

Inflation Monitor

July 2013



State Bank of Pakistan

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Team Leader

- Behzad Ali Ahmad Sr. Joint Director
behzad.ali@sbp.org.pk

Team Members

- Muhammad Ashfaq Assistant Director
muhammad.ashfaqch@sbp.org.pk
- Syed Salman Bukhari Assistant Director
salman.bukhari@sbp.org.pk

Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 8.3 percent on year-on-year basis in July 2013 as compared to 5.9 percent in the previous month and 9.6 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 2.0 percent in July 2013 as compared to 0.7 percent in the previous and -0.2 percent during the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation recorded at 1.3 percent in July 2013 as compared to 0.8 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis increased to 7.8 percent in July 2013 as compared to 6.8 percent in the previous month and was 10.7 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) increased to 1.2 percent in July 2013 as compared to 0.6 percent in the previous month and was 0.7 percent in the corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis increased to 8.2 percent in July 2013 as compared to 7.8 percent in the previous month. It was 11.3 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis increased to 1.5 percent in July 2013 as compared to 0.4 percent in the previous month. An 1.0 percent rate of change in Core NFNE was observed in July 2012.
7. WPI inflation on year-on-year basis increased to 6.5 percent in July 2013 when compared to 5.2 percent a month earlier. During July 2012, WPI inflation was recorded at 7.2%.

8. WPI inflation on month-on-month basis recorded at 1.6 percent in July 2013 as compared to 1.0 percent in the previous month and was 0.4 percent in the corresponding month of last year.
9. SPI inflation on year-on-year basis increased to 9.1 percent in July 2013 as compared to 4.6 percent in the previous month. It was 7.3 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis recorded at 2.1 percent in July 2013 as compared to 2.5 percent in previous month and was -2.2 percent in July 2012.

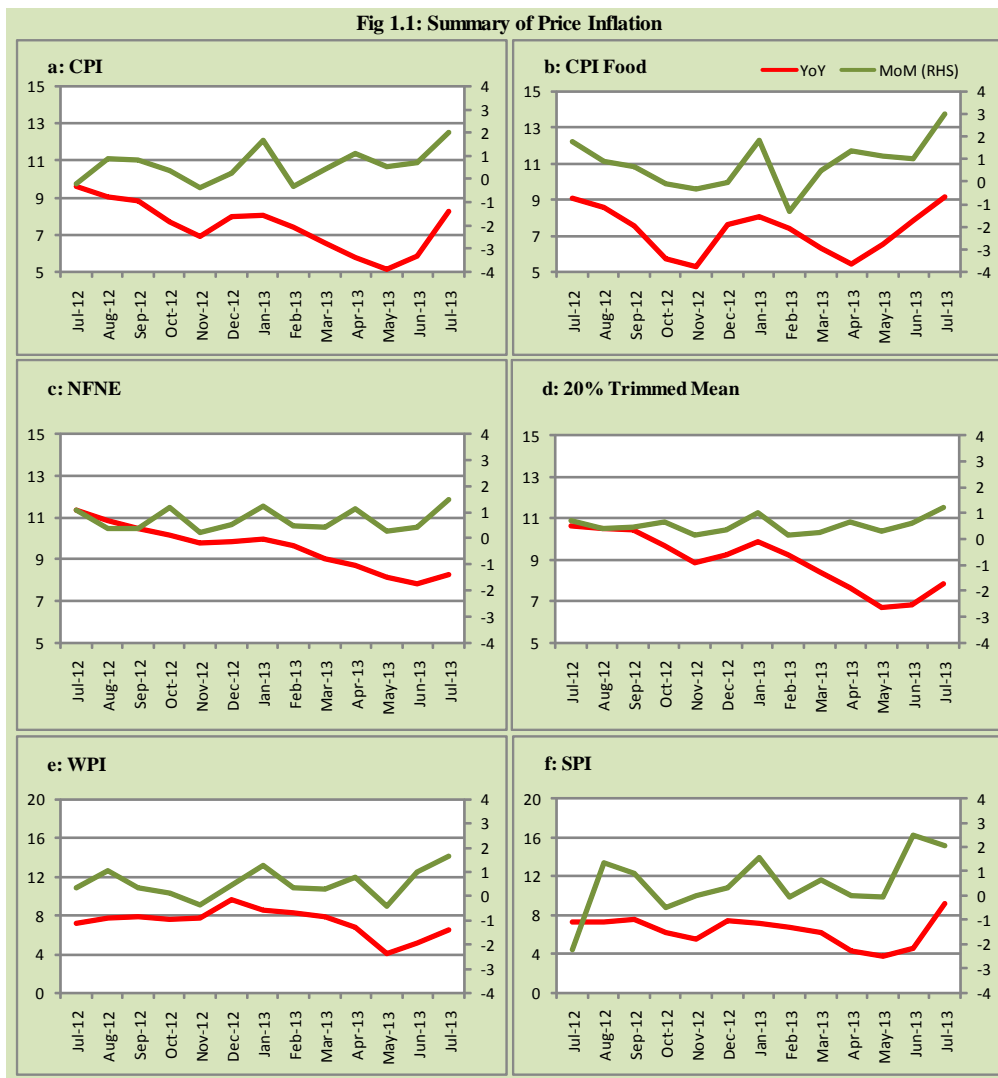
Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)

Period	CPI Inflation						Core Inflation				WPI Inflation		SPI** Inflation	
	General		Food		Non-food		NFNE*		Trimmed					
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
Jul-12	9.6	-0.2	9.1	1.8	10.0	-1.7	11.3	1.0	10.7	0.7	7.2	0.4	7.3	-2.2
Aug-12	9.1	0.9	8.5	0.9	9.4	0.9	10.8	0.3	10.6	0.4	7.7	1.0	7.3	1.4
Sep-12	8.8	0.8	7.6	0.7	9.7	0.9	10.5	0.4	10.4	0.5	7.8	0.3	7.5	0.9
Oct-12	7.7	0.4	5.8	-0.1	9.0	0.7	10.2	1.2	9.7	0.7	7.5	0.1	6.2	-0.5
Nov-12	6.9	-0.4	5.3	-0.3	8.1	-0.4	9.8	0.2	8.8	0.2	7.7	-0.4	5.5	0.0
Dec-12	7.9	0.2	7.7	0.0	8.1	0.4	9.8	0.5	9.2	0.3	9.6	0.4	7.4	0.3
Jan-13	8.1	1.7	8.1	1.9	8.1	1.5	10.0	1.2	9.9	1.0	8.6	1.2	7.1	1.6
Feb-13	7.4	-0.3	7.4	-1.3	7.4	0.4	9.6	0.4	9.2	0.2	8.3	0.3	6.8	-0.1
Mar-13	6.6	0.4	6.3	0.5	6.7	0.3	9.0	0.4	8.4	0.2	7.9	0.3	6.2	0.6
Apr-13	5.8	1.1	5.5	1.4	6.0	0.9	8.7	1.1	7.6	0.7	6.8	0.8	4.3	0.0
May-13	5.1	0.5	6.5	1.1	4.1	0.1	8.1	0.3	6.7	0.3	4.1	-0.4	3.8	0.0
Jun-13	5.9	0.7	7.9	1.1	4.4	0.5	7.8	0.4	6.8	0.6	5.2	1.0	4.6	2.5
Jul-13	8.3	2.0	9.2	3.0	7.6	1.3	8.2	1.5	7.8	1.2	6.5	1.6	9.1	2.1

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



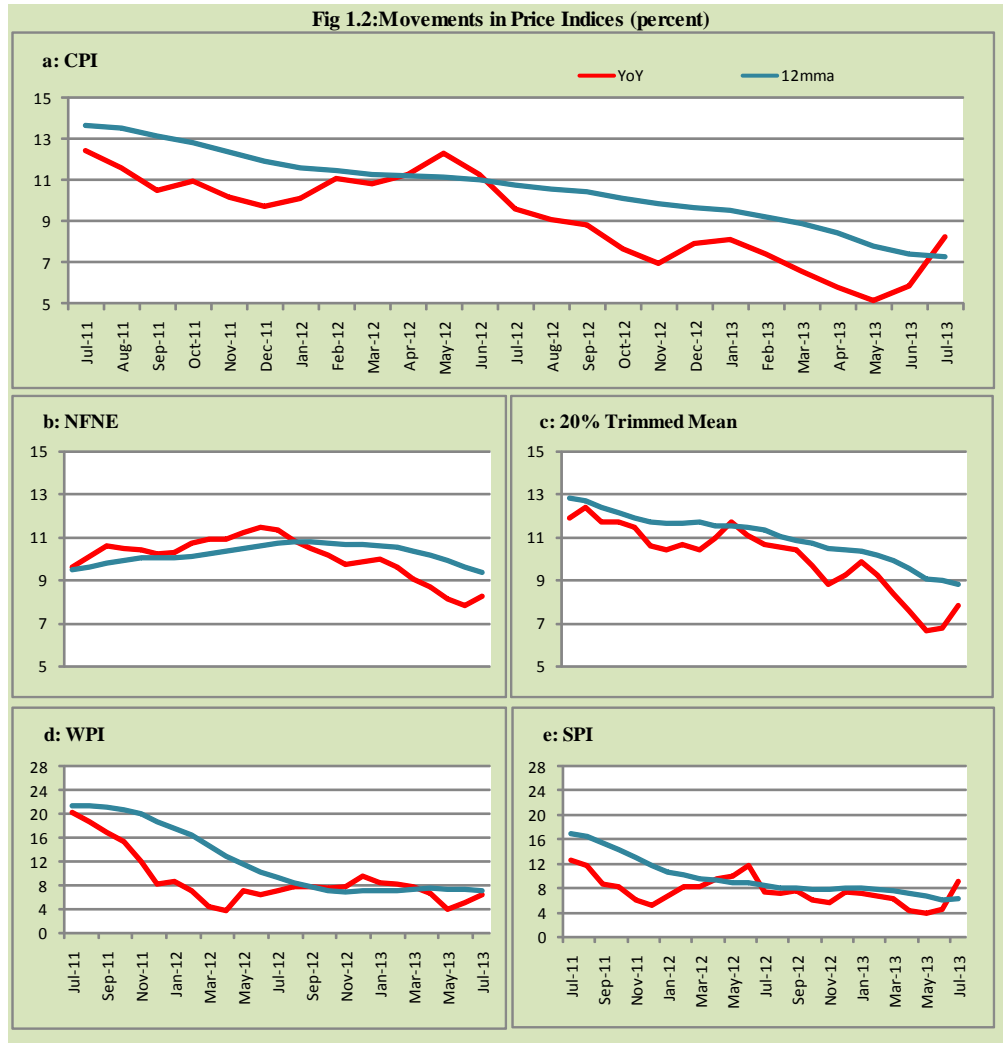
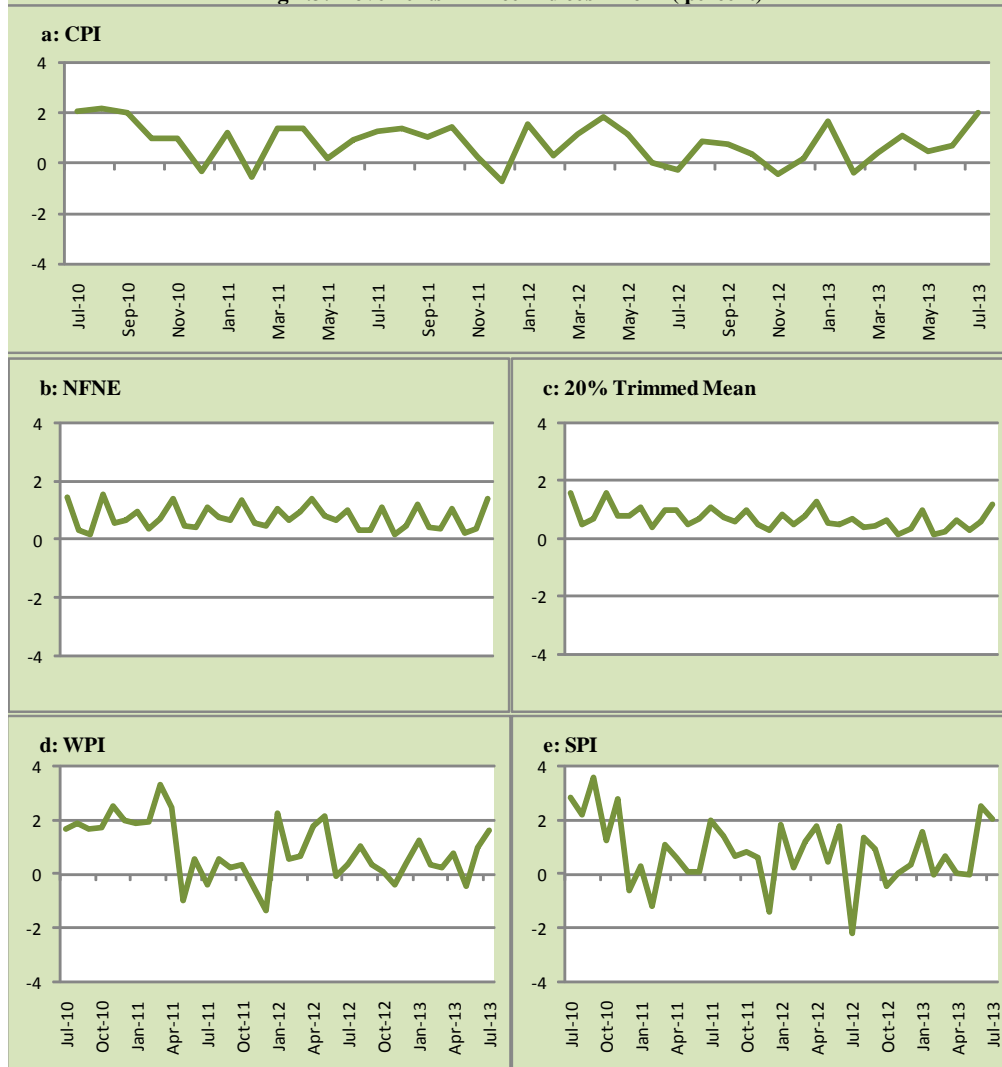
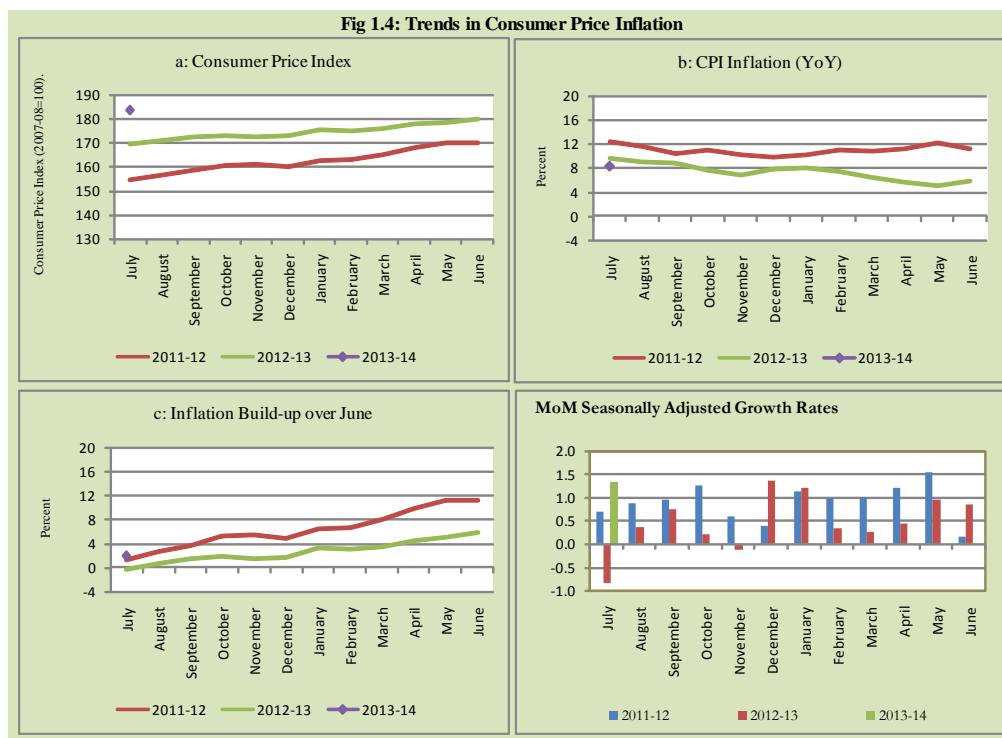


