

Inflation Monitor

May 2013



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 5.1 percent on year-on-year basis in May 2013 as compared to 5.8 percent in the previous month and 12.3 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.5 percent in May 2013 as compared to 1.1 percent in the previous and corresponding month of last year. Seasonally adjusted month-on-month CPI inflation increased to 0.9 percent in May 2013 as compared 0.4 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 6.7 percent in May 2013 as compared to 7.6 percent in the previous month and it was 11.7 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) decreased to 0.3 percent in May 2013 as compared to 0.7 percent in the previous month and was 0.5 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 8.1 percent in May 2013 as compared to 8.7 percent in the previous month. It was 11.2 percent in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis decreased to 0.3 percent in May 2013 as compared to 1.1 percent in the previous month. A 0.8 percent rate of change in Core NFNE was observed in May 2012.
7. WPI inflation on year-on-year basis decreased to 4.1 percent in May 2013 when compared to 6.8 percent a month earlier. During May 2012, WPI inflation was recorded at 7.1%.

8. WPI inflation on month-on-month basis recorded at -0.4 percent in May 2013 as compared to 0.8 percent in the previous month. It was 2.1 percent in May 2012.
9. SPI inflation on year-on-year basis decreased to 3.8 percent in May 2013 as compared to 4.3 percent in the previous month. It was 10.1 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis recorded non-significant decrease during May 2013 as compared to negligible increase in previous month and it was 0.5 percent in May 2012.

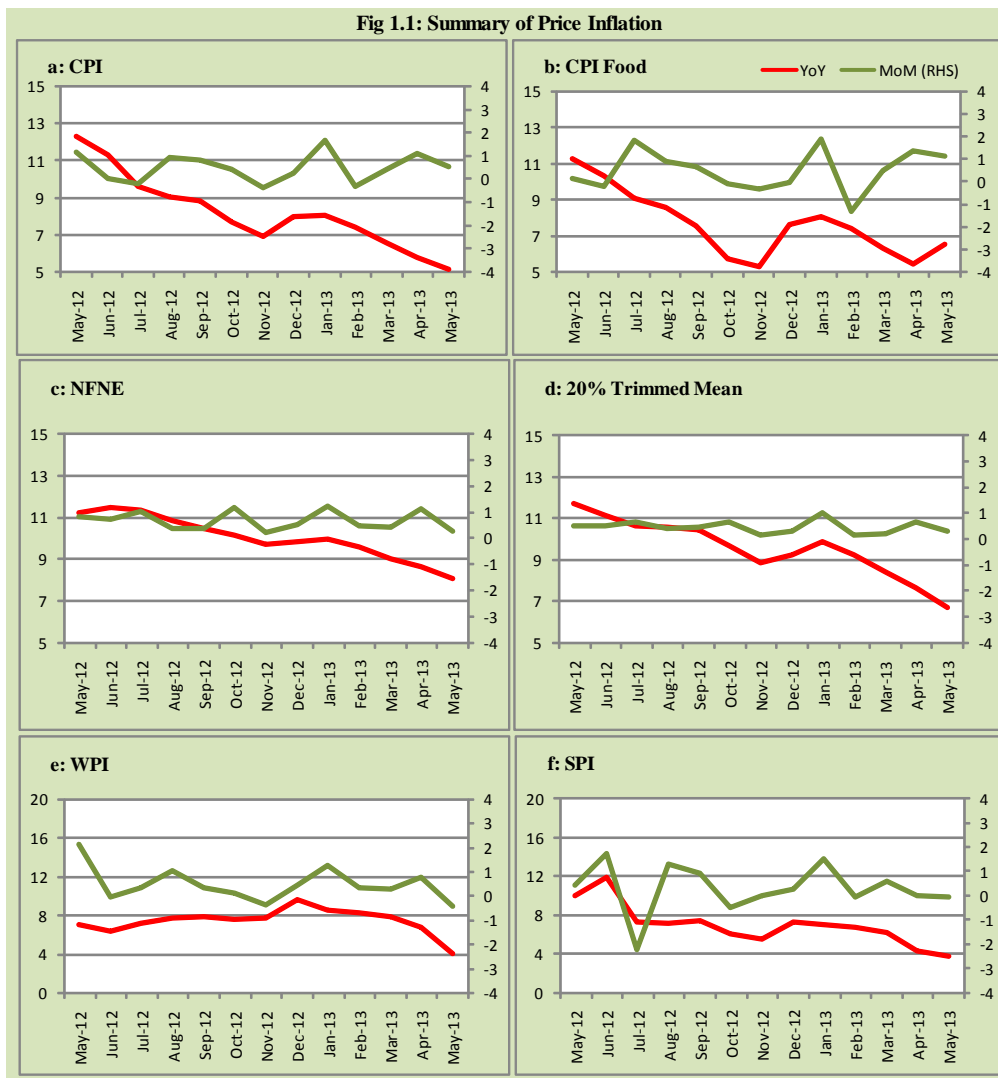
Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)

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
May-12	12.3	1.1	11.3	0.2	13.0	1.9	11.2	0.8	11.7	0.5	7.1	2.1	10.1	0.5
Jun-12	11.3	0.0	10.3	-0.2	12.0	0.2	11.5	0.7	11.1	0.5	6.4	0.0	11.9	1.8
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

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



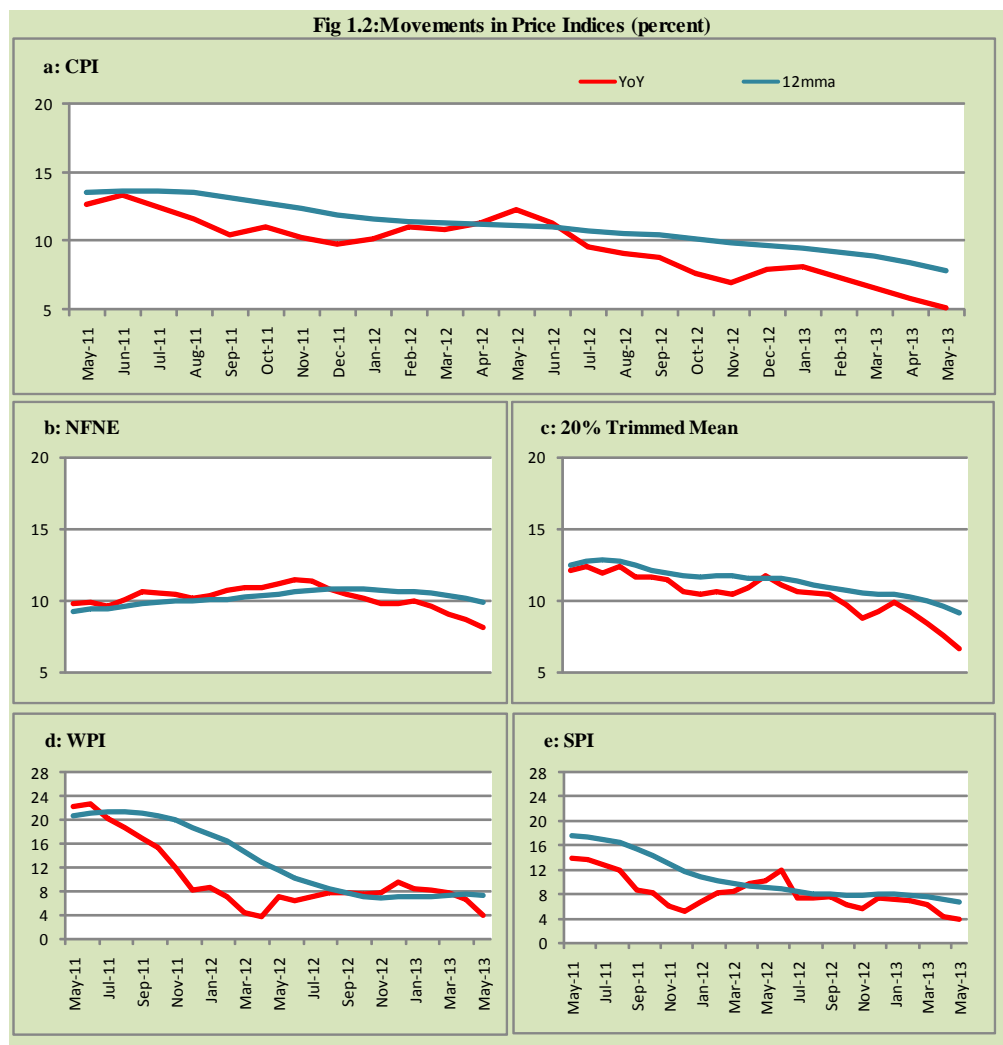


Fig 1.3: Movements in Price Indices -MoM (percent)

