups	General			Food			Non-food		
	May-14	Apr-15	May-15	May-14	Apr-15	May-15	May-14	Apr-15	May-15
All Groups Combined	8.3	2.1	3.2	7.4	0.0	3.0	9.0	3.7	3.3
Up to Rs. 8,000	7.5	1.0	2.8	7.1	-1.6	1.8	8.0	4.4	4.0
Rs. 8,001- 12,000	7.5	1.3	2.9	7.2	-1.1	2.2	7.7	4.0	3.6
Rs. 12,001- 18,000	8.6	1.7	3.0	7.3	-0.5	2.6	9.9	3.9	3.5
Rs. 18,001- 35,000	8.7	1.8	3.0	7.4	0.0	3.1	9.9	3.4	3.0
Above Rs. 35,000	8.4	2.6	3.3	7.5	0.8	3.6	8.8	3.6	3.2

Fig 3.1: Income Group- wise Inflation

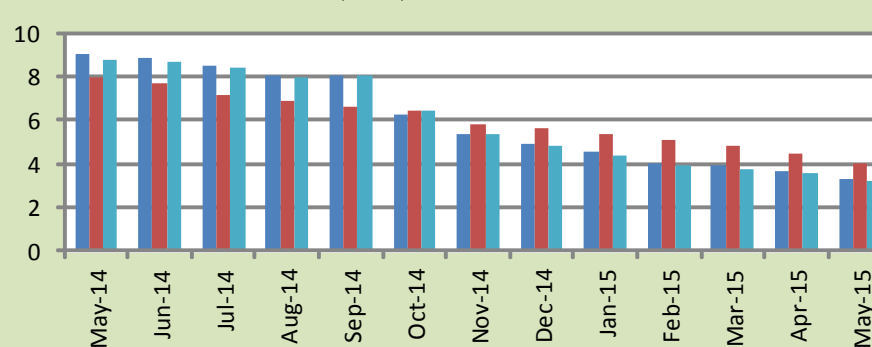
a: CPI Overall Inflation (YoY)



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 39.65 percent during May 2015 from -0.64 percent in April 2015. It was 37.10 percent in May 2014.

The weighted contribution of non-food group decreased to 60.35 percent in May 2015 from 100.64 percent in April 2015.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)						
Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Mar-15	8.95	23.54	58.95	-31.96	19.90	20.62
Apr-15	-0.64	26.66	59.33	-33.22	23.40	24.46
May-15	39.65	15.58	39.67	-21.47	13.19	13.38

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change

	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15
General	46.5	38.9	42.8	41.2	46.2	30.9	33.7	25.4	23.0	18.2	14.9	25.8	23.1
Food & Non-Alcoholic Beverages	33.6	25.7	43.0	39.8	43.0	38.3	35.7	2.7	18.6	-3.6	1.8	0.0	32.7
Alcoholic Beverages & Tobacco	83.3	66.7	66.7	50.0	0.0	33.3	33.3	-33.3	-33.3	33.3	-16.7	16.7	100.0
Clothing & Footwear	67.8	57.6	64.4	50.8	71.2	32.2	67.8	55.9	49.2	23.7	35.6	49.2	30.5
Housing, Water, Elect, Gas & other Fuels	27.8	33.3	36.1	33.3	33.3	30.6	25.0	11.1	27.8	0.0	11.1	38.9	13.9
Furnishing & Household Equip. Maintenance etc	89.9	69.6	69.6	75.4	76.8	43.5	65.2	56.5	56.5	59.4	33.3	52.2	42.0
Health	25.6	17.9	23.1	12.8	20.5	12.8	17.9	25.6	23.1	20.5	10.3	5.1	7.7
Transport	9.3	18.6	23.3	23.3	44.2	4.7	-7.0	4.7	-39.5	-16.3	-4.7	-2.3	4.7
Communication	16.7	8.3	16.7	16.7	25.0	8.3	16.7	33.3	8.3	33.3	0.0	25.0	0.0
Recreation & Culture	23.1	20.5	0.0	17.9	20.5	12.8	10.3	15.4	7.7	10.3	10.3	30.8	2.6
Education	62.5	68.8	37.5	25.0	18.8	18.8	0.0	0.0	0.0	0.0	6.3	37.5	0.0
Restaurant & Hotels	100.0	50.0	50.0	66.7	83.3	66.7	0.0	100.0	33.3	66.7	50.0	50.0	50.0
Miscellaneous	65.7	54.3	60.0	60.0	48.6	60.0	37.1	42.9	40.0	57.1	31.4	45.7	17.1
NFNE	51.2	43.5	43.5	42.0	49.7	29.6	34.3	34.3	26.9	25.7	19.8	33.7	18.6

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	May-14		Apr-15		May-15	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	10.39	-8.81	-9.21	-2.18	-3.28	-2.86
2	Wheat Flour Bag	10 Kg	10.11	-6.94	-7.49	-1.67	-1.78	-1.19
3	Rice Basmati Sup. Qlty.	Kg	8.91	1.10	-7.44	0.12	-9.20	-0.82
4	Pulse Masoor (Washed)	Kg	19.87	0.93	5.07	0.09	7.48	3.24
5	Pulse Moong (Washed)	Kg	34.77	4.48	10.09	-0.28	6.50	1.08
6	Pulse Mash (Washed)	Kg	8.30	4.00	19.20	2.19	21.46	5.97
7	Pulse Gram	Kg	-12.06	-0.46	2.19	-1.36	17.95	14.90
8	Vegetable Ghee (Loose)	Kg	2.37	-1.49	-13.45	-4.47	-12.80	-0.75
9	Sugar Refined	Kg	-1.40	-1.23	7.50	5.84	11.53	2.47
10	Milk Fresh (Unboiled)	Ltr	7.70	1.17	5.63	0.34	5.04	0.60
11	Tea- Tapal Danedar	200 Gm	-18.57	-7.50	1.12	3.55	10.37	0.96
12	Beef With Bone Av. Qlty.	Kg	6.05	0.37	4.05	0.31	3.77	0.10
13	Mutton Av. Qlty.	Kg	7.00	0.06	4.54	0.77	4.75	0.26
14	Chicken Farm Broiler (Live)	Kg	20.23	-1.11	-9.38	11.07	1.44	10.70
15	Eggs Farm	Doz	4.78	-8.31	-2.41	-7.07	0.14	-5.91
16	Potatoes	Kg	175.43	1.67	-66.47	-16.02	-67.95	-2.82
17	Onion	Kg	-28.23	-9.54	18.31	51.16	40.39	7.34
18	Tomatoes	Kg	-50.07	-49.57	0.69	-21.84	134.76	17.57
19	Ginger	Kg	94.47	3.48	-24.30	1.21	-22.68	5.69
20	Garlic	Kg	-12.47	-12.56	3.11	-1.52	23.60	4.82

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	May-14		Apr-15		May-15	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	2.7	-0.2	-35.1	2.5	-31.7	4.9
Food	-1.3	-1.5	-22.8	-0.8	-22.2	-0.7
Metals	-6.7	-2.9	-21.1	-0.6	-15.2	4.3
Energy	4.8	0.6	-43.1	5.0	-39.1	7.7
Agricultural Raw Material	3.6	-0.9	-11.9	-1.3	-11.0	0.2
Cotton	0.1	-1.6	-23.9	3.4	-21.4	1.6

Source: IMF

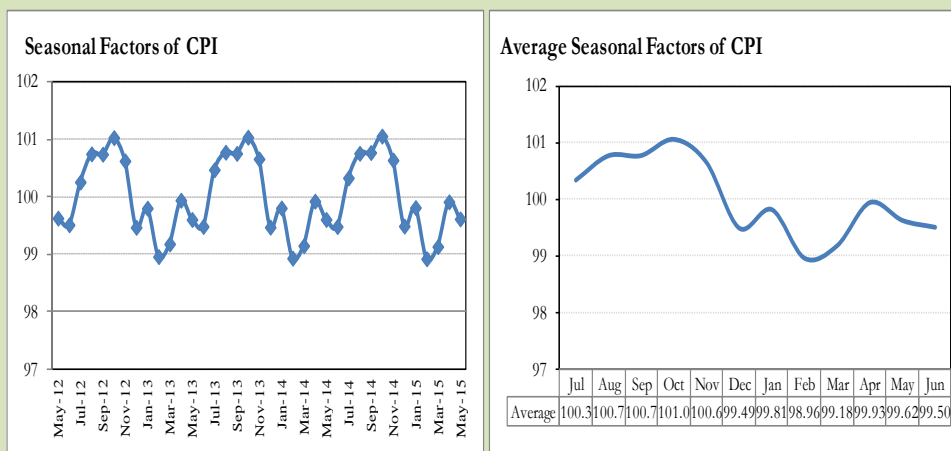
8. Seasonal Adjustment in CPI

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

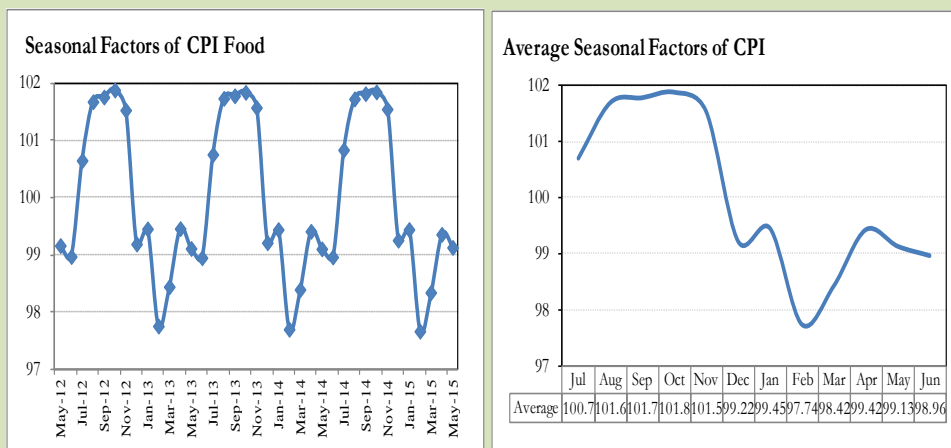
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