Fig 1.3: Movements in Price Indices -MoM (percent)





2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan showed mixed trend during July 2013. Among these five cities, the lowest inflation was observed in Lahore at 5.8 percent while the highest inflation was observed in Peshawar at 11.0 percent (Table A6 of annexure-A).

Table 2.1 City-wise Inflation of Selected Cities (percent)

	Jul-12		Jun-13		Jul-13	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	-0.2	9.6	0.7	5.9	2.0	8.3
Islamabad	-0.2	8.6	-0.1	5.6	1.7	7.6
Karachi	-1.6	7.8	1.4	4.7	1.7	8.2
Lahore	0.4	9.0	1.0	4.8	1.4	5.8
Peshawar	-0.8	6.7	0.8	7.4	2.5	11.0
Quetta	-0.7	9.5	1.2	5.6	2.7	9.2

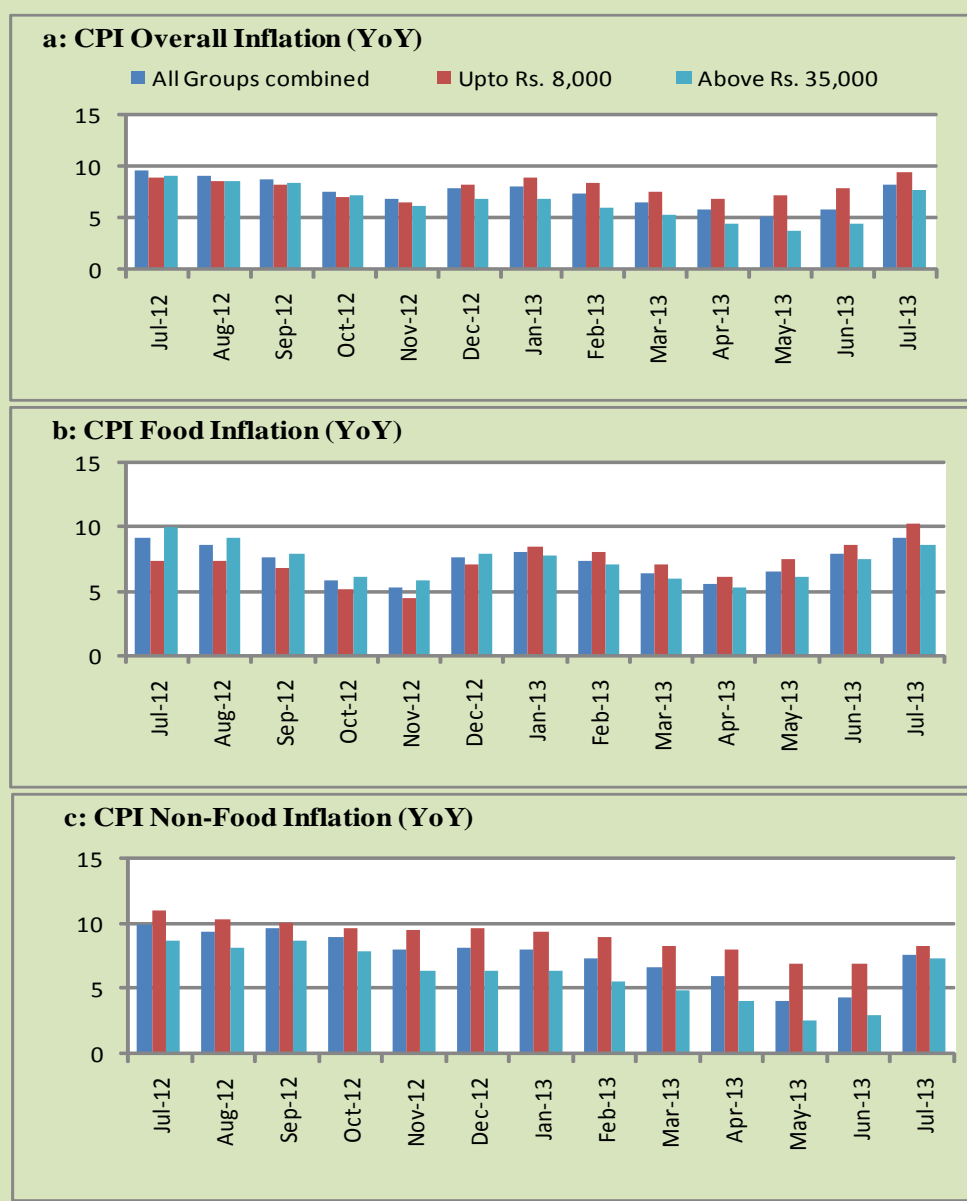
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 witnessed lower inflation than the overall inflation in CPI basket during July 2013 for general, food and non-food groups and also lowest among the groups. The lowest income group (Up to Rs. 8, 000) has the highest inflation among the groups during the month of July 2013 (Table A7 of annexure-A).

Table 3.1 Income Group- wise Inflation (YoY)

Income Groups	General			Food			Non-food		
	Jul-12	Jun-13	Jul-13	Jul-12	Jun-13	Jul-13	Jul-12	Jun-13	Jul-13
All Groups Combined	9.6	5.9	8.3	9.1	7.9	9.2	10.0	4.4	7.6
Up to Rs. 8,000	8.9	7.9	9.4	7.4	8.6	10.2	11.0	7.0	8.4
Rs. 8,001- 12,000	10.2	7.5	8.9	8.0	8.3	9.7	12.8	6.6	8.0
Rs. 12,001- 18,000	10.1	7.3	8.6	8.6	8.1	9.5	11.7	6.6	7.8
Rs. 18,001- 35,000	9.0	5.6	8.5	9.1	7.9	9.2	8.8	3.7	7.8
Above Rs. 35,000	9.2	4.5	7.8	10.0	7.5	8.7	8.7	3.0	7.4

Fig 3.1: Income Group- wise Inflation



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 46.72 percent during July 2013 from 55.58 percent in June 2013. It was 40.17 percent in July 2012.

The weighted contribution of non-food group showed increase to touch 53.28 percent in July 2013 from 44.42 percent in June 2013.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
Jul-12	40.17	11.54	15.53	9.68	3.66	19.42
Aug-12	39.99	12.01	12.97	12.64	3.85	18.55
Sep-12	36.69	11.86	13.06	16.16	3.86	18.38
Oct-12	32.26	13.20	14.34	15.11	4.52	20.57
Nov-12	32.78	14.79	15.75	10.05	4.90	21.74
Dec-12	40.58	14.29	13.76	8.43	4.39	18.56
Jan-13	41.94	13.53	11.88	10.07	4.20	18.38
Feb-13	41.59	15.24	12.70	8.00	3.93	18.53
Mar-13	40.11	14.02	14.27	7.14	4.58	19.89
Apr-13	39.66	15.99	16.52	1.30	4.17	22.36
May-13	52.66	17.82	4.28	-0.34	4.91	20.67
Jun-13	55.58	17.03	3.84	3.09	4.46	15.99
Jul-13	46.72	13.37	20.20	5.27	3.25	11.19

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13
General	41.4	41.4	48.6	54.7	39.6	49.6	51.4	37.9	39.1	40.9	44.5	48.4	58.0
Food & Non-Alcoholic Beverages	25.4	47.8	44.2	38.3	19.1	33.0	49.6	15.2	22.5	23.9	34.6	50.4	53.5
Alcoholic Beverages & Tobacco	100.0	83.3	83.3	33.3	83.3	83.3	33.3	0.0	0.0	0.0	33.3	100.0	100.0
Clothing & Footwear	62.7	76.3	64.4	84.7	79.7	89.8	72.9	84.7	59.3	67.8	67.8	55.9	76.3
Housing, Water, Elect, Gas & other Fuels	33.3	30.6	38.9	50.0	22.2	38.9	66.7	22.2	33.3	58.3	16.7	50.0	66.7
Furnishing & Household Equip. Maintenance etc	68.1	20.3	81.2	79.7	69.6	76.8	63.8	53.6	68.1	69.6	78.3	76.8	78.3
Health	33.3	23.1	41.0	23.1	33.3	23.1	30.8	17.9	15.4	23.1	20.5	10.3	17.9
Transport	39.5	41.9	37.2	48.8	11.6	37.2	44.2	46.5	27.9	14.0	27.9	32.6	53.5
Communication	-25.0	8.3	16.7	50.0	33.3	50.0	66.7	16.7	8.3	16.7	33.3	16.7	58.3
Recreation & Culture	17.9	23.1	10.3	35.9	17.9	20.5	28.2	25.6	25.6	35.9	30.8	28.2	33.3
Education	25.0	43.8	31.3	43.8	12.5	25.0	6.3	25.0	75.0	25.0	43.8	43.8	50.0
Restaurant & Hotels	100.0	33.3	83.3	100.0	66.7	100.0	83.3	100.0	66.7	50.0	83.3	66.7	100.0
Miscellaneous	60.0	60.0	54.3	80.0	65.7	65.7	51.4	51.4	57.1	54.3	60.0	57.1	60.0
NFNE	47.0	38.8	49.1	62.1	46.4	55.3	52.7	45.9	45.6	49.1	49.4	47.9	58.6

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	Jul-12		Jun-13		Jul-13	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	6.49	0.21	18.58	2.63	22.47	3.49
2	Wheat Flour Bag	10 Kg	4.84	-0.40	19.52	2.70	22.27	1.90
3	Rice Basmati Sup. Qlty.	Kg	18.65	2.28	19.83	1.73	18.48	1.13
4	Pulse Masoor (Washed)	Kg	-8.18	-1.10	6.00	1.35	9.82	2.46
5	Pulse Moong (Washed)	Kg	-14.15	-0.47	-3.41	2.27	2.71	5.84
6	Pulse Mash (Washed)	Kg	-12.19	-1.45	-4.86	0.67	-3.88	-0.43
7	Pulse Gram	Kg	49.95	0.03	-21.40	-1.27	-25.56	-5.27
8	Vegetable Ghee (Loose)	Kg	4.25	-1.16	-6.71	0.39	-5.69	-0.08
9	Sugar Refined	Kg	-21.90	-0.74	-2.08	1.57	-0.63	0.73
10	Milk Fresh (Unboiled)	Ltr	12.80	0.64	7.94	1.59	7.74	0.46
11	Tea- Tapal Danedar	200 Gm	-1.76	-7.19	23.20	0.70	36.24	2.63
12	Beef With Bone Av. Qlty.	Kg	13.24	0.02	3.39	0.14	4.21	0.81
13	Mutton Av. Qlty.	Kg	13.40	0.00	5.36	0.55	6.13	0.73
14	Chicken Farm Broiler (Live)	Kg	14.59	12.15	15.59	23.16	-0.76	-3.71
15	Eggs Farm	Doz	0.11	3.04	2.47	-2.63	8.35	8.95
16	Potatoes	Kg	-11.03	11.85	-0.16	19.16	11.46	24.87
17	Onion	Kg	50.94	20.82	87.83	-14.17	61.82	4.09
18	Tomatoes	Kg	-31.94	16.60	125.05	23.19	247.07	79.83
19	Ginger	Kg	-26.29	3.16	31.78	2.21	36.17	6.59
20	Garlic	Kg	-37.01	9.01	36.30	-8.23	21.58	-2.77