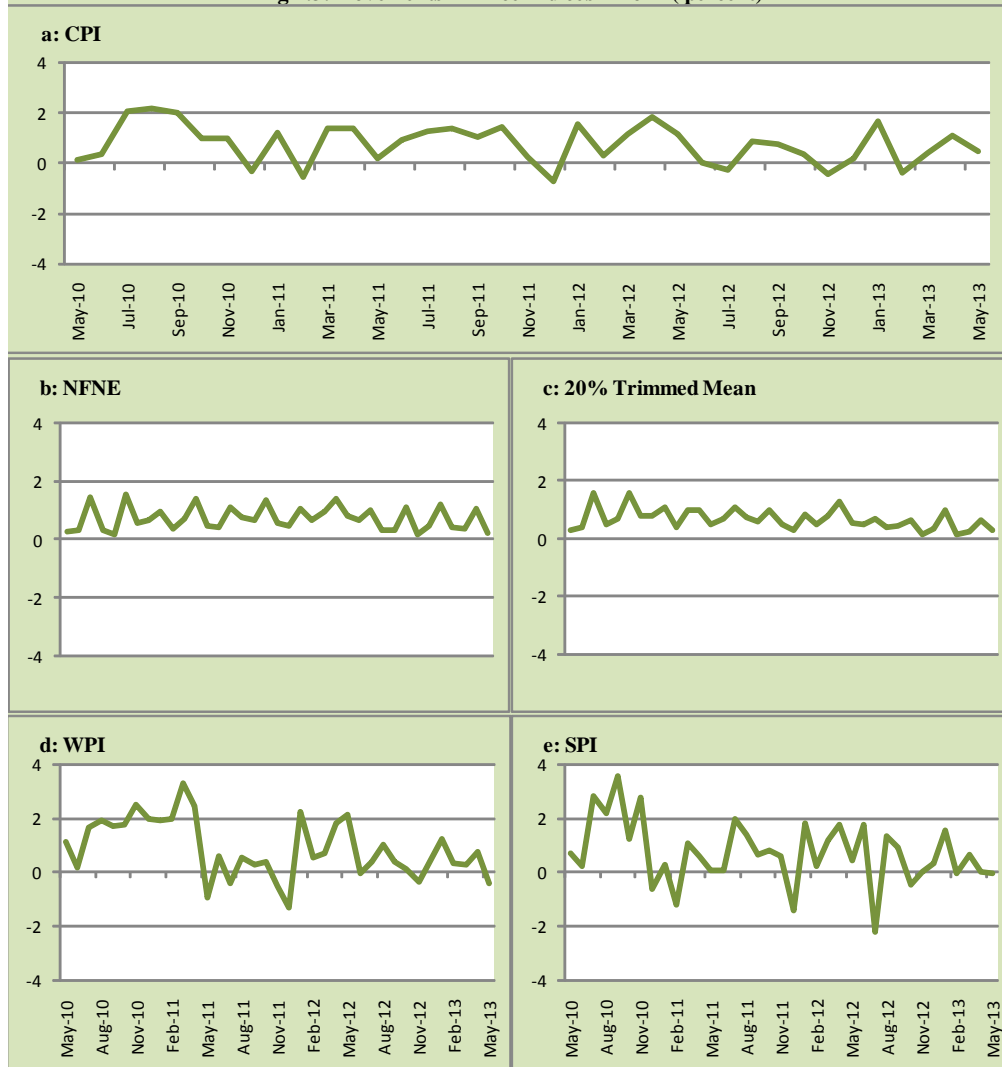
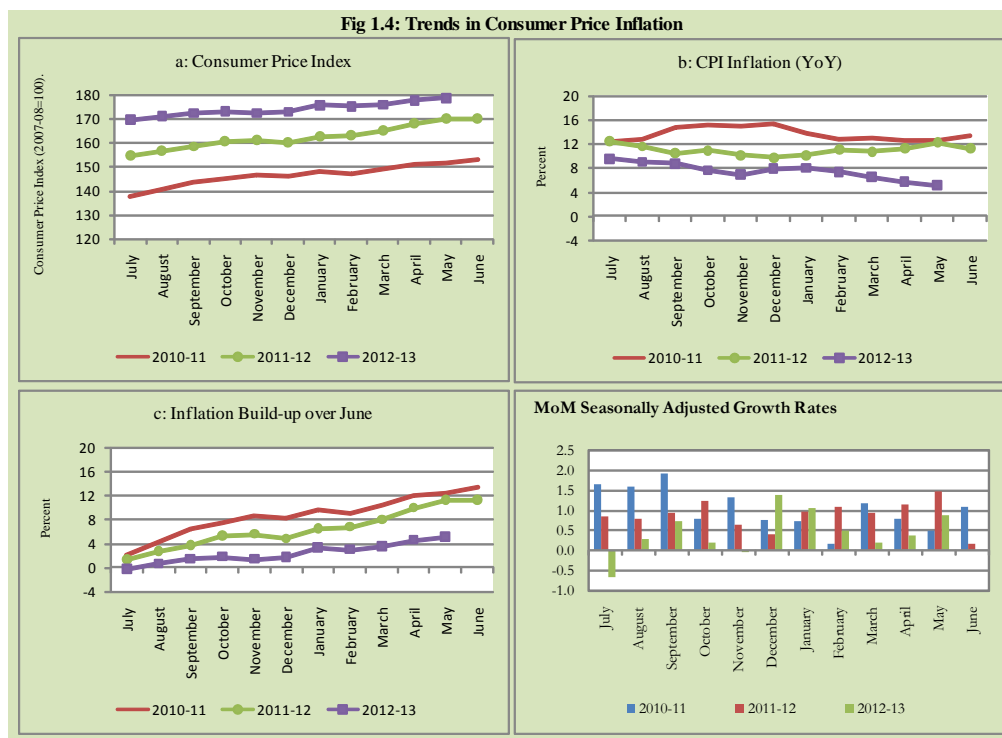


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in provincial capitals of Pakistan showed mixed trend during May 2013 while in federal capital it was higher than the overall inflation. Among provincial capitals, the lowest inflation was observed in Karachi at 3.8 percent while the highest inflation was observed in Peshawar at 5.2 percent (Table A6 of annexure-A).

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

	May-12		Apr-13		May-13	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.1	12.3	1.1	5.8	0.5	5.1
Islamabad	1.4	12.0	1.3	5.8	1.0	5.4
Karachi	1.3	11.6	-0.3	4.4	0.7	3.8
Lahore	0.9	10.4	1.1	5.0	0.9	4.9
Peshawar	0.7	11.0	1.5	5.3	0.6	5.2
Quetta	-0.2	12.2	1.0	3.9	0.9	5.1

3. Income Group wise Inflation

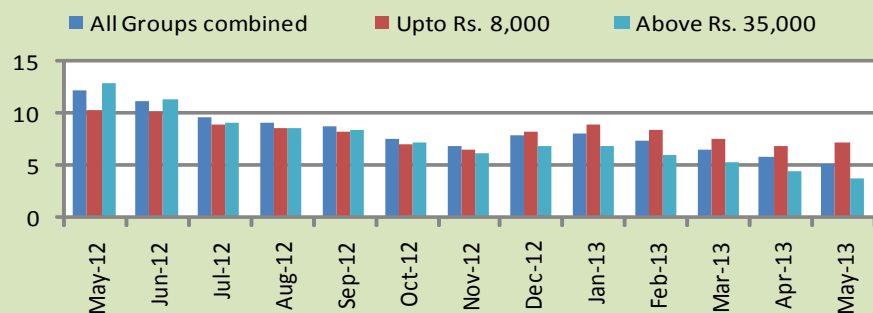
Income group- wise data showed that income group above Rs. 35,000 witnessed lower inflation than the overall inflation in CPI basket during May 2013 for general, food and non-food groups and also lowest among the groups. The lowest income group (Up to Rs. 8, 000) has the highest inflation among the groups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

Table 3.1 Income Group- wise Inflation (YoY)