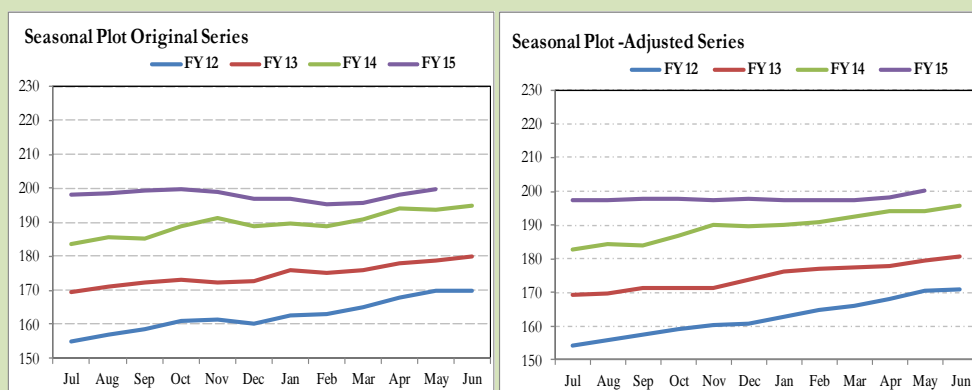
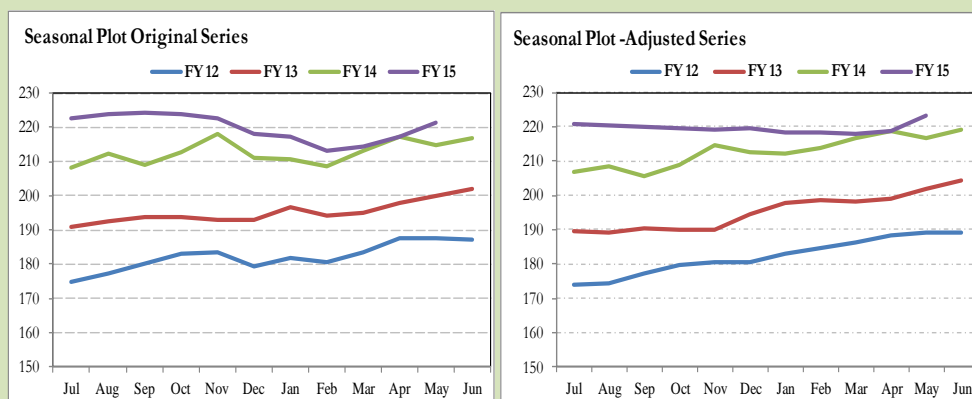


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for May 2015 stood at 200.42 against 199.66 in original series showing an increase of 0.76 on account of adjustment of downward seasonality in May 2015.

Seasonally adjusted CPI food group for May 2015 stood at 223.16 against 221.22 in original series showing an increase of 1.94 on account of adjustment of downward seasonality in May 2015.

Month-on-month change of seasonally adjusted CPI series stood at 1.06% reflecting increase during May 2015 over April 2015 and an increase of 0.76% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 2.06% reflecting increase during May 2015 over April 2015 and an increase 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 May 2015 (corresponding to the seasonally adjusted month-on-month rate) is 13.46 percent.

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

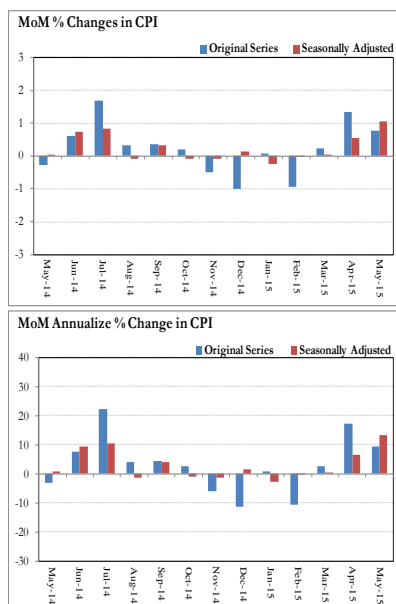
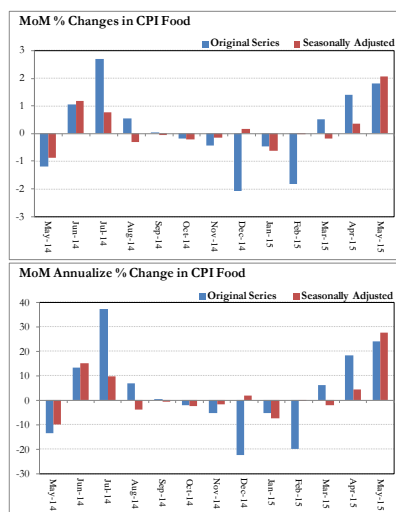


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		May-14	Apr-15	May-15	May-14	Apr-15	May-15
I. Food Group	37.5	-1.2	1.4	1.8	7.4	0.0	3.0
Food & Non-Alcoholic Beverages	34.8	-1.3	1.5	1.9	6.8	-1.0	2.2
Alcoholic Beverages & Tobacco	1.4	0.8	0.0	0.9	17.0	20.2	20.3
Restaurant & Hotels	1.2	0.5	0.2	0.3	13.4	4.5	4.4
II. Non-Food Group	62.5	0.4	1.3	0.0	9.0	3.7	3.3
Clothing & Footwear	7.6	1.1	1.0	0.2	11.6	7.1	6.1
Housing, Water, Elect, Gas & other Fuels	29.4	0.0	0.7	0.0	9.7	4.9	4.9
Furnishing & Household Equip. Maintenance etc	4.2	0.5	0.6	-0.1	9.4	5.0	4.4
Health	2.2	1.1	0.5	0.0	7.6	4.5	3.3
Transport	7.2	-0.3	0.9	0.1	5.1	-9.7	-9.3
Communication	3.2	0.0	0.0	0.0	0.9	0.4	0.4
Recreation & Culture	2.0	0.3	1.5	0.1	6.7	2.5	2.4
Education	3.9	2.1	8.7	0.0	16.4	13.2	10.8
Miscellaneous	2.8	1.0	0.6	-0.4	6.3	5.1	3.6
Headline	100.0	-0.3	1.3	0.8	8.3	2.1	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)	
		May-14	May-15	May-14	May-15	May-14	May-15	May-14	May-15	May-14	May-15
I. Food Group	3.0	126	126	26	31	24	34	25	29	51	32
Food & Non-Alcoholic Beverages	2.2	114	114	26	30	23	31	24	26	41	27
Alcoholic Beverages & Tobacco	20.3	6	6	0	1	1	0	0	0	5	5
Restaurant & Hotels	4.4	6	6	0	0	0	3	1	3	5	0
II. Non-Food Group	3.3	348	348	61	95	59	151	110	83	118	19
Clothing & Footwear	6.1	59	59	4	8	1	24	21	21	33	6
Housing, Water, Elect, Gas & other Fuels	4.9	36	36	2	11	9	13	13	12	12	0
Furnishing & Household Equip. Maintenance etc	4.4	69	69	1	4	11	38	27	24	30	3
Health	3.3	39	39	21	21	6	11	4	5	8	2
Transport	-9.3	43	43	16	27	12	10	10	5	5	1
Communication	0.4	12	12	4	5	3	5	2	1	3	1
Recreation & Culture	2.4	39	39	10	14	10	19	11	6	8	0
Education	10.8	16	16	0	1	1	9	7	2	8	4
Miscellaneous	3.6	35	35	3	4	6	22	15	7	11	2
Overall	3.2	474	474	87	126	83	185	135	112	169	51

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

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in May 2015					
Top 15 Contributors		Weights	YoY Change		Weighted Contribution
Items/ Contributors			May-14	May-15	
Ranked by Weighted Contribution					
1	House Rent	21.81	8.63	6.26	35.10
2	Milk Fresh	6.68	7.74	5.16	13.50
3	Education	3.94	16.38	10.83	13.19
4	Fresh Vegetable	1.66	-0.65	18.11	10.45
5	Cigarette	1.39	17.10	20.50	10.45
6	Tomatoes	0.45	-50.07	134.77	7.20
7	Onion	0.54	-28.24	40.39	7.17
8	Fresh Fruits	1.86	3.41	6.97	5.04
9	Cotton Cloth	1.73	12.93	7.69	4.30
10	Meat	2.43	6.37	4.10	3.87
11	Sugar	1.04	-1.40	11.53	3.72
12	Tailoring	0.88	12.77	10.46	3.71
13	Electricity	4.40	15.82	1.79	2.94
14	Household Servant	1.04	9.85	6.96	2.55
15	Ready Made Garment	0.97	13.37	7.27	2.38
Total		50.85			125.58
Bottom 15 Contributors					
1	Potatoes	0.48	175.43	-67.95	-20.75
2	Motor Fuel	3.03	6.63	-19.52	-18.08
3	Vegetable Ghee	2.07	2.09	-11.15	-6.00
4	Transport Services	2.70	3.68	-6.01	-5.58
5	Cooking Oil	1.75	0.29	-11.08	-5.18
6	Rice	1.58	5.43	-8.61	-4.33
7	Wheat Flour	4.16	10.87	-2.14	-3.14
8	Wheat	0.35	10.39	-3.28	-0.38
9	Fish	0.30	10.97	-3.17	-0.34
10	Mustard Oil	0.10	-0.64	-3.11	-0.08
11	Wheat Product	0.10	17.14	-1.84	-0.06
12	Kerosene Oil	0.01	4.12	-23.73	-0.06
13	Beans	0.03	12.17	-4.14	-0.04
14	Motor Vehicle Accessories	0.24	6.28	-0.48	-0.04
15	Gas	1.58	0.86	0.00	0.00
Total		18.47			-64.07