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Jul-12		Jun-13		Jul-13	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-10.4	4.7	5.2	-0.2	3.1	2.6
Food	2.7	9.2	9.4	0.5	-0.6	-0.7
Metals	-24.4	-1.4	-8.6	-3.8	-5.7	1.8
Energy	-9.8	5.1	7.0	0.0	6.1	4.2
Agricultural	-16.7	-0.3	6.3	2.7	3.3	-3.1
Cotton	-43.7	2.2	13.3	0.5	10.3	-0.5

Source: IMF

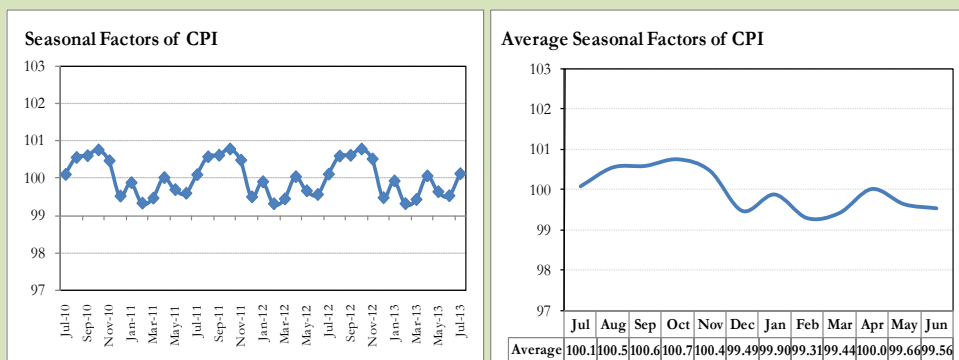
8. Seasonal Adjustment in CPI

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 July 2013 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

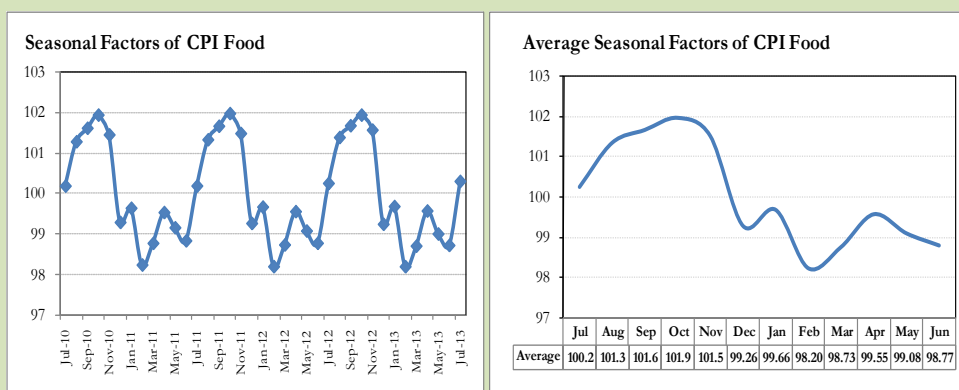
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

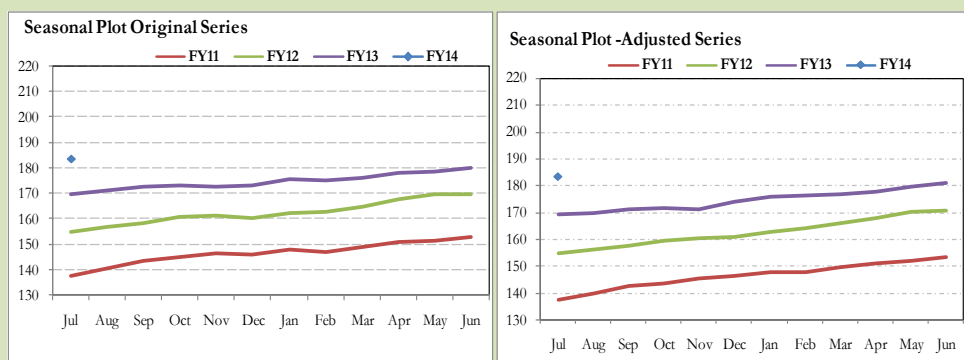
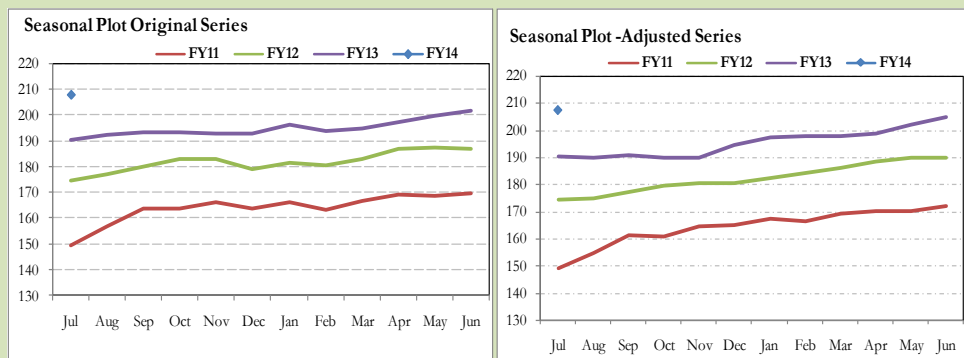


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for July 2013 stood at 183.34 against 183.58 in original series showing a decrease of -0.24 on account of adjustment of upward seasonality in July 2013.

Seasonally adjusted CPI food group for July 2013 stood at 207.57 against 208.19 in original series showing a decrease of -0.62 on account of adjustment of upward seasonality in July 2013.

Month-on-month change of seasonally adjusted CPI series stood at 1.34% reflecting increase during July 2013 over June 2013 and an increase of 2.02% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 1.38% reflecting increase during July 2013 over June 2013 and an increase of 3.01% 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 July 2013 (corresponding to the seasonally adjusted month-on-month rate) is 17.28 percent.

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

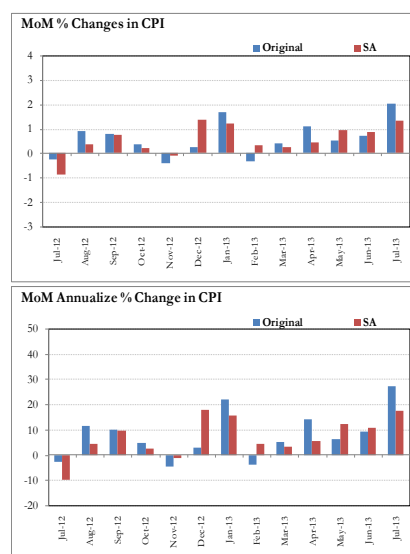
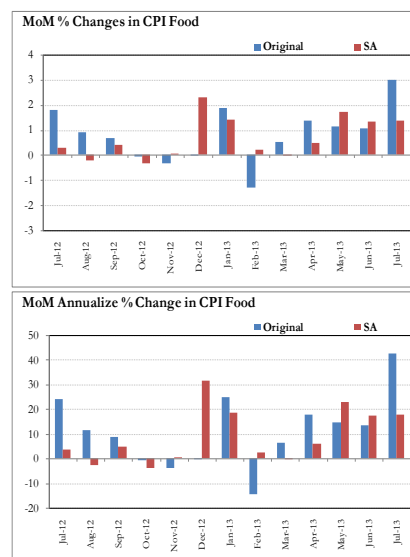


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		Jul-12	Jun-13	Jul-13	Jul-12	Jun-13	Jul-13
I. Food Group	37.5	1.8	1.1	3.0	9.1	7.9	9.2
Food & Non-Alcoholic Beverages	34.8	1.9	1.0	2.7	8.7	8.1	8.9
Alcoholic Beverages & Tobacco	1.4	0.7	1.8	11.7	18.1	3.5	14.8
Restaurant & Hotels	1.2	0.6	0.3	1.5	10.3	8.0	9.0
II. Non-Food Group	62.5	-1.7	0.5	1.3	10.0	4.4	7.6
Clothing & Footwear	7.6	1.0	1.5	2.1	15.8	13.6	14.9
Housing, Water, Elect, Gas &	29.4	-3.5	0.1	1.9	5.6	0.8	6.5
Furnishing & Household Equip.	4.2	0.5	0.6	0.8	20.2	7.3	7.6
Health	2.2	1.6	0.4	0.3	15.6	9.2	7.7
Transport	7.2	-2.4	0.9	0.8	12.6	2.3	5.7
Communication	3.2	0.0	0.0	0.7	0.1	4.1	4.9
Recreation & Culture	2.0	0.2	0.7	0.4	18.6	8.2	8.4
Education	3.9	0.3	0.8	0.4	9.9	7.4	7.6
Miscellaneous	2.8	0.1	-0.1	-0.7	15.2	6.2	5.4
Headline	100	-0.2	0.7	2.0	9.6	5.9	8.3

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)	
		Jul-12	Jul-13	Jul-12	Jul-13	Jul-12	Jul-13	Jul-12	Jul-13	Jul-12	Jul-13
I. Food Group	9.2	127	127	24	28	17	19	26	36	60	44
Food & Non-Alcoholic Beverages	8.9	115	115	24	28	17	19	21	30	53	38
Alcoholic Beverages & Tobacco	14.8	6	6	0	0	0	0	2	2	4	4
Restaurant & Hotels	9.0	6	6	0	0	0	0	3	4	3	2
II. Non-Food Group	7.6	348	348	34	52	40	70	60	128	214	98
Clothing & Footwear	14.9	59	59	2	3	2	2	4	13	51	41
Housing, Water, Elect, Gas & other Fuels	6.5	36	36	3	6	1	4	16	21	16	5
Furnishing & Household Equip. Maintenance etc	7.6	69	69	1	3	4	16	10	38	54	12
Health	7.7	39	39	12	17	8	4	3	10	16	8
Transport	5.7	43	43	0	8	6	14	7	18	30	3
Communication	4.9	12	12	5	2	3	3	1	4	3	3
Recreation & Culture	8.4	39	39	6	8	9	16	9	5	15	10
Education	7.6	16	16	4	1	3	5	1	6	8	4
Miscellaneous	5.4	35	35	1	4	4	6	9	13	21	12
Overall	8.3	475	475	58	80	57	89	86	164	274	142

Note: Prices of 12 seasonal items were not reported during the month.

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in July 2013

Top 15 Contributors		Weights	YoY Change		Weighted Contribution
Items/ Contributors			Jul-12	Jul-13	
Ranked by Weighted Contribution					
1	House Rent	21.81	6.52	8.19	17.47
2	Wheat Flour	4.16	4.13	23.43	11.54
3	Milk Fresh	6.68	12.91	7.58	7.62
4	Tomatoes	0.44	-31.94	247.08	7.24
5	Fresh Vegetable	1.68	-4.14	19.56	4.14
6	Motor Fuel	3.03	8.36	10.64	3.78
7	Onion	0.53	50.93	61.82	3.63
8	Education	3.94	9.93	7.56	3.25
9	Tea	0.84	0.96	25.34	3.05
10	Footwear	1.55	16.08	18.78	2.96
11	Cigarette	1.39	18.20	14.96	2.81
12	Cotton Cloth	1.73	9.79	14.32	2.75
13	Rice	1.58	14.53	13.19	2.49
14	Tailoring	0.88	17.25	16.03	1.98
15	Meat	2.43	13.30	4.85	1.81
Total		52.69			76.52
Bottom 15 Contributors					
1	Spices	0.54	13.86	-19.38	-2.02
2	Fresh Fruits	1.86	28.01	-4.14	-1.34
3	Vegetable Ghee	2.07	5.58	-5.17	-1.26
4	Pulse Gram	0.24	49.95	-25.56	-1.04
5	Besan	0.15	42.97	-22.67	-0.57
6	Gram Whole	0.16	31.52	-18.50	-0.49
7	Cooking Oil	1.75	13.54	-1.42	-0.29
8	Chicken	1.36	14.59	-0.76	-0.15
9	Pulse Mash (Washed)	0.21	-12.19	-3.88	-0.11
10	Sugar	1.04	-21.90	-0.63	-0.09
11	Mustard Oil	0.10	10.36	-0.89	-0.01
12	Electricity	4.40	16.39	0.00	0.00
13	Medical Equipment	0.01	13.80	8.42	0.01
14	Kerosene Oil	0.01	8.89	12.89	0.01
15	Motor Vehicle Tax	0.11	28.73	1.13	0.01
Total		14.01			-7.34