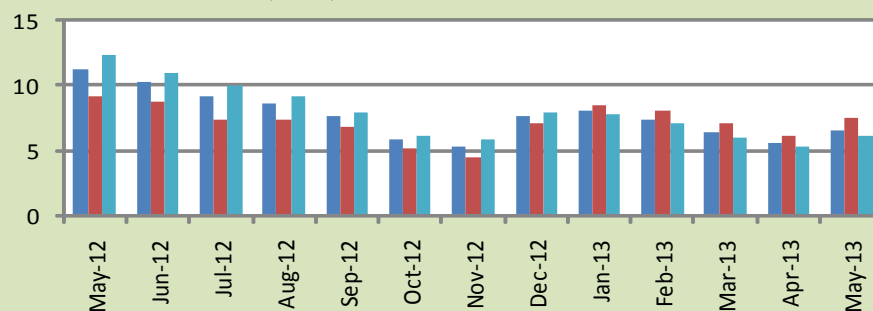
Income Groups	General			Food			Non-food		
	May-12	Apr-13	May-13	May-12	Apr-13	May-13	May-12	Apr-13	May-13
All Groups Combined	12.3	5.8	5.1	11.3	5.5	6.5	13.0	6.0	4.1
Up to Rs. 8,000	10.3	7.0	7.2	9.2	6.1	7.4	11.8	8.1	6.9
Rs. 8,001- 12,000	11.8	7.7	6.7	10.0	5.8	7.0	13.9	9.8	6.4
Rs. 12,001- 18,000	11.5	7.3	6.6	10.6	5.6	6.7	12.5	9.0	6.5
Rs. 18,001- 35,000	12.0	5.4	4.8	11.2	5.5	6.5	12.6	5.3	3.4
Above Rs. 35,000	13.0	4.5	3.8	12.3	5.2	6.1	13.3	4.1	2.6

Fig 3.1: Income Group- wise Inflation

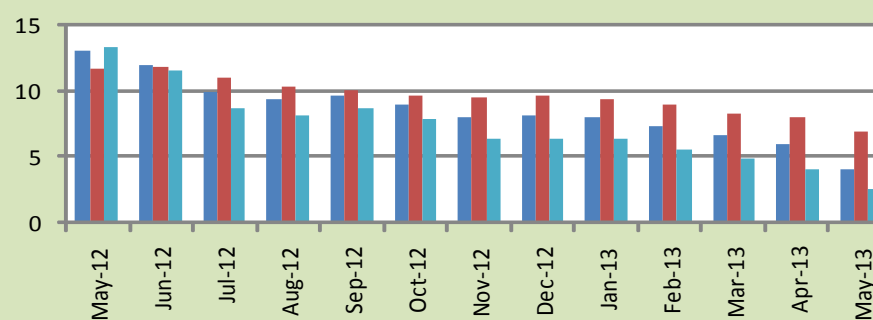
a: CPI Overall Inflation (YoY)



b: CPI Food Inflation (YoY)



c: CPI Non-Food Inflation (YoY)



4. Weighted Contribution

The weighted contribution of food group in the overall inflation increased to 52.66 percent during May 2013 from 39.66 percent in April 2013. It was 38.26 percent in May 2012.

The weighted contribution of non-food group showed decrease to touch 47.34 percent in May 2013 from 60.34 percent in April 2013.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
May-12	38.26	9.17	23.72	10.54	3.49	14.82
Jun-12	38.05	9.65	25.43	6.22	3.60	17.04
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

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
General	55.6	27.0	41.4	41.4	48.6	54.7	39.6	49.6	51.4	37.6	38.8	40.3	42.7
Food & Non-Alcoholic Beverages	43.4	-23.4	25.4	47.8	44.2	38.3	19.1	33.0	49.6	14.2	21.4	21.6	27.4
Alcoholic Beverages & Tobacco	50.0	33.3	100.0	83.3	83.3	33.3	83.3	83.3	33.3	0.0	0.0	0.0	33.3
Clothing & Footwear	76.3	44.1	62.7	76.3	64.4	84.7	79.7	89.8	72.9	84.7	59.3	67.8	67.8
Housing, Water, Elect, Gas & other Fuels	38.9	33.3	33.3	30.6	38.9	50.0	22.2	38.9	66.7	22.2	33.3	58.3	16.7
Furnishing & Household Equip. Maintenance etc	87.0	78.3	68.1	20.3	81.2	79.7	69.6	76.8	63.8	53.6	68.1	69.6	78.3
Health	30.8	41.0	33.3	23.1	41.0	23.1	33.3	23.1	30.8	17.9	15.4	23.1	20.5
Transport	44.2	20.9	39.5	41.9	37.2	48.8	11.6	37.2	44.2	46.5	27.9	14.0	27.9
Communication	8.3	50.0	-25.0	8.3	16.7	50.0	33.3	50.0	66.7	16.7	8.3	16.7	33.3
Recreation & Culture	74.4	17.9	17.9	23.1	10.3	35.9	17.9	20.5	28.2	25.6	25.6	35.9	30.8
Education	31.3	0.0	25.0	43.8	31.3	43.8	12.5	25.0	6.3	25.0	75.0	25.0	43.8
Restaurant & Hotels	100.0	66.7	100.0	33.3	83.3	100.0	66.7	100.0	83.3	100.0	66.7	50.0	83.3
Miscellaneous	54.3	48.6	60.0	60.0	54.3	80.0	65.7	65.7	51.4	51.4	57.1	54.3	60.0
NFNE	57.7	44.7	47.0	38.8	49.1	62.1	46.4	55.3	52.7	45.9	45.6	49.1	49.4

See annexure B (Technical Notes) for the definition of Inflation Diffusion Index.

6. Domestic Commodity Prices

Table 6.1 Inflation in Domestic CPI Food Commodities

Sr. No	Item	Unit	May-12		Apr-13		May-13	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	8.82	-2.88	15.64	-5.50	15.49	-3.00
2	Wheat Flour Bag	10 Kg	6.15	-0.84	15.43	-2.70	16.58	0.15
3	Rice Basmati Sup. Qlty.	Kg	18.34	6.47	23.15	0.47	17.29	1.40
4	Pulse Masoor (Washed)	Kg	-9.43	0.18	1.56	1.18	3.94	2.54
5	Pulse Moong (Washed)	Kg	-10.74	-0.20	-8.58	-1.52	-8.05	0.38
6	Pulse Mash (Washed)	Kg	-9.52	-0.13	-8.87	-2.36	-8.60	0.17
7	Pulse Gram	Kg	57.32	12.29	-6.59	-6.91	-21.09	-5.14
8	Vegetable Ghee (Loose)	Kg	6.66	-0.08	-7.79	-1.95	-7.88	-0.19
9	Sugar Refined	Kg	-16.04	-2.23	-4.76	1.70	-2.83	-0.24
10	Milk Fresh (Unboiled)	Ltr	13.19	1.14	9.62	0.56	8.87	0.45
11	Tea- Tapal Danedar	200 Gm	0.00	0.00	26.31	4.94	29.52	2.54
12	Beef With Bone Av. Qlty.	Kg	15.39	0.53	3.83	0.82	3.50	0.22
13	Mutton Av. Qlty.	Kg	15.82	1.02	5.58	0.90	5.36	0.81
14	Chicken Farm Broiler (Live)	Kg	33.47	0.01	-17.33	4.76	-15.25	2.53
15	Eggs Farm	Doz	34.25	15.78	10.06	-13.69	-8.19	-3.42
16	Potatoes	Kg	-3.86	5.10	-14.95	-6.26	-12.54	8.09
17	Onion	Kg	32.69	-7.82	116.48	40.12	106.66	-12.00
18	Tomatoes	Kg	17.99	-56.37	-17.55	-27.11	77.52	-6.06
19	Ginger	Kg	-31.59	0.64	31.12	-0.02	32.19	1.47
20	Garlic	Kg	-41.51	0.46	30.43	0.07	33.92	3.14

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	May-12		Apr-13		May-13	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	-7.1	-6.3	-9.5	-2.7	-3.3	0.1
Food	-9.0	-2.9	2.5	-0.8	7.6	2.0
Metals	-19.3	-5.0	-9.8	-3.7	-8.8	-3.9
Energy	-2.9	-7.8	-12.3	-3.1	-4.7	0.2
Agricultural	-14.6	-1.5	-6.6	-1.5	-5.1	0.2
Cotton	-46.5	-11.6	-7.6	-2.0	4.6	0.1