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

<u>Top 15 Contributors</u>		<u>MoM Change</u>		Weighted Contribution	
Items/ Contributors	Weights	Apr-15	May-15		
Ranked by Weighted Contribution					
1	Fresh Vegetable	1.66	14.33	11.49	28.63
2	Fresh Fruits	1.86	9.93	9.16	26.46
3	Chicken	1.36	11.07	10.70	18.35
4	Tomatoes	0.45	-21.84	17.57	7.63
5	Onion	0.54	51.16	7.34	6.94
6	Milk Fresh	6.68	0.32	0.58	6.46
7	Pulse Gram	0.24	-1.36	14.89	4.06
8	Sugar	1.04	5.85	2.47	3.53
9	Besan	0.15	0.27	13.05	2.29
10	Cigarette	1.39	0.00	0.87	2.15
11	Pulse Mash (Washed)	0.21	2.19	5.97	1.93
12	Cotton Cloth	1.73	1.02	0.62	1.52
13	Beverages	1.20	0.53	0.76	1.27
14	Tea	0.84	3.37	0.89	1.12
15	Gram Whole	0.16	-0.37	5.81	1.12
Total		19.51			113.46
Bottom 15 Contributors					
1	Wheat Flour	4.16	-1.32	-1.07	-6.33
2	Egg	0.46	-7.07	-5.91	-3.15
3	Cooking Oil	1.75	-3.27	-1.69	-2.90
4	Vegetable Ghee	2.07	-4.03	-1.46	-2.89
5	Washing Soap & Detergent	0.79	0.21	-1.47	-1.74
6	Wheat	0.35	-2.18	-2.86	-1.34
7	Potatoes	0.48	-16.02	-2.82	-1.16
8	Personal Care	1.49	0.28	-0.55	-1.13
9	Rice	1.58	-1.05	-0.48	-0.90
10	Personal Equipments	0.84	1.33	-0.40	-0.60
11	Fish	0.30	-1.39	-0.51	-0.22
12	Motor Fuel	3.03	2.74	-0.05	-0.16
13	Mustard Oil	0.10	-1.46	-1.06	-0.10
14	Motor Vehicle Accessories	0.24	-1.59	-0.27	-0.10
15	Fire Wood Whole	0.23	-0.15	-0.08	-0.03
Total		17.87			-22.73

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in May 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-14	May-15	
A. Ranked by Percentage Change					
1	Tomatoes	0.45	-50.07	134.77	7.20
2	Onion	0.54	-28.24	40.39	7.17
3	Motor Vehicle Tax	0.11	0.00	36.71	1.02
4	Pulse Mash (Washed)	0.21	8.30	21.46	1.49
5	Cigarette	1.39	17.10	20.50	10.45
6	Fresh Vegetable	1.66	-0.65	18.11	10.45
7	Pulse Gram	0.24	-12.06	17.95	1.17
8	Besan	0.15	-14.40	13.94	0.60
9	Sugar	1.04	-1.40	11.53	3.72
10	Sewing Needle & Dry Cell	0.15	9.30	11.35	0.50
11	Education	3.94	16.38	10.83	13.19
12	Tailoring	0.88	12.77	10.46	3.71
13	Woolen Readymade Garments	0.40	13.45	10.31	1.46
14	Tea	0.84	-13.96	8.17	2.37
15	Dry Fruits	0.25	9.09	8.07	0.78
Total		12.25			65.28
B. Ranked by Weights					
1	House Rent	21.81	8.63	6.26	35.10
2	Milk Fresh	6.68	7.74	5.16	13.50
3	Electricity	4.40	15.82	1.79	2.94
4	Wheat Flour	4.16	10.87	-2.14	-3.14
5	Education	3.94	16.38	10.83	13.19
6	Communication & Apparatus	3.15	0.22	0.19	0.12
7	Motor Fuel	3.03	6.63	-19.52	-18.08
8	Transport Services	2.70	3.68	-6.01	-5.58
9	Meat	2.43	6.37	4.10	3.87
10	Vegetable Ghee	2.07	2.09	-11.15	-6.00
11	Fresh Fruits	1.86	3.41	6.97	5.04
12	Cooking Oil	1.75	0.29	-11.08	-5.18
13	Cotton Cloth	1.73	12.93	7.69	4.30
14	Fresh Vegetable	1.66	-0.65	18.11	10.45
15	Rice	1.58	5.43	-8.61	-4.33
Total		62.97			46.20
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 May, 2015.					

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

Table 1: Top 10 Contributors to CPI Food Inflation (2014/15 to May 2015)					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-14	May-15	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	7.74	5.16	13.50
2	Fresh Vegetable	1.66	-0.65	18.11	10.45
3	Cigarette	1.39	17.10	20.50	10.45
4	Tomatoes	0.45	-50.07	134.77	7.20
5	Onion	0.54	-28.24	40.39	7.17
6	Fresh Fruits	1.86	3.41	6.97	5.04
7	Meat	2.43	6.37	4.10	3.87
8	Sugar	1.04	-1.40	11.53	3.72
9	Tea	0.84	-13.96	8.17	2.37
10	Ready Made Food	1.23	13.38	4.37	2.09
Total		18.13			65.87
B. Ranked by Percentage Change					
1	Tomatoes	0.45	-50.07	134.77	7.20
2	Onion	0.54	-28.24	40.39	7.17
3	Pulse Mash (Washed)	0.21	8.30	21.46	1.49
4	Cigarette	1.39	17.10	20.50	10.45
5	Fresh Vegetable	1.66	-0.65	18.11	10.45
6	Pulse Gram	0.24	-12.06	17.95	1.17
7	Besan	0.15	-14.40	13.94	0.60
8	Sugar	1.04	-1.40	11.53	3.72
9	Tea	0.84	-13.96	8.17	2.37
10	Dry Fruits	0.25	9.09	8.07	0.78
Total		6.77			45.41
C. Ranked by Weights					
1	Milk Fresh	6.68	7.74	5.16	13.50
2	Wheat Flour	4.16	10.87	-2.14	-3.14
3	Meat	2.43	6.37	4.10	3.87
4	Vegetable Ghee	2.07	2.09	-11.15	-6.00
5	Fresh Fruits	1.86	3.41	6.97	5.04
6	Cooking Oil	1.75	0.29	-11.08	-5.18
7	Fresh Vegetable	1.66	-0.65	18.11	10.45
8	Rice	1.58	5.43	-8.61	-4.33
9	Cigarette	1.39	17.10	20.50	10.45
10	Chicken	1.36	20.23	1.44	0.66
Total		24.96			25.33
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 3.0 percent in May, 2015.					

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in May 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-14	May-15	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.63	6.26	35.10
2	Education	3.94	16.38	10.83	13.19
3	Cotton Cloth	1.73	12.93	7.69	4.30
4	Tailoring	0.88	12.77	10.46	3.71
5	Electricity	4.40	15.82	1.79	2.94
6	Household Servant	1.04	9.85	6.96	2.55
7	Ready Made Garment	0.97	13.37	7.27	2.38
8	Personal Care	1.49	7.16	3.62	1.76
9	Woolen Readymade Garments	0.40	13.45	10.31	1.46
10	Woolen Cloth	0.88	9.48	4.24	1.36
Total		37.55			68.75
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	36.71	1.02
2	Sewing Needle & Dry Cell	0.15	9.30	11.35	0.50
3	Education	3.94	16.38	10.83	13.19
4	Tailoring	0.88	12.77	10.46	3.71
5	Woolen Readymade Garments	0.40	13.45	10.31	1.46
6	Cotton Cloth	1.73	12.93	7.69	4.30
7	Ready Made Garment	0.97	13.37	7.27	2.38
8	Household Servant	1.04	9.85	6.96	2.55
9	Construction Wage Rate	0.33	10.37	6.87	0.74
10	House Rent	21.81	8.63	6.26	35.10
Total		31.38			64.94
C. Ranked by Weights					
1	House Rent	21.81	8.63	6.26	35.10
2	Electricity	4.40	15.82	1.79	2.94
3	Education	3.94	16.38	10.83	13.19
4	Communication & Apparatus	3.15	0.22	0.19	0.12
5	Motor Fuel	3.03	6.63	-19.52	-18.08
6	Transport Services	2.70	3.68	-6.01	-5.58
7	Cotton Cloth	1.73	12.93	7.69	4.30
8	Gas	1.58	0.86	0.00	0.00
9	Footwear	1.55	9.13	0.68	0.28
10	Personal Care	1.49	7.16	3.62	1.76
Total		45.39			34.03
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 3.3 percent in May, 2015.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: May 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	Potatoes, Ginger, Kinnu, Vegetable Ghee (Loose), Cooking Oil (Pakwan), Cooking Oil (Dalda), Bananas	Tea Loose Kenya Av.Qlty 250 Gm, Mutton Av.Qlty., Pickles Ahmed/Mitchelles, Samosa (Vegetable), Curd, Cold Drink (Standard Size)	Gram Whole Black Av Qlty., Chillies Green, Milo 200 Gm., Powder Milk Nido 400Gm., Milk Tetra Pack 1/2 Ltr., Fruit Juice Tetra Pack	Tomatoes, Aloo Bukhara, Lady Finger, Onion, Tinda, Brinjal, Karaila, Cucumber (Kheera), Bottlegourd, Garlic, Pulse Mash (Washed), Almonds Whole Av.Qlty., Cardamom Large Loose Av. Q, Pulse Gram
Alcoholic Beverages & Tobacco	Betel Leaves			Cigarettes Capstan 20,S, Cigarettes Morven Gold 20,S, Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Betel Nuts
Clothing & Footwear	Gents Shoe, Art 1109 Servis, Child Shoe Power Lite Bata, Gents Shoes Paul Bata, Sports Shoes, Gents Spoung Chappal Bata	Long Cloth 57" Gul Ahmed/Al Karam, Washing Ch. (Kamiz-Shalwar), Heavy Wt Suiting Law.Pur Sup. Qlty, Foot Wear Local (Children), Washing Charges Paint & Shirt	School Uni. Pant, Shirt Boys, Frock W/Wear Girls, School Uni. Kameez, Shal. Girls, School Uni. Kameez, Shal. Boys, Second-Hand Coat For Men	Secondhand Sweater For Men, Lawn Printed Gul Ahmed/Al Karam, Tailoring Suit (Female), Gloves Av.Qlty, Tailoring Awami-Suit (Male), Vest/Shameez (Women) Avg. Qlty
Housing, Water, Elect, Gas & other Fuels	Kerosene Oil, Iron Bar (M.S. Bar) 1/2", Elect. Charges Upto 50 Units, Elect. Charges 01 - 100 Units	Bricks (New) 1st Class, Sand (Black Pit Sand), Synthetic Enemal ICI, Synthetic Enemal Robialac, Firewood Whole	Unskilled Labour Wage Rat, Electrician Wage Rate(P/Pnt), Plumber Wage Rate, Mason (Raj) Wage Rate, Carpenter Wage Rate	
Furnishing & Household Equip. Maintenance etc	Surf Excel 400 Gms Poly Bag, Washing Powder (Wheel/ Bonus), Electric Blub Energy Saver 14 Watt	Marriage Hall Charges Without Refreshment, Tea Set Pak. China Wear 21 Pcs, Table Spoon S. Steel Sup. Qlty, Pressure Cooker 4 Ltr.	Harpic, Thermos Starvac 1 Ltr, Gizer Large Size 30 Gallon, Household Servant Female (Part Time), Blanket (90" X 54"), Dining Table 6 Chairs	Match Box (Small), Robin Blue (35 Gms), Boot Polish Cherry/Kiwi 50 Ml
Health	Flagyl Tab. 200 Mg., Betnovate-N Ointment 5 Gm, Calcium Syrup Sandoz, Burnol Cream 30 Gm, Lederplex Syrup	ECG Charges, Thermometer China, Doctor (MBBS) Clinic Fee, Sugar Test (Random/Fasting), Septran Tablets	X-Ray (Chest) Charges, Urine Test (Dr) Charges, Gripe-Water Woodward's, O.R.S. (Nimcol), Blood Test (Cp) Charges	Jouhar Joshanda, Hydryllin Syrup 120 Ml.
Transport	Petrol Super, High Speed Diesel HSD, Gas Cylinder S. Size (L.P.G), Minibus Fare Max. Within City, Bus Fare Outside City (A/C)	Car Suzuki 1000 CC, Car Service Charges, Motor Cycle Service Charges, Suzuki Fare Maximum Within City, Bicycle With Tyres & Tube	Car Toyota 1300 CC, Cycle Overhauling Charges, Tyre Puncture Charges, CNG, Air Fare Economy Class	Car Tax For 800 CC To 1300 CC
Communication	Postal Envelope Domestic, Mobile Cell Charges, Telephone Charges Local Call	Telephone Set Av. Qlty, Fax Charges (Local), Postal Envelope For Saudi Arabia, U.M.S. Reg Charges Min.	Internet Charges	T.C.S. Ch. Min. Within Zone
Recreation & Culture	Urdu Book Class IX/X (T.B.Board), T.V. 20" Colored Sony, English Book Class IX or X, Radio With C.Player National	Pencil Goldfish/Deer, Fountain Pen Hero/Wings/China, Urdu Book 1st Year/ Inter, Urdu Book Class V (T.B.Board), Paper Fool Scape (27"x17")	Cinema Non-A/C High Class, Maths Book Class IX or X, Maths Book Cals V (T.B.Board), Cinema A/C High Class, English Book Class V1	
Education	Coaching Fee For Class IX/X	MBA Tuition Fee, Pvt Eng. College Fee (1st Year), I.T. Tuition Fees, Govt. College Fee 1st. Year	Pvt Med. College Fee MBBS (1st Year), Govt. University Fee MS/ MA	Pvt School Fee Eng. Med (Class-X), Pvt School Fee Eng. Med (Class-VI), Pvt School Fee Eng. Med (Class-V), Pvt School Fee Eng. Med (Class-I)
Restaurant & Hotels		Cooked Dal (Av. Hotel), Bread Tandoori St. Size, Chicken Biryani Full/Double	Cooked Mutton (Av. Hotel), Tea Prepared (Ordinary), Cooked Beef (Av. Hotel)	
Miscellaneous	Toilet Soap Lux 95 Gms, Silver Tezabi 24 Ct, Gold Tezabi 24 Ct, Toothpaste Macleans 70 Gms	Hair Oil Amla/Chambeli, Hair Color (Kala Kola), Gel Medium Size, Hair Color Bigen	Haircut Charges For Men, Artificial Jewellery Set, Perfume Med. Size Medora/Broche	Purse Ladies (Leather) Av. Qlty, Shaving Charges

