

Inflation Monitor

March 2015



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 2.5 percent on year-on-year basis in March 2015 as compared to 3.2 percent in the previous month and 8.5 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.2 percent in March 2015 as compared to -0.9 percent in the previous month and 1.0 percent during the corresponding month of last year. Insignificant decrease has been observed in seasonally adjusted month-on-month CPI inflation in March 2015 compared to -0.1 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 3.8 percent in March 2015 as compared to 4.2 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) has increased insignificantly in March 2015 as compared to -0.2 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 5.9 percent in March 2015 as compared to 6.2 percent in the previous month. It was 7.6 percent in the corresponding month of last year.
6. Negligible increase has been observed in Core inflation (NFNE) on month-on-month basis in March 2015 as compared to a slight decrease in the previous month. It was 0.3 percent increase in Core NFNE index observed in March 2014.
7. WPI inflation on year-on-year basis decreased to -3.7 percent in March 2015 when compared to -3.4 percent a month earlier. During March 2014, WPI inflation was recorded at 7.7 percent.

8. WPI inflation on month-on-month basis showed a slight increase in March 2015 as compared to -1.1 percent in the previous and 0.3 percent in the corresponding month of last year.
9. SPI inflation on year-on-year basis decreased to -2.4 percent in March 2015 as compared to -0.7 percent in the previous month. It was 10.5 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis has increased slightly in March 2015 as compared to -1.4 percent in the previous month and 1.7 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 March 2015 are described below:

- Core inflation based on new measure RSC on year-on-year basis is recorded at 6.2 percent in March 2015 compared to 6.4 percent in the previous month and 7.8 percent in the corresponding month of last year.
- Core RSC inflation on month-on-month basis is recorded at 0.1 in March 2015 compared to negligible increase in the previous month and 0.2 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
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
Mar-15	2.5	0.2	0.5	0.5	3.9	0.0 ¹	5.9	0.0 ²	3.8	0.0 ³	6.2	0.1	-3.7	0.0 ⁴	-2.4	0.0 ⁵
* NFNE is Non-food non-energy ** Relatively Stable Component of CPI *** SPI for all income groups combined 1: 0.0235 2: 0.0445 3: 0.0226 4: 0.0147 5: 0.0338																

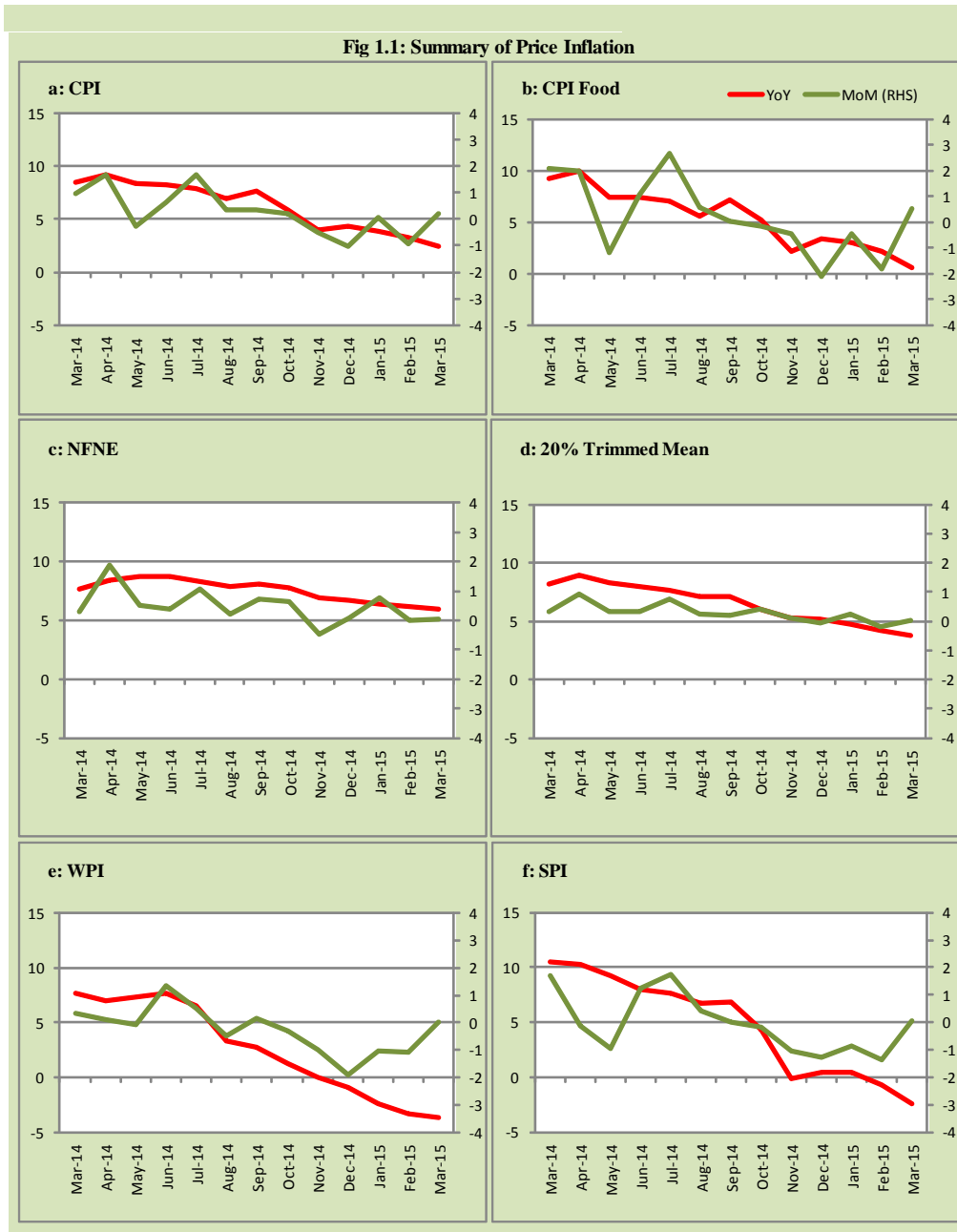
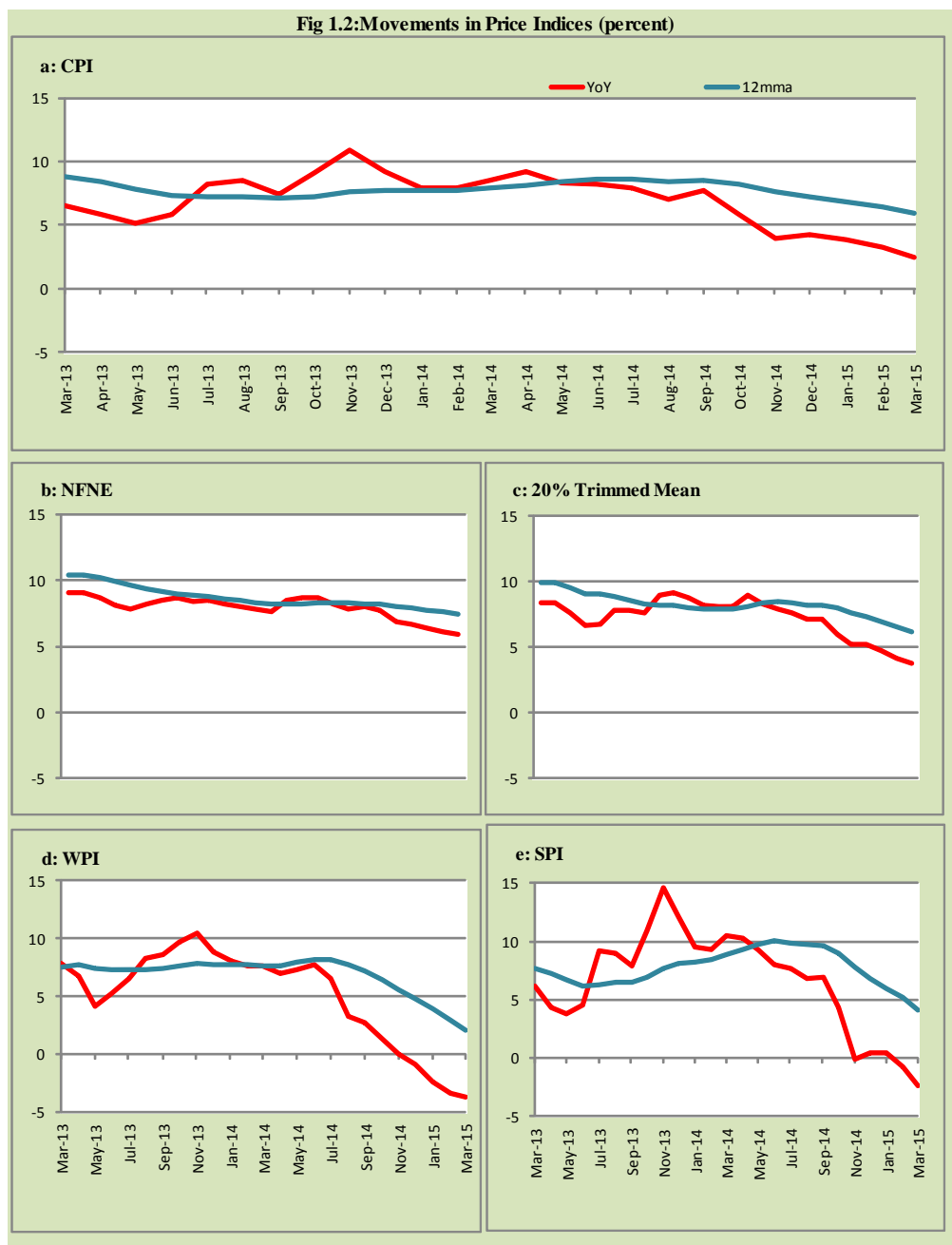


Fig 1.2: Movements in Price Indices (percent)