Source: IMF

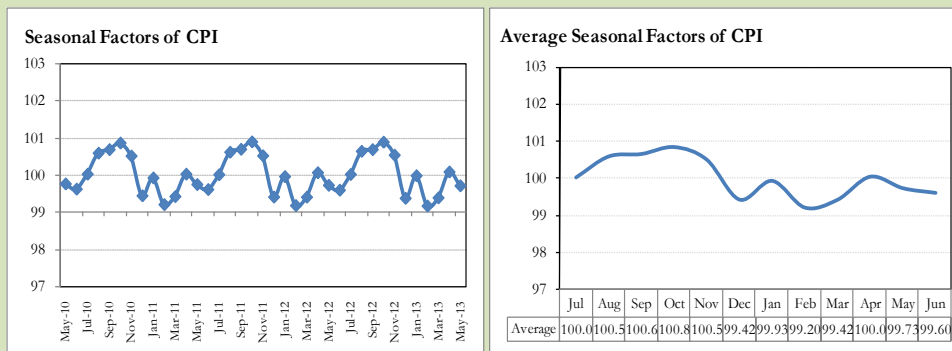
8. Seasonal Adjustment in CPI

Seasonal adjustment is the process of estimating and removing the seasonal effects from a time series after decomposing it into seasonal, trend, cycle and irregular components. The purpose is to identify the different components of the time series and thus provide a better understanding of its underlying behavior. Seasonally adjusted changes are usually preferred for analyzing general price trends in the economy because they eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year. Various statistical methods can be used to decompose a time series into its constituent components. The State Bank of Pakistan uses X-12- ARIMA Seasonal Adjustment Method for this purpose.

The changes in consumer prices are normally reported in terms of year-on-year and month-on-month basis. Seasonal adjustment is particularly useful for analyzing month-on-month changes. The monthly data series of Consumer Price Index (CPI) from July 2008 to May 2013 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

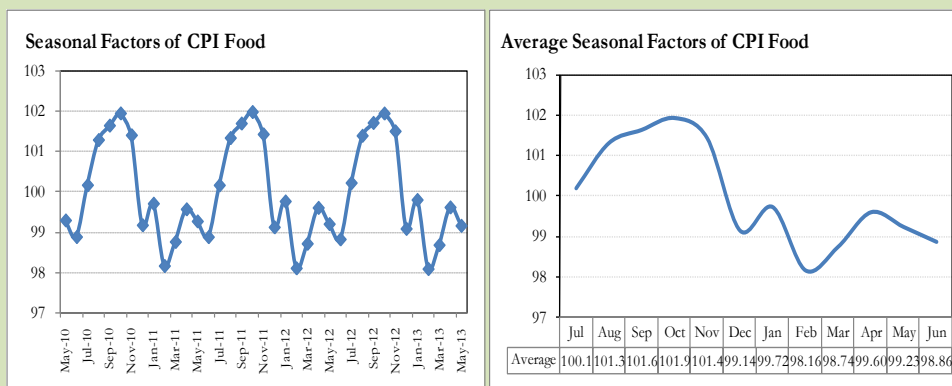
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months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

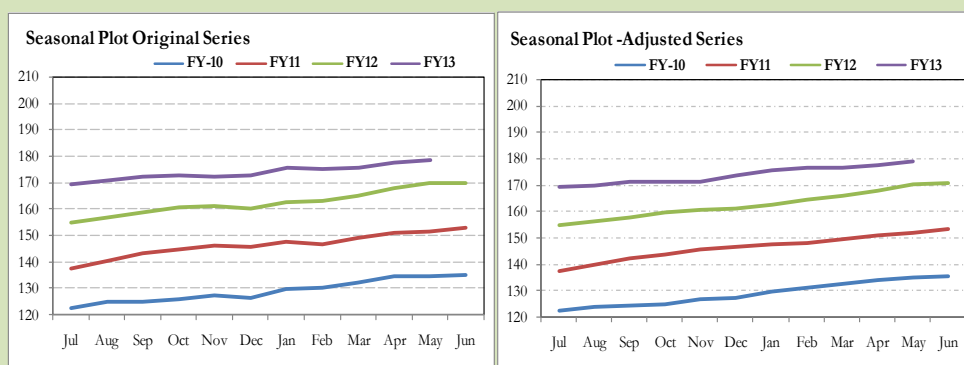
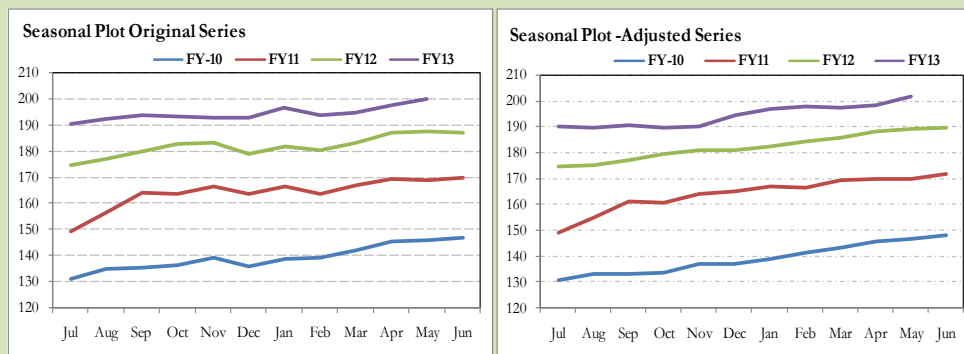


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for May 2013 stood at 179.18 against 178.65 in original series showing an increase of 0.53 on account of adjustment of downward seasonality in May 2013.

Seasonally adjusted CPI food group for May 2013 stood at 201.70 against 200.00 in original series showing an increase of 1.70 on account of adjustment of downward seasonality in May 2013.

Month-on-month change of seasonally adjusted CPI series stood at 0.89% reflecting increase during May 2013 over April 2013 and an increase of 0.51% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 1.61% reflecting increase during May 2013 over April 2013 and an increase of 1.14% in original series.

It is important to note that inflation rates should be analyzed on the basis of seasonally adjusted rates. This is especially needed for inflation rates on month-on-month basis. The most recent annual rate of inflation is usually indicated by annualizing the seasonally adjusted month-on-month rate. Annualized rate of CPI inflation in May 2013 (corresponding to the seasonally adjusted month-on-month rate) is 11.19 percent.

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

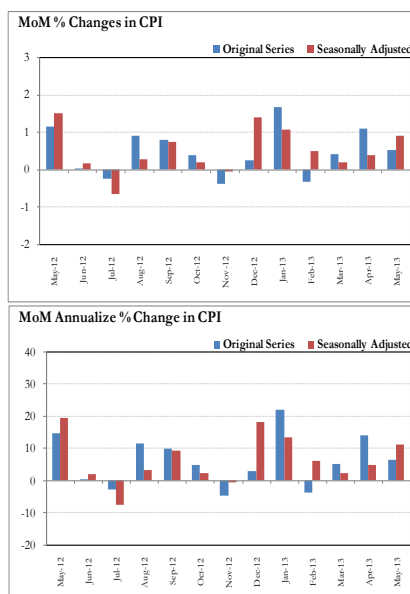
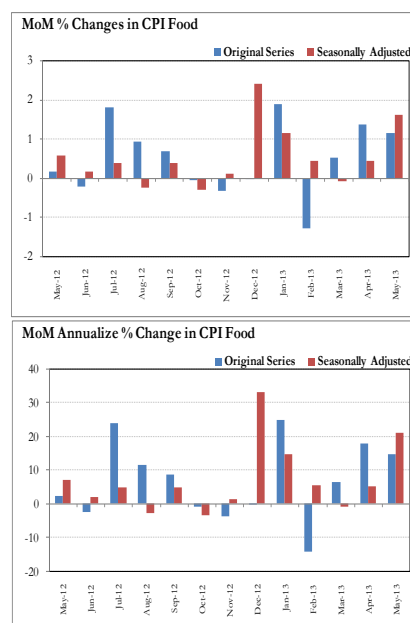