Table A5: City- wise CPI Inflation by Income Groups, May 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	1.8	5.3	3.8	4.7	-0.5	6.1	1.7	5.7	3.8	4.6	-0.5	6.8
2 Islamabad	0.9	2.7	1.8	1.7	-0.2	3.8	0.8	3.0	2.0	2.4	-0.4	3.6
3 Lahore	0.6	4.6	1.2	6.4	-0.3	2.2	0.7	4.5	1.5	6.7	-0.2	1.9
4 Gujranwala	0.6	4.3	1.2	5.6	-0.2	2.7	0.6	4.0	1.3	5.6	-0.1	2.3
5 Sialkot	1.7	4.8	3.1	5.5	0.0	3.9	1.7	4.2	3.0	5.1	0.1	3.3
6 Faisalabad	0.8	3.3	1.5	2.7	-0.1	4.1	0.7	3.2	1.5	3.0	-0.1	3.4
7 Multan	-0.4	2.5	-0.5	2.1	-0.2	2.9	-0.4	2.3	-0.5	2.2	-0.2	2.4
8 Sargodha	0.4	3.1	0.6	1.0	0.1	5.5	0.3	3.3	0.5	1.0	0.1	5.6
9 Bahawalpur	-0.8	2.7	-1.7	1.3	0.0	4.1	-0.7	2.0	-1.3	1.0	0.0	2.9
10 Karachi	0.7	2.6	1.3	-0.4	-0.2	6.8	0.7	2.9	1.3	0.2	-0.1	6.0
11 Hyderabad	1.4	3.0	2.4	3.1	0.0	2.8	1.4	3.3	2.5	3.5	0.0	2.9
12 Sukkur	1.6	-0.1	2.6	-3.8	0.3	4.7	1.2	0.8	2.1	-2.8	0.2	4.9
13 Larkana	0.6	-0.5	1.1	-2.1	0.1	1.5	0.9	0.4	1.6	-0.9	0.1	1.7
14 Peshawar	2.3	4.3	4.1	3.8	0.3	4.9	2.0	4.4	3.9	4.2	0.2	4.6
15 Bannu	-0.4	2.0	-0.6	0.6	-0.1	3.7	-0.3	1.9	-0.5	0.5	-0.1	3.4
16 Quetta	1.6	2.1	2.7	1.6	0.2	2.7	1.4	1.9	2.6	1.7	0.1	2.2
17 Khuzdar	-0.3	0.0	0.0	0.0	-0.6	0.0	-0.5	-0.5	0.2	0.1	-1.3	-1.2
	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	1.8	5.9	4.0	5.1	-0.2	6.7	1.7	6.0	4.3	6.1	-0.2	5.9
2 Islamabad	1.0	3.0	2.3	2.9	-0.2	3.1	0.9	3.1	2.5	3.4	-0.3	2.9
3 Lahore	0.7	4.6	1.4	7.3	-0.1	1.6	0.7	4.2	1.5	7.8	-0.1	0.9
4 Gujranwala	0.8	4.1	1.5	6.0	0.0	2.2	0.8	3.6	1.6	6.1	0.0	1.4
5 Sialkot	1.4	3.8	2.5	4.5	0.4	3.1	1.3	3.7	2.4	5.0	0.4	2.6
6 Faisalabad	0.7	3.4	1.4	3.3	0.0	3.6	0.6	3.0	1.4	3.5	-0.1	2.6
7 Multan	-0.4	2.3	-0.6	2.3	-0.3	2.3	-0.4	2.1	-0.6	2.4	-0.3	1.9
8 Sargodha	0.4	3.3	0.6	1.1	0.2	5.2	0.4	3.1	0.7	1.5	0.1	4.4
9 Bahawalpur	-0.6	2.3	-1.2	1.5	-0.1	2.9	-0.4	1.8	-0.9	1.6	0.0	1.9
10 Karachi	0.8	3.3	1.5	1.0	0.0	5.8	0.7	3.3	1.6	1.5	-0.1	5.0
11 Hyderabad	1.5	3.3	2.7	4.2	0.2	2.4	1.3	3.2	2.6	4.8	0.2	1.7
12 Sukkur	1.3	1.1	2.3	-2.5	0.3	4.7	1.4	1.3	2.7	-1.8	0.4	4.1
13 Larkana	0.9	1.0	1.7	0.0	0.2	1.9	1.0	1.8	2.0	1.2	0.2	2.3
14 Peshawar	1.8	4.3	3.7	4.1	0.1	4.5	1.6	4.2	3.8	4.6	-0.1	3.9
15 Bannu	-0.1	2.0	-0.2	0.6	-0.1	3.3	-0.3	2.0	-0.4	0.5	-0.1	3.3
16 Quetta	1.3	1.7	2.5	2.0	0.1	1.3	1.1	1.8	2.5	2.5	0.0	1.2
17 Khuzdar	-0.5	-0.6	0.1	1.0	-1.1	-2.1	-0.5	-0.1	-0.1	1.7	-0.8	-1.6
	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	1.1	6.9	3.8	6.6	-0.1	7.1	1.3	6.6	3.9	6.2	-0.4	6.8
2 Islamabad	0.5	4.9	2.2	4.4	-0.3	5.2	0.6	4.7	2.3	4.1	-0.6	5.1
3 Lahore	0.5	4.0	1.5	8.0	-0.1	1.7	0.6	4.2	1.5	7.7	-0.1	1.4
4 Gujranwala	0.7	3.4	1.9	6.2	0.1	2.0	0.7	3.7	1.6	6.0	0.1	2.1
5 Sialkot	1.2	3.2	2.4	4.5	0.6	2.5	1.3	3.6	2.5	4.8	0.5	2.7
6 Faisalabad	0.5	2.8	1.3	3.5	0.0	2.5	0.6	3.1	1.4	3.3	0.1	2.9
7 Multan	-0.3	2.1	-0.4	2.6	-0.3	1.9	-0.4	2.2	-0.5	2.4	-0.3	2.0
8 Sargodha	0.4	3.5	1.0	2.1	0.1	4.1	0.4	3.3	0.7	1.4	0.2	4.5
9 Bahawalpur	-0.2	2.1	-0.5	1.6	0.0	2.3	-0.4	2.1	-1.1	1.5	-0.1	2.5
10 Karachi	0.5	4.7	1.4	2.5	0.0	5.8	0.6	4.1	1.5	1.7	-0.1	5.9
11 Hyderabad	1.4	3.2	3.1	5.9	0.5	1.8	1.4	3.2	2.7	4.7	0.4	2.0
12 Sukkur	1.0	1.9	2.3	-1.4	0.4	3.5	1.3	1.2	2.4	-2.2	0.5	3.6
13 Larkana	0.9	2.1	2.2	1.9	0.3	2.2	0.9	1.0	1.7	0.0	0.3	1.6
14 Peshawar	1.0	3.6	3.6	4.5	-0.3	3.1	1.4	3.9	3.8	4.3	0.0	3.7
15 Bannu	-0.3	1.3	-0.8	1.0	-0.1	1.5	-0.3	1.9	-0.4	0.6	-0.1	2.7
16 Quetta	0.9	1.9	2.3	2.6	0.3	1.6	1.2	1.8	2.4	2.2	0.3	1.6
17 Khuzdar	0.3	0.1	1.1	4.2	-0.1	-2.0	-0.3	-0.2	0.1	1.5	-0.7	-1.4