Table A3.1: Top and Bottom 15 Contributors to CPI Inflation (MoM) in July 2013					
Top 15 Contributors		Weights	MoM Change		Weighted Contribution
Items/ Contributors			Jun-13	Jul-13	
Ranked by Weighted Contribution					
1	House Rent	21.81	0.00	2.54	21.99
2	Tomatoes	0.44	23.19	79.83	17.37
3	Fresh Fruits	1.86	-10.10	13.59	14.35
4	Cigarette	1.39	1.82	11.88	8.84
5	Wheat Flour	4.16	2.59	2.42	5.54
6	Potatoes	0.47	19.16	24.87	5.43
7	Footwear	1.55	6.16	6.28	4.26
8	Fresh Vegetable	1.68	-4.21	2.94	2.79
9	Motor Fuel	3.03	2.16	1.51	2.25
10	Tailoring	0.88	0.58	3.72	1.97
11	Milk Fresh	6.68	1.54	0.44	1.84
12	Egg	0.46	-2.62	8.95	1.72
13	Onion	0.53	-14.18	4.09	1.44
14	Meat	2.43	0.28	0.78	1.17
15	Ready Made Food	1.23	0.33	1.53	1.09
Total		48.62			92.02
Bottom 15 Contributors					
1	Chicken	1.36	23.16	-3.71	-2.93
2	Personal Equipments	0.84	-2.28	-2.62	-1.52
3	Besan	0.15	-1.99	-9.27	-0.76
4	Pulse Gram	0.24	-1.27	-5.27	-0.65
5	Cooking Oil	1.75	0.21	-0.57	-0.44
6	Spices	0.54	-0.30	-1.15	-0.38
7	Gram Whole	0.16	-0.02	-3.96	-0.34
8	Vegetable Ghee	2.07	0.19	-0.08	-0.07
9	Pulse Mash (Washed)	0.21	0.67	-0.43	-0.05
10	Woolen Readymade Garments	0.40	0.00	0.00	0.00
11	Electricity	4.40	0.00	0.00	0.00
12	Motor Vehicle Tax	0.11	0.00	0.00	0.00
13	News Papers	0.19	0.00	0.00	0.00
14	Honey	0.04	0.00	0.00	0.00
15	Medical Equipment	0.01	0.00	0.00	0.00
Total		12.48			-7.14

Table A3.2: Top Fifteen Contributors to CPI Inflation (YoY) in July 2013

A. Ranked by Percentage Change					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jul-12	Jul-13	
1	Tomatoes	0.44	-31.94	247.08	7.24
2	Onion	0.53	50.93	61.82	3.63
3	Postal Services	0.07	5.73	25.98	0.21
4	Tea	0.84	0.96	25.34	3.05
5	Wheat Flour	4.16	4.13	23.43	11.54
6	Wheat	0.35	6.49	22.47	0.89
7	Fresh Vegetable	1.68	-4.14	19.56	4.14
8	Woolen Readymade Garments	0.40	16.79	18.92	0.87
9	Footwear	1.55	16.08	18.78	2.96
10	Gur	0.02	-15.09	18.19	0.06
11	Wheat Product	0.10	2.97	17.95	0.20
12	Tailoring	0.88	17.25	16.03	1.98
13	Dopatta	0.44	20.39	14.99	0.84
14	Cigarette	1.39	18.20	14.96	2.81
15	Cotton Cloth	1.73	9.79	14.32	2.75
Total		14.58			43.18
B. Ranked by Weights					
1	House Rent	21.81	6.52	8.19	17.47
2	Milk Fresh	6.68	12.91	7.58	7.62
3	Electricity	4.40	16.39	0.00	0.00
4	Wheat Flour	4.16	4.13	23.43	11.54
5	Education	3.94	9.93	7.56	3.25
6	Communication & Apparatus	3.15	-0.07	4.29	1.18
7	Motor Fuel	3.03	8.36	10.64	3.78
8	Transport Services	2.70	15.57	1.22	0.47
9	Meat	2.43	13.30	4.85	1.81
10	Vegetable Ghee	2.07	5.58	-5.17	-1.26
11	Fresh Fruits	1.86	28.01	-4.14	-1.34
12	Cooking Oil	1.75	13.54	-1.42	-0.29
13	Cotton Cloth	1.73	9.79	14.32	2.75
14	Fresh Vegetable	1.68	-4.14	19.56	4.14
15	Rice	1.58	14.53	13.19	2.49
Total		63.00			53.61
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 8.3 percent in July, 2013.					

Table A3.3: Top Ten Contributors to CPI Food Inflation (YoY) in July 2013					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jul-12	Jul-13	
A. Ranked by Weighted Contribution					
1	Wheat Flour	4.16	4.13	23.43	11.54
2	Milk Fresh	6.68	12.91	7.58	7.62
3	Tomatoes	0.44	-31.94	247.08	7.24
4	Fresh Vegetable	1.68	-4.14	19.56	4.14
5	Onion	0.53	50.93	61.82	3.63
6	Tea	0.84	0.96	25.34	3.05
7	Cigarette	1.39	18.20	14.96	2.81
8	Rice	1.58	14.53	13.19	2.49
9	Meat	2.43	13.30	4.85	1.81
10	Beverages	1.20	7.90	10.97	1.58
Total		20.94			45.92
B. Ranked by Percentage Change					
1	Tomatoes	0.44	-31.94	247.08	7.24
2	Onion	0.53	50.93	61.82	3.63
3	Tea	0.84	0.96	25.34	3.05
4	Wheat Flour	4.16	4.13	23.43	11.54
5	Wheat	0.35	6.49	22.47	0.89
6	Fresh Vegetable	1.68	-4.14	19.56	4.14
7	Gur	0.02	-15.09	18.19	0.06
8	Wheat Product	0.10	2.97	17.95	0.20
9	Cigarette	1.39	18.20	14.96	2.81
10	Rice	1.58	14.53	13.19	2.49
Total		11.10			36.06
C. Ranked by Weights					
1	Milk Fresh	6.68	12.91	7.58	7.62
2	Wheat Flour	4.16	4.13	23.43	11.54
3	Meat	2.43	13.30	4.85	1.81
4	Vegetable Ghee	2.07	5.58	-5.17	-1.26
5	Fresh Fruits	1.86	28.01	-4.14	-1.34
6	Cooking Oil	1.75	13.54	-1.42	-0.29
7	Fresh Vegetable	1.68	-4.14	19.56	4.14
8	Rice	1.58	14.53	13.19	2.49
9	Cigarette	1.39	18.20	14.96	2.81
10	Chicken	1.36	14.59	-0.76	-0.15
Total		24.98			27.37
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 9.2 percent in July, 2013.					

Table A3.4: Top Ten Contributors to CPI Non-food Inflation (YoY) in July 2013

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jul-12	Jul-13	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	6.52	8.19	17.47
2	Motor Fuel	3.03	8.36	10.64	3.78
3	Education	3.94	9.93	7.56	3.25
4	Footwear	1.55	16.08	18.78	2.96
5	Cotton Cloth	1.73	9.79	14.32	2.75
6	Tailoring	0.88	17.25	16.03	1.98
7	Ready Made Garment	0.97	18.18	12.19	1.40
8	Woolen Cloth	0.88	19.52	12.04	1.39
9	Text Books	0.57	40.60	12.95	1.21
10	Household Servant	1.04	35.04	8.92	1.20
Total		36.41			37.38
B. Ranked by Percentage Change					
1	Postal Services	0.07	5.73	25.98	0.21
2	Woolen Readymade Garments	0.40	16.79	18.92	0.87
3	Footwear	1.55	16.08	18.78	2.96
4	Tailoring	0.88	17.25	16.03	1.98
5	Dopatta	0.44	20.39	14.99	0.84
6	Cotton Cloth	1.73	9.79	14.32	2.75
7	Cleaning & Laundering	0.21	18.56	14.10	0.39
8	News Papers	0.19	5.67	13.68	0.28
9	Text Books	0.57	40.60	12.95	1.21
10	Kerosene Oil	0.01	8.89	12.89	0.01
Total		6.05			11.50
C. Ranked by Weights					
1	House Rent	21.81	6.52	8.19	17.47
2	Electricity	4.40	16.39	0.00	0.00
3	Education	3.94	9.93	7.56	3.25
4	Communication & Apparatus	3.15	-0.07	4.29	1.18
5	Motor Fuel	3.03	8.36	10.64	3.78
6	Transport Services	2.70	15.57	1.22	0.47
7	Cotton Cloth	1.73	9.79	14.32	2.75
8	Gas	1.58	-34.25	7.05	1.07
9	Footwear	1.55	16.08	18.78	2.96
10	Personal Care	1.49	15.45	6.44	1.20
Total		45.39			34.12

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 7.6 percent in July, 2013.

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: July 2013

Groups	Decrease or no change	Subdued increase (Up to 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food & Non-Alcoholic Beverages	Chillies Powd.National 200 Gm, Chillies Powder Loose, Pulse Gram, Besan Av. Qlty., Gram Whole Yellow Av.Qlty	Salt-Powdered (Lahori) Loose, Butter Local Packed, Squash-Mitchelles, Beef With Bone Av.Qlty., Bottlegourd, Cloves Loose Av.Qlty	Bread Plain Medium Size, Pulse Masoor (Washed), Pulse Masoor (Whole), Pickles Ahmed/Mitchelles, Tomato Ketchup Ahmed/Mitchells	Tomatoes, Onion, Chillies Green, Tapal Danedar Tea 200 Gm, Ginger, Brinjal, Tea Lipton Yellow Label 200 Gm, Ice, Ice Cream Walls, Karaila, Wheat Flour Fine/Superior, Wheat Flour Avg. Qlty, Arvi, Wheat, Wheat Flour Bag
Alcoholic Beverages & Tobacco			Betel Nuts, Betel Leaves	Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Cigarettes Capstan 20,S, Cigarettes Morven Gold 20,S
Clothing & Footwear	Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Ladies Sandal Bata	Pullover Ladies Oxford/Bon, Heavy Wt Suiting Law.Pur Av. Qlty	Second-Hand Coat For Men, School Uni. Pant, Shirt Boys, Pullover Gents Oxford/Bon, Foot Wear Local (Male), Azarband Cotton Av.Qlty	Gents Shoe, Art 1109 Servis, Gents Shoes Paul Bata, Sports Shoes, Secondhand Sweater For Men, Georgette Av.Qlty, Lungi/Dhoti(Cotton) Av.Qlty, Child Shoe Power Lite Bata, Brassier Sup. Qlty, Tailoring Charges Pant (Men), Shirting Av.Qlty., Secondhand Winter Jacket
Housing, Water, Elect, Gas & other Fuels	Elect. Charges Upto 50 Units, Elect. Charges Above 1000 Units Elect. Charges 01 - 100 Units	Sand (Black Pit Sand), Bricks (New) 1st Class, Bajree, Iron Bar (M.S. Bar) 1/2"	Mason (Raj) Wage Rate, Timber Shesham Log, Synthetic Enemal ICI, Cement Blocks (6"X8"X12"), Synthetic Enemal Robialac	Electrician Wage Rate(P/Pnt), Kerosene Oil, Plumber Wage Rate, Cement (Local), Unskilled Labour Wage Rat
Furnishing & Household Equip. Maintenance etc	Tawa Iron (Medium Size) Avg. Qlty, Electric Juicer, Carpet Plain Av. Qlty	Electric Blubs "0" Watt, Toilet Paper Roll (R.Petal), Pedestal Fan 22" Super Qlty, Water Cooler 9/10 Ltr., Mattress Single(4"Thick)	Dari Cotton (6X2 1/2), Sofa Set Wooden With Foam, Chair Shesham Wood, Aluminum Cooking Pan, Elect. Iron Philips	Match Box (Small), Boot Polish Cherry/Kiwi 50 MI, Cleanser Powder Vim 1000 Gms, Washing Powder (Wheel/ Bonus), Finis 500 MI, Robin Blue (35 Gms), Tea Set Pak. China Wear 21 Pcs, Surf Excel 400 Gms Poly Bag
Health	Calcium Syrup Sandoz, Burnol Cream 30 Gm, Amoxil Capsule 250 Mg., Polyfax Eye Ointment, Daonil Tab. 5 Mg.	Sugar Test (Random/Fasting), Gripe-Water Woodward's, ECG Charges, Cac. 1000 Tab	Phenergan Syrup 120 ML, X-Ray (Chest) Charges, Cotton Bandage 2" - 4", Glycerin Small Bottle, Saniplast (1 Putty)	Hydriyllin Syrup 120 ML O.R.S. (Nimcol), Galxos-D (450 Gm), Sanco's Syrup (50 ML), Trisil Tab., Doctor (MBBS) Clinic Fee, Ear Drops (Cardisporine)
Transport	Minibus Fare Min.Within City, Minibus Fare Max. Within City, CNG, Bus Fare Min (Within City)	Train Fare A/C Slp > 500K, Train Fare A/C Slp.101-500, Train Fare Eco. 1-100 Km., Train Fare Eco. 101-500 K, Train Fare 1st Slp. 1-100	High Speed Diesel HSD, Cycle Overhauling Charges, Car Suzuki 800 Cc (W/O. Ac), Motor Cycle Service Charges, Tyre Car W/O Tube	Gas Cylinder S. Size (L.P.G), Petrol Super, Bus Fare Outside City (Non A/C)
Communication	Postal Envelope Domestic, Mobile Cell Charges	Postal Envelope For Saudi Arabia, Telephone Set Av. Qlty, Mobile Set Nokia/Sony/Ericsson Av.Qlty	Telephone Charges Local Call, Telephone Charges Outside City, Fax Charges (Local), Internet Charges	U.M.S. Reg Charges Min., T.C.S. Ch. Min. Within Zone, Postal Registration Charges
Recreation & Culture	V.C.P. Panasonic/LG/National, T.V. 20" Colored Sony, English Book BA/B.Sc, TV License Fee Domestic, Weekly "Mag"	Fountain Pen Hero/Wings/China, Paper Fool Scape (27"X17"), English Book Class V1, Radio With C.Player National, Pencil Goldfish/Deer	Maths Book Ist. Year (T.B. Board), Exercise Book Lined 80/10, Eng. Book Ist. Yr Complete Set, Urdu Book Class IX/X (T.B.Board), Ball Pen (Local)	Maths Book Calss V (T.B.Board), Urdu Book Class V (T.B.Board), Daily "Dawn", English Book Class IX or X, Daily "Jang", Daily "Nawa-e-Waqt", Cinema A/C High Class, Monthly "Naunehal Digest", Pen Ink Dollor 57 MI Bottle, Cinema Non-A/C High Class
Education	Coaching Charges For Class XI/ XII Commerce Group	I.T. Tuition Fees, Govt. Med. College Fee MBBS 1st Year, Coaching Charges For Class XI/ XII Science Group	Coaching Fee For Class IX/ X, Pvt School Fee Eng. Med (Class-V), MBA Tuition Fee	Govt. Engg. Coll. Fee 1st Year, Pvt Med. College Fee MBBS(1st Year), Pvt Eng. College Fee (1st Year), Govt. University Fee MSc/ MA
Restaurant & Hotels			Cooked Dal (Av. Hotel), Chicken Biryani Full/Double, Tea Prepared (Ordinary)	Cooked Beef (Av. Hotel), Cooked Mutton (Av. Hotel)
Miscellaneous	Toothpaste Med Size Colgate 70Gms, Silver Tezabi 24 Ct, Gold Tezabi 24 Ct	Blade 7-o-Clock Steel (5), Wrist Watch Ladies Citizen, Wrist Watch Gents Citizen, Gel Medium Size	Toilet Soap Lux 95 Gms, Toothbrush Shield, Toilet Soap Lifebuoy 140 Gms, Disposable Razor Gillette-II	Perfume Med. Size Medora/Broche, Purse Ladies (Leather) Av. Qlty, Artificial Jewellery Set, Shaving Charges, Toothpaste Macleans 70 Gms, Trunk Medium Size, Hair Oil Amla/Chambeli