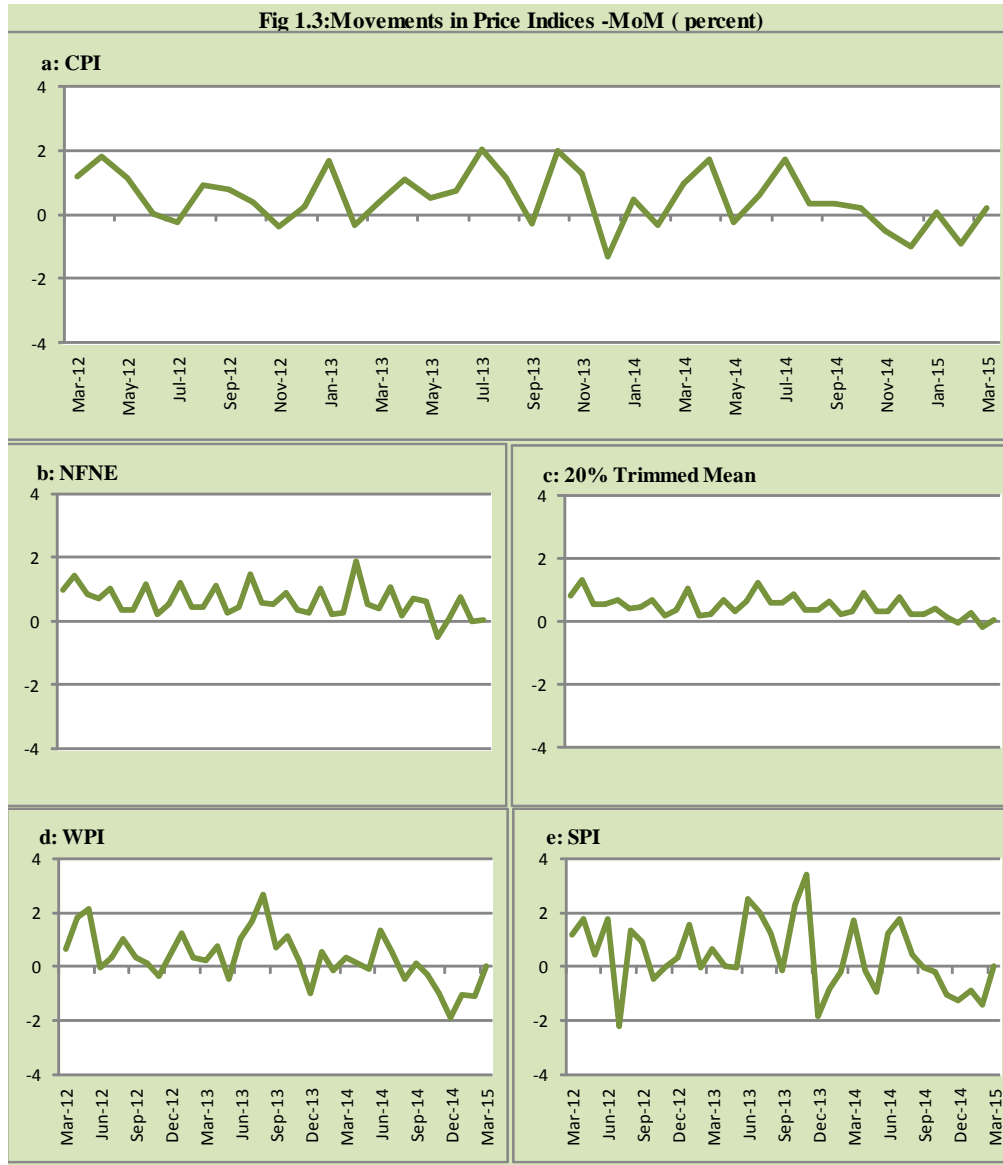
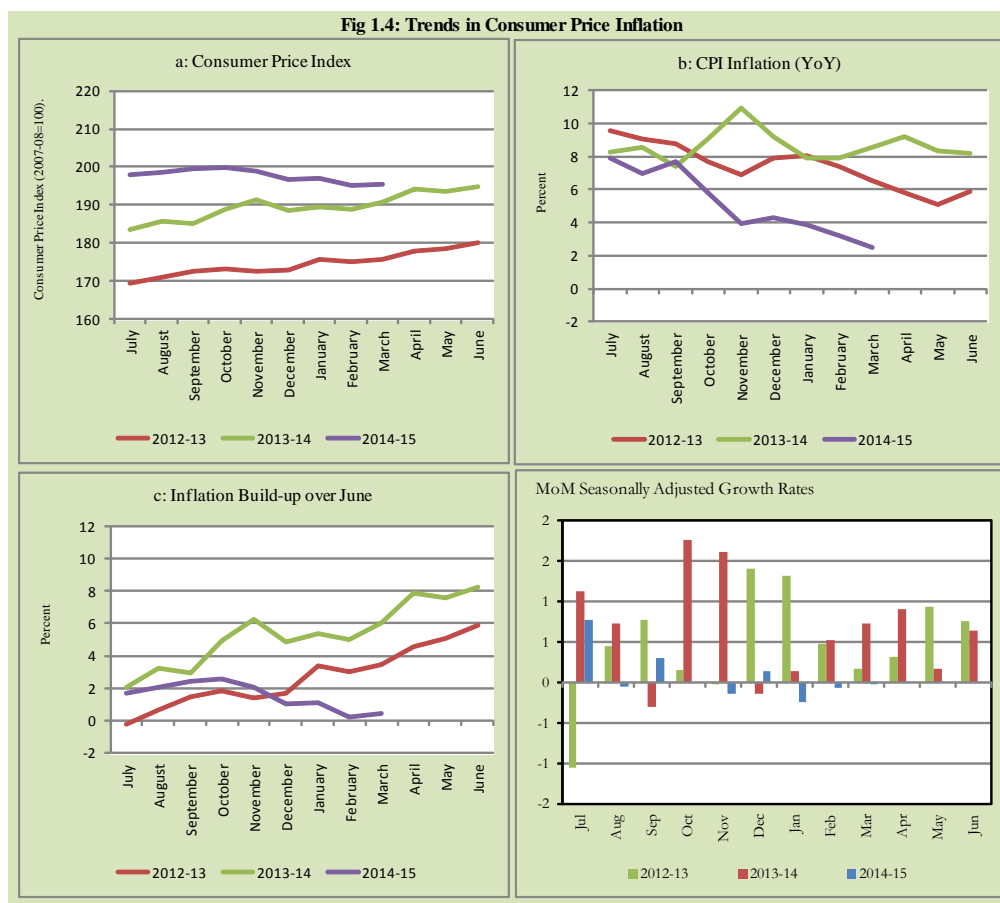


Fig 1.4: Trends in Consumer Price Inflation



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 March 2015 except Quetta. Among these five cities, the lowest inflation was observed in Quetta at -0.2 percent while the highest inflation was observed in Islamabad at 5.5 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)						
	Mar-14		Feb-15		Mar-15	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.0	8.5	-0.9	3.2	0.2	2.5
Islamabad	0.7	14.1	-0.5	6.0	0.2	5.5
Karachi	0.6	7.8	-0.5	4.2	0.3	3.8
Lahore	1.4	9.1	-1.1	5.8	0.6	4.9
Peshawar	1.3	10.6	-0.8	4.7	0.2	3.6
Quetta	0.7	8.8	-0.5	0.8	-0.2	-0.2

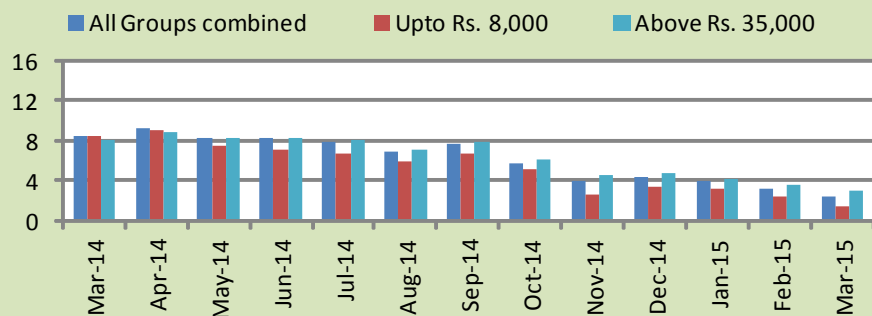
3. Income Group wise Inflation

Income group above Rs. 35,000 manifested highest inflation in general and food groups during March 2015 among all income groups, but for the same groups (general & non-food) the undermost income group (up to Rs. 8,000) has the lowest inflation and highest inflation in non-food group during the month of March 2015 (Table A7 of annexure-A).

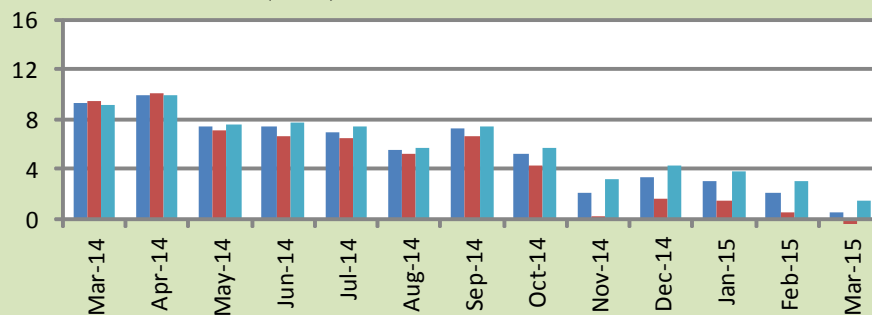
Table 3.1 Income Group- wise Inflation (YoY)									
Income Groups	General			Food			Non-food		
	Mar-14	Feb-15	Mar-15	Mar-14	Feb-15	Mar-15	Mar-14	Feb-15	Mar-15
All Groups Combined	8.5	3.2	2.5	9.3	2.1	0.5	8.0	4.0	3.9
Up to Rs. 8,000	8.5	2.5	1.5	9.4	0.5	-1.1	7.4	5.0	4.9
Rs. 8,001- 12,000	8.2	2.7	1.8	9.3	1.1	-0.6	7.0	4.6	4.4
Rs. 12,001- 18,000	9.2	3.0	2.1	9.3	1.6	0.0	9.1	4.3	4.2
Rs. 18,001- 35,000	9.1	3.0	2.2	9.3	2.1	0.5	9.0	3.8	3.7
Above Rs. 35,000	8.1	3.6	3.0	9.2	3.0	1.4	7.6	3.9	3.8

Fig 3.1: Income Group- wise Inflation

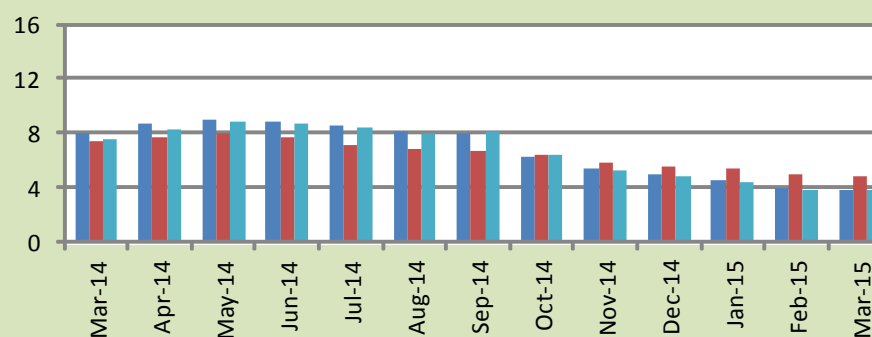
a: CPI Overall Inflation (YoY)



b: CPI Food Inflation (YoY)



c: CPI Non-Food Inflation (YoY)



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 8.95 percent during March 2015 from 26.97 percent in February 2015. It was 45.11 percent in March 2014.

The weighted contribution of non-food group increased to 91.05 percent in March 2015 from 73.03 percent in February 2015.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)						
Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Mar-15	8.95	23.54	58.95	-31.96	19.90	20.62

5. Inflation Diffusion Index

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
General	45.9	41.2	46.5	38.9	42.8	41.2	46.2	30.9	33.7	25.4	23.0	18.2	14.9
Food & Non-Alcoholic Beverages	59.5	23.9	33.6	25.7	43.0	39.8	43.0	38.3	35.7	2.7	18.6	-3.6	1.8
Alcoholic Beverages & Tobacco	0.0	33.3	83.3	66.7	66.7	50.0	0.0	33.3	33.3	-33.3	-33.3	33.3	-16.7
Clothing & Footwear	52.5	67.8	67.8	57.6	64.4	50.8	71.2	32.2	67.8	55.9	49.2	23.7	35.6
Housing, Water, Elect, Gas & other Fuels	27.8	38.9	27.8	33.3	36.1	33.3	33.3	30.6	25.0	11.1	27.8	0.0	11.1
Furnishing & Household Equip. Maintenance etc	75.4	82.6	89.9	69.6	69.6	75.4	76.8	43.5	65.2	56.5	56.5	59.4	33.3
Health	28.2	25.6	25.6	17.9	23.1	12.8	20.5	12.8	17.9	25.6	23.1	20.5	10.3
Transport	25.6	16.3	9.3	18.6	23.3	23.3	44.2	4.7	-7.0	4.7	-39.5	-16.3	-4.7
Communication	16.7	-8.3	16.7	8.3	16.7	16.7	25.0	8.3	16.7	33.3	8.3	33.3	0.0
Recreation & Culture	7.7	30.8	23.1	20.5	0.0	17.9	20.5	12.8	10.3	15.4	7.7	10.3	10.3
Education	12.5	31.3	62.5	68.8	37.5	25.0	18.8	18.8	0.0	0.0	0.0	0.0	6.3
Restaurant & Hotels	100.0	66.7	100.0	50.0	50.0	66.7	83.3	66.7	0.0	100.0	33.3	66.7	50.0
Miscellaneous	62.9	48.6	65.7	54.3	60.0	60.0	48.6	60.0	37.1	42.9	40.0	57.1	31.4
NFNE	42.6	48.5	51.2	43.5	43.5	42.0	49.7	29.6	34.3	34.3	26.9	25.7	19.8