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

City	High inflation cities			City	Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Rawalpindi	6.6	6.2	6.8	Faisalabad	3.1	3.3	2.9
Wazirabad	6.3	9.2	4.2	Rahim Yar Khan	2.9	2.8	3.0
Mardan	6.0	5.7	6.1	D.G. Khan	2.4	2.2	2.5
Nawabshah	5.5	2.5	7.5	Mianwali	2.4	-1.5	5.0
Islamabad	4.7	4.1	5.1	Multan	2.2	2.4	2.0
Mingora	4.4	3.6	4.8	Bahawalpur	2.1	1.5	2.5
Lahore	4.2	7.7	1.4	Vehari	1.9	3.7	0.6
Karachi	4.1	1.7	5.9	Bannu	1.9	0.6	2.7
Peshawar	3.9	4.3	3.7	D. I. Khan	1.9	2.5	1.4
Sahiwal	3.9	0.9	5.9	Jhelum	1.8	1.1	2.4
Jhang	3.8	5.8	2.6	Quetta	1.8	2.2	1.6
Gujranwala	3.7	6.0	2.1	Bahawalnagar	1.5	1.0	1.8
Sialkot	3.6	4.8	2.7	Turbat	1.2	3.2	-0.1
Abbotabad	3.6	5.4	2.3	Sukkur	1.2	-2.2	3.6
Attock	3.4	0.5	5.5	Muzaffargarh	1.2	1.0	1.3
Dadu	3.4	3.2	3.5	Larkana	1.0	0.0	1.6
Sargodha	3.3	1.4	4.5	Gwadar	0.6	1.2	0.1
Mir Pur Khas	3.3	3.9	2.9	Loralai & Cantt	0.2	-0.4	0.5
Mithi	3.2	3.4	3.2	Khuzdar	-0.2	1.5	-1.4
Hyderabad	3.2	4.7	2.0	Dera Mrd.Jamali	-1.7	-5.1	0.8

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		
	May-14	Apr-15	May-15	May-14	Apr-15	May-15
<u>Up to Rs. 8000</u>						
General	-0.9	1.1	0.9	7.5	1.0	2.8
Food	-1.9	1.2	1.6	7.1	-1.6	1.8
Non-food	0.4	1.0	0.0	8.0	4.4	4.0
<u>Rs. 8001- 12000</u>						
General	-0.7	1.2	0.8	7.5	1.3	2.9
Food	-1.6	1.3	1.6	7.2	-1.1	2.2
Non-food	0.4	1.1	0.0	7.7	4.0	3.6
<u>Rs. 12001- 18000</u>						
General	-0.5	1.2	0.8	8.6	1.7	3.0
Food	-1.4	1.4	1.7	7.3	-0.5	2.6
Non-food	0.4	1.1	0.0	9.9	3.9	3.5
<u>Rs. 18001- 35000</u>						
General	-0.3	1.3	0.8	8.7	1.8	3.0
Food	-1.2	1.4	1.8	7.4	0.0	3.1
Non-food	0.4	1.2	0.0	9.9	3.4	3.0
<u>Above Rs. 35000</u>						
General	0.0	1.4	0.7	8.4	2.6	3.3
Food	-0.8	1.5	1.9	7.5	0.8	3.6
Non-food	0.4	1.4	0.0	8.8	3.6	3.2
<u>All income groups</u>						
General	-0.3	1.3	0.8	8.3	2.1	3.2
Food	-1.2	1.4	1.8	7.4	0.0	3.0
Non-food	0.4	1.3	0.0	9.0	3.7	3.3

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices	Percentage change	
			May-15	YoY	MoM
1	Wheat	10Kg.	330.0	-2.7	-2.6
2	Wheat Flour Bag	10Kg.	379.3	-2.6	-1.3
3	Rice Basmati Broken	Kg.	69.4	-6.2	-1.0
4	Rice Irri-6	Kg.	50.4	-7.5	0.1
5	Bread Plain Med. Size (340-400 Gm.)	Each	40.8	0.6	0.0
6	Beef	Kg.	304.2	5.4	0.3
7	Mutton	Kg.	599.5	4.8	0.7
8	Chicken Live (Farm)	Kg.	175.1	4.5	16.6
9	Milk Fresh	Litr	77.2	5.8	0.7
10	Curd	Kg.	90.2	6.1	0.4
11	Milk Powdered Nido	500G	355.9	9.5	0.0
12	Egg Hen (Farm)	Doz.	79.1	-2.0	-2.7
13	Mustard Oil	Kg.	178.2	-3.3	-0.4
14	Cooking Oil (Tin)	2.5Ltr	471.3	-12.9	-1.6
15	Veg. Ghee (Tin)	2.5Kg.	463.6	-9.7	-1.2
16	Veg. Ghee Loose	Kg.	141.8	-11.7	-0.5
17	Bananas	Doz.	82.3	-13.4	14.7
18	Masoor Pulse Washed	Kg.	140.2	9.2	3.3
19	Moong Pulse Washed	Kg.	169.5	7.0	1.1
20	Mash Pulse Washed	Kg.	179.5	25.5	6.8
21	Gram Pulse Washed	Kg.	90.2	20.0	17.3
22	Potatoes	Kg.	19.1	-65.9	-6.0
23	Onions	Kg.	47.2	44.1	10.3
24	Tomatoes	Kg.	58.9	140.9	38.9
25	Sugar	Kg.	59.5	13.9	4.6
26	Gur	Kg.	88.0	10.5	4.8
27	Salt Powdered Loose (Lahori)	Kg.	10.0	2.8	0.3
28	Red Chilies Powder Loose	Kg.	265.0	15.8	1.2
29	Garlic	Kg.	148.3	23.0	5.4
30	Tea (Yellow Label)	200Gm.	148.5	13.7	1.2
31	Cooked Beef Plate	Each	83.7	3.3	0.4
32	Cooked Dal Plate	Each	49.2	5.5	0.4
33	Tea Prepared (Sada)	Cup	18.9	5.4	0.1
34	Cigarettes K-2 (20'S)	20'S	45.7	18.3	0.7
35	Long Cloth (Coarse Latha)	Mtr.	201.9	8.3	0.0
36	Shirting	Mtr.	159.6	6.0	0.0
37	Lawn	Mtr.	241.6	10.5	0.6
38	Georgette (Voil Printed)	Mtr.	123.1	4.8	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	87.2	-26.5	1.2
45	Firewood	40Kg	577.4	3.9	0.1
46	Energy Savor 14 Watts	Each	165.7	0.5	0.0
47	Washing Soap (200-250 Gm.)	Cake	24.4	2.6	0.0
48	Match Box	Each	1.9	24.8	4.9
49	Petrol	Litr	75.1	-31.4	0.0
50	Diesel	Litr	84.5	-23.8	0.0
51	L.P.G.(11 Kg Cylinder.)	Each	1057.9	-15.7	-2.8
52	Tele. Local Call	Call	3.9	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	36.3	0.9	0.9
Maximum				140.9	38.9
Median				3.3	0.1
Minimum				-65.9	-6.0

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

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

Items and specification	Weights	Index		
		May-14	Apr-15	May-15
General	100.00	193.55	198.16	199.66
Food & Non-Alcoholic Beverages.	34.83	213.57	214.18	218.32
1 Wheat	0.35	202.46	201.58	195.82
2 Wheat Flour	4.16	215.86	213.53	211.25
3 Wheat Product	0.10	216.64	212.35	212.65
4 Besan	0.15	174.07	175.45	198.34
5 Rice	1.58	194.11	178.25	177.40
6 Cereals	0.16	234.92	239.89	240.96
7 Bakery & Confectionary	1.16	203.57	207.72	208.20
8 Nimco	0.46	229.43	238.93	239.02
9 Meat	2.43	236.99	246.33	246.71
10 Chicken	1.36	206.39	189.13	209.37
11 Fish	0.30	221.27	215.34	214.25
12 Milk Fresh	6.68	239.56	250.46	251.91
13 Milk Product	0.63	234.87	243.32	244.99
14 Milk Powder	0.11	216.45	225.93	226.10
15 Egg	0.46	164.96	175.57	165.19
16 Mustard Oil	0.10	157.00	153.75	152.12
17 Cooking Oil	1.75	162.67	147.12	144.64
18 Vegetable Ghee	2.07	158.90	143.28	141.19
19 Dry Fruits	0.25	233.21	250.60	252.03
20 Fresh Fruits	1.86	237.01	232.24	253.52
21 Pulse Masoor	0.27	180.78	188.36	194.06
22 Pulse Moong	0.23	295.25	311.10	314.45
23 Pulse Mash (Washed)	0.21	202.05	231.57	245.40
24 Pulse Gram	0.24	168.69	173.18	198.97
25 Gram Whole	0.16	179.36	178.42	188.78
26 Beans	0.03	243.91	232.45	233.82
27 Potatoes	0.48	390.89	128.90	125.27
28 Onion	0.54	200.43	262.15	281.38
29 Tomatoes	0.45	72.63	145.03	170.51
30 Fresh Vegetable	1.66	212.79	225.41	251.32
31 Sugar	1.04	188.83	205.53	210.60
32 Gur	0.02	248.63	256.44	264.36
33 Honey	0.04	282.11	303.39	303.39
34 Sweet Meet	0.25	225.95	234.89	234.89
35 Beverages	1.20	200.63	207.94	209.53
36 Jam, Tomato Ketchup & Pickle	0.25	193.93	207.59	207.96
37 Condiments	0.27	242.66	257.07	258.07
38 Spices	0.54	221.11	234.74	235.30
39 Tea	0.84	211.36	226.62	228.63
Alcoholic Beverages, Tobacco	1.41	223.66	266.65	268.97
40 Cigarette	1.39	224.02	267.63	269.95
41 Betel Leaves & Nuts	0.02	201.93	207.03	209.62
Clothing & Footwear	7.57	205.01	217.17	217.58
42 Cotton Cloth	1.73	197.56	211.44	212.76
43 Woolen Cloth	0.88	224.61	234.13	234.13
44 Ready Made Garment	0.97	205.68	220.40	220.64
45 Woolen Readymade Garments	0.40	218.34	240.86	240.86
46 Hosiery	0.51	216.85	229.28	229.66
47 Dopatta	0.44	223.46	232.30	232.33
48 Cleaning & Laundering	0.21	226.92	237.64	237.72