Table A5: City- wise CPI Inflation by Income Groups, July 2013

	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	2.2	9.9	2.5	10.5	1.8	9.1	2.3	9.7	2.7	10.1	1.8	9.3
2 Islamabad	2.3	9.6	3.2	10.7	1.0	8.1	2.0	9.3	3.3	10.6	0.6	7.8
3 Lahore	1.5	6.3	2.1	6.4	0.6	6.3	1.6	6.3	2.3	6.3	0.7	6.4
4 Gujranwala	2.5	6.9	3.4	7.6	1.3	6.0	2.5	6.6	3.5	7.0	1.4	6.1
5 Sialkot	2.3	9.0	2.7	8.4	1.8	9.9	2.3	8.5	2.8	7.7	1.7	9.6
6 Faisalabad	1.4	7.4	1.6	8.8	1.0	5.5	1.2	6.9	1.6	8.2	0.7	5.4
7 Multan	2.7	8.5	3.0	9.8	2.3	6.9	2.6	8.1	3.0	9.3	2.1	6.9
8 Sargodha	1.2	7.1	0.5	6.2	2.0	8.2	1.2	7.1	0.5	6.0	1.9	8.1
9 Bahawalpur	1.4	7.0	0.7	5.5	2.1	8.8	1.5	7.0	1.2	5.4	1.9	8.6
10 Karachi	1.9	8.7	3.0	12.6	0.4	3.5	2.0	8.5	3.2	12.6	0.6	4.0
11 Hyderabad	1.9	9.3	2.9	12.8	0.5	4.6	1.8	8.8	2.9	12.3	0.5	4.8
12 Sukkur	2.4	8.6	3.5	9.2	0.9	7.9	2.4	8.1	3.7	8.4	1.1	7.7
13 Larkana	3.6	12.5	4.3	11.5	2.8	13.8	3.1	12.5	3.7	11.8	2.5	13.1
14 Peshawar	2.9	12.7	4.1	13.7	1.6	11.6	2.7	12.1	3.8	12.5	1.6	11.6
15 Bannu	5.2	11.7	8.3	14.9	1.6	7.9	4.9	11.2	8.2	14.1	1.6	8.2
16 Quetta	3.6	10.5	4.9	11.7	1.8	9.0	2.9	9.8	4.3	10.8	1.4	8.8
17 Khuzdar	1.1	4.7	1.3	4.3	0.7	5.1	1.0	4.9	1.2	4.1	0.9	5.7
	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	2.5	10.3	2.9	10.2	2.1	10.5	2.4	9.7	3.1	10.1	1.7	9.5
2 Islamabad	2.0	9.1	3.3	10.0	0.7	8.2	2.0	8.6	3.6	9.8	0.5	7.5
3 Lahore	1.6	6.5	2.2	6.2	0.8	6.9	1.4	6.1	2.2	6.0	0.7	6.1
4 Gujranwala	2.6	6.6	3.6	6.8	1.6	6.5	2.5	6.0	3.8	6.2	1.4	5.8
5 Sialkot	2.3	9.0	2.8	8.0	1.8	10.1	2.2	8.2	2.9	7.5	1.5	8.8
6 Faisalabad	1.2	6.9	1.6	8.0	0.8	5.8	1.2	6.1	1.9	7.6	0.5	4.8
7 Multan	2.7	8.5	3.0	9.2	2.3	7.8	2.4	7.7	3.0	8.9	1.9	6.7
8 Sargodha	1.3	7.3	0.6	5.8	1.9	8.6	1.1	6.8	0.6	5.4	1.6	7.8
9 Bahawalpur	1.8	7.7	1.6	5.9	2.0	9.4	1.7	7.3	1.8	5.8	1.6	8.4
10 Karachi	2.2	8.8	3.3	12.6	0.9	4.9	2.0	8.2	3.2	12.3	0.8	4.6
11 Hyderabad	2.0	9.0	3.3	12.3	0.5	5.7	1.8	8.2	3.4	11.9	0.4	4.9
12 Sukkur	2.4	8.1	3.6	8.2	1.2	8.0	2.1	7.7	3.6	8.2	0.9	7.2
13 Larkana	3.1	12.7	3.7	11.9	2.5	13.6	2.7	12.1	3.4	12.1	2.1	12.0
14 Peshawar	2.7	12.3	4.0	12.5	1.6	12.1	2.6	11.2	4.2	11.8	1.3	10.7
15 Bannu	5.1	11.8	8.4	14.7	2.0	9.0	4.8	10.9	8.6	13.9	1.7	8.4
16 Quetta	2.8	9.6	4.1	9.7	1.5	9.5	2.7	9.1	4.2	9.5	1.4	8.9
17 Khuzdar	0.9	5.1	0.9	4.0	0.8	6.2	0.7	4.8	0.8	3.6	0.6	5.8
	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	2.2	9.5	2.9	9.7	1.8	9.4	2.2	9.6	2.9	9.9	1.8	9.4
2 Islamabad	1.6	7.5	3.5	8.9	0.6	6.6	1.7	7.6	3.5	9.2	0.2	6.4
3 Lahore	1.3	5.5	2.3	5.6	0.7	5.4	1.4	5.8	2.3	5.9	0.7	5.8
4 Gujranwala	2.3	5.3	3.9	5.5	1.5	5.2	2.4	6.0	3.7	6.4	1.5	5.7
5 Sialkot	2.1	8.0	2.8	7.5	1.8	8.2	2.2	8.2	2.8	7.6	1.7	8.7
6 Faisalabad	1.0	5.0	1.7	7.1	0.5	3.9	1.1	6.1	1.7	7.8	0.7	4.8
7 Multan	2.1	7.0	2.7	8.4	1.7	6.3	2.3	7.6	2.9	8.9	1.9	6.6
8 Sargodha	1.1	7.6	0.5	5.9	1.4	8.4	1.2	7.1	0.6	5.9	1.6	7.9
9 Bahawalpur	2.1	7.5	2.6	6.5	1.8	8.0	1.8	7.3	1.7	5.9	1.8	8.2
10 Karachi	1.5	8.0	3.1	11.5	0.6	6.2	1.7	8.2	3.2	12.0	0.6	5.4
11 Hyderabad	1.6	7.0	3.6	11.4	0.5	4.7	1.8	8.0	3.3	12.0	0.6	5.2
12 Sukkur	1.9	6.8	3.5	8.0	1.1	6.3	2.2	7.7	3.6	8.4	1.2	7.2
13 Larkana	2.3	11.1	3.0	11.6	2.0	10.9	2.9	12.1	3.7	11.9	2.4	12.3
14 Peshawar	2.2	10.0	4.3	11.1	1.1	9.5	2.5	11.0	4.1	12.1	1.3	10.3
15 Bannu	3.5	8.9	7.0	12.5	1.7	7.2	4.7	10.8	8.2	14.1	2.3	8.5
16 Quetta	2.5	8.7	4.1	9.3	1.8	8.4	2.7	9.2	4.2	9.8	1.7	8.8
17 Khuzdar	0.5	3.8	1.4	3.0	0.0	4.2	0.9	4.7	1.1	4.0	0.7	5.2

Table A6: City- wise CPI Inflation (YoY) July, 2013							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
D.I.Khan	13.9	16.7	12.0	Sialkot	8.2	7.6	8.7
Mithi	13.2	10.6	14.8	Karachi	8.2	12.0	5.4
Mardan	13.0	14.7	12.0	Wazirabad	8.2	8.1	8.2
Mingora	12.2	12.3	12.1	Hyderabad	8.0	12.0	5.2
Larkana	12.1	11.9	12.3	Jhang	8.0	5.7	9.5
Rahim Yar Khan	11.7	13.4	10.5	Sukkur	7.7	8.4	7.2
D.G. Khan	11.2	8.2	13.3	Islamabad	7.6	9.2	6.4
Peshawar	11.0	12.1	10.3	Multan	7.6	8.9	6.6
Mianwali	10.8	9.3	11.9	Bahawalpur	7.3	5.9	8.2
Bannu	10.8	14.1	8.5	Sargodha	7.1	5.9	7.9
Vehari	10.5	13.7	8.2	Abbotabad	7.1	9.2	5.7
Loralai&Cantt	10.4	11.9	9.4	Faisalabad	6.1	7.8	4.8
Dera Mrd.Jamali	10.3	12.2	8.9	Gujranwala	6.0	6.4	5.7
Turbat	10.1	8.8	10.9	Lahore	5.8	5.9	5.8
Nawabshah	9.9	12.2	8.3	Khuzdar	4.7	4.0	5.2
Muzaffargarh	9.7	10.6	9.1				
Bahawalnagar	9.6	11.6	8.3				
Rawalpindi	9.6	9.9	9.4				
Quetta	9.2	9.8	8.8				
Dadu	8.6	12.2	6.2				
Sahiwal	8.6	7.9	9.1				
Gawadar	8.6	10.0	7.5				
Mir Pur Khas	8.5	9.1	8.1				
Attock	8.4	10.1	7.2				
Jehlum	8.3	8.0	8.6				
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		
	Jul-12	Jun-13	Jul-13	Jul-12	Jun-13	Jul-13
<u>Up to Rs. 8000</u>						
General	0.9	0.9	2.3	8.9	7.9	9.4
Food	1.5	1.3	3.0	7.4	8.6	10.2
Non-food	0.1	0.5	1.4	11.0	7.0	8.4
<u>Rs. 8001- 12000</u>						
General	0.9	0.9	2.2	10.2	7.5	8.9
Food	1.6	1.2	2.9	8.0	8.3	9.7
Non-food	0.0	0.6	1.4	12.8	6.6	8.0
<u>Rs. 12001- 18000</u>						
General	1.0	0.9	2.2	10.1	7.3	8.6
Food	1.7	1.2	3.0	8.6	8.1	9.5
Non-food	0.2	0.5	1.4	11.7	6.6	7.8
<u>Rs. 18001- 35000</u>						
General	-0.6	0.8	2.1	9.0	5.6	8.5
Food	1.8	1.1	3.1	9.1	7.9	9.2
Non-food	-2.6	0.5	1.3	8.8	3.7	7.8
<u>Above Rs. 35000</u>						
General	-1.3	0.6	1.9	9.2	4.5	7.8
Food	1.9	0.9	3.0	10.0	7.5	8.7
Non-food	-2.9	0.4	1.3	8.7	3.0	7.4
<u>All income groups</u>						
General	-0.2	0.7	2.0	9.6	5.9	8.3
Food	1.8	1.1	3.0	9.1	7.9	9.2
Non-food	-1.7	0.5	1.3	10.0	4.4	7.6