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	Mar-14		Feb-15		Mar-15	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	19.20	1.16	-11.96	-0.01	-13.59	-0.72
2	Wheat Flour Bag	10 Kg	17.55	1.36	-6.27	-0.53	-7.73	-0.22
3	Rice Basmati Sup. Qlty.	Kg	9.85	0.05	-5.47	-1.89	-7.63	-2.23
4	Pulse Masoor (Washed)	Kg	23.95	2.67	8.84	-0.01	4.36	-1.56
5	Pulse Moong (Washed)	Kg	25.78	6.31	19.65	0.38	11.90	-0.57
6	Pulse Mash (Washed)	Kg	2.28	1.29	18.49	0.60	16.15	-0.71
7	Pulse Gram	Kg	-20.96	0.47	4.94	-0.32	2.24	-2.12
8	Vegetable Ghee (Loose)	Kg	2.28	2.11	-7.82	-2.20	-9.91	-0.21
9	Sugar Refined	Kg	1.93	4.21	5.61	0.66	0.93	-0.40
10	Milk Fresh (Unboiled)	Ltr	6.73	0.00	6.05	0.00	6.07	0.03
11	Tea- Tapal Danedar	200 Gm	-4.94	-7.92	-10.80	1.17	-2.68	0.46
12	Beef With Bone Av. Qlty.	Kg	6.51	0.68	4.66	0.18	3.97	0.02
13	Mutton Av. Qlty.	Kg	7.98	0.93	5.43	0.81	4.51	0.04
14	Chicken Farm Broiler (Live)	Kg	27.25	6.11	-12.83	-17.95	-16.27	1.92
15	Eggs Farm	Doz	26.14	15.29	-0.56	-13.85	-20.70	-8.06
16	Potatoes	Kg	93.20	39.17	-15.71	-17.00	-43.28	-6.35
17	Onion	Kg	-10.29	0.70	-30.64	-5.89	-14.65	23.92
18	Tomatoes	Kg	-21.56	53.32	57.80	0.68	11.35	8.19
19	Ginger	Kg	72.24	4.41	-15.44	-8.21	-17.22	2.22
20	Garlic	Kg	11.41	11.02	7.71	-0.38	-2.90	0.08

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Mar-14		Feb-15		Mar-15	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-0.4	-0.1	-34.1	5.3	-35.8	-2.8
Food	1.3	4.3	-15.8	-3.7	-21.3	-2.5
Metals	-13.4	-4.0	-20.2	-2.2	-18.4	-1.9
Energy	0.1	-1.1	-43.9	11.9	-45.1	-3.1
Agricultural Raw Material	9.2	3.2	-6.6	0.6	-10.6	-1.3
Cotton	2.6	3.1	-25.7	3.7	-28.5	-0.7

Source: IMF

8. Seasonal Adjustment in CPI

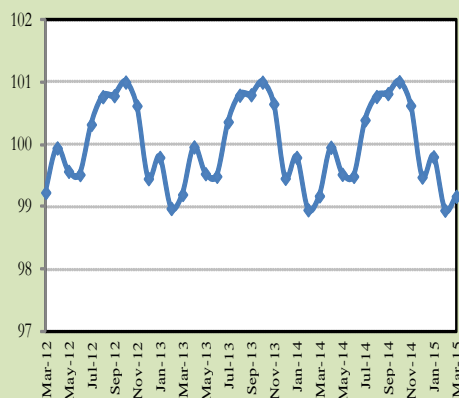
Seasonal adjustment is the process of estimating and removing the seasonal effects from a time series after decomposing it into seasonal, trend, cycle and irregular components. The purpose is to identify the different components of the time series and thus provide a better understanding of its underlying 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 March 2015 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

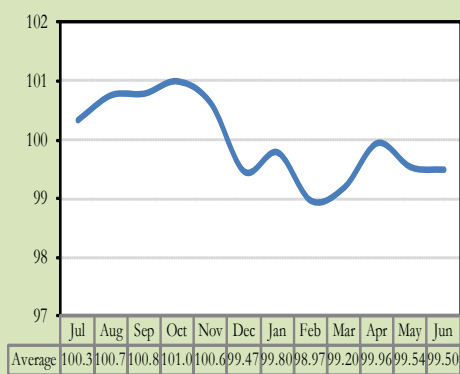
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

Seasonal Factors of CPI



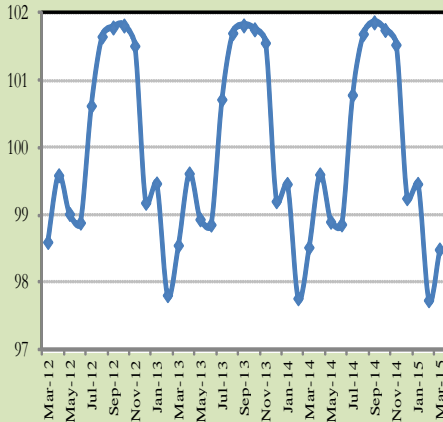
Average Seasonal Factors of CPI



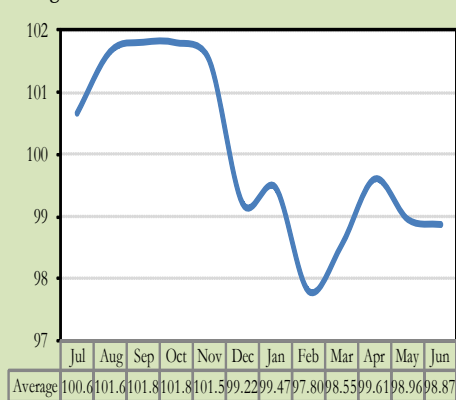
Note: Data Available in Annex Table 16.

Fig. 8.2 Seasonal Factors of CPI Food

Seasonal Factors of CPI Food



Average Seasonal Factors of CPI



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

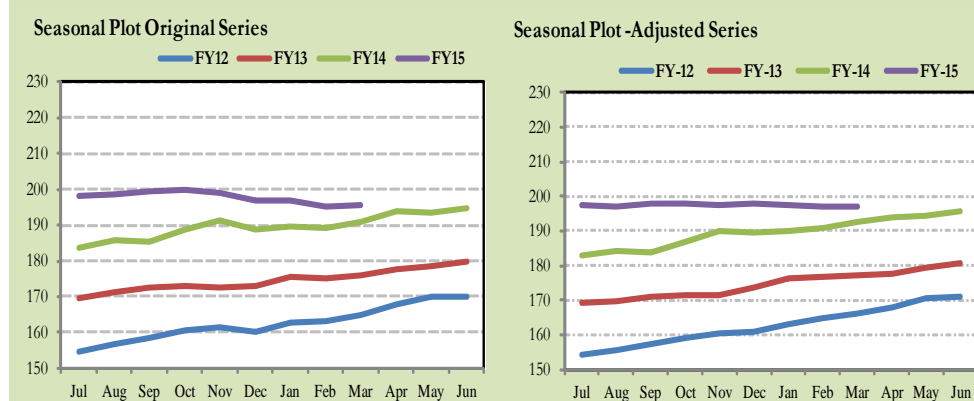
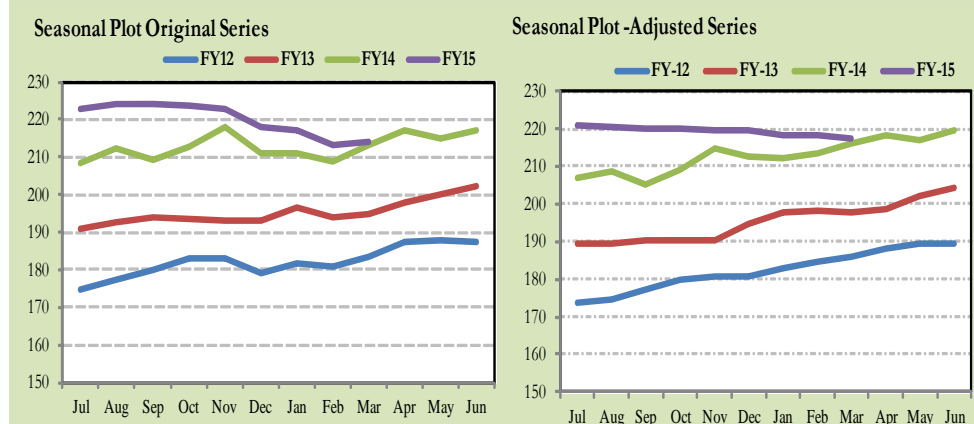


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for March 2015 stood at 197.21 against 195.57 in original series showing an increase of 1.64 on account of adjustment of downward seasonality in March 2015.

Seasonally adjusted CPI food group for March 2015 stood at 217.53 against 214.25 in original series showing an increase of 3.28 on account of adjustment of downward seasonality in March 2015.

An insignificant decrease has been observed in seasonally adjusted CPI series on Month-on-month basis during March 2015 and an increase of 0.23 percent in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at -0.25 percent reflecting decrease during March 2015 over February 2015 and an increase of 0.52 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 March 2015 (corresponding to the seasonally adjusted month-on-month rate) is -0.01 percent.

Figure 8.5: Month-on-Month Percent changes in CPI

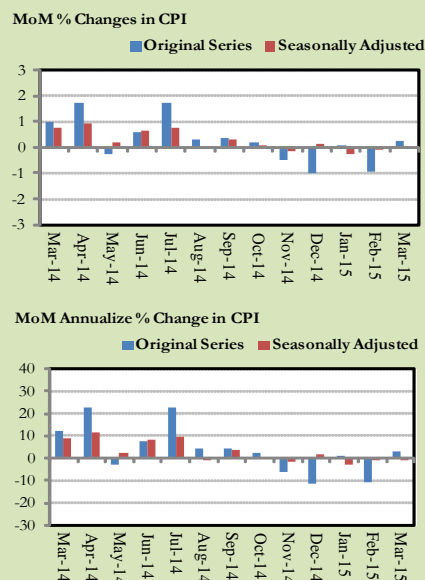
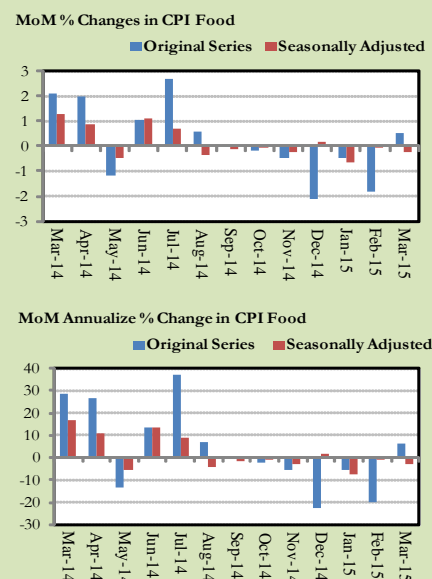


Figure 8.6: Month-on-Month Percent changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weigh	MoM change			YoY change		
		Mar-14	Feb-15	Mar-15	Mar-14	Feb-15	Mar-15
I. Food Group	37.5	2.1	-1.8	0.5	9.3	2.1	0.5
Food & Non-Alcoholic Beverages	34.8	2.2	-2.0	0.5	8.8	1.2	-0.5
Alcoholic Beverages & Tobacco	1.4	0.0	0.0	0.0	16.0	20.2	20.2
Restaurant & Hotels	1.2	0.9	0.5	0.4	13.2	5.5	5.0
II. Non-Food Group	62.5	0.2	-0.3	0.0	8.0	4.0	3.9
Clothing & Footwear	7.6	0.6	0.1	0.3	11.6	7.7	7.4
Housing, Water, Elect, Gas & other Fuels	29.4	0.0	0.0	0.0	9.2	5.7	5.7
Furnishing & Household Equip. Maintenance etc	4.2	0.5	0.2	0.1	9.0	6.0	5.6
Health	2.2	1.5	0.1	0.1	7.2	5.8	4.3
Transport	7.2	-0.6	-3.2	-0.1	3.8	-11.1	-10.7
Communication	3.2	0.0	0.1	0.0	0.9	0.3	0.3
Recreation & Culture	2.0	0.2	0.0	0.1	7.7	3.4	3.3
Education	3.9	0.0	0.0	0.0	6.9	14.2	14.2
Miscellaneous	2.8	0.9	0.7	-0.1	5.8	4.9	3.8
Headline	100.0	1.0	-0.9	0.2	8.5	3.2	2.5

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)	
		Mar-15	Mar-14	Mar-15	Mar-14	Mar-15	Mar-14	Mar-15	Mar-14	Mar-15	Mar-15
I. Food Group	0.5	123	123	21	37	21	34	27	21	54	31
Food & Non-Alcoholic Beverages	-0.5	111	111	21	37	21	30	25	19	44	25
Alcoholic Beverages & Tobacco	20.2	6	6	0	0	0	1	2	0	4	5
Restaurant & Hotels	5.0	6	6	0	0	0	3	0	2	6	1
II. Non-Food Group	3.9	348	348	64	87	64	117	110	118	110	26
Clothing & Footwear	7.4	59	59	4	8	1	15	18	28	36	8
Housing, Water, Elect, Gas & other Fuels	5.7	36	36	2	11	7	10	17	15	10	0
Furnishing & Household Equip. Maintenance etc	5.6	69	69	0	2	11	27	29	37	29	3
Health	4.3	39	39	22	20	6	7	4	9	7	3
Transport	-10.7	43	43	17	22	9	16	15	3	2	2
Communication	0.3	12	12	4	6	3	4	2	1	3	1
Recreation & Culture	3.3	39	39	10	13	14	16	6	7	9	3
Education	14.2	16	16	2	0	6	6	5	5	3	5
Miscellaneous	3.8	35	35	3	5	7	16	14	13	11	1
Overall	2.5	471	471	85	124	85	151	137	139	164	57

Note: Prices of 16 seasonal items were not reported during the month.