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		May-14	Apr-15	May-15
49 Tailoring	0.88	245.06	270.28	270.70
50 Footwear	1.55	163.45	164.53	164.56
Housing,Water,Elect,Gas & Other Fuel	29.41	169.51	177.73	177.75
51 House Rent	21.81	157.05	166.88	166.88
52 Construction Input Item	0.56	232.02	238.88	238.93
53 Construction Wage Rate	0.33	198.08	210.14	211.69
54 Water Supply	0.50	149.92	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	277.67	208.84	211.77
58 Fire Wood Whole	0.23	266.27	274.81	274.59
Furnished H.Hold Equip.& Maint. Etc	4.21	202.02	211.06	210.84
59 Furniture	0.33	194.15	202.69	203.03
60 Household Textile	0.65	198.83	207.73	207.80
61 Household Equipment	0.59	170.01	173.79	174.36
62 Utensils	0.32	204.94	212.94	213.57
63 Plastic Products	0.25	195.15	201.48	201.69
64 Washing Soap & Detergent	0.79	219.42	225.12	221.82
65 Sewing Needle & Dry Cell	0.15	178.69	198.97	198.97
66 Household Servant	1.04	214.31	228.35	229.23
67 Marriage Hall Charges	0.08	220.81	231.83	231.83
Health	2.19	172.45	178.21	178.22
68 Drug Medicine	1.27	145.18	148.33	148.34
69 Medical Equipment	0.01	217.98	225.36	225.36
70 Doctor (MBBS) Clinic Fee	0.59	232.41	241.97	241.97
71 Medical Test	0.32	168.61	177.69	177.69
Transport	7.20	195.03	176.70	176.82
72 Motor Vehicle	0.66	159.77	163.41	163.41
73 Motor Vehicle Accessories	0.24	226.97	226.51	225.89
74 Motor Fuel	3.03	186.95	150.53	150.45
75 Mechanical Service	0.46	204.29	212.78	215.35
76 Motor Vehicle Tax	0.11	153.74	210.18	210.18
77 Transport Services	2.70	209.96	197.35	197.35
Communication	3.22	129.81	130.29	130.29
78 Postal Services	0.07	215.89	227.44	227.44
79 Communication & Apparatus	3.15	128.01	128.25	128.25
Recreation & Culture	2.02	188.47	192.74	192.98
80 Recreation & Culture	0.86	127.00	128.25	128.25
81 Text Books	0.57	279.73	290.10	290.62
82 News Papers	0.19	175.42	175.42	175.42
83 Stationery	0.40	197.36	201.55	201.99
Education	3.94	188.73	209.17	209.17
84 Education	3.94	188.73	209.17	209.17
Restaurants And Hotels	1.23	238.05	247.73	248.45
85 Ready Made Food	1.23	238.05	247.73	248.45
Miscellaneous Goods And Services	2.76	215.29	223.99	223.08
86 Personal Care	1.49	198.96	207.29	206.16
87 Cosmetics	0.39	181.99	190.49	190.66
88 Blades	0.03	183.30	185.88	185.88
89 Personal Equipments	0.84	260.62	270.30	269.23

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

Items and Specifications	Index		
	May-14	Apr-15	May-15
General	211.71	205.65	207.92
Agriculture Forestry & Fishery	223.55	219.00	224.47
1 Wheat	204.31	206.14	199.19
2 Maize	190.14	188.60	198.78
3 Rice	179.49	163.71	163.53
4 Sorghum/Jowar	317.54	292.62	321.25
5 Millet/Bajra	169.81	172.47	189.44
6 Vegetables	211.50	262.99	289.71
7 Fresh Fruits	266.20	242.95	262.42
8 Dry Fruits	213.82	237.25	238.89
9 Cotton Seeds	220.44	215.48	231.37
10 Other Oil Seeds	177.64	157.14	161.07
11 Edible Roots/ Potatoes	447.26	115.50	106.40
12 Stimulant And Spice Crops	377.03	286.93	299.29
13 Pulses	198.71	209.56	229.44
14 Sugar Crops	267.92	286.29	286.29
15 Fibre Crops	217.38	172.53	178.69
16 Unmanufactured Tobacco	196.08	217.50	219.79
17 Poultry	215.25	189.61	214.91
18 Milk From Bovine Animals	230.92	251.69	252.55
19 Eggs	158.06	170.54	163.42
20 Raw Animal Material/Wool	156.33	177.10	174.38
21 Hides And Fur Skins, Raw	145.23	159.72	158.90
22 Fuel Wood In Logs	243.47	259.53	259.09
23 Fishes Live Fresh Or Chilled	249.76	283.89	282.30
Ores/Minerals, Gas & Elect.	242.36	245.66	245.36
24 Coal Not Agglomerated	223.53	223.53	223.53
25 Natural Gas Liquefied	201.77	200.74	200.10
26 Salt & Pure Sodium Chloride	234.11	248.84	248.84
27 Electrical Energy	287.44	295.61	295.61
Food, Beverages, Tobacco, Textiles	201.29	205.98	206.76
28 Meat Of Animals	241.31	260.64	262.20
29 Vegetables & Fruit Juices	192.16	199.28	199.38
30 Dried Fruits & Nuts	218.45	228.25	229.34
31 Fruit Juices	169.52	174.06	174.61
32 Vegetable Oil Refined	165.54	155.23	153.75
33 Vegetable Ghee	141.65	124.33	122.65
34 Oil Cakes	219.35	200.07	206.29
35 Processed Liquid Milk	222.76	251.52	251.52
36 Milk And Cream In Solid Form	209.55	221.70	220.36
37 Ice Cream	209.79	219.91	219.91
38 Dairy Products N.E.C	230.41	243.80	243.80
39 Wheat Flour	197.22	194.97	192.24
40 Other Cereal Flour	139.33	146.98	173.87
41 Sugar Refined	196.99	220.03	226.96
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	102.28	102.28	102.28
44 Coffee And Tea	188.38	203.67	204.59
45 Spices	191.65	189.90	189.82
46 Other Food Products	293.22	294.23	292.02
47 Mineral Water	185.23	187.86	187.86
48 Beverages	164.58	171.62	171.95
49 Tobacco Products	242.41	290.52	290.52
50 Cotton Yarn	200.83	170.12	170.81
51 Nylon Yarn	165.10	150.22	150.22
52 Blended Yarn	191.86	182.72	184.93
53 Woven Fabrics	226.82	258.39	258.39
54 Cotton Fabrics	193.10	201.34	201.34
55 Other Fabrics	194.43	212.61	213.71

Inflation Monitor, May 2015

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities				
Items and Specifications		Index		
		May-14	Apr-15	May-15
56	Silk And Rayon Fabrics	165.85	181.33	181.33
57	Towels	242.19	265.62	265.62
58	Blankets	219.66	235.86	235.86
59	Bed Sheets	242.12	256.29	256.29
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	198.64	218.08	218.08
64	Ready Made Garments	168.50	186.77	188.82
65	Leather With Out Hairs	212.68	215.06	221.97
66	Other Leather N.E.C	276.72	212.39	212.39
67	Footwear's	134.22	134.22	134.22
Other Transportable Goods		212.29	181.06	184.03
68	Timber	178.07	202.05	202.05
69	Printing Paper	174.58	162.72	164.56
70	Hard Board	229.17	197.92	197.92
71	Coke	163.45	163.45	163.45
72	Motor Sprit	182.40	125.47	125.47
73	Diesel Oil	260.69	178.33	178.33
74	Kerosene Oil	288.01	178.93	178.93
75	Furnace Oil	166.52	94.70	114.06
76	Mobil Oil	197.73	200.74	200.65
77	Chemicals	176.24	195.03	194.51
78	Dying Materials	143.77	146.55	146.55
79	Fertilizers	265.61	272.54	272.00
80	Pesticides	237.58	293.74	293.74
81	Insecticides	178.94	143.34	141.69
82	Paints & Varnishes	269.84	291.69	291.69
83	Medicines	141.80	145.19	145.19
84	Soaps & Detergent	182.20	178.14	180.40
85	Auto Tyres	186.63	191.36	191.36
86	Plastic Products	203.08	222.47	225.35
87	Glass Sheets	209.86	228.76	230.11
88	Other Glass Articles	218.27	243.63	243.63
89	Ceramics And Sanitary	199.50	219.25	219.45
90	Bricks Blocks And Tiles	196.15	209.76	210.12
91	Cement	207.98	206.86	207.25
92	Bed Foams	149.67	156.67	156.67
93	Matches	143.20	143.20	162.62
Metal Product Machinery & Equip		170.11	172.88	172.74
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	139.53	140.03	139.25
96	Pipe Fittings	168.33	191.94	191.94
97	Steel Products	170.24	173.88	173.88
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	181.12	197.69	199.53
101	Cultivators	226.90	219.76	219.76
102	Chuff Cutter	149.20	149.20	149.20
103	Tractors	214.54	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	193.39	198.20	198.30
107	Electrical Wires	179.18	190.87	187.86
108	Lighting Equipments	164.95	168.19	168.19
109	Radio And Television	126.49	126.49	126.49
110	Motor Vehicles	182.59	183.03	183.03
111	Motor Cycles	126.70	125.89	125.89
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	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
	Mar	195.57	214.25	184.37	203.89	222.11	192.33	207.05
	Apr	198.16	217.26	186.71	205.65	225.38	193.13	208.42
	May	199.66	221.22	186.74	207.92	228.09	195.12	211.48