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Jul-13	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	331.6	22.3	3.7
2	Wheat Flour Bag	10Kg.	380.8	24.4	3.1
3	Rice Basmati Broken	Kg.	73.3	11.5	1.7
4	Rice Irri-6	Kg.	53.3	10.5	3.2
5	Bread Plain Med. Size (340-400 Gm.)	Each	35.7	9.7	0.4
6	Beef	Kg.	276.3	4.9	1.0
7	Mutton	Kg.	543.7	7.5	0.6
8	Chicken Live (Farm)	Kg.	167.9	0.4	-5.0
9	Milk Fresh	Litr	68.0	6.8	0.9
10	Curd	Kg.	79.2	6.2	0.9
11	Milk Powdered Nido	500G	290.0	0.9	0.0
12	Egg Hen (Farm)	Doz.	80.3	4.1	3.5
13	Mustard Oil	Kg.	182.2	-2.6	-0.3
14	Cooking Oil (Tin)	2.5Ltr	537.4	-2.1	0.0
15	Veg. Ghee (Tin)	2.5Kg.	508.8	-5.6	0.8
16	Veg. Ghee Loose	Kg.	158.2	-6.7	0.5
17	Bananas	Doz.	84.8	-16.4	13.7
18	Masoor Pulse Washed	Kg.	110.4	10.3	3.1
19	Moong Pulse Washed	Kg.	123.9	2.3	4.0
20	Mash Pulse Washed	Kg.	130.2	-5.1	-0.4
21	Gram Pulse Washed	Kg.	78.7	-27.6	-5.8
22	Potatoes	Kg.	28.9	-1.7	15.5
23	Onions	Kg.	40.6	48.8	7.0
24	Tomatoes	Kg.	87.8	182.7	47.2
25	Sugar	Kg.	54.4	0.2	0.4
26	Gur	Kg.	84.9	16.2	1.7
27	Salt Powdered Loose (Lahori)	Kg.	9.1	6.7	0.3
28	Red Chillies Powder Loose	Kg.	215.1	-28.5	-0.1
29	Garlic	Kg.	120.5	16.2	1.5
30	Tea (Yellow Label)	200Gm.	171.7	28.8	1.1
31	Cooked Beef Plate	Each	72.2	10.7	1.2
32	Cooked Dal Plate	Each	42.6	8.6	1.7
33	Tea Prepared (Sada)	Cup	15.9	6.4	0.4
34	Cigarettes K-2 (20'S)	20'S	37.4	16.8	10.4
35	Long Cloth (Coarse Latha)	Mtr.	170.3	21.9	0.7
36	Shirting	Mtr.	139.1	21.2	1.6
37	Lawn	Mtr.	189.7	18.4	3.5
38	Georgette (Voil Printed)	Mtr.	109.6	14.4	0.8
39	Sandal Gents Bata	Pair	599.0	20.0	0.0
40	Chappal Spong. Bata (Gents)	Pair	179.0	0.0	0.0
41	Sandal Ladies Bata	Pair	499.0	25.1	0.0
42	Electric Charges 1-50	Unit	2.0	0.0	0.0
43	Gas Charges upto 3.3719	Mmbtu	124.2	7.1	0.6
44	Kerosene	Litr	117.0	12.6	1.9
45	Firewood	40Kg	507.8	7.1	0.4
46	Energy Savor 14 Watts	Each	160.1	9.7	0.8
47	Washing Soap (200-250 Gm.)	Cake	22.3	11.7	0.4
48	Match Box	Each	1.2	8.3	2.6
49	Petrol	Litr	103.5	19.7	2.0
50	Diesel	Litr	108.5	10.4	2.2
51	L.P.G.(11 Kg Cylinder.)	Each	1488.2	20.8	1.6
52	Tele. Local Call	Call	3.9	9.7	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	35.0	9.4	2.2
Maximum				182.7	47.2
Median				9.4	0.9
Minimum				-28.5	-5.8

Table A9: Distribution of Price Changes (YoY) - WPI Items: July 2013

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

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Jul-12	Jun-13	Jul-13
General	100.00	169.57	179.94	183.58
Food & Non-Alcoholic Beverages.	34.83	190.58	202.11	207.61
1 Wheat	0.35	159.07	188.23	194.81
2 Wheat Flour	4.16	165.74	199.73	204.57
3 Wheat Product	0.10	162.45	189.19	191.61
4 Besan	0.15	233.88	199.32	180.85
5 Rice	1.58	167.07	186.75	189.10
6 Cereals	0.16	196.40	216.83	219.23
7 Bakery & Confectionary	1.16	170.02	183.07	183.59
8 Nimco	0.46	191.57	206.43	208.18
9 Meat	2.43	214.77	223.43	225.18
10 Chicken	1.36	205.11	211.41	203.56
11 Fish	0.30	186.25	200.15	200.39
12 Milk Fresh	6.68	210.80	225.78	226.78
13 Milk Product	0.63	205.90	216.57	219.34
14 Milk Powder	0.11	180.01	190.81	192.03
15 Egg	0.46	154.16	153.31	167.03
16 Mustard Oil	0.10	160.06	158.43	158.64
17 Cooking Oil	1.75	163.95	162.54	161.62
18 Vegetable Ghee	2.07	164.31	155.94	155.82
19 Dry Fruits	0.25	199.15	214.95	217.86
20 Fresh Fruits	1.86	244.15	206.05	234.05
21 Pulse Masoor	0.27	143.47	154.35	157.42
22 Pulse Moong	0.23	230.89	224.06	237.14
23 Pulse Mash (Washed)	0.21	194.55	187.81	187.00
24 Pulse Gram	0.24	241.04	189.40	179.42
25 Gram Whole	0.16	229.76	194.98	187.26
26 Beans	0.03	205.15	221.84	228.13
27 Potatoes	0.47	189.45	169.11	211.16
28 Onion	0.53	154.19	239.70	249.51
29 Tomatoes	0.44	92.84	179.19	322.23
30 Fresh Vegetable	1.68	176.65	205.17	211.21
31 Sugar	1.04	197.18	194.50	195.93
32 Gur	0.02	221.22	250.06	261.46
33 Honey	0.04	237.13	256.65	256.65
34 Sweet Meet	0.25	200.89	210.79	211.81
35 Beverages	1.20	168.43	184.25	186.90
36 Jam, Tomato Ketchup & Pickle	0.25	172.43	185.63	187.26
37 Condiments	0.27	210.32	216.64	217.51
38 Spices	0.54	268.98	219.37	216.85
39 Tea	0.84	201.61	248.27	252.69
Alcoholic Beverages, Tobacco	1.41	189.36	194.66	217.46
40 Cigarette	1.39	189.57	194.79	217.93
41 Betel Leaves & Nuts	0.02	176.60	186.64	188.57
Clothing & Footwear	7.57	165.67	186.46	190.42
42 Cotton Cloth	1.73	155.55	176.47	177.82
43 Woolen Cloth	0.88	184.64	206.49	206.87
44 Ready Made Garment	0.97	164.95	182.09	185.06
45 Woolen Readymade Garments	0.40	161.83	192.45	192.45
46 Hosiery	0.51	173.15	194.30	195.40
47 Dopatta	0.44	178.69	203.75	205.47
48 Cleaning & Laundering	0.21	182.46	206.24	208.19

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

Items and specification	Weights	Index		
		Jul-12	Jun-13	Jul-13
49 Tailoring	0.88	195.36	218.55	226.68
50 Footwear	1.55	142.27	159.00	168.99
Housing, Water, Elect, Gas & Other Fuel	29.41	147.92	154.65	157.54
51 House Rent	21.81	137.02	144.57	148.24
52 Construction Input Item	0.56	198.90	210.12	214.61
53 Construction Wage Rate	0.33	167.76	181.81	185.33
54 Water Supply	0.50	133.23	139.65	141.36
55 Electricity	4.40	196.37	196.37	196.37
56 Gas	1.58	134.34	143.81	143.81
57 Kerosene Oil	0.01	243.58	267.67	274.98
58 Fire Wood Whole	0.23	225.49	243.22	244.09
Furnished H.Hold Equip. & Maint. Etc	4.21	174.01	185.82	187.23
59 Furniture	0.33	163.36	174.82	177.21
60 Household Textile	0.65	170.35	180.81	182.53
61 Household Equipment	0.59	155.52	162.40	162.88
62 Utensils	0.32	173.16	184.55	185.91
63 Plastic Products	0.25	173.73	181.60	183.11
64 Washing Soap & Detergent	0.79	189.47	203.46	204.48
65 Sewing Needle & Dry Cell	0.15	148.64	166.36	166.67
66 Household Servant	1.04	181.30	195.58	197.48
67 Marriage Hall Charges	0.08	190.06	200.04	201.35
Health	2.19	149.84	160.93	161.45
68 Drug Medicine	1.27	132.72	140.94	141.18
69 Medical Equipment	0.01	189.54	205.49	205.49
70 Doctor (MBBS) Clinic Fee	0.59	185.15	203.36	204.66
71 Medical Test	0.32	151.52	160.67	160.87
Transport	7.20	178.58	187.25	188.83
72 Motor Vehicle	0.66	150.32	156.71	158.19
73 Motor Vehicle Accessories	0.24	203.03	213.67	217.18
74 Motor Fuel	3.03	164.31	179.10	181.80
75 Mechanical Service	0.46	179.09	189.24	190.80
76 Motor Vehicle Tax	0.11	152.02	153.74	153.74
77 Transport Services	2.70	200.29	202.50	202.74
Communication	3.22	123.56	128.73	129.62
78 Postal Services	0.07	171.37	175.16	215.89
79 Communication & Apparatus	3.15	122.55	127.75	127.81
Recreation & Culture	2.02	164.63	177.84	178.48
80 Recreation & Culture	0.86	121.45	122.65	123.55
81 Text Books	0.57	230.22	260.03	260.03
82 News Papers	0.19	149.97	170.49	170.49
83 Stationery	0.40	171.42	183.35	184.67
Education	3.94	152.71	163.54	164.25
84 Education	3.94	152.71	163.54	164.25
Restaurants And Hotels	1.23	196.24	210.64	213.87
85 Ready Made Food	1.23	196.24	210.64	213.87
Miscellaneous Goods And Services	2.76	190.67	202.39	200.91
86 Personal Care	1.49	174.64	185.79	185.88
87 Cosmetics	0.39	148.03	163.22	166.59
88 Blades	0.03	168.82	176.40	177.70
89 Personal Equipments	0.84	239.33	250.63	244.06

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities			
Items and Specifications	Index		
	Jul-12	Jun-13	Jul-13
General	190.05	199.21	202.49
Agriculture Forestry & Fishery	197.57	209.16	214.77
1 Wheat	164.32	198.50	206.16
2 Maize	166.89	189.41	193.96
3 Rice	157.90	174.41	177.08
4 Sorghum/Jowar	201.88	259.71	270.15
5 Millet/Bajra	176.57	191.77	193.87
6 Vegetables	185.97	241.43	273.46
7 Fresh Fruits	287.82	227.05	253.15
8 Dry Fruits	173.89	194.73	192.88
9 Cotton Seeds	181.23	164.31	165.17
10 Other Oil Seeds	174.82	170.04	169.50
11 Edible Roots/ Potatoes	178.09	149.12	188.79
12 Stimulant And Spice Crops	170.53	212.17	231.75
13 Pulses	221.59	186.44	184.78
14 Sugar Crops	267.92	267.92	267.92
15 Fibre Crops	194.22	207.94	210.28
16 Unmanufactured Tobacco	167.67	176.22	176.34
17 Poultry	222.42	224.76	215.62
18 Milk From Bovine Animals	207.47	218.54	220.27
19 Eggs	155.50	153.34	167.37
20 Raw Animal Material/Wool	135.38	150.66	151.73
21 Hides And Fur Skins, Raw	137.11	141.49	140.52
22 Fuel Wood In Logs	203.50	228.51	230.69
23 Fishes Live Fresh Or Chilled	171.26	240.87	247.49
Ores/Minerals, Gas & Elect.	206.19	214.86	215.17
24 Coal Not Agglomerated	196.08	223.53	223.53
25 Natural Gas Liquefied	188.89	203.09	203.74
26 Salt & Pure Sodium Chloride	165.22	203.88	204.73
27 Electrical Energy	226.10	226.10	226.10
Food, Beverages, Tobacco, Textiles	182.41	192.87	195.21
28 Meat Of Animals	225.25	232.03	232.94
29 Vegetables & Fruit Juices	179.40	190.57	190.74
30 Dried Fruits & Nuts	207.20	222.76	222.76
31 Fruit Juices	156.40	163.81	164.49
32 Vegetable Oil Refined	158.08	159.65	160.21
33 Vegetable Ghee	145.30	141.61	141.00
34 Oil Cakes	148.24	171.55	175.62
35 Processed Liquid Milk	202.74	208.15	205.54
36 Milk And Cream In Solid Form	169.39	177.58	178.39
37 Ice Cream	170.00	191.15	204.00
38 Dairy Products N.E.C	203.56	213.25	216.21
39 Wheat Flour	153.66	186.66	190.04
40 Other Cereal Flour	213.80	163.97	150.06
41 Sugar Refined	203.40	208.83	212.01
42 Chocolate	99.19	99.19	99.19
43 Sugar Confectionary	100.40	102.28	102.28
44 Coffee And Tea	191.91	223.78	229.54
45 Spices	305.49	227.90	197.26
46 Other Food Products	314.93	314.63	316.68
47 Mineral Water	165.88	175.01	177.53
48 Beverages	135.30	139.28	139.35
49 Tobacco Products	208.80	208.80	242.41
50 Cotton Yarn	198.24	209.76	210.89
51 Nylon Yarn	175.86	189.67	188.58
52 Blended Yarn	186.60	198.67	197.47
53 Woven Fabrics	169.72	208.98	208.98
54 Cotton Fabrics	174.86	182.84	183.43
55 Other Fabrics	165.46	172.31	175.06