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in March 2015					
Top 15 Contributors		YoY Change		Weighted Contribution	
Items/ Contributors	Weights	Mar-14	Mar-15		
Ranked by Weighted Contribution					
1	House Rent	21.81	7.97	7.46	52.68
2	Milk Fresh	6.68	6.49	6.46	21.29
3	Education	3.94	6.88	14.22	19.90
4	Cigarette	1.39	16.20	20.39	13.27
5	Cotton Cloth	1.73	13.40	11.75	8.01
6	Fresh Fruits	1.86	5.55	9.98	7.53
7	Meat	2.43	7.00	4.15	5.00
8	Tailoring	0.88	12.95	10.51	4.71
9	Beverages	1.20	9.07	8.92	4.28
10	Electricity	4.40	15.82	1.79	3.78
11	Household Servant	1.04	7.95	8.10	3.74
12	Personal Care	1.49	7.20	5.38	3.32
13	Ready Made Garment	0.97	11.50	7.48	3.05
14	Ready Made Food	1.23	13.20	4.97	3.03
15	Woolen Cloth	0.88	10.89	4.69	1.93
Total		51.95			155.50
Bottom 15 Contributors					
1	Motor Fuel	3.03	4.45	-23.16	-28.13
2	Wheat Flour	4.16	17.99	-8.16	-16.86
3	Potatoes	0.49	93.20	-43.28	-12.12
4	Chicken	1.36	27.25	-16.27	-9.47
5	Transport Services	2.70	2.15	-5.58	-6.63
6	Vegetable Ghee	2.07	1.96	-6.91	-4.83
7	Egg	0.46	26.14	-20.70	-4.73
8	Rice	1.58	6.72	-7.29	-4.72
9	Cooking Oil	1.75	0.73	-6.29	-3.77
10	Onion	0.56	-10.29	-14.65	-3.48
11	Wheat	0.35	19.20	-13.59	-2.37
12	Tea	0.84	-3.51	-3.44	-1.38
13	Wheat Product	0.10	18.35	-4.46	-0.20
14	Kerosene Oil	0.01	6.52	-30.26	-0.11
15	Beans	0.03	13.71	-4.85	-0.07
Total		19.48			-98.88

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

<u>Top 15 Contributors</u>		<u>MoM Change</u>			Weighted Contribution
Items/ Contributors		Weights	Feb-15	Mar-15	
Ranked by Weighted Contribution					
1	Fresh Fruits	1.86	-2.09	5.97	50.44
2	Onion	0.56	-5.89	23.92	42.27
3	Fresh Vegetable	1.62	-11.40	4.26	29.56
4	Tomatoes	0.46	0.68	8.19	14.80
5	Chicken	1.36	-17.95	1.92	9.92
6	Cotton Cloth	1.73	0.00	0.77	6.25
7	Tea	0.84	0.75	0.93	3.85
8	Personal Care	1.49	0.32	0.48	3.36
9	Ready Made Food	1.23	0.54	0.41	2.79
10	Bakery & Confectionary	1.16	0.01	0.35	1.92
11	Jam, Tomato Ketchup & Pickle	0.25	0.31	1.25	1.43
12	Ready Made Garment	0.97	0.08	0.24	1.13
13	Washing Soap & Detergent	0.79	0.38	0.26	1.06
14	Beverages	1.20	0.14	0.18	1.04
15	Woolen Cloth	0.88	0.12	0.21	0.96
Total		16.39			170.75
<u>Bottom 15 Contributors</u>					
1	Egg	0.46	-13.86	-8.06	-17.14
2	Potatoes	0.49	-17.00	-6.35	-11.63
3	Rice	1.58	-2.02	-1.29	-8.49
4	Wheat Flour	4.16	-0.99	-0.31	-6.34
5	Personal Equipments	0.84	1.28	-0.98	-5.04
6	Cooking Oil	1.75	-0.94	-0.82	-5.02
7	Motor Fuel	3.03	-6.73	-0.24	-2.41
8	Pulse Gram	0.24	-0.32	-2.12	-2.04
9	Vegetable Ghee	2.07	-1.37	-0.27	-1.88
10	Sugar	1.04	0.67	-0.41	-1.88
11	Fish	0.30	-1.80	-1.13	-1.69
12	Pulse Masoor	0.27	0.15	-1.43	-1.68
13	Transport Services	2.70	-1.98	-0.14	-1.66
14	Besan	0.15	0.68	-1.98	-1.20
15	Wheat	0.35	-0.01	-0.72	-1.18
Total		19.44			-69.28

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in March 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-14	Mar-15	
A. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	36.71	1.31
2	Cigarette	1.39	16.20	20.39	13.27
3	Pulse Mash (Washed)	0.21	2.28	16.16	1.39
4	Education	3.94	6.88	14.22	19.90
5	Pulse Moong	0.23	25.78	11.90	1.63
6	Cotton Cloth	1.73	13.40	11.75	8.01
7	Tomatoes	0.46	-21.56	11.35	1.85
8	Tailoring	0.88	12.95	10.51	4.71
9	Woolen Readymade Garments	0.40	13.38	10.32	1.88
10	Fresh Fruits	1.86	5.55	9.98	7.53
11	Honey	0.04	8.28	9.34	0.24
12	Condiments	0.27	9.33	9.23	1.21
13	Beverages	1.20	9.07	8.92	4.28
14	Marriage Hall Charges	0.08	9.62	8.72	0.30
15	Milk Powder	0.11	11.34	8.68	0.43
Total		12.92			67.93
B. Ranked by Weights					
1	House Rent	21.81	7.97	7.46	52.68
2	Milk Fresh	6.68	6.49	6.46	21.29
3	Electricity	4.40	15.82	1.79	3.78
4	Wheat Flour	4.16	17.99	-8.16	-16.86
5	Education	3.94	6.88	14.22	19.90
6	Communication & Apparatus	3.15	0.30	0.15	0.13
7	Motor Fuel	3.03	4.45	-23.16	-28.13
8	Transport Services	2.70	2.15	-5.58	-6.63
9	Meat	2.43	7.00	4.15	5.00
10	Vegetable Ghee	2.07	1.96	-6.91	-4.83
11	Fresh Fruits	1.86	5.55	9.98	7.53
12	Cooking Oil	1.75	0.73	-6.29	-3.77
13	Cotton Cloth	1.73	13.40	11.75	8.01
14	Fresh Vegetable	1.62	21.85	2.23	1.47
15	Rice	1.58	6.72	-7.29	-4.72
Total		62.93			54.83
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 2.5 percent in March, 2015.					

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-14	Mar-15	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	6.49	6.46	21.29
2	Cigarette	1.39	16.20	20.39	13.27
3	Fresh Fruits	1.86	5.55	9.98	7.53
4	Meat	2.43	7.00	4.15	5.00
5	Beverages	1.20	9.07	8.92	4.28
6	Ready Made Food	1.23	13.20	4.97	3.03
7	Tomatoes	0.46	-21.56	11.35	1.85
8	Milk Product	0.63	8.17	5.89	1.80
9	Spices	0.54	-3.16	7.11	1.79
10	Pulse Moong	0.23	25.78	11.90	1.63
Total		16.67			61.46
B. Ranked by Percentage Change					
1	Cigarette	1.39	16.20	20.39	13.27
2	Pulse Mash (Washed)	0.21	2.28	16.16	1.39
3	Pulse Moong	0.23	25.78	11.90	1.63
4	Tomatoes	0.46	-21.56	11.35	1.85
5	Fresh Fruits	1.86	5.55	9.98	7.53
6	Honey	0.04	8.28	9.34	0.24
7	Condiments	0.27	9.33	9.23	1.21
8	Beverages	1.20	9.07	8.92	4.28
9	Milk Powder	0.11	11.34	8.68	0.43
10	Dry Fruits	0.25	9.09	8.22	1.02
Total		6.04			32.85
C. Ranked by Weights					
1	Milk Fresh	6.68	6.49	6.46	21.29
2	Wheat Flour	4.16	17.99	-8.16	-16.86
3	Meat	2.43	7.00	4.15	5.00
4	Vegetable Ghee	2.07	1.96	-6.91	-4.83
5	Fresh Fruits	1.86	5.55	9.98	7.53
6	Cooking Oil	1.75	0.73	-6.29	-3.77
7	Fresh Vegetable	1.62	21.85	2.23	1.47
8	Rice	1.58	6.72	-7.29	-4.72
9	Cigarette	1.39	16.20	20.39	13.27
10	Chicken	1.36	27.25	-16.27	-9.47
Total		24.91			8.90
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 0.5 percent in March, 2015.					