*: all groups combined

Table A13: International Commodity Prices/ Indices				
	Feb-15	Mar-15	Apr-15	May-15
Energy				
Crude Oil (US\$ per barrel) *	54.9	52.8	57.4	62.5
IMF Energy Index (2005 = 100)	108.3	104.2	109.4	117.8
WB Energy Index (2010 = 100) @	70.4	68.3	72.3	78.1
Food				
Rice (\$/MT)	409.5	400.7	392.4	382.4
Wheat (\$/MT)	237.2	230.8	223.3	215.1
Sugar (US cent/ pound)	14.5	12.8	12.9	12.7
Palm Oil (\$/MT)	634.4	607.7	591.8	601.4
Soybean Oil (\$/MT)	697.9	683.4	691.7	716.5
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	69.8	69.4	71.7	72.9
IMF Metal Price Index (2005 = 100)	137.3	134.6	133.8	139.6
Copper (\$/MT)	5,729.3	5,939.7	6,042.1	6,294.8
Aluminum (\$/MT)	1,817.8	1,773.9	1,819.2	1,804.0
Iron Ore (\$ cents/dry MT)	62.7	56.9	51.2	60.2
Tin (\$/MT)	18,233.9	17,421.9	15,900.9	15,803.6
Nickle (\$/MT)	14,573.8	13,755.5	12,830.9	13,511.3
Zinc (\$/MT)	2,097.8	2,028.7	2,212.7	2,281.8
Lead (\$/MT)	1,795.7	1,792.5	2,005.4	1,991.8
Uranium (\$/MT)	38.1	39.4	38.7	35.6
DAP (\$/MT)	485.3	479.0	464.0	470.0
Urea (\$/MT)	297.0	271.0	259.0	253.0
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	195.57
Apr	168.00	177.74	194.06	198.16
May	169.93	178.65	193.55	199.66
Jun	169.99	179.94	194.74	
Seasonally Adjusted Series				
Jul	154.37	169.12	182.71	197.39
Aug	155.76	169.81	184.27	197.20
Sep	157.33	171.16	183.78	197.86
Oct	159.16	171.33	186.87	197.71
Nov	160.28	171.34	189.95	197.52
Dec	160.93	173.73	189.67	197.79
Jan	162.90	176.04	189.96	197.31
Feb	164.72	176.94	191.03	197.24
Mar	166.26	177.26	192.44	197.27
Apr	168.10	177.83	194.20	198.32
May	170.55	179.35	194.30	200.42
Jun	170.81	180.86	195.74	

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	214.25
Apr	187.43	197.74	217.33	217.26
May	187.75	200.00	214.75	221.22
Jun	187.35	202.11	216.98	
Seasonally Adjusted Series				
Jul	173.86	189.49	206.63	220.95
Aug	174.53	189.29	208.65	220.25
Sep	177.09	190.45	205.43	220.12
Oct	179.63	190.08	208.77	219.68
Nov	180.62	190.12	214.78	219.35
Dec	180.63	194.54	212.56	219.71
Jan	182.90	197.66	211.99	218.32
Feb	184.72	198.50	213.65	218.24
Mar	186.23	198.14	216.59	217.86
Apr	188.44	198.81	218.61	218.66
May	189.33	201.79	216.69	223.16
Jun	189.30	204.25	219.25	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.23	100.26	100.48	100.34	100.33
Aug	100.72	100.75	100.78	100.76	100.75
Sep	100.75	100.75	100.76	100.78	100.76
Oct	101.03	101.04	101.04	101.06	101.04
Nov	100.61	100.63	100.67	100.64	100.64
Dec	99.50	99.48	99.48	99.50	99.49
Jan	99.80	99.81	99.81	99.82	99.81
Feb	99.00	98.97	98.94	98.93	98.96
Mar	99.23	99.19	99.16	99.14	99.18
Apr	99.94	99.95	99.93	99.92	99.93
May	99.63	99.61	99.61	99.62	99.62
Jun	99.52	99.49	99.49		99.50

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.54	100.65	100.76	100.84	100.70
Aug	101.60	101.68	101.74	101.73	101.69
Sep	101.74	101.76	101.78	101.82	101.77
Oct	101.92	101.88	101.84	101.85	101.87
Nov	101.46	101.53	101.58	101.55	101.53
Dec	99.21	99.19	99.21	99.26	99.22
Jan	99.45	99.46	99.44	99.44	99.45
Feb	97.82	97.76	97.70	97.67	97.74
Mar	98.51	98.45	98.40	98.34	98.42
Apr	99.46	99.46	99.41	99.36	99.42
May	99.16	99.11	99.11	99.13	99.13
Jun	98.97	98.95	98.96		98.96

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	0.23
Apr	1.83	1.09	1.70	1.32
May	1.15	0.51	-0.26	0.76
Jun	0.04	0.72	0.61	
Seasonally Adjusted Series				
Jul	0.57	-0.99	1.02	0.84
Aug	0.90	0.41	0.85	-0.10
Sep	1.00	0.79	-0.27	0.34
Oct	1.16	0.10	1.68	-0.08
Nov	0.71	0.01	1.65	-0.10
Dec	0.41	1.40	-0.15	0.14
Jan	1.23	1.33	0.15	-0.24
Feb	1.11	0.51	0.56	-0.03
Mar	0.94	0.18	0.74	0.01
Apr	1.11	0.32	0.91	0.53
May	1.46	0.85	0.06	1.06
Jun	0.15	0.84	0.74	

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	0.52
Apr	2.16	1.37	1.98	1.41
May	0.17	1.15	-1.19	1.82
Jun	-0.21	1.05	1.04	
Seasonally Adjusted Series				
Jul	1.31	0.10	1.16	0.78
Aug	0.38	-0.10	0.98	-0.32
Sep	1.47	0.61	-1.54	-0.06
Oct	1.44	-0.19	1.62	-0.20
Nov	0.55	0.02	2.88	-0.15
Dec	0.01	2.33	-1.03	0.17
Jan	1.26	1.60	-0.27	-0.64
Feb	0.99	0.43	0.78	-0.03
Mar	0.82	-0.18	1.37	-0.18
Apr	1.19	0.34	0.94	0.37
May	0.47	1.50	-0.88	2.06
Jun	-0.02	1.22	1.18	