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weigh	MoM change			YoY change		
		May-12	Apr-13	May-13	May-12	Apr-13	May-13
I. Food Group	37.5	0.2	1.4	1.1	11.3	5.5	6.5
Food & Non-Alcoholic Beverages	34.8	0.2	1.5	1.2	11.2	5.1	6.2
Alcoholic Beverages & Tobacco	1.4	0.3	0.0	0.0	11.6	13.3	13.0
Restaurant & Hotels	1.2	0.5	0.3	0.6	11.1	8.2	8.3
II. Non-Food Group	62.5	1.9	0.9	0.1	13.0	6.0	4.1
Clothing & Footwear	7.6	1.0	1.6	0.8	16.0	12.7	12.6
Housing, Water, Elect, Gas &	29.4	2.8	1.1	0.0	10.8	3.7	0.8
Furnishing & Household Equip.	4.2	1.6	0.6	0.6	21.5	8.8	7.7
Health	2.2	1.6	0.5	0.6	12.1	12.4	11.2
Transport	7.2	0.0	-0.7	-1.2	17.2	0.9	-0.2
Communication	3.2	0.0	0.0	0.1	-1.1	5.1	5.2
Recreation & Culture	2.0	11.9	2.9	0.5	19.0	19.9	7.7
Education	3.9	0.0	2.5	0.3	12.2	6.8	7.2
Miscellaneous	2.8	-0.3	-0.1	0.0	15.3	7.3	7.7
Headline	100	1.1	1.1	0.5	12.3	5.8	5.1

Table A2: Distribution of Price changes (YoY) of CPI basket											
Groups	% changes	No of items in each inflation range									
		Total number of items		Decrease or no change (0% or less)		Subdued increase (>0% but <5%)		Moderate increase (5% but less than 10%)		Double digit increase (10% or more)	
		May-12	May-13	May-12	May-13	May-12	May-13	May-12	May-13	May-12	May-13
I. Food Group	6.5	124	124	17	34	10	17	26	34	71	39
Food & Non-Alcoholic Beverages	6.2	112	112	17	34	10	16	22	27	63	35
Alcoholic Beverages & Tobacco	13.0	6	6	0	0	0	1	2	3	4	2
Restaurant & Hotels	8.3	6	6	0	0	0	0	2	4	4	2
II. Non-Food Group	4.1	348	348	37	61	30	71	64	103	217	113
Clothing & Footwear	12.6	59	59	3	5	0	0	8	11	48	43
Housing, Water, Elect, Gas & other Fuels	0.8	36	36	0	14	0	4	12	14	24	4
Furnishing & Household Equip. Maintenance etc	7.7	69	69	2	3	3	18	12	29	52	19
Health	11.2	39	39	16	15	6	2	1	7	16	15
Transport	-0.2	43	43	1	7	6	14	8	16	28	6
Communication	5.2	12	12	6	2	1	5	3	4	2	1
Recreation & Culture	7.7	39	39	5	11	9	12	7	7	18	9
Education	7.2	16	16	3	4	1	5	3	4	9	3
Miscellaneous	7.7	35	35	1	0	4	11	10	11	20	13
Overall	5.1	472	472	54	95	40	88	90	137	288	152

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

Table A3: Top and Bottom 15 Contributors to CPI Inflation (YoY) in May 2013					
Top 15 Contributors		YoY Change			Weighted Contribution
Items/ Contributors	Weights	May-12	May-13		
Ranked by Weighted Contribution					
1	House Rent	21.81	6.59	7.07	23.89
2	Milk Fresh	6.68	13.04	8.96	14.01
3	Wheat Flour	4.16	3.20	17.22	13.66
4	Fresh Vegetable	1.66	-1.56	29.64	9.31
5	Onion	0.54	32.69	106.67	8.95
6	Education	3.94	12.21	7.18	4.91
7	Cotton Cloth	1.73	10.21	14.97	4.52
8	Transport Services	2.70	10.46	6.93	4.07
9	Cigarette	1.39	11.58	13.15	3.55
10	Tea	0.84	4.64	17.55	3.52
11	Rice	1.58	17.58	11.39	3.42
12	Tomatoes	0.45	17.98	77.52	3.27
13	Tailoring	0.88	17.60	13.21	2.57
14	Meat	2.43	15.53	4.12	2.46
15	Personal Care	1.49	15.71	8.31	2.44
Total		52.30			104.54
Bottom 15 Contributors					
1	Gas	1.58	29.41	-46.08	-22.02
2	Fresh Fruits	1.86	35.24	-13.80	-7.84
3	Motor Fuel	3.03	24.33	-9.25	-6.21
4	Chicken	1.36	33.48	-15.25	-4.82
5	Spices	0.54	16.20	-19.29	-3.28
6	Vegetable Ghee	2.07	5.33	-4.92	-1.91
7	Pulse Gram	0.24	57.32	-21.09	-1.39
8	Potatoes	0.48	-3.86	-12.54	-1.11
9	Egg	0.46	34.25	-8.19	-0.73
10	Gram Whole	0.16	37.48	-16.21	-0.70
11	Sugar	1.04	-16.04	-2.82	-0.67
12	Pulse Moong	0.23	-10.74	-8.05	-0.51
13	Besan	0.15	45.64	-12.73	-0.51
14	Pulse Mash (Washed)	0.21	-9.52	-8.60	-0.42
15	Mustard Oil	0.10	12.17	-0.95	-0.02
Total		13.51			-52.14

Table A3.1: Top and Bottom 15 Contributors to CPI Inflation (MoM) in May 2013					
Top 15 Contributors					
Items/ Contributors	Weights	MoM Change		Weighted Contribution	
		Apr-13	May-13		
Ranked by Weighted Contribution					
1 Fresh Fruits	1.86	12.46	11.99		50.27
2 Fresh Vegetable	1.66	20.97	11.87		41.41
3 Milk Fresh	6.68	0.53	0.44		7.12
4 Chicken	1.36	4.76	2.53		6.33
5 Potatoes	0.48	-6.26	8.09		5.57
6 Cotton Cloth	1.73	4.38	1.47		4.82
7 Tea	0.84	2.53	1.82		4.05
8 Personal Care	1.49	0.19	1.29		3.87
9 Wheat Flour	4.16	-2.91	0.43		3.80
10 Meat	2.43	0.85	0.41		2.46
11 Rice	1.58	0.42	0.70		2.23
12 Education	3.94	2.52	0.32		2.21
13 Tailoring	0.88	0.84	1.02		2.14
14 Beverages	1.20	1.29	0.87		2.03
15 Ready Made Food	1.23	0.27	0.64		1.80
Total	31.53				140.10
Bottom 15 Contributors					
1 Onion	0.54	40.12	-12.00		-22.67
2 Motor Fuel	3.03	-0.76	-3.22		-19.43
3 Tomatoes	0.45	-27.11	-6.06		-4.63
4 Personal Equipments	0.84	-0.53	-1.73		-4.18
5 Egg	0.46	-13.69	-3.42		-2.79
6 Pulse Gram	0.24	-6.91	-5.14		-2.70
7 Wheat	0.35	-5.50	-3.00		-2.17
8 Besan	0.15	-5.04	-4.95		-1.74
9 Gram Whole	0.16	-5.08	-3.18		-1.14
10 Fire Wood Whole	0.23	0.35	-1.72		-1.06
11 Fish	0.30	1.73	-1.59		-1.05
12 Spices	0.54	-2.31	-0.61		-0.80
13 Sugar	1.04	1.70	-0.24		-0.53
14 Vegetable Ghee	2.07	-0.95	-0.10		-0.34
15 Wheat Product	0.10	-1.29	-1.22		-0.24
Total	10.49				-65.48