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in March 2015					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-14	Mar-15	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	7.97	7.46	52.68
2	Education	3.94	6.88	14.22	19.90
3	Cotton Cloth	1.73	13.40	11.75	8.01
4	Tailoring	0.88	12.95	10.51	4.71
5	Electricity	4.40	15.82	1.79	3.78
6	Household Servant	1.04	7.95	8.10	3.74
7	Personal Care	1.49	7.20	5.38	3.32
8	Ready Made Garment	0.97	11.50	7.48	3.05
9	Woolen Cloth	0.88	10.89	4.69	1.93
10	Woolen Readymade Garments	0.40	13.38	10.32	1.88
Total		37.55			102.99
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	36.71	1.31
2	Education	3.94	6.88	14.22	19.90
3	Cotton Cloth	1.73	13.40	11.75	8.01
4	Tailoring	0.88	12.95	10.51	4.71
5	Woolen Readymade Garments	0.40	13.38	10.32	1.88
6	Marriage Hall Charges	0.08	9.62	8.72	0.30
7	Household Servant	1.04	7.95	8.10	3.74
8	Construction Wage Rate	0.33	9.79	7.70	1.05
9	Hosiery	0.51	11.15	7.50	1.69
10	Ready Made Garment	0.97	11.50	7.48	3.05
Total		10.00			45.63
C. Ranked by Weights					
1	House Rent	21.81	7.97	7.46	52.68
2	Electricity	4.40	15.82	1.79	3.78
3	Education	3.94	6.88	14.22	19.90
4	Communication & Apparatus	3.15	0.30	0.15	0.13
5	Motor Fuel	3.03	4.45	-23.16	-28.13
6	Transport Services	2.70	2.15	-5.58	-6.63
7	Cotton Cloth	1.73	13.40	11.75	8.01
8	Gas	1.58	0.86	0.00	0.00
9	Footwear	1.55	9.11	0.78	0.41
10	Personal Care	1.49	7.20	5.38	3.32
Total		45.39			53.46
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 3.9 percent in March, 2015.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: March 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, Eggs Farm, Ginger, Chicken Farm Broiler (Live), Peas, Onion, Wheat, Radish, Vegetable Ghee (Loose)	Pickles Ahmed/Mitchell's, Saunf, Custard Powder Rafhan 300, Mutton Av.Qlty., Pulse Masoor (Washed), Sweetmeat (Mixed)	Coriander Seed Powdered, National., Powder Milk Nido 400Gm., Cabbage, Honey Langanese 500 Gm., Bananas, Samosa (Vegetable)	Cauliflower, Coriander Seed (Loose), Cardamom Large Loose Av.Q, Almonds Whole Av.Qlty., Malta/Mosambi, Lemon, Fruit Juice Tetra Pack, Coconut Dry Av.Qlty., Milk Tetra Pack 1/2 Ltr., Chillies Powder Loose
Alcoholic Beverages & Tobacco		Betel Leaves		Cigarettes Morven Gold 20,S, Cigarettes Capstan 20,S, Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Betel Nuts
Clothing & Footwear	Gents Sandal Bata, Ladies Sandal Bata, Sports Shoes, Gents Shoes Paul Bata, Gents Shoe, Art 1109 Serves', Child Shoe Power Light Bata	Heavy Wt Suiting Law.Pur Sup. Qlty, Dry Cleaning Suit Coat Pant, School Uni. Kameez,Shal.Boys, Georgette Av.Qlty, Pullover Ladies Oxford/Bon, Tailoring Shirt	Shoe Repair Half Sole, Awami-Suit W&W (Gents)Av.Qlty, Awami-Suit W & W (Boys) 24"/26", Chaddar (W/Wear) (2X2.5 Mtr)	Lawn Printed Gul Ahmed/AI Karam, Vest/Shameez (Women) Avg.Qlty, Secondhand Sweater For Men, Gloves Av.Qlty, Tailoring Awami-Suit (Male), Tailoring Suit (Female), Shirting Av.Qlty., Frock W/Wear Girls
Housing, Water, Elect, Gas & other Fuels	Kerosene Oil, Bajree, Gas Charges Overall/ Combined, Gas Charges All Over 500 Mmbtu, Gas Charges Over 100 - 200	Synthetic Enemal Robialac, Firewood Whole, Bricks (New) Ist Class, Iron Bar (M.S. Bar) 1/2", Electric. Charges 301 - 1000 Units	Unskilled Labor Wage Rat, Mason (Raj) Wage Rate, Electrician Wage Rate(P/Pnt), Carpenter Wage Rate, Cement Blocks (6"X8"X12")	
Furnishing & Household Equip. Maintenance etc	Electric Blub Energy Saver 14 Watt, Surf Excel 400 Gms Poly Bag	Hand Stching Needle, Mattress Single(4"Thick), Cleanser Powder Vim 1000 Gms, Washing Powder (Wheel/ Bonus)	Thermos Starvac 1 Ltr, Toilet Paper Roll (R.Petal), Chair Shesham Wood, Dining Table 6 Chairs, Marriage Hall Charges Without Refreshment	Boot Polish Cherry/Kiwi 50 MI, Robin Blue (35 Gms), Finis 500 MI
Health	Dettol (Medium), Cac, 1000 Tab, Calcium Syrup Sandoz, Ear Drops (Cardisorpine), Phenergan Syrup 120 MI	Thermometer China, ECG Charges, Septran Tablets, Galxos-D (450 Gm), Saniplast (1 Putty), Vicks Vaporub/ Balm, Polyfax Eye Ointment	Urine Test (Dr) Charges, X-Ray (Chest) Charges, Glycerin Small Bottle, Cotton Bandage 2" - 4", Gripe-Water Woodward's	Jouhar Joshanda, Betnesol Eye Drops, Hydryllin Syrup 120 MI.
Transport	Petrol Super, High Speed Diesel HSD, Gas Cylinder S Size (L.P.G), 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 Tax For 800 Cc To 1300 Cc, Air Fare Economy Class
Communication	Mobile Set Nokia/Sony/Ericsson Av.Qlty, 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	Math's Book Class V (T.B Board), T.V. 20" Colored Sony, Radio With C.Player National, V.C.P., Panasonic/LG/National, TV License Fee Domestic	Exercise Book Lined 80/10, Pen Ink Dollor 57 MI Bottle, Ball Pen (Local), Math's Book Ist Year (T.B. Board), Photostat Paper 70 Gm, Tape Recorder Cassette (Blank)	Cinema Non-A/C High Class, Fountain Pen Hero/Wings/China, Pencil Goldfish/Deer, English Book Class V1, Paper Fool Scape (27"X17")	Math's Book Class IX Or X, Urdu Book Class IX/X (T.B Board), Cinema A/C High Class
Education		Govt. Engg. Coll. Fee Ist Year, Coaching Fee For Class IX/ X, Coaching Charges For Class XI/ XII Science Group	Govt. Med. College Fee MBBS Ist Year, MBA Tuition 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		Cooked Dal (Av. Hotel), Bread Tandoori St. Size, Chicken Biryani Full/Double	Cooked Beef (Av. Hotel), Tea Prepared (Ordinary)	Cooked Mutton (Av. Hotel)
Miscellaneous	Silver Tezabi 24 Ct, Gold Tezabi 24 Ct, Toilet Soap Lux 95 Gms, Toilet Soap Lifebouy 140 Gms	Toothpowder Dentonic 90 Gms, Disposable Razor Gillete-II, Trunk Medium Size, Hair Color Bigen	Shaving Charges, Toothpaste Med Size Colgate 70Gms, Haircut Charges For Men	Purse Ladies (Leather) Av. Qlty

Table A5: City- wise CPI Inflation by Income Groups, March 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	0.6	5.1	1.0	2.1	0.1	8.9	0.6	5.9	1.1	2.5	0.1	9.7
2 Islamabad	0.4	2.9	0.7	0.8	0.1	5.5	0.3	3.3	0.6	1.2	0.0	5.6
3 Lahore	0.7	4.6	1.3	4.3	-0.3	5.0	0.7	4.7	1.4	4.7	-0.2	4.6
4 Gujranwala	0.6	3.1	1.0	2.3	0.0	4.2	0.6	3.0	1.1	2.6	0.0	3.6
5 Sialkot	0.9	2.7	1.6	1.2	-0.1	4.7	0.9	2.3	1.6	0.9	0.1	3.8
6 Faisalabad	0.6	3.2	1.1	0.3	-0.1	6.9	0.6	3.3	1.2	1.1	-0.1	5.9
7 Multan	0.2	1.0	0.3	-0.7	0.0	3.1	0.2	1.3	0.4	0.0	0.0	2.7
8 Sargodha	1.4	0.7	2.5	-2.4	0.2	4.2	1.2	0.9	2.4	-2.3	0.2	4.0
9 Bahawalpur	0.6	1.0	1.2	-2.2	0.0	4.6	0.5	0.8	1.1	-1.8	0.0	3.3
10 Karachi	0.3	2.1	0.6	-1.6	0.0	7.3	0.4	2.5	0.7	-0.8	0.0	6.4
11 Hyderabad	0.1	-0.1	0.1	-1.5	0.1	1.8	0.1	0.3	0.2	-0.8	0.1	1.8
12 Sukkur	0.5	-1.2	0.9	-5.6	0.1	4.4	0.4	-0.4	0.8	-4.5	0.1	4.1
13 Larkana	0.4	-0.4	0.8	-3.2	0.1	2.8	0.5	0.5	0.8	-2.0	0.1	3.0
14 Peshawar	0.2	1.9	0.3	-1.5	0.1	5.8	0.2	2.5	0.4	-0.9	0.0	6.0
15 Bannu	0.0	1.8	0.1	-0.1	0.0	4.0	-0.1	1.8	-0.2	0.0	-0.1	3.7
16 Quetta	-0.2	-1.0	-0.4	-2.6	0.0	1.2	-0.2	-0.5	-0.4	-1.8	0.0	0.9
17 Khuzdar	-0.6	2.6	-1.1	3.6	-0.1	1.4	-0.6	2.4	-1.1	3.8	-0.1	0.8
	Rs 12001-18000						Rs 18001-35000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.6	6.0	1.1	2.6	0.2	9.3	0.6	6.0	1.3	3.3	0.1	8.2
2 Islamabad	0.4	3.4	0.7	1.9	0.1	4.9	0.3	3.7	0.7	2.4	0.1	4.7
3 Lahore	0.7	4.9	1.4	5.5	-0.1	4.2	0.6	4.6	1.4	6.1	-0.1	3.1
4 Gujranwala	0.7	3.1	1.3	3.3	0.2	3.0	0.8	2.6	1.4	3.1	0.2	2.0
5 Sialkot	0.9	2.1	1.6	1.0	0.2	3.2	0.7	2.0	1.4	1.6	0.1	2.4
6 Faisalabad	0.5	3.8	1.1	1.6	0.0	6.1	0.4	3.5	1.0	2.3	-0.1	4.6
7 Multan	0.3	1.5	0.5	0.5	0.1	2.5	0.4	1.7	0.7	1.0	0.1	2.2
8 Sargodha	1.2	0.7	2.4	-2.1	0.2	3.2	1.1	0.7	2.6	-1.4	0.1	2.4
9 Bahawalpur	0.5	1.1	1.2	-1.3	0.0	3.2	0.5	1.1	1.2	-0.6	-0.1	2.3
10 Karachi	0.4	2.8	0.7	-0.1	0.1	6.0	0.3	2.9	0.7	0.5	0.0	5.1
11 Hyderabad	0.2	0.3	0.2	-0.1	0.1	0.8	0.2	0.5	0.3	0.8	0.1	0.2
12 Sukkur	0.4	-0.4	0.7	-4.1	0.1	3.4	0.4	-0.2	0.8	-3.1	0.1	2.2
13 Larkana	0.4	0.9	0.7	-1.5	0.1	3.1	0.4	1.7	0.8	-0.7	0.1	3.6
14 Peshawar	0.2	2.9	0.4	-0.9	0.1	6.3	0.2	3.7	0.5	0.1	0.0	6.6
15 Bannu	0.0	2.0	0.0	0.1	-0.1	3.9	0.0	2.6	0.1	0.7	-0.1	4.2
16 Quetta	-0.1	-0.5	-0.3	-1.0	0.0	0.0	-0.2	-0.1	-0.4	-0.4	0.0	0.1
17 Khuzdar	-0.5	2.1	-0.9	4.6	-0.1	-0.5	-0.5	2.4	-1.0	5.4	-0.1	-0.1
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.4	7.3	1.3	4.0	0.1	8.9	0.5	6.8	1.2	3.5	0.0	9.1
2 Islamabad	0.2	5.7	0.7	3.9	0.0	6.7	0.2	5.5	0.7	3.5	-0.1	6.9
3 Lahore	0.6	5.2	1.6	6.8	0.0	4.2	0.6	4.9	1.5	6.1	-0.1	4.0
4 Gujranwala	0.7	2.6	1.7	3.4	0.3	2.2	0.7	2.8	1.4	3.1	0.2	2.5
5 Sialkot	0.6	1.6	1.5	1.4	0.2	1.8	0.7	1.9	1.5	1.3	0.2	2.3
6 Faisalabad	0.2	3.6	0.7	3.0	-0.1	4.0	0.4	3.5	1.0	2.0	0.0	4.7
7 Multan	0.3	1.9	0.8	1.7	0.0	2.0	0.3	1.6	0.6	0.9	0.1	2.2
8 Sargodha	0.9	1.4	2.6	-0.4	0.2	2.2	1.1	0.9	2.5	-1.6	0.3	2.5
9 Bahawalpur	0.3	1.9	1.2	-0.4	-0.1	3.0	0.5	1.4	1.2	-1.1	0.0	2.9
10 Karachi	0.2	4.5	0.8	2.1	0.0	5.8	0.3	3.8	0.7	1.0	0.0	6.0
11 Hyderabad	0.0	0.4	0.2	1.5	-0.1	-0.2	0.1	0.4	0.2	0.4	0.0	0.3
12 Sukkur	0.2	0.6	0.7	-2.1	0.0	1.9	0.4	-0.2	0.7	-3.6	0.1	2.2
13 Larkana	0.2	2.6	0.6	0.0	0.1	3.8	0.4	1.1	0.7	-1.4	0.2	2.7
14 Peshawar	0.2	4.4	0.7	0.9	-0.1	6.2	0.2	3.6	0.5	-0.1	0.0	6.1
15 Bannu	-0.1	1.5	0.1	1.1	-0.2	1.7	0.0	2.0	0.0	0.4	-0.1	3.1
16 Quetta	-0.3	0.2	-0.5	0.1	-0.2	0.3	-0.2	-0.2	-0.4	-0.8	-0.1	0.2
17 Khuzdar	-0.4	1.8	-0.8	7.0	-0.2	-0.8	-0.6	2.3	-1.0	5.0	-0.3	0.4