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

Items and Specifications		Index		
		Jul-12	Jun-13	Jul-13
56	Silk And Rayon Fabrics	142.47	158.62	159.34
57	Towels	192.17	213.19	213.19
58	Blankets	164.83	185.21	185.21
59	Bed Sheets	185.57	213.18	213.18
60	Quilts	147.05	154.00	156.32
61	Woolen Carpets	106.55	106.55	106.55
62	Synthetic Carpets	128.41	114.41	114.41
63	Hosiery Products	164.70	185.30	185.30
64	Ready Made Garments	127.25	147.20	150.00
65	Leather With Out Hairs	109.83	125.27	132.51
66	Other Leather N.E.C	122.57	179.51	203.07
67	Footwear's	128.50	139.49	139.49
Other Transportable Goods		195.56	202.56	206.44
68	Timber	145.11	154.65	157.52
69	Printing Paper	153.92	164.54	164.45
70	Hard Board	166.67	200.00	200.00
71	Coke	163.45	163.45	163.45
72	Motor Sprit	143.91	169.03	171.92
73	Diesel Oil	232.99	248.72	254.92
74	Kerosene Oil	232.52	250.79	256.74
75	Furnace Oil	189.21	169.52	171.62
76	Mobil Oil	179.57	186.56	191.04
77	Chemicals	146.39	160.39	163.56
78	Dying Materials	104.26	107.23	107.23
79	Fertilizers	261.59	261.32	268.23
80	Pesticides	184.25	203.99	208.72
81	Insecticides	117.64	123.90	124.43
82	Paints & Varnishes	233.80	244.12	247.56
83	Medicines	134.27	138.71	138.83
84	Soaps & Detergent	157.12	176.21	176.55
85	Auto Tyres	176.49	184.54	185.57
86	Plastic Products	191.18	197.98	198.15
87	Glass Sheets	183.78	201.02	203.49
88	Other Glass Articles	217.98	206.09	206.09
89	Ceramics And Sanitary	150.87	161.77	164.06
90	Bricks Blocks And Tiles	170.40	185.87	184.78
91	Cement	180.22	189.49	194.83
92	Bed Foams	133.83	144.33	144.33
93	Matches	122.82	142.72	143.20
Metal Product Machinery & Equip		158.63	162.20	164.46
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	139.57	135.04	138.21
96	Pipe Fittings	141.04	148.98	149.13
97	Steel Products	160.53	167.61	167.61
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	172.67	179.78	179.78
101	Cultivators	184.66	189.23	189.23
102	Chuff Cutter	138.54	144.94	144.94
103	Tractors	161.96	161.96	161.96
104	Lathe Machines	147.68	147.68	147.68
105	Concrete Mixer	138.83	138.83	138.83
106	Refrige,Wash& Sew Mach, Iron,Fan	164.31	177.00	179.92
107	Electrical Wires	163.80	160.12	167.53
108	Lighting Equipments	146.79	151.78	159.47
109	Radio And Television	132.73	126.49	126.49
110	Motor Vehicles	167.04	173.75	173.99
111	Motor Cycles	125.19	124.56	124.80
112	Bicycles	175.08	178.81	178.81

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
2010	Nov	146.34	166.59	134.20	159.34	157.03	160.81	167.56
	Dec	145.90	163.69	135.24	162.48	155.88	166.67	166.52
2011	Jan	147.67	166.52	136.37	165.58	159.08	169.70	166.96
	Feb	146.85	163.56	136.83	168.82	158.33	175.47	164.99
	Mar	148.91	167.10	138.01	174.41	162.92	181.70	166.81
	Apr	150.99	169.25	140.05	178.69	165.46	187.09	167.83
	May	151.33	168.76	140.88	176.97	167.15	183.20	167.98
	Jun	152.78	169.88	142.53	177.98	172.14	181.68	168.09
	Jul	154.72	174.80	142.68	177.26	175.45	178.41	171.45
	Aug	156.89	177.32	144.65	178.24	178.67	177.97	173.86
	Sep	158.50	180.16	145.52	178.68	181.88	176.65	175.02
	Oct	160.79	183.07	147.44	179.34	182.82	177.13	176.45
	Nov	161.25	183.26	148.06	178.39	181.48	176.43	177.53
	Dec	160.12	179.21	148.67	176.01	178.29	174.57	175.04
2012	Jan	162.58	181.90	151.00	179.99	178.95	180.65	178.25
	Feb	163.07	180.69	152.51	180.99	177.56	183.17	178.63
	Mar	164.98	183.46	153.90	182.20	180.41	183.34	180.79
	Apr	168.00	187.43	156.35	185.48	184.45	186.13	184.03
	May	169.93	187.75	159.25	189.46	186.57	191.29	184.88
	Jun	169.99	187.35	159.58	189.37	189.36	189.37	188.14
	Jul	169.57	190.72	156.89	190.05	193.92	187.59	183.98
	Aug	171.09	192.47	158.27	191.99	195.30	189.89	186.47
	Sep	172.44	193.80	159.64	192.66	195.81	190.66	188.21
	Oct	173.10	193.66	160.77	192.88	196.21	190.77	187.32
	Nov	172.42	193.03	160.07	192.16	193.02	191.61	187.35
	Dec	172.82	192.97	160.74	192.98	195.49	191.39	187.95
2013	Jan	175.70	196.58	163.19	195.39	198.81	193.22	190.89
	Feb	175.11	194.05	163.76	196.06	197.22	195.32	190.79
	Mar	175.82	195.06	164.29	196.57	196.02	196.92	192.01
	Apr	177.74	197.74	165.75	198.09	199.00	197.51	192.02
	May	178.65	200.00	165.85	197.23	201.14	194.75	191.96
	Jun	179.94	202.11	166.65	199.21	204.60	195.79	196.75
	Jul	183.58	208.19	168.83	202.49	209.34	198.15	200.80

*: all groups combined

Table A13: International Commodity Prices/ Indices

	Apr-13	May-13	Jun-13	Jul-13
Energy				
Crude Oil (US\$ per barrel) *	98.9	99.3	99.7	105.2
IMF Energy Index (2005 = 100)	184.4	184.5	184.5	192.2
WB Energy Index (2005 = 100) @	178.6	179.0	178.7	186.6
Food				
Rice (\$/MT)	553.7	552.1	546.3	538.3
Wheat (\$/MT)	308.7	319.1	313.5	304.7
Sugar (US cent/ pound)	17.7	17.4	16.9	16.4
Palm Oil (\$/MT)	756.5	763.4	763.0	729.9
Soybean Oil (\$/MT)	1,086.7	1,082.8	1,058.6	1,000.8
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	92.5	92.6	93.1	92.6
IMF Metal Price Index (2005 = 100)	183.5	176.4	169.7	172.7
Copper (\$/MT)	7,221.2	7,248.7	7,000.2	6,906.6
Aluminum (\$/MT)	1,861.0	1,832.6	1,814.5	1,769.6
Iron Ore (\$ cents/dry MT)	137.4	124.0	114.8	127.2
Tin (\$/MT)	21,589.6	20,781.6	20,267.4	19,563.8
Nickle (\$/MT)	15,629.3	14,948.2	14,280.3	13,750.3
Zinc (\$/MT)	1,855.6	1,831.0	1,839.0	1,837.6
Lead (\$/MT)	2,024.4	2,031.9	2,099.7	2,047.7
Uranium (\$/MT)	41.4	40.6	39.9	38.0
DAP (\$/MT)	508.3	485.1	476.1	460.0
Urea (\$/MT)	361.5	344.4	321.4	321.5

Source: IMF and World Bank

\$/MT = US\$ per metric ton.

* Crude Oil (Petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai fateh

Middling 1-3/32 inch staple, Liverpool Index "A", average of the cheapest Cts/lb five of fourteen styles, CIF Liverpool (Cotton Outlook, Liverpool). From January 1968 to May 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16.2/

DAP: Diammonium Phosphate

@ World Bank commodity index for low and middle income countries

Table 14. CPI Data Series Original and Seasonally Adjusted				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	137.62	154.72	169.57	183.58
Aug	140.63	156.88	171.09	
Sep	143.49	158.50	172.44	
Oct	144.90	160.79	173.10	
Nov	146.34	161.25	172.42	
Dec	145.90	160.12	172.82	
Jan	147.67	162.58	175.70	
Feb	146.85	163.07	175.11	
Mar	148.91	164.98	175.82	
Apr	150.99	168.00	177.74	
May	151.33	169.93	178.65	
Jun	152.78	169.99	179.94	
Seasonally Adjusted Series				
Jul	137.48	154.57	169.37	183.34
Aug	139.79	155.91	169.98	
Sep	142.51	157.41	171.26	
Oct	143.68	159.40	171.62	
Nov	145.55	160.35	171.42	
Dec	146.64	160.96	173.77	
Jan	147.88	162.77	175.87	
Feb	147.97	164.34	176.47	
Mar	149.80	165.99	176.93	
Apr	151.03	167.99	177.70	
May	151.86	170.58	179.39	
Jun	153.49	170.83	180.92	

Table 15. CPI Food Data Series Original and Seasonally Adjusted

Original Series				
Period	FY11	FY12	FY13	FY14
Jul	149.33	174.80	190.72	208.19
Aug	156.70	177.32	192.47	
Sep	163.96	180.16	193.80	
Oct	163.91	183.07	193.66	
Nov	166.59	183.26	193.03	
Dec	163.69	179.21	192.97	
Jan	166.52	181.90	196.58	
Feb	163.56	180.69	194.05	
Mar	167.10	183.46	195.06	
Apr	169.25	187.43	197.74	
May	168.77	187.75	200.00	
Jun	169.88	187.35	202.11	
Seasonally Adjusted Series				
Jul	149.06	174.48	190.24	207.57
Aug	154.72	174.99	189.84	
Sep	161.36	177.21	190.61	
Oct	160.78	179.52	189.98	
Nov	164.21	180.58	190.05	
Dec	164.87	180.55	194.45	
Jan	167.13	182.51	197.21	
Feb	166.50	184.02	197.63	
Mar	169.18	185.82	197.63	
Apr	170.05	188.27	198.60	
May	170.20	189.51	202.02	
Jun	171.89	189.68	204.74	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY11	FY12	FY13	FY14	Average
Jul	100.10	100.09	100.11	100.12	100.10
Aug	100.56	100.58	100.60		100.58
Sep	100.61	100.62	100.62		100.61
Oct	100.76	100.79	100.79		100.78
Nov	100.47	100.49	100.52		100.49
Dec	99.51	99.49	99.47		99.49
Jan	99.88	99.90	99.92		99.90
Feb	99.32	99.31	99.31		99.31
Mar	99.46	99.44	99.42		99.44
Apr	100.01	100.04	100.06		100.04
May	99.69	99.66	99.63		99.66
Jun	99.59	99.56	99.52		99.56

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY11	FY12	FY13	FY14	Average
Jul	100.18	100.19	100.25	100.30	100.23
Aug	101.28	101.33	101.39		101.33
Sep	101.61	101.66	101.68		101.65
Oct	101.94	101.98	101.94		101.95
Nov	101.45	101.48	101.57		101.50
Dec	99.29	99.26	99.24		99.26
Jan	99.64	99.67	99.68		99.66
Feb	98.23	98.19	98.19		98.20
Mar	98.77	98.73	98.70		98.73
Apr	99.53	99.55	99.57		99.55
May	99.15	99.07	99.00		99.08
Jun	98.83	98.77	98.72		98.77

Table 18: CPI Month-on-Month Change Original & Seasonally Adjusted				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	2.07	1.27	-0.25	2.02
Aug	2.19	1.40	0.90	
Sep	2.03	1.03	0.79	
Oct	0.98	1.44	0.38	
Nov	0.99	0.29	-0.39	
Dec	-0.30	-0.70	0.23	
Jan	1.21	1.54	1.67	
Feb	-0.56	0.30	-0.34	
Mar	1.40	1.17	0.41	
Apr	1.40	1.83	1.09	
May	0.23	1.15	0.51	
Jun	0.96	0.04	0.72	
Seasonally Adjusted Series				
Jul		0.70	-0.86	1.34
Aug	1.68	0.87	0.36	
Sep	1.95	0.96	0.75	
Oct	0.82	1.26	0.21	
Nov	1.30	0.60	-0.12	
Dec	0.75	0.38	1.37	
Jan	0.85	1.12	1.21	
Feb	0.06	0.97	0.34	
Mar	1.24	1.01	0.26	
Apr	0.82	1.20	0.43	
May	0.55	1.54	0.96	
Jun	1.07	0.15	0.85	

Table 19: CPI Food Month-on-Month Change Original & Seasonally Adjusted Series				
Original Series				
Period	FY11	FY12	FY13	FY14
Jul	1.84	2.90	1.80	3.01
Aug	4.93	1.44	0.92	
Sep	4.64	1.60	0.69	
Oct	-0.04	1.62	-0.07	
Nov	1.64	0.10	-0.33	
Dec	-1.74	-2.21	-0.03	
Jan	1.73	1.50	1.87	
Feb	-1.77	-0.66	-1.29	
Mar	2.16	1.53	0.52	
Apr	1.28	2.16	1.37	
May	-0.28	0.17	1.14	
Jun	0.66	-0.21	1.06	
Seasonally Adjusted Series				
Jul	0.48	1.50	0.30	1.38
Aug	3.80	0.30	-0.21	
Sep	4.29	1.27	0.40	
Oct	-0.36	1.30	-0.33	
Nov	2.13	0.59	0.04	
Dec	0.40	-0.02	2.32	
Jan	1.37	1.09	1.42	
Feb	-0.37	0.83	0.21	
Mar	1.61	0.98	0.00	
Apr	0.51	1.32	0.49	
May	0.09	0.66	1.72	
Jun	0.99	0.09	1.34	