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-12	May-13	
A. Ranked by Percentage Change					
1	Onion	0.54	32.69	106.67	8.95
2	Tomatoes	0.45	17.98	77.52	3.27
3	Fresh Vegetable	1.66	-1.56	29.64	9.31
4	Woolen Readymade Garments	0.40	14.03	19.53	1.43
5	Tea	0.84	4.64	17.55	3.52
6	Wheat Flour	4.16	3.20	17.22	13.66
7	Dopatta	0.44	21.42	16.84	1.48
8	Cleaning & Laundering	0.21	17.53	16.19	0.70
9	Wheat	0.35	8.83	15.49	0.98
10	Honey	0.04	11.83	15.41	0.18
11	Cotton Cloth	1.73	10.21	14.97	4.52
12	Doctor (MBBS) Clinic Fee	0.59	20.24	14.48	1.72
13	News Papers	0.19	8.94	13.68	0.46
14	Tailoring	0.88	17.60	13.21	2.57
15	Cigarette	1.39	11.58	13.15	3.55
Total		13.88			56.29
B. Ranked by Weights					
1	House Rent	21.81	6.59	7.07	23.89
2	Milk Fresh	6.68	13.04	8.96	14.01
3	Electricity	4.40	17.03	0.00	0.00
4	Wheat Flour	4.16	3.20	17.22	13.66
5	Education	3.94	12.21	7.18	4.91
6	Communication & Apparatus	3.15	-1.24	5.21	2.29
7	Motor Fuel	3.03	24.33	-9.25	-6.21
8	Transport Services	2.70	10.46	6.93	4.07
9	Meat	2.43	15.53	4.12	2.46
10	Vegetable Ghee	2.07	5.33	-4.92	-1.91
11	Fresh Fruits	1.86	35.24	-13.80	-7.84
12	Cooking Oil	1.75	7.40	4.79	1.49
13	Cotton Cloth	1.73	10.21	14.97	4.52
14	Fresh Vegetable	1.66	-1.56	29.64	9.31
15	Rice	1.58	17.58	11.39	3.42
Total		62.97			68.05
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 5.1 percent in May, 2013.					

Table A3.3: Top Ten Contributors to CPI Food Inflation (YoY) in May 2013					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-12	May-13	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	13.04	8.96	14.01
2	Wheat Flour	4.16	3.20	17.22	13.66
3	Fresh Vegetable	1.66	-1.56	29.64	9.31
4	Onion	0.54	32.69	106.67	8.95
5	Cigarette	1.39	11.58	13.15	3.55
6	Tea	0.84	4.64	17.55	3.52
7	Rice	1.58	17.58	11.39	3.42
8	Tomatoes	0.45	17.98	77.52	3.27
9	Meat	2.43	15.53	4.12	2.46
10	Ready Made Food	1.23	11.07	8.34	2.28
Total		20.96			64.42
B. Ranked by Percentage Change					
1	Onion	0.54	32.69	106.67	8.95
2	Tomatoes	0.45	17.98	77.52	3.27
3	Fresh Vegetable	1.66	-1.56	29.64	9.31
4	Tea	0.84	4.64	17.55	3.52
5	Wheat Flour	4.16	3.20	17.22	13.66
6	Wheat	0.35	8.83	15.49	0.98
7	Honey	0.04	11.83	15.41	0.18
8	Cigarette	1.39	11.58	13.15	3.55
9	Wheat Product	0.10	2.83	12.69	0.23
10	Rice	1.58	17.58	11.39	3.42
Total		11.11			47.06
C. Ranked by Weights					
1	Milk Fresh	6.68	13.04	8.96	14.01
2	Wheat Flour	4.16	3.20	17.22	13.66
3	Meat	2.43	15.53	4.12	2.46
4	Vegetable Ghee	2.07	5.33	-4.92	-1.91
5	Fresh Fruits	1.86	35.24	-13.80	-7.84
6	Cooking Oil	1.75	7.40	4.79	1.49
7	Fresh Vegetable	1.66	-1.56	29.64	9.31
8	Rice	1.58	17.58	11.39	3.42
9	Cigarette	1.39	11.58	13.15	3.55
10	Chicken	1.36	33.48	-15.25	-4.82
Total		24.96			33.31
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 6.5 percent in May, 2013.					

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-12	May-13	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	6.59	7.07	23.89
2	Education	3.94	12.21	7.18	4.91
3	Cotton Cloth	1.73	10.21	14.97	4.52
4	Transport Services	2.70	10.46	6.93	4.07
5	Tailoring	0.88	17.60	13.21	2.57
6	Personal Care	1.49	15.71	8.31	2.44
7	Ready Made Garment	0.97	17.82	12.91	2.32
8	Communication & Apparatus	3.15	-1.24	5.21	2.29
9	Woolen Cloth	0.88	21.05	11.70	2.16
10	Household Servant	1.04	39.15	8.62	1.85
Total		38.61			51.01
B. Ranked by Percentage Change					
1	Woolen Readymade Garments	0.40	14.03	19.53	1.43
2	Dopatta	0.44	21.42	16.84	1.48
3	Cleaning & Laundering	0.21	17.53	16.19	0.70
4	Cotton Cloth	1.73	10.21	14.97	4.52
5	Doctor (MBBS) Clinic Fee	0.59	20.24	14.48	1.72
6	News Papers	0.19	8.94	13.68	0.46
7	Tailoring	0.88	17.60	13.21	2.57
8	Ready Made Garment	0.97	17.82	12.91	2.32
9	Hosiery	0.51	15.48	12.57	1.26
10	Sewing Needle & Dry Cell	0.15	11.93	12.57	0.31
Total		6.08			16.76
C. Ranked by Weights					
1	House Rent	21.81	6.59	7.07	23.89
2	Electricity	4.40	17.03	0.00	0.00
3	Education	3.94	12.21	7.18	4.91
4	Communication & Apparatus	3.15	-1.24	5.21	2.29
5	Motor Fuel	3.03	24.33	-9.25	-6.21
6	Transport Services	2.70	10.46	6.93	4.07
7	Cotton Cloth	1.73	10.21	14.97	4.52
8	Gas	1.58	29.41	-46.08	-22.02
9	Footwear	1.55	16.07	5.48	1.38
10	Personal Care	1.49	15.71	8.31	2.44
Total		45.39			15.27

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI Non-food, which is 4.1 percent in May, 2013.