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

City	High inflation cities			City	Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Rawalpindi	6.8	3.5	9.1	Khuzdar	2.3	5.0	0.4
Nawabshah	5.5	-0.6	9.5	Mianwali	2.3	-0.8	4.3
Islamabad	5.5	3.5	6.9	Bannu	2.0	0.4	3.1
Lahore	4.9	6.1	4.0	Sialkot	1.9	1.3	2.3
Sahiwal	4.8	0.8	7.4	Jhelum	1.9	0.7	2.8
Karachi	3.8	1.0	6.0	Multan	1.6	0.9	2.2
Mardan	3.7	-1.9	7.0	Wazirabad	1.6	0.3	2.5
Peshawar	3.6	-0.1	6.1	Bahawalpur	1.4	-1.1	2.9
Faisalabad	3.5	2.0	4.7	Gawadar	1.2	1.3	1.1
D. G. Khan	3.4	-0.1	5.9	Dadu	1.2	-0.2	2.2
Abbottabad	3.4	2.5	3.9	Larkana	1.1	-1.4	2.7
Gujranwala	2.8	3.1	2.5	Sargodha	0.9	-1.6	2.5
				Rahim Yar Khan	0.9	-1.4	2.5
				Muzaffargarh	0.8	-0.5	1.8
				Vehari	0.8	1.8	0.1
				Mingora	0.8	-1.5	2.2
				Mithi	0.7	-0.5	1.5
				Turbat	0.7	0.8	0.6
				D. I. Khan	0.6	0.0	1.0
				Attock	0.5	-2.7	2.8
				Hyderabad	0.4	0.4	0.3
				Mirpur Khas	0.3	-0.8	1.1
				Loralai & Cantt	0.2	-3.0	2.4
				Jhang	-0.1	-2.0	1.0
				Sukkur	-0.2	-3.6	2.2
				Quetta	-0.2	-0.8	0.2
				Bahawalnagar	-0.2	-1.5	0.6
				D. M. Jamali	-1.8	-6.6	1.7

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

Table A7: Income Group-wise Inflation (percent)						
	MoM			YoY		
	Mar-14	Feb-15	Mar-15	Mar-14	Feb-15	Mar-15
<u>Up to Rs. 8000</u>						
General	1.3	-1.0	0.3	8.5	2.5	1.5
Food	2.2	-1.7	0.5	9.4	0.5	-1.1
Non-food	0.2	-0.1	0.1	7.4	5.0	4.9
<u>Rs. 8001- 12000</u>						
General	1.2	-1.0	0.3	8.2	2.7	1.8
Food	2.2	-1.8	0.5	9.3	1.1	-0.6
Non-food	0.2	-0.2	0.1	7.0	4.6	4.4
<u>Rs. 12001- 18000</u>						
General	1.1	-1.0	0.3	9.2	3.0	2.1
Food	2.1	-1.8	0.5	9.3	1.6	0.0
Non-food	0.2	-0.3	0.1	9.1	4.3	4.2
<u>Rs. 18001- 35000</u>						
General	1.0	-1.0	0.3	9.1	3.0	2.2
Food	2.1	-1.9	0.5	9.3	2.1	0.5
Non-food	0.2	-0.3	0.0	9.0	3.8	3.7
<u>Above Rs. 35000</u>						
General	0.8	-0.8	0.2	8.1	3.6	3.0
Food	2.0	-1.8	0.5	9.2	3.0	1.4
Non-food	0.1	-0.3	0.0	7.6	3.9	3.8
<u>All income groups</u>						
General	1.0	-0.9	0.2	8.5	3.2	2.5
Food	2.1	-1.8	0.5	9.3	2.1	0.5
Non-food	0.2	-0.3	0.0	8.0	4.0	3.9

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Mar-15	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	347.9	-13.9	-0.3
2	Wheat Flour Bag	10Kg.	390.1	-10.4	-0.4
3	Rice Basmati Broken	Kg.	70.9	-4.2	-1.0
4	Rice Irri-6	Kg.	50.6	-6.8	-0.5
5	Bread Plain Med. Size (340-400 Gm.)	Each	40.8	1.2	0.0
6	Beef	Kg.	302.7	5.0	0.0
7	Mutton	Kg.	594.0	4.5	0.0
8	Chicken Live (Farm)	Kg.	134.1	-19.3	2.1
9	Milk Fresh	Litr	76.4	10.0	0.0
10	Curd	Kg.	89.7	9.6	0.0
11	Milk Powdered Nido	500G	355.9	9.6	0.9
12	Egg Hen (Farm)	Doz.	90.7	-21.0	-7.0
13	Mustard Oil	Kg.	181.2	-3.3	-1.1
14	Cooking Oil (Tin)	2.5Ltr	502.6	-7.0	-0.8
15	Veg. Ghee (Tin)	2.5Kg.	490.2	-4.7	-0.7
16	Veg.Ghee Loose	Kg.	147.9	-10.4	-0.9
17	Bananas	Doz.	69.1	1.3	4.3
18	Masoor Pulse Washed	Kg.	136.4	6.3	-1.3
19	Moong Pulse Washed	Kg.	167.4	14.3	-0.6
20	Mash Pulse Washed	Kg.	163.7	22.2	0.6
21	Gram Pulse Washed	Kg.	77.2	0.8	-2.5
22	Potatoes	Kg.	23.5	-45.6	-5.9
23	Onions	Kg.	28.0	-15.5	17.0
24	Tomatoes	Kg.	52.6	-1.6	-0.9
25	Sugar	Kg.	54.3	1.7	0.1
26	Gur	Kg.	81.9	4.4	0.1
27	Salt Powdered Loose (Lahori)	Kg.	10.0	5.0	0.0
28	Red Chilies Powder Loose	Kg.	263.7	18.1	-0.4
29	Garlic	Kg.	142.3	-2.3	-3.4
30	Tea (Yellow Label)	200Gm.	136.9	-7.1	2.0
31	Cooked Beef Plate	Each	83.1	4.4	0.0
32	Cooked Dal Plate	Each	48.9	5.9	0.0
33	Tea Prepared (Sada)	Cup	18.9	8.5	0.0
34	Cigarettes K-2 (20'S)	20'S	45.4	17.5	0.0
35	Long Cloth (Coarse Latha)	Mtr.	201.3	13.4	0.9
36	Shirting	Mtr.	159.2	8.6	0.7
37	Lawn	Mtr.	239.2	20.3	0.0
38	Georgette (Voil Printed)	Mtr.	123.1	9.1	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	84.4	-33.4	-0.4
45	Firewood	40Kg	577.2	3.7	0.0
46	Energy Savor 14 Watts	Each	165.7	1.2	0.1
47	Washing Soap (200-250 Gm.)	Cake	24.4	2.7	0.0
48	Match Box	Each	1.7	16.0	0.0
49	Petrol	Litr	71.2	-36.2	0.0
50	Diesel	Litr	81.5	-30.9	0.0
51	L.P.G.(11 Kg Cylinder.)	Each	1162.9	-20.4	-4.6
52	Tele. Local Call	Call	3.9	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	36.0	0.0	0.0
Maximum				22.2	17.0
Median				0.8	0.0
Minimum				-45.6	-7.0

Table A9: Distribution of Price Changes (YoY) - WPI Items: March 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, Fiber Crops, Eggs, Stimulant And Spice Crops, Poultry, Wheat, Millet/Bajra, Rice, Other Oil Seeds, Vegetables	Maize, Cotton Seeds, Sorghum/Jowar	Pulses, Hides And Fur Skins, Raw, Fuel Wood In Logs, Sugar Crops, Fresh Fruits	Fish Live Fresh Or Chilled, Unmanufactured Tobacco, Raw Animal Material/Wool, Dry Fruits, Milk From Bovine Animals
Ors & 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, Vegetable Ghee, Wheat Flour, Blended Yarn, Oil Cakes, Coffee And Tea, Other Food Products, Vegetable Oil Refined, Spices, Leather With Out Hairs, Footwear, Sugar Confectionary, Chocolate	Ice Cream, Other Cereal Flour, Fruit Juices, Vegetables & Fruit Juices, Mineral Water, Sugar Refined	Synthetic Carpets, Meat Of Animals, Bed Sheets, Blankets, Dairy Products N.E.C, Milk And Cream In Solid Form, Cotton Fabrics, Dried Fruits & Nuts	Ready Made Garments, Tobacco Products, Other Fabrics, Processed Liquid Milk, Woolen Carpets, Quilts, Woven Fabrics, Towels, Silk And Reyon Fabrics, Hosiery Products, Beverages
Other Transportable Goods except Metal Products, Machinery and Equipments	Furnace Oil, Kerosene Oil, Diesel Oil, Motor Sprit, Hard Board, Printing Paper, Soaps & Detergent, Cement, Coke, Matches	Bed Foams, Insecticides, Auto Tyres, Fertilizers, Medicines, Mobil Oil	Plastic Products, Paints & Varnishes, Bricks Blocks And Tiles	Dying Materials, Pesticides, Timber, Other Glass Articles, Ceramics And Sanitary, Chemicals, Glass Sheets
Metal Product Machinery & Equipment	Cultivators, Motor Vehicles, Pig Iron, Engines And Motors, Vacuum Pumps, Concrete Mixer, Radio And Television, Lathe Machines, Chuff Cutter	Lighting Equipments, Refrige, Wash& Sew Mach, Iron, Fan, Steel Products, Motor Cycles, Bicycles, Steel Bars & Sheets	Air Conditioners, Electrical Wires	Pipe Fittings, Tractors

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

Items and specification	Weights	Index		
		Mar-14	Feb-15	Mar-15
General	100.00	190.82	195.13	195.57
Food & Non-Alcoholic Beverages.	34.83	211.97	209.81	210.96
1 Wheat	0.35	238.50	207.57	206.08
2 Wheat Flour	4.16	235.61	217.05	216.38
3 Wheat Product	0.10	224.47	215.48	214.46
4 Besan	0.15	172.71	178.51	174.98
5 Rice	1.58	194.31	182.50	180.14
6 Cereals	0.16	233.06	239.75	239.89
7 Bakery & Confectionary	1.16	201.00	206.90	207.63
8 Nimco	0.46	224.39	238.91	238.99
9 Meat	2.43	235.42	245.12	245.19
10 Chicken	1.36	203.37	167.07	170.28
11 Fish	0.30	218.54	220.88	218.38
12 Milk Fresh	6.68	234.51	249.59	249.65
13 Milk Product	0.63	229.24	242.74	242.74
14 Milk Powder	0.11	208.19	225.79	226.26
15 Egg	0.46	238.24	205.49	188.93
16 Mustard Oil	0.10	159.32	157.49	156.03
17 Cooking Oil	1.75	162.30	153.35	152.09
18 Vegetable Ghee	2.07	160.38	149.70	149.30
19 Dry Fruits	0.25	232.50	252.44	251.60
20 Fresh Fruits	1.86	192.09	199.36	211.26
21 Pulse Masoor	0.27	178.99	191.16	188.43
22 Pulse Moong	0.23	278.78	313.75	311.95
23 Pulse Mash (Washed)	0.21	195.09	228.22	226.61
24 Pulse Gram	0.24	171.73	179.36	175.56
25 Gram Whole	0.16	178.82	180.95	179.08
26 Beans	0.03	247.84	236.81	235.83
27 Potatoes	0.49	270.62	163.90	153.49
28 Onion	0.56	203.21	139.95	173.43
29 Tomatoes	0.46	166.63	171.50	185.55
30 Fresh Vegetable	1.62	192.85	189.11	197.16
31 Sugar	1.04	192.40	194.97	194.18
32 Gur	0.02	242.61	253.51	252.22
33 Honey	0.04	277.48	303.39	303.39
34 Sweet Meet	0.25	224.66	233.47	234.31
35 Beverages	1.20	189.90	206.46	206.84
36 Jam, Tomato Ketchup & Pickle	0.25	192.31	205.02	207.58
37 Condiments	0.27	235.12	255.89	256.81
38 Spices	0.54	219.45	234.85	235.06
39 Tea	0.84	227.06	217.22	219.24
Alcoholic Beverages, Tobacco	1.41	221.82	266.63	266.63
40 Cigarette	1.39	222.30	267.63	267.63
41 Betel Leaves & Nuts	0.02	192.37	206.10	206.03
Clothing & Footwear	7.57	200.29	214.49	215.06
42 Cotton Cloth	1.73	187.29	207.71	209.30
43 Woolen Cloth	0.88	223.23	233.21	233.69
44 Ready Made Garment	0.97	199.09	213.47	213.98
45 Woolen Readymade Garments	0.40	218.34	240.93	240.87
46 Hosiery	0.51	210.64	225.91	226.43
47 Dopatta	0.44	218.65	231.18	231.21
48 Cleaning & Laundering	0.21	222.23	236.38	237.64