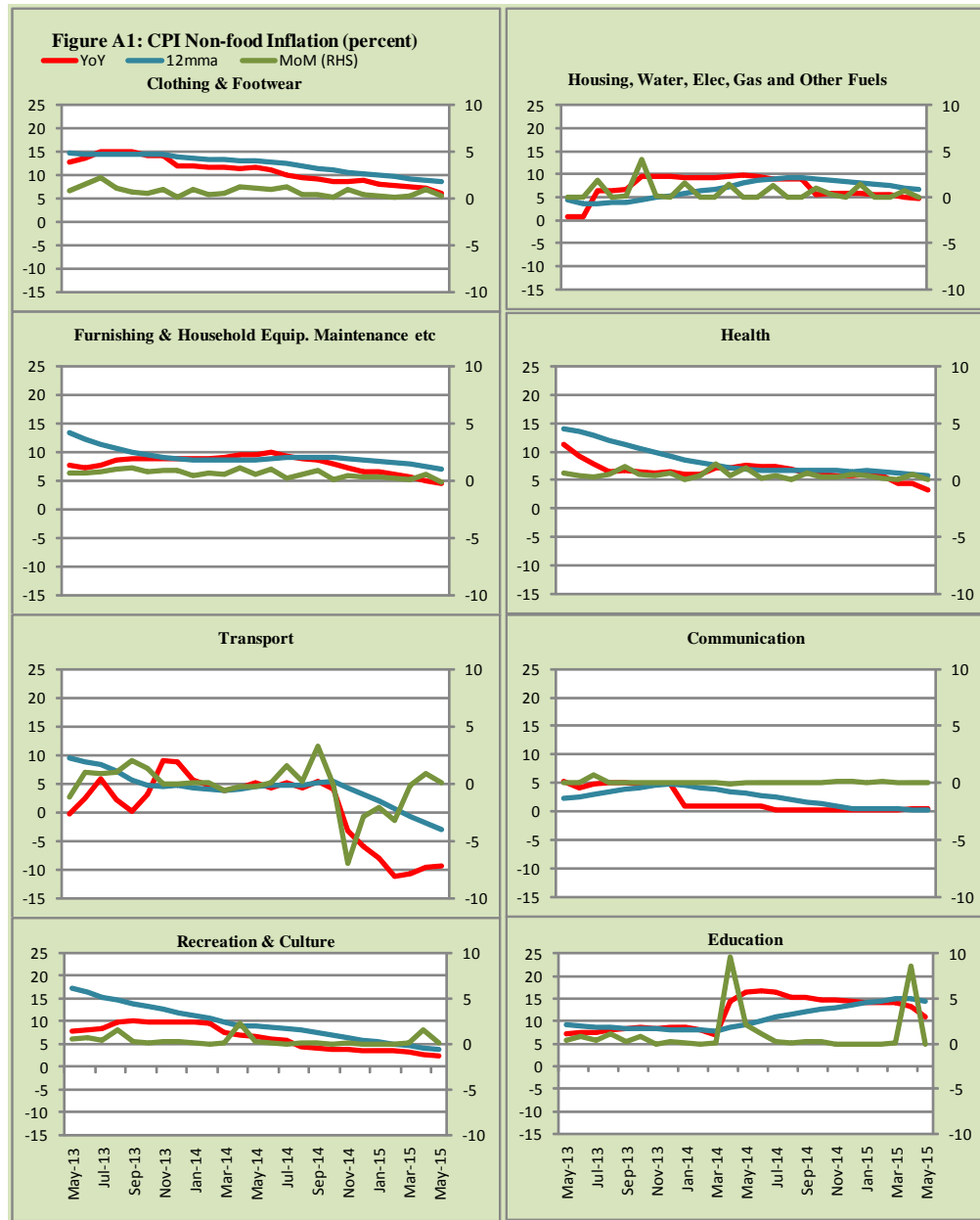


Figure A2: Frequency Distribution of Price Changes of CPI Items, May 2015

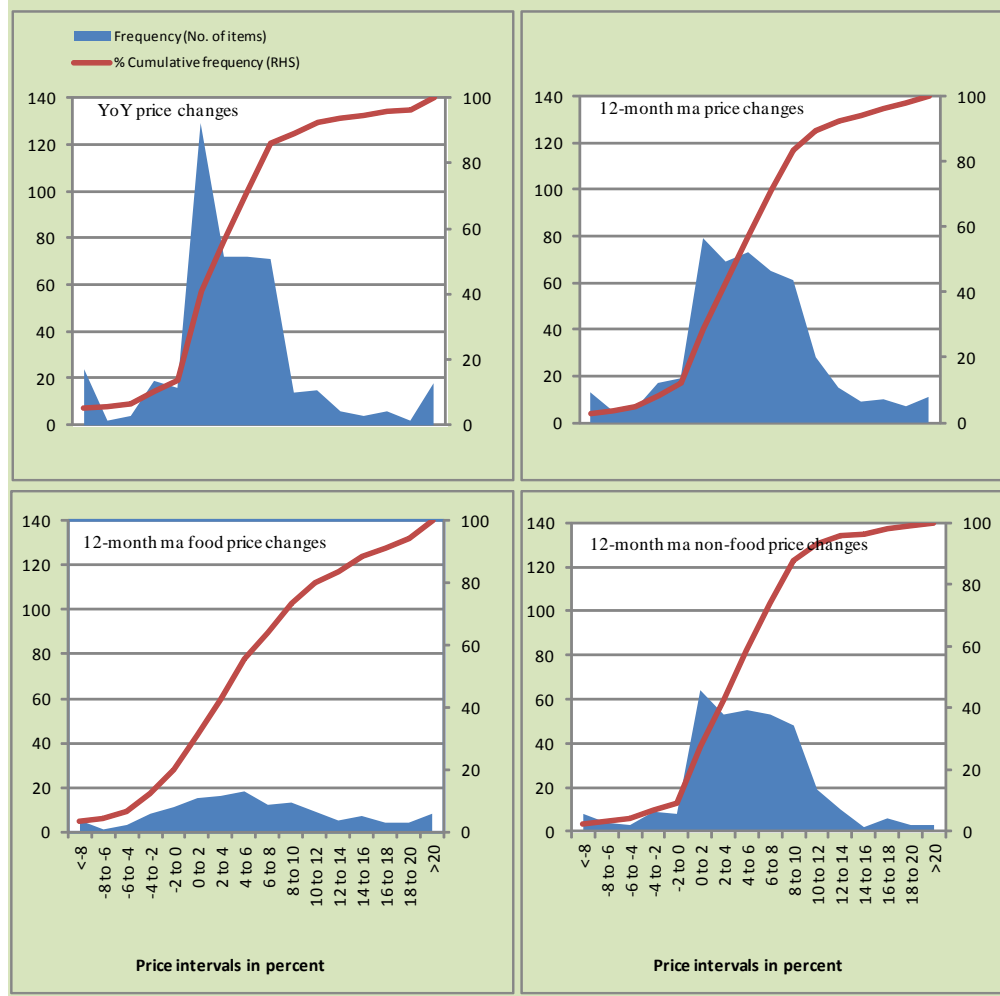


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, May 2015

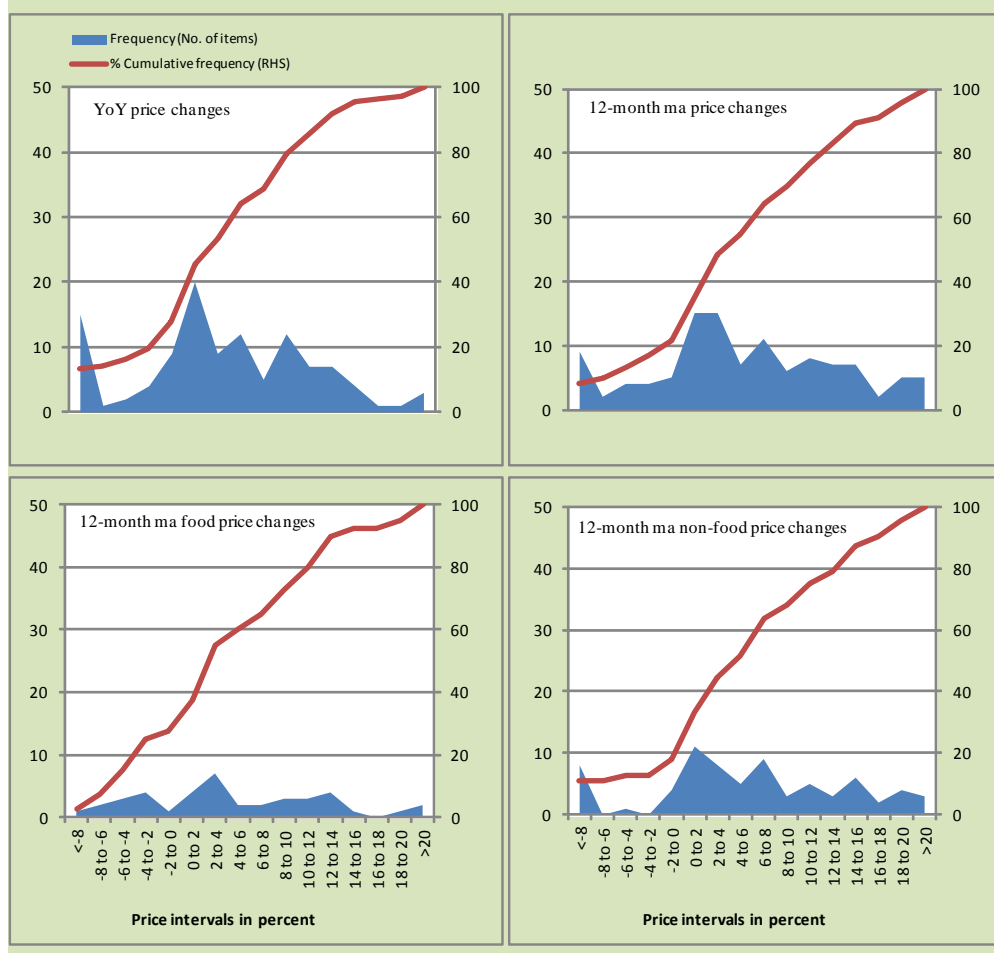
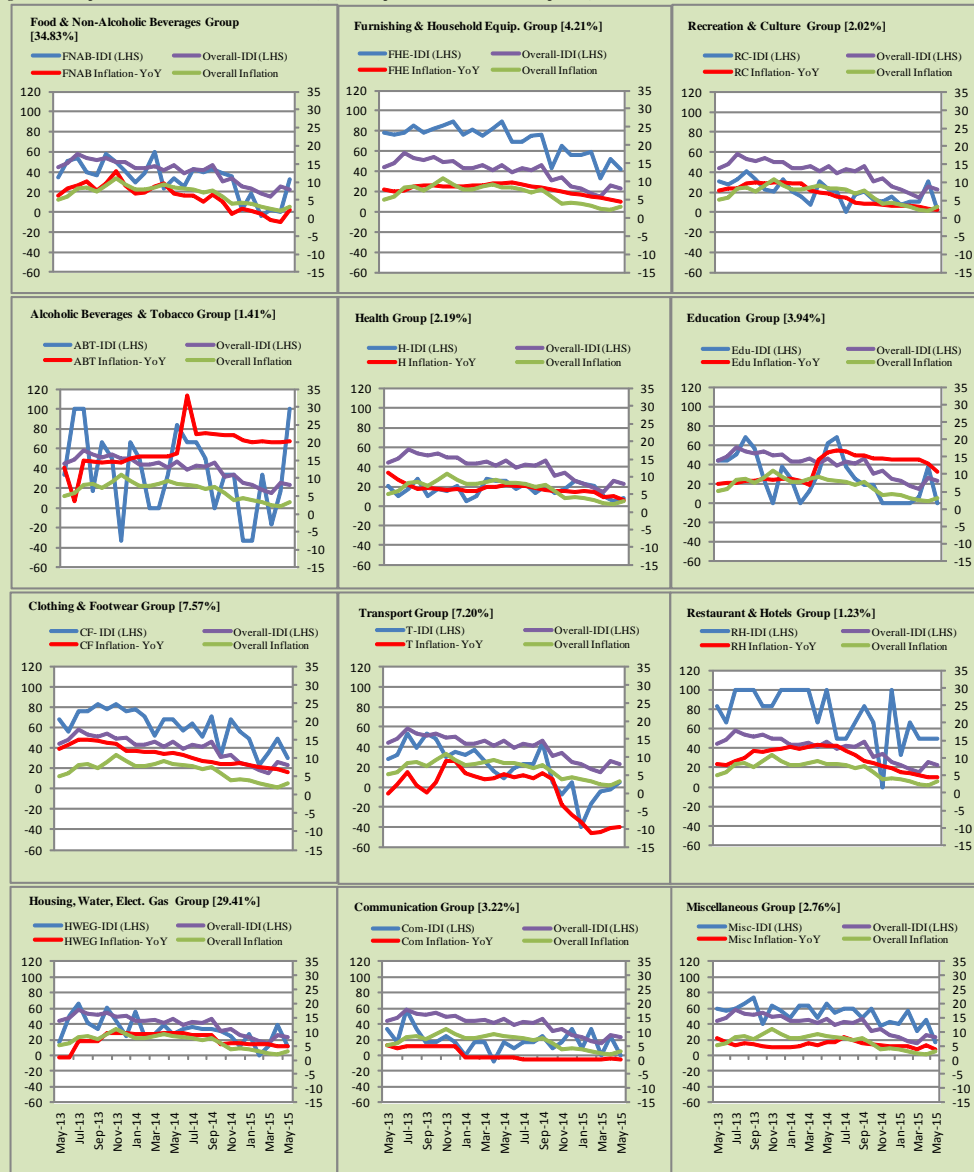


Figure A4: Group-wise/Overall Inflation Diffusion Index (IDI) and respective/overall YoY Inflation (percent)



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:

- 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.