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: May 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, Bananas, Chillies Powder Loose, Pulse Gram, Gram Whole Yellow Av.Qlty, Apple	Salt-Powdered (Lahori) Loose, Dates Av.Qlty. Cooking Oil (Dalda), Pulse Masoor (Washed), Pistachio Av.Qlty.	Bottlegourd, Rice Basmati Broken Av.Qlty, Beans (Lal Lobia), Bread Plain Medium Size, Coffee-Nescafe 75 Gm, Rusk (Papay), Vermicelli	Onion, Tomatoes, Lady Finger, Turai, Karaila, Garlic, Ginger, Tinda, Tapal Danedar Tea 200 Gm, Ice Cream Walls, Milo 200 Gm., Ice, Lemon, Chillies Green, Mango Kalmi
Alcoholic Beverages & Tobacco		Betel Leaves	Cigarettes K-20,S, Cigarettes Gold Leaf 20,S, Betel Nuts	Cigarettes Morven Gold 20,S, Cigarettes Capstan 20,S
Clothing & Footwear	Gents Shoes Paul Bata, Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Ladies Sandal Bata, Gents Sandal Bata		Tropical Suiting Law.Pur, Child Shoe Power Lite Bata, School Uni. Pant, Shirt Boys, Foot Wear Local (Male), Shoe Repair Half Sole, Azarband Cotton Av.Qlty	Gents Shoe, Art 1109 Servis, Washing Charges Paint & Shirt, Secondhand Sweater For Men, Dopatta Cotton Av. Qlty, Brassier Sup. Qlty, Lungi/Dhoti (Cotton) Av. Qlty, Lawn Printed Gul Ahmed/Al Karam, Dopatta Georgette Av.Qlty, Secondhand Winter Jacket, Shirting Av.Qlty.
Housing, Water, Elect, Gas & other Fuels	Gas Chrg All Over 500 Mmbtu, Gas Chrg Over 300 - 500 Mmbtu, Gas Chrg Overall/ Combined	Water Charges Per House, Bajree, Cement (Local), Bricks (New) Ist Class	Unskilled Labour Wage Rat, Synthetic Enemal Robialac, Mason (Raj) Wage Rate, Cement Blocks (6"X8"X12"), Firewood Whole	Electrician Wage Rate(P/Day), Electrician Wage Rate(P/Pnt), Synthetic Enemal ICI, Plumber Wage Rate
Furnishing & Household Equip. Maintenance etc	Tawa Iron (Medium Size) Avg. Qlty, Electric Juicer, Carpet Plain Av. Qlty	Electric Blubs "0" Watt, Washing Machine (Singer), Bed Sheet Double With Two Pillow Cover, Dry Cell 1.5 Volt (Local)	Toilet Paper Roll (R.Petal), Boot Polish Liquid (Cherry), Washing Powder 1000 Grm (Express), Sofa Set Wooden With Foam	Boot Polish Cherry/Kiwi 50 MI, Match Box (Small), Robin Blue (35 Gms), Dinner Set Plastic 72 Pcs, Table Shesham Wood, Finis 500 MI, Dari Cotton (6X2 1/2), Water Set Jug+6 Glasses, Cleanser Powder Vim 1000 Gms
Health	Amoxil Capsule 250 Mg., Daonil Tab. 5 Mg., Calcium Syrup Sandoz, Polyfax Eye Ointment, Lederplex Syrup	ECG Charges, Cac. 1000 Tab	Dettol (Medium), Urine Test (Dr) Charges, Gripe-Water Woodwards, Thermometer China, Betnovate-N Ointment 5 Gm	Hydriyllin Syrup 120 MI. O.R.S. (Nimcol), Disprin Tab., Trisil Tab., Phenergan Syrup 120 MI., Galxos-D (450 Gm), Sancos Syrup (50 MI.), Doctor (Mbbs) Clinic Fee, Cotton Bandage 2" - 4", Glycerin Small Bottle
Transport	CNG, Petrol Super, Minibus Fare Min.Within City, High Speed Diesel HSD, Suzuki Fare Maximum 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 Ist Slp. 1-100	Car Suzuki 800 CC (W/O. Ac), Bus Fare Min (Within City), Tyre Car With Tube General, Tyre Puncture Charges, Bus Fare Max	Taxi 4 Seater Fare, Bus Fare Outside City (Non A/C), Cycle Overhauling Charges, Full Tonga Charges, Car Suzuki 1000 CC, Car Honda Civic 1500 CC
Communication	Postal Envelope Domestic, U.M.S. Reg Charges Min.	Postal Registration Charges, Telephone Set Av. Qlty, Fax Charges (Local), Mobile Cell Charges	Telephone Charges Local Call, Telephone Charges Outside City, Internet Charges, T.C.S. Ch. Min.Within Zone	Postal Envelope For Saudi Arabia
Recreation & Culture	Video Game Sega 16 Byte, T.V 20" Color China/Korea, Computer CD (Tdk/Imation), English Book BA/B.Sc, TV License Fee Domestic	V.C.P Panasonic/LG/National, English Book Class V1, Pencil Goldfish/Deer, DVD/VCD Player Panasonic/LG, Video Cassette Blank. Tdk/Sony, Maths Book Class IX or X	Pen Ink Dollor 57 MI Bottle, Paper Fool Scape (27"X17"), Maths Book Ist. Year (T.B. Board), Exercise Book Lined 80/10, Urdu Book Class IX/X (T.B.Board)	Cinema A/C High Class, Maths Book Cals V (T.B.Board), Urdu Book Class V (T.B.Board), Daily "Dawn", English Book Class IX or X, Cinema Non-A/C High Class, Daily "Jang", Daily "Nawa-e-Waqt", Monthly "Naunehal Digest"
Education	MBA Tuition Fee, Coaching Charges For Class XI/ XII Commerce Group, I.T. Tuition Fees	Pvt School Fee Eng. Med (Class-VI), Govt. University Fee MSC/ MA	Pvt School Fee Eng. Med (Class-V), Coaching Fee For Class IX/ X, Pvt School Fee Eng. Med (Class-X)	Govt. Engg. Coll. Fee Ist Year, Pvt Eng.College Fee (Ist Year), Pvt Med. College Fee MBBS(Ist Year)
Restaurant & Hotels			Chicken Biryani Full/Double, Cooked Dal (Av. Hotel), Bread Tandoori St. Size	Cooked Beef (Av. Hotel), Cooked Mutton (Av. Hotel)
Miscellaneous		Gel Medium Size, Talc Powder Viceroy/ Black Cat, Perfume Med. Size Medora/Broche	Disposable Razor Gillette-II, Toothpaste Med Size Colgate 70Gms, Wrist Watch Ladies Citizen	Purse Ladies (Leather) Av. Qlty, Wall Clock Quartz Av.Qlty, Artificial Jewellery Set, Shaving Charges, Toothpaste Macleans 70 Gms, Hair Oil Amla/Chambeli, Hair Color (Kala Kola)

Table A5: City- wise CPI Inflation by Income Groups, May 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	2.0	8.8	3.7	10.7	-0.2	6.6	1.9	8.3	3.8	10.3	-0.2	6.1
2 Islamabad	2.1	7.8	3.9	8.0	-0.2	7.5	2.0	7.0	3.9	7.8	-0.2	6.1
3 Lahore	1.2	6.1	2.3	6.9	-0.3	5.0	1.1	5.6	2.3	6.7	-0.3	4.3
4 Gujranwala	0.5	3.7	0.5	4.5	0.6	2.8	0.5	2.8	0.4	3.6	0.5	1.9
5 Sialkot	0.9	7.5	1.4	8.6	0.2	6.1	0.9	6.8	1.3	8.1	0.4	5.4
6 Faisalabad	-0.3	5.8	-0.6	7.1	0.2	4.2	-0.1	5.0	-0.3	6.5	0.1	3.4
7 Multan	0.1	5.5	0.0	6.3	0.2	4.4	0.0	5.1	0.0	6.6	0.1	3.6
8 Sargodha	-0.2	5.6	-0.5	5.4	0.1	5.8	-0.3	4.9	-0.6	4.7	0.1	5.1
9 Bahawalpur	-0.2	6.2	-0.6	4.4	0.2	8.2	-0.1	5.7	-0.4	4.0	0.1	7.3
10 Karachi	1.5	5.4	2.4	7.5	0.1	2.5	1.2	4.6	2.1	6.8	0.2	2.1
11 Hyderabad	0.4	5.7	0.5	7.3	0.2	3.6	0.4	4.9	0.5	6.7	0.2	2.9
12 Sukkur	0.8	7.9	0.6	8.2	0.9	7.5	0.6	7.1	0.4	7.5	0.9	6.8
13 Larkana	-0.2	7.9	-0.8	4.8	0.5	11.8	0.3	8.7	0.1	6.6	0.6	10.9
14 Peshawar	0.9	7.3	1.1	6.1	0.6	8.6	0.6	6.7	0.8	5.4	0.4	7.9
15 Bannu	-0.3	7.3	-0.4	8.1	-0.2	6.4	-0.4	7.0	-0.4	7.5	-0.3	6.5
16 Quetta	1.4	7.3	2.4	7.6	0.1	7.0	1.1	6.4	2.3	6.9	-0.1	5.8
17 Khuzdar	0.4	4.3	1.3	3.4	-0.6	5.4	0.6	4.5	1.4	3.2	-0.2	5.9
	Rs 12001-18000						Rs 18001-35000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	1.9	8.3	3.8	10.3	0.1	6.3	1.8	7.6	3.9	10.1	0.0	5.6
2 Islamabad	2.1	6.9	3.9	7.6	0.3	6.1	1.8	6.3	3.9	7.6	0.1	5.2
3 Lahore	1.1	5.5	2.2	6.9	-0.2	4.0	0.9	4.8	2.2	6.9	-0.3	2.9
4 Gujranwala	0.5	2.5	0.6	3.7	0.5	1.4	0.5	1.8	0.6	2.9	0.4	0.8
5 Sialkot	0.9	7.3	1.4	9.1	0.4	5.4	0.9	6.2	1.6	9.0	0.3	3.9
6 Faisalabad	0.0	4.5	-0.1	6.3	0.1	2.7	-0.1	3.5	0.0	5.8	-0.1	1.4
7 Multan	0.1	4.9	0.1	6.6	0.1	3.3	0.1	4.4	0.2	6.7	0.0	2.5
8 Sargodha	0.1	4.8	0.1	4.7	0.0	4.8	0.2	4.2	0.5	4.5	0.0	4.0
9 Bahawalpur	-0.1	5.7	-0.3	4.2	0.1	7.1	0.0	6.0	0.0	4.1	0.0	7.4
10 Karachi	1.1	4.2	1.9	6.5	0.3	1.9	0.9	3.7	1.8	6.3	0.1	1.4
11 Hyderabad	0.4	4.4	0.7	6.3	0.1	2.4	0.3	3.6	0.7	5.9	0.0	1.5
12 Sukkur	0.7	6.8	0.5	7.4	0.8	6.2	0.6	6.2	0.7	7.3	0.6	5.3
13 Larkana	0.4	8.5	0.3	7.1	0.5	9.8	0.7	8.3	0.9	8.5	0.6	8.1
14 Peshawar	0.6	6.2	0.7	5.1	0.5	7.3	0.5	5.1	0.7	4.6	0.4	5.6
15 Bannu	-0.4	7.4	-0.4	7.9	-0.4	6.9	-0.5	6.9	-0.7	7.1	-0.4	6.7
16 Quetta	1.0	5.4	2.2	6.4	-0.2	4.5	0.9	5.1	2.3	6.2	-0.2	4.2
17 Khuzdar	0.5	4.7	1.1	3.1	-0.1	6.3	0.4	4.6	0.9	2.8	-0.1	6.2
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	1.2	6.6	3.4	9.5	0.1	5.3	1.4	7.2	3.7	9.8	-0.1	5.3
2 Islamabad	0.9	5.0	3.3	7.2	-0.3	3.9	1.0	5.4	3.4	7.3	-0.8	4.0
3 Lahore	0.7	4.7	2.2	7.0	-0.1	3.5	0.9	4.9	2.2	6.9	-0.2	3.4
4 Gujranwala	0.5	1.3	0.8	2.1	0.3	0.9	0.5	1.9	0.6	3.1	0.4	1.1
5 Sialkot	1.0	5.1	2.1	8.3	0.4	3.5	0.9	5.9	1.7	8.7	0.4	4.0
6 Faisalabad	0.0	2.2	0.4	5.5	-0.2	0.5	-0.1	3.5	-0.1	6.1	-0.1	1.6
7 Multan	0.1	3.8	0.4	7.5	-0.1	2.0	0.1	4.2	0.2	7.0	0.0	2.4
8 Sargodha	0.6	4.7	2.0	5.5	0.0	4.4	0.2	4.5	0.4	5.0	0.0	4.2
9 Bahawalpur	0.0	6.0	0.2	4.1	0.0	6.9	-0.1	5.8	-0.2	4.2	0.0	6.8
10 Karachi	0.5	3.6	1.5	5.6	0.0	2.6	0.7	3.8	1.7	6.0	0.0	2.2
11 Hyderabad	0.2	2.7	0.9	5.1	-0.1	1.5	0.3	3.5	0.7	6.0	0.0	1.8
12 Sukkur	0.6	5.2	0.8	7.0	0.5	4.3	0.6	6.2	0.6	7.5	0.7	5.3
13 Larkana	0.9	7.5	1.6	8.0	0.6	7.3	0.4	8.0	0.4	7.1	0.5	8.6
14 Peshawar	0.5	4.5	0.7	3.9	0.5	4.9	0.6	5.2	0.8	4.8	0.5	5.5
15 Bannu	-0.5	6.1	-0.5	7.7	-0.5	5.4	-0.4	6.9	-0.5	7.7	-0.4	6.4
16 Quetta	0.7	4.7	2.1	6.1	0.0	4.0	0.9	5.1	2.2	6.4	0.0	4.2
17 Khuzdar	0.3	3.9	1.6	1.8	-0.3	4.9	0.5	4.4	1.2	3.1	-0.1	5.3