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Mar-14	Feb-15	Mar-15
49 Tailoring	0.88	240.93	266.17	266.24
50 Footwear	1.55	163.18	164.41	164.45
Housing,Water,Elect,Gas & Other Fuel	29.41	166.99	176.51	176.51
51 House Rent	21.81	153.82	165.29	165.29
52 Construction Input Item	0.56	227.61	236.82	237.12
53 Construction Wage Rate	0.33	193.88	208.81	208.81
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	295.11	207.40	205.81
58 Fire Wood Whole	0.23	266.51	276.56	275.22
Furnished H.Hold Equip.& Maint. Etc	4.21	198.85	209.72	209.89
59 Furniture	0.33	190.75	202.10	202.15
60 Household Textile	0.65	197.21	207.67	207.67
61 Household Equipment	0.59	167.61	172.53	172.55
62 Utensils	0.32	200.51	212.31	212.69
63 Plastic Products	0.25	192.33	201.01	201.40
64 Washing Soap & Detergent	0.79	216.51	224.05	224.64
65 Sewing Needle & Dry Cell	0.15	176.49	184.21	184.21
66 Household Servant	1.04	210.10	227.11	227.11
67 Marriage Hall Charges	0.08	213.24	231.83	231.83
Health	2.19	169.93	177.16	177.26
68 Drug Medicine	1.27	144.13	148.15	148.33
69 Medical Equipment	0.01	210.51	222.66	222.66
70 Doctor (MBBS) Clinic Fee	0.59	226.12	238.49	238.49
71 Medical Test	0.32	167.41	177.69	177.69
Transport	7.20	196.22	175.39	175.14
72 Motor Vehicle	0.66	162.83	163.87	163.87
73 Motor Vehicle Accessories	0.24	223.52	230.17	230.17
74 Motor Fuel	3.03	190.67	146.87	146.52
75 Mechanical Service	0.46	201.85	212.34	212.42
76 Motor Vehicle Tax	0.11	153.74	210.18	210.18
77 Transport Services	2.70	208.93	197.55	197.28
Communication	3.22	129.85	130.27	130.27
78 Postal Services	0.07	215.89	227.44	227.44
79 Communication & Apparatus	3.15	128.04	128.23	128.23
Recreation & Culture	2.02	183.72	189.67	189.80
80 Recreation & Culture	0.86	126.95	128.09	128.25
81 Text Books	0.57	267.10	280.89	280.89
82 News Papers	0.19	175.42	175.42	175.42
83 Stationery	0.40	191.42	199.45	199.80
Education	3.94	168.53	192.41	192.50
84 Education	3.94	168.53	192.41	192.50
Restaurants And Hotels	1.23	235.52	246.22	247.22
85 Ready Made Food	1.23	235.52	246.22	247.22
Miscellaneous Goods And Services	2.76	214.42	222.81	222.57
86 Personal Care	1.49	196.15	205.72	206.71
87 Cosmetics	0.39	180.22	190.14	190.30
88 Blades	0.03	182.56	185.88	185.88
89 Personal Equipments	0.84	263.58	269.38	266.75

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

Items and Specifications	Index		
	Mar-14	Feb-15	Mar-15
General	211.66	203.86	203.89
Agriculture Forestry & Fishery	217.63	212.19	212.84
1 Wheat	250.86	210.66	210.62
2 Maize	180.57	189.01	187.54
3 Rice	178.17	166.83	162.53
4 Sorghum/Jowar	289.35	289.98	289.73
5 Millet/Bajra	174.91	162.93	159.44
6 Vegetables	195.18	180.66	188.58
7 Fresh Fruits	213.00	217.00	226.58
8 Dry Fruits	207.33	229.16	232.48
9 Cotton Seeds	197.27	208.28	203.39
10 Other Oil Seeds	183.71	177.61	172.36
11 Edible Roots/ Potatoes	288.60	161.82	150.80
12 Stimulant And Spice Crops	355.25	281.50	281.74
13 Pulses	191.54	212.31	209.71
14 Sugar Crops	267.92	287.55	286.29
15 Fibre Crops	217.76	161.34	165.63
16 Unmanufactured Tobacco	190.00	217.23	217.50
17 Poultry	210.42	163.19	167.92
18 Milk From Bovine Animals	226.49	251.69	251.69
19 Eggs	246.39	205.24	189.76
20 Raw Animal Material/Wool	157.45	178.52	177.10
21 Hides And Fur Skins, Raw	147.11	159.76	159.92
22 Fuel Wood In Logs	242.82	259.53	259.53
23 Fishes Live Fresh Or Chilled	244.62	288.48	286.70
Ores/Minerals, Gas & Elect.	243.45	246.75	246.08
24 Coal Not Agglomerated	223.53	223.53	223.53
25 Natural Gas Liquefied	204.10	203.03	201.62
26 Salt & Pure Sodium Chloride	231.42	247.16	247.16
27 Electrical Energy	287.44	295.61	295.61
Food, Beverages, Tobacco, Textiles	201.93	205.53	205.27
28 Meat Of Animals	240.41	259.95	260.18
29 Vegetables & Fruit Juices	191.62	198.31	198.31
30 Dried Fruits & Nuts	218.74	228.83	229.85
31 Fruit Juices	166.09	173.27	173.34
32 Vegetable Oil Refined	164.69	158.19	158.10
33 Vegetable Ghee	144.11	129.25	128.57
34 Oil Cakes	198.60	197.37	186.18
35 Processed Liquid Milk	215.66	252.28	253.81
36 Milk And Cream In Solid Form	207.17	220.24	221.70
37 Ice Cream	209.79	219.91	219.91
38 Dairy Products N.E.C	223.27	239.22	239.38
39 Wheat Flour	217.42	198.41	198.06
40 Other Cereal Flour	138.58	148.22	144.94
41 Sugar Refined	201.11	205.44	204.82
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	102.28	102.28	102.28
44 Coffee And Tea	208.86	194.48	195.98
45 Spices	191.41	189.66	189.66
46 Other Food Products	308.40	298.34	294.23
47 Mineral Water	183.04	187.86	187.86
48 Beverages	155.31	171.52	171.62
49 Tobacco Products	242.41	290.52	290.52
50 Cotton Yarn	207.32	171.00	170.43
51 Nylon Yarn	177.75	154.23	150.22
52 Blended Yarn	199.15	185.12	182.56
53 Woven Fabrics	226.82	258.39	258.39
54 Cotton Fabrics	189.65	200.51	201.34
55 Other Fabrics	179.75	209.87	212.61

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities				
		Index		
Items and Specifications		Mar-14	Feb-15	Mar-15
56	Silk And Rayon Fabrics	161.09	179.89	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	255.40
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	195.50	216.06	216.06
64	Ready Made Garments	153.12	186.77	186.77
65	Leather With Out Hairs	209.40	215.02	207.72
66	Other Leather N.E.C	339.91	213.42	212.39
67	Footwear's	134.22	134.22	134.22
Other Transportable Goods		217.63	180.79	180.97
68	Timber	174.55	202.05	202.05
69	Printing Paper	176.01	167.70	162.79
70	Hard Board	229.17	221.35	197.92
71	Coke	163.45	163.45	163.45
72	Motor Sprit	185.89	118.71	118.71
73	Diesel Oil	279.46	175.03	175.03
74	Kerosene Oil	288.01	178.93	178.93
75	Furnace Oil	177.75	95.56	100.86
76	Mobil Oil	194.41	201.53	200.74
77	Chemicals	175.87	197.65	196.79
78	Dying Materials	107.55	146.55	146.55
79	Fertilizers	264.50	275.65	273.84
80	Pesticides	237.58	290.39	290.39
81	Insecticides	136.47	134.91	142.24
82	Paints & Varnishes	268.31	288.63	291.17
83	Medicines	140.31	145.19	145.19
84	Soaps & Detergent	181.82	178.31	178.14
85	Auto Tyres	185.73	192.43	192.43
86	Plastic Products	202.33	222.47	222.47
87	Glass Sheets	207.75	228.76	228.76
88	Other Glass Articles	214.09	242.89	243.63
89	Ceramics And Sanitary	194.56	216.99	218.62
90	Bricks Blocks And Tiles	195.96	206.92	208.60
91	Cement	207.69	207.84	206.83
92	Bed Foams	149.67	156.67	156.67
93	Matches	143.20	143.20	143.20
Metal Product Machinery & Equip		169.52	173.23	173.00
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	138.60	141.59	140.43
96	Pipe Fittings	168.33	191.94	191.94
97	Steel Products	170.24	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	196.18	196.18
101	Cultivators	226.90	226.90	219.76
102	Chuff Cutter	149.20	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	192.37	198.16	198.16
107	Electrical Wires	178.73	190.87	190.87
108	Lighting Equipments	163.27	168.19	168.19
109	Radio And Television	126.49	126.49	126.49
110	Motor Vehicles	184.47	183.03	183.03
111	Motor Cycles	126.15	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	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
	Mar	195.57	214.25	184.37	203.89	222.11	192.33	207.05

*: all groups combined

Table A13: International Commodity Prices/ Indices				
	Dec-14	Jan-15	Feb-15	Mar-15
Energy				
Crude Oil (US\$ per barrel) *	60.6	47.5	54.9	52.8
IMF Energy Index (2005 = 100)	119.2	96.7	108.2	104.8
WB Energy Index (2010 = 100) @	78.6	63.1	70.5	68.3
Food				
Rice (\$/MT)	410.7	409.7	409.5	400.7
Wheat (\$/MT)	269.6	248.5	237.2	230.8
Sugar (US cent/ pound)	15.0	15.1	14.5	12.8
Palm Oil (\$/MT)	624.5	641.6	634.4	607.7
Soybean Oil (\$/MT)	705.6	707.9	697.9	683.4
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	68.3	67.4	69.8	69.4
IMF Metal Price Index (2005 = 100)	148.7	140.3	137.3	134.6
Copper (\$/MT)	6,446.5	5,830.5	5,729.3	5,939.7
Aluminum (\$/MT)	1,909.5	1,814.7	1,817.8	1,773.9
Iron Ore (\$ cents/dry MT)	68.8	67.4	62.7	56.9
Tin (\$/MT)	19,829.7	19,454.1	18,233.9	17,421.9
Nickle (\$/MT)	15,962.0	14,849.2	14,573.8	13,755.5
Zinc (\$/MT)	2,175.8	2,113.0	2,097.8	2,028.7
Lead (\$/MT)	1,938.1	1,843.1	1,795.7	1,792.5
Uranium (\$/MT)	37.2	36.0	38.1	39.4
DAP (\$/MT)	459.6	484.3	485.3	479.0
Urea (\$/MT)	312.4	319.2	297.0	271.0
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	
May	169.93	178.65	193.55	
Jun	169.99	179.94	194.74	
Seasonally Adjusted Series				
Jul	154.28	169.02	182.91	197.27
Aug	155.73	169.78	184.25	197.18
Sep	157.27	171.10	183.71	197.78
Oct	159.18	171.38	186.94	197.81
Nov	160.29	171.35	189.97	197.55
Dec	160.97	173.77	189.71	197.82
Jan	162.93	176.06	189.99	197.33
Feb	164.71	176.92	191.00	197.21
Mar	166.26	177.24	192.40	197.21
Apr	168.09	177.81	194.14	
May	170.66	179.49	194.48	
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	
May	187.75	200.00	214.75	
Jun	187.35	202.11	216.98	
Seasonally Adjusted Series				
Jul	173.88	189.53	206.70	221.05
Aug	174.55	189.33	208.70	220.31
Sep	177.06	190.39	205.35	220.01
Oct	179.71	190.20	208.93	219.88
Nov	180.64	190.14	214.80	219.37
Dec	180.64	194.55	212.57	219.72
Jan	182.86	197.62	211.94	218.26
Feb	184.62	198.38	213.51	218.08
Mar	186.06	197.92	216.30	217.53
Apr	188.19	198.49	218.18	
May	189.61	202.14	217.13	
Jun	189.45	204.44	219.47	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.29	100.33	100.37	100.40	100.34
Aug	100.74	100.77	100.79	100.77	100.77
Sep	100.78	100.79	100.80	100.82	100.80
Oct	101.01	101.01	101.00	101.01	101.01
Nov	100.60	100.62	100.65	100.63	100.63
Dec	99.47	99.45	99.46	99.48	99.47
Jan	99.79	99.79	99.80	99.81	99.80
Feb	99.00	98.98	98.95	98.95	98.97
Mar	99.23	99.20	99.18	99.17	99.20
Apr	99.95	99.96	99.96		99.96
May	99.57	99.53	99.52		99.54
Jun	99.52	99.49	99.49		99.50