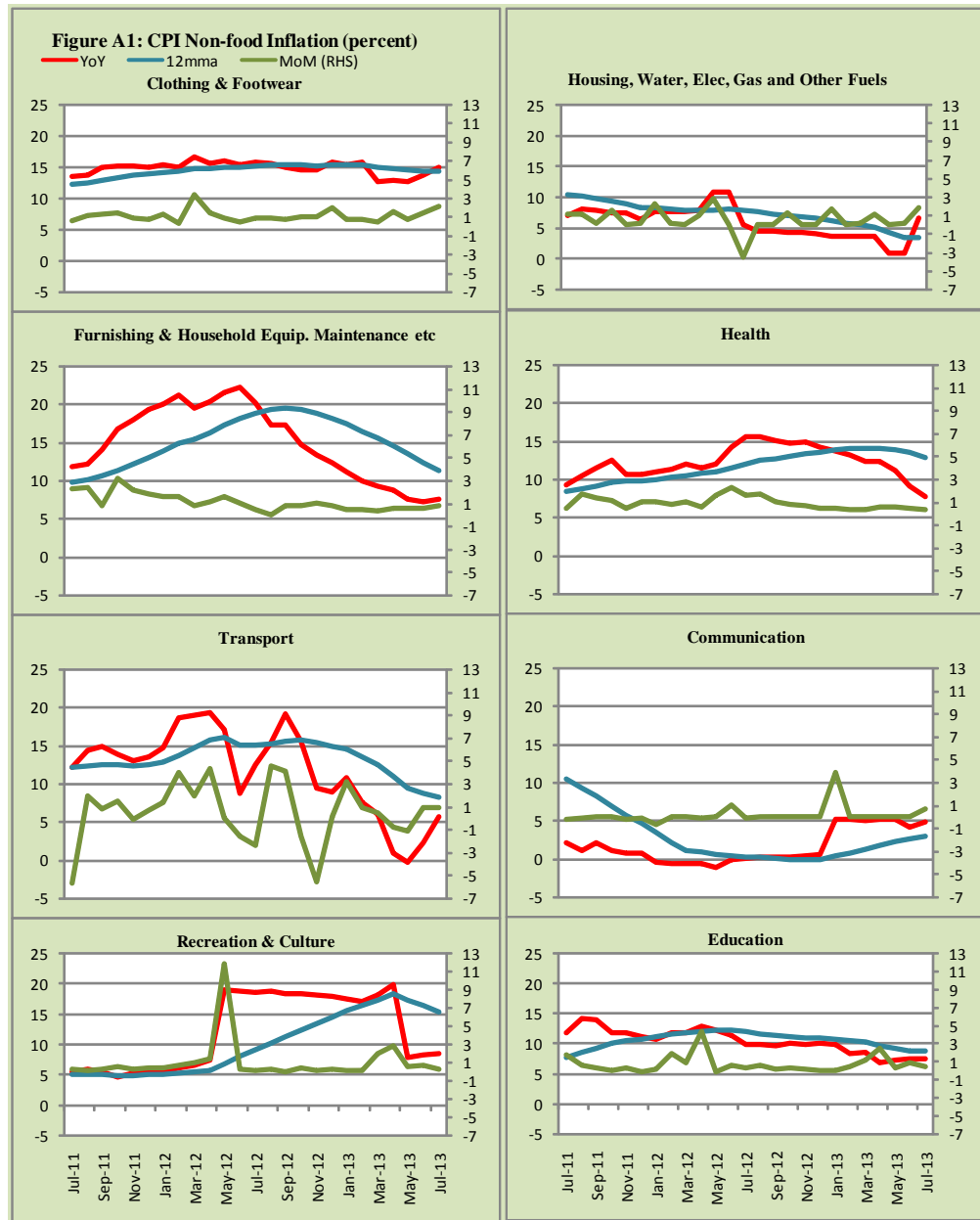


Figure A2: Frequency Distribution of Price Changes of CPI Items, July 2013

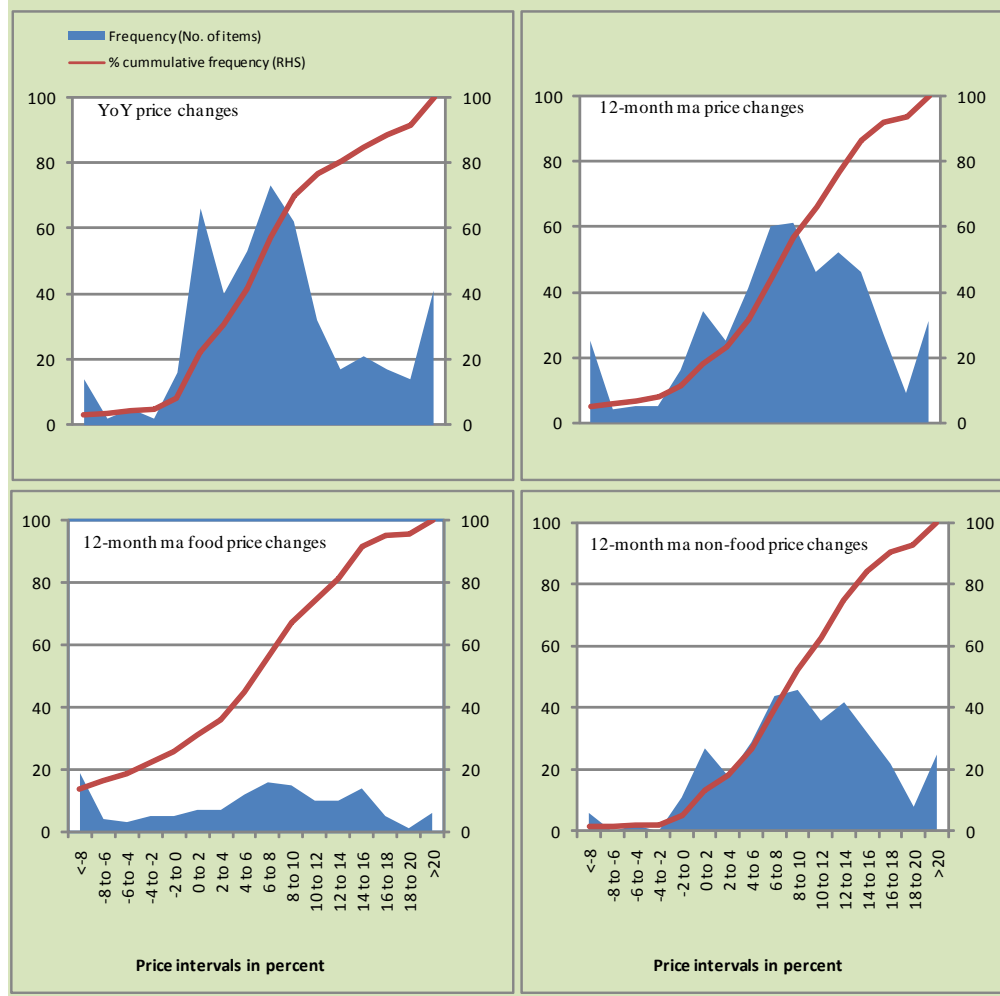
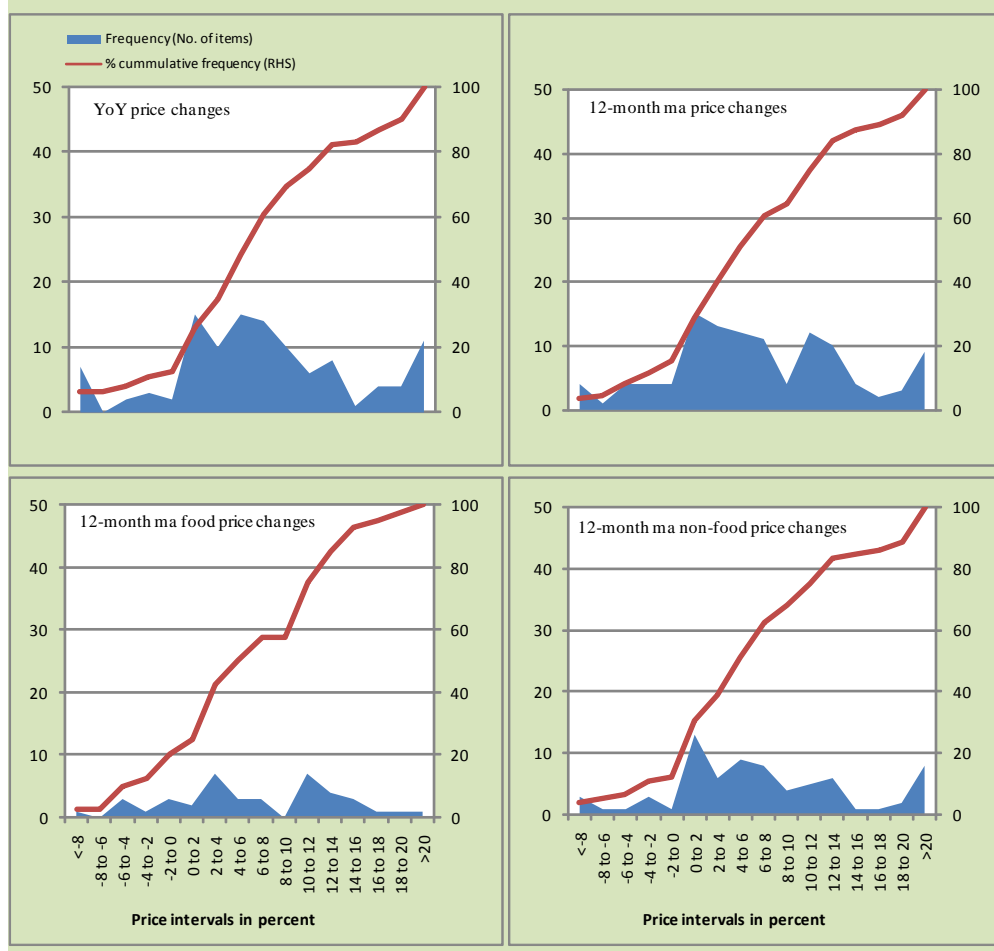
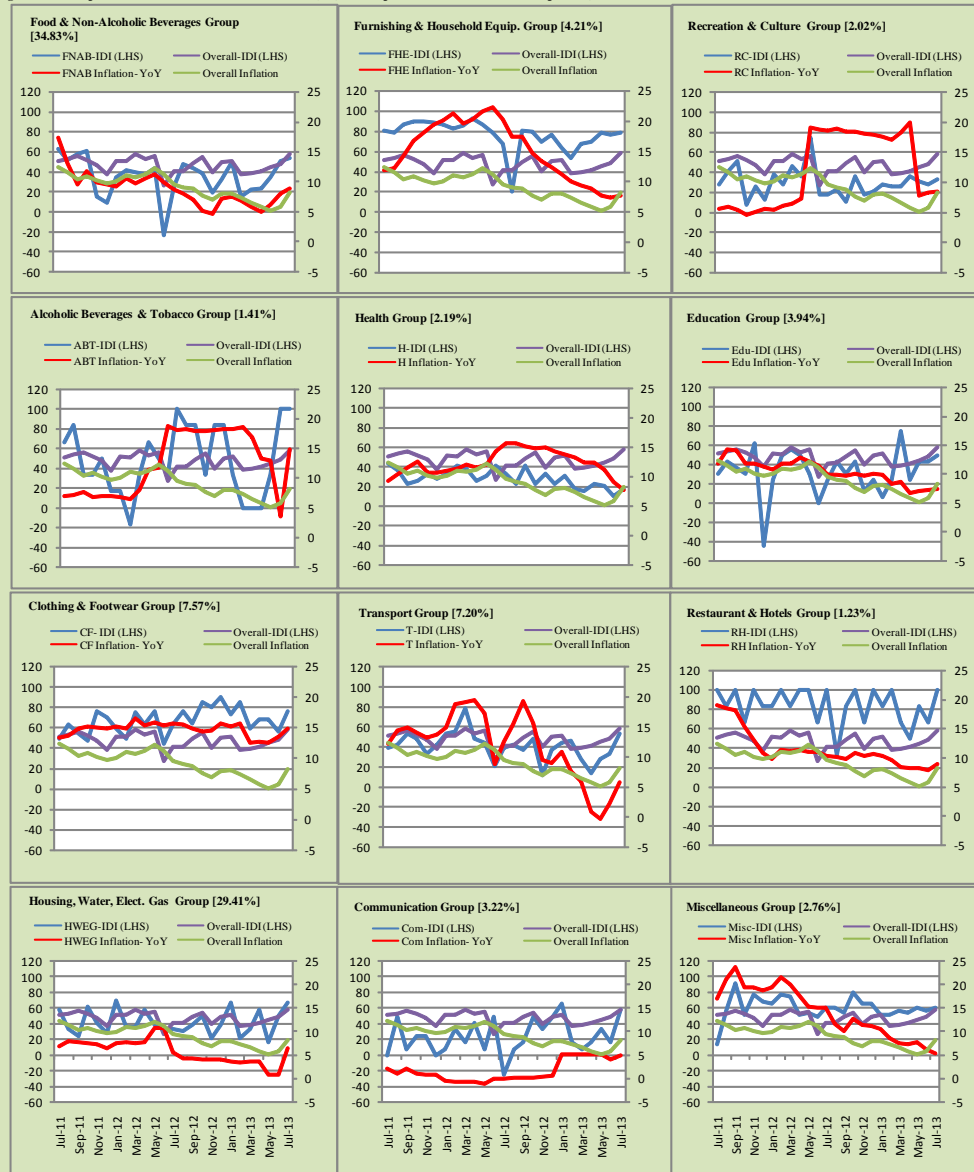


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, July 2013



Inflation Monitor, July 2013

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 two 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.
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.