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY12	FY13	FY14	FY15	Average
Jul	100.53	100.63	100.72	100.79	100.67
Aug	101.59	101.66	101.71	101.70	101.66
Sep	101.75	101.79	101.82	101.87	101.81
Oct	101.87	101.82	101.76	101.76	101.80
Nov	101.45	101.52	101.56	101.54	101.52
Dec	99.21	99.19	99.21	99.26	99.22
Jan	99.47	99.48	99.47	99.47	99.47
Feb	97.87	97.82	97.77	97.74	97.80
Mar	98.61	98.56	98.53	98.49	98.55
Apr	99.60	99.62	99.61		99.61
May	99.02	98.94	98.91		98.96
Jun	98.89	98.86	98.87		98.87

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	
May	1.15	0.51	-0.26	
Jun	0.04	0.72	0.61	
Seasonally Adjusted Series				
Jul		-1.05	1.13	0.78
Aug	0.94	0.45	0.73	-0.05
Sep	0.99	0.77	-0.29	0.31
Oct	1.21	0.16	1.76	0.02
Nov	0.69	-0.01	1.62	-0.13
Dec	0.43	1.41	-0.14	0.14
Jan	1.22	1.32	0.15	-0.25
Feb	1.09	0.49	0.53	-0.06
Mar	0.94	0.18	0.73	0.00
Apr	1.10	0.32	0.90	
May	1.53	0.95	0.17	
Jun	0.09	0.76	0.65	

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	
May	0.17	1.15	-1.19	
Jun	-0.21	1.05	1.04	
Seasonally Adjusted Series				
Jul		0.04	1.11	0.72
Aug	0.39	-0.10	0.97	-0.33
Sep	1.43	0.56	-1.61	-0.14
Oct	1.50	-0.10	1.74	-0.06
Nov	0.52	-0.03	2.81	-0.23
Dec	0.00	2.32	-1.04	0.16
Jan	1.23	1.58	-0.30	-0.66
Feb	0.96	0.39	0.74	-0.08
Mar	0.78	-0.23	1.31	-0.25
Apr	1.15	0.29	0.87	
May	0.75	1.84	-0.48	
Jun	-0.08	1.14	1.08	



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

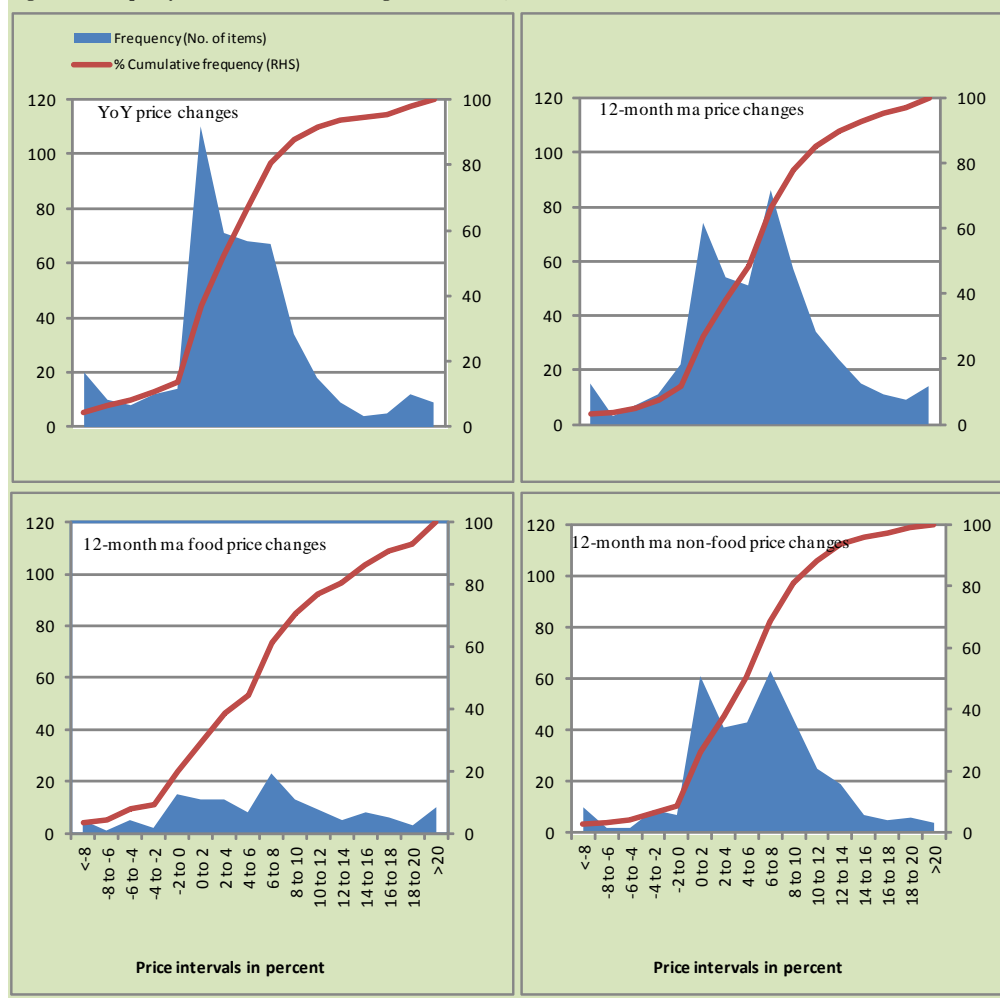


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, March 2015

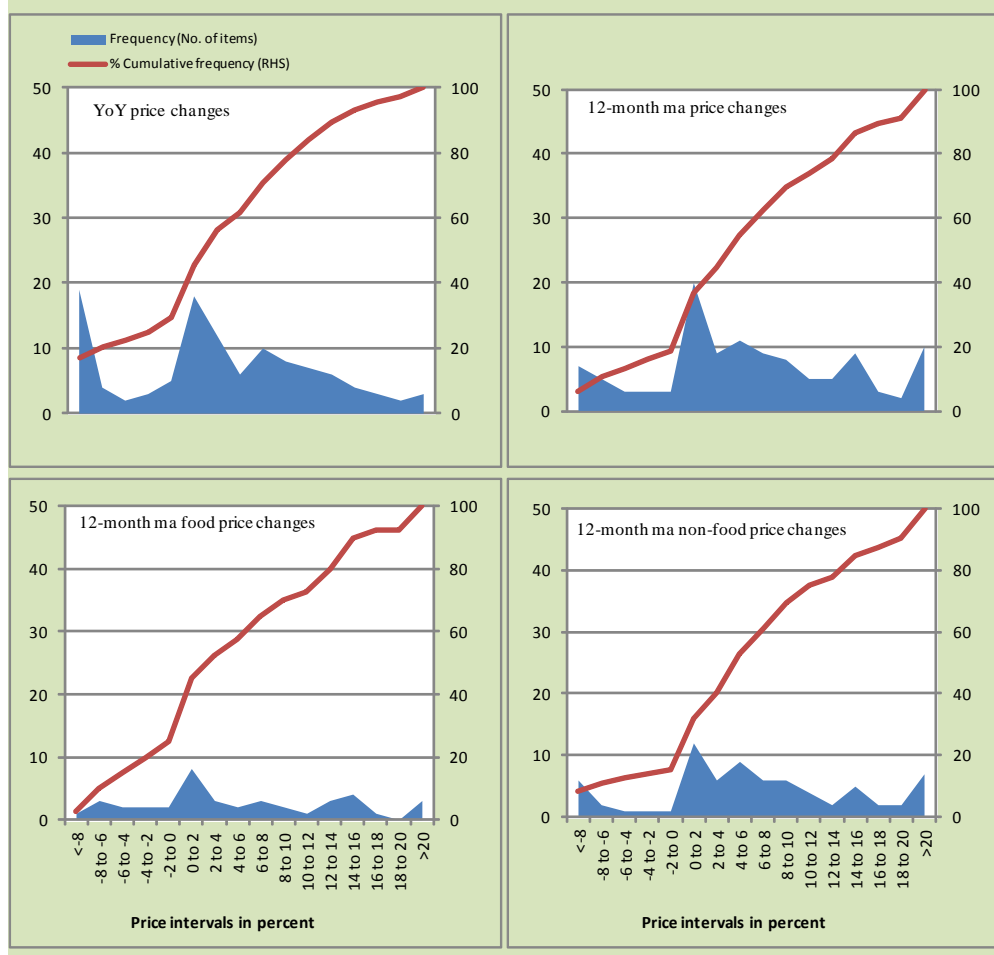
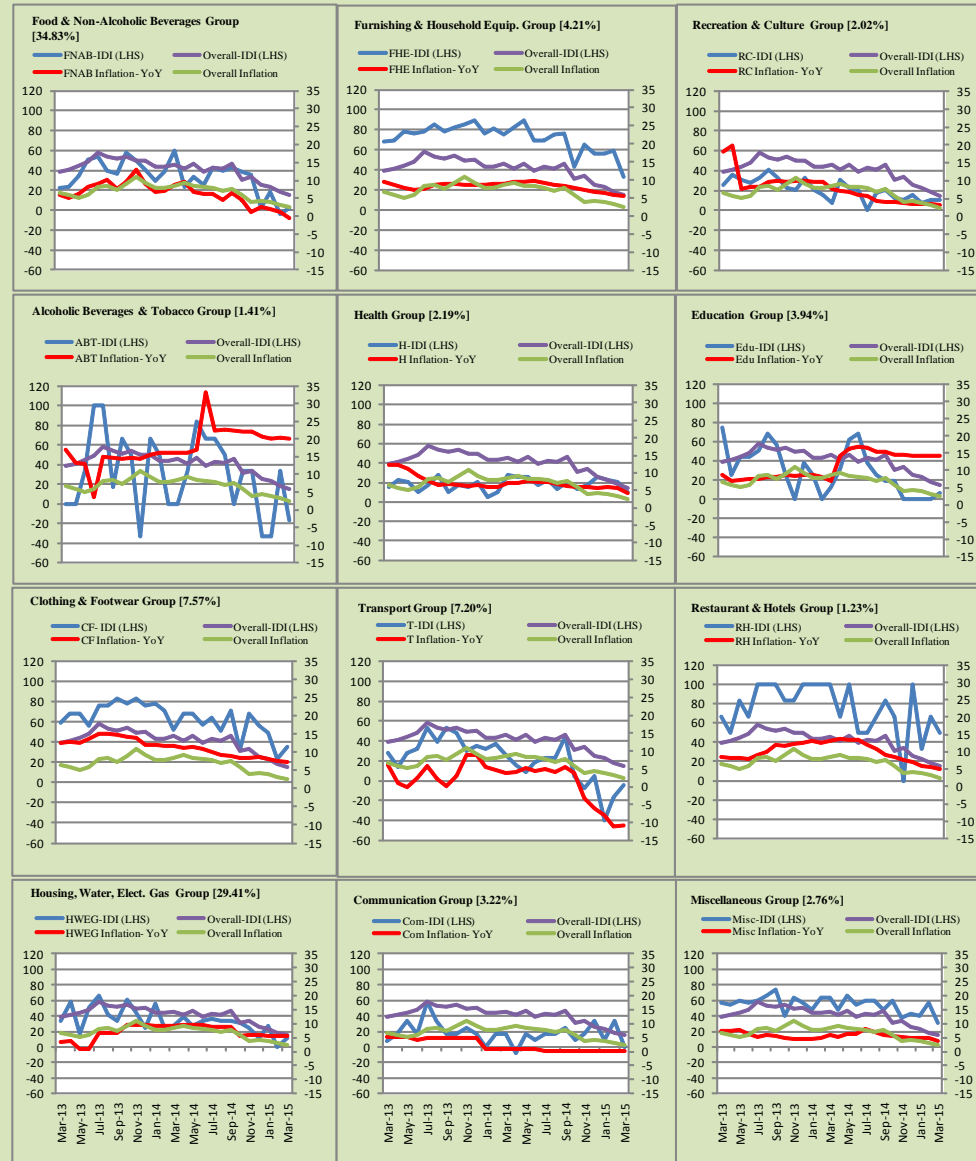


Figure A4: Group-wise/ Overall Inflation Diffusion Index (IDI) and respective/ overall YoY Inflation (percent)



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:

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

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.