Table A6: City- wise CPI Inflation (YoY) May, 2013							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Mithi	11.0	7.2	13.5	Dadu	5.0	7.6	3.3
D.I.Khan	10.1	10.9	9.6	Attock	5.0	6.7	3.8
D.G. Khan	9.4	8.2	10.2	Lahore	4.9	6.9	3.4
Mingora	9.1	7.8	10.0	Mir Pur Khas	4.6	5.0	4.4
Mardan	8.6	10.7	7.4	Sargodha	4.5	5.0	4.2
Rahim Yar Khan	8.6	10.4	7.3	Khuzdar	4.4	3.1	5.3
Mianwali	8.0	5.7	9.6	Multan	4.2	6.9	2.4
Larkana	8.0	7.1	8.6	Karachi	3.8	6.0	2.2
Nawabshah	7.8	8.9	7.1	Abbotabad	3.7	5.3	2.6
Bahawalnagar	7.7	8.5	7.1	Hyderabad	3.5	6.0	1.8
Loralai&Cantt	7.4	9.4	6.2	Jhang	3.5	0.4	5.6
Gawadar	7.4	10.2	5.5	Faisalabad	3.5	6.1	1.6
Sahiwal	7.3	8.5	6.4	Wazirabad	3.5	4.3	2.9
Rawalpindi	7.2	9.8	5.3	Gujranwala	1.9	3.1	1.1
Bannu	6.9	7.7	6.4				
Muzaffargarh	6.6	7.5	5.9				
Turbat	6.5	7.4	5.9				
Vehari	6.3	7.7	5.3				
Sukkur	6.2	7.5	5.3				
Sialkot	5.9	8.7	4.0				
Bahawalpur	5.8	4.2	6.8				
Dera Mrd.Jamali	5.7	5.1	6.1				
Islamabad	5.4	7.3	4.0				
Peshawar	5.2	4.8	5.5				
Jehlum	5.2	5.9	4.7				
Quetta	5.1	6.4	4.2				
Note: High inflation refers to equal or above average inflation, and low inflation refers to below average							

Table A7: Income Group-wise Inflation (percent)

	MoM			YoY		
	May-12	Apr-13	May-13	May-12	Apr-13	May-13
<u>Up to Rs. 8000</u>						
General	0.4	1.1	0.6	10.3	7.0	7.2
Food	-0.4	1.1	0.8	9.2	6.1	7.4
Non-food	1.3	1.0	0.2	11.8	8.1	6.9
<u>Rs. 8001- 12000</u>						
General	1.5	1.1	0.6	11.8	7.7	6.7
Food	-0.2	1.2	0.9	10.0	5.8	7.0
Non-food	3.4	1.0	0.2	13.9	9.8	6.4
<u>Rs. 12001- 18000</u>						
General	1.2	1.1	0.6	11.5	7.3	6.6
Food	0.0	1.3	1.0	10.6	5.6	6.7
Non-food	2.6	0.9	0.2	12.5	9.0	6.5
<u>Rs. 18001- 35000</u>						
General	1.1	1.1	0.6	12.0	5.4	4.8
Food	0.1	1.4	1.1	11.2	5.5	6.5
Non-food	2.0	0.9	0.1	12.6	5.3	3.4
<u>Above Rs. 35000</u>						
General	1.1	1.1	0.4	13.0	4.5	3.8
Food	0.5	1.5	1.3	12.3	5.2	6.1
Non-food	1.4	0.8	0.0	13.3	4.1	2.6
<u>All income groups</u>						
General	1.1	1.1	0.5	12.3	5.8	5.1
Food	0.2	1.4	1.1	11.3	5.5	6.5
Non-food	1.9	0.9	0.1	13.0	6.0	4.1

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices May-13	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	307.0	14.0	-3.0
2	Wheat Flour Bag	10Kg.	354.1	15.0	0.7
3	Rice Basmati Broken	Kg.	71.2	11.3	0.3
4	Rice Irri-6	Kg.	51.2	8.0	0.1
5	Bread Plain Med. Size (340-400 Gm.)	Each	35.5	11.8	0.0
6	Beef	Kg.	272.4	4.0	0.5
7	Mutton	Kg.	536.5	6.9	1.2
8	Chicken Live (Farm)	Kg.	142.0	-4.0	4.1
9	Milk Fresh	Litr	66.4	9.1	0.9
10	Curd	Kg.	77.1	7.8	1.2
11	Milk Powdered Nido	500G	290.0	7.4	0.0
12	Egg Hen (Farm)	Doz.	72.8	-6.4	-5.9
13	Mustard Oil	Kg.	182.9	-1.2	-1.1
14	Cooking Oil (Tin)	2.5Ltr	533.0	2.8	0.6
15	Veg. Ghee (Tin)	2.5Kg.	505.0	-2.4	0.0
16	Veg. Ghee Loose	Kg.	155.0	-10.9	-0.6
17	Bananas	Doz.	67.1	-28.2	5.5
18	Masoor Pulse Washed	Kg.	105.5	5.4	4.1
19	Moong Pulse Washed	Kg.	116.4	-5.2	1.4
20	Mash Pulse Washed	Kg.	130.1	-8.0	0.7
21	Gram Pulse Washed	Kg.	84.5	-22.1	-4.0
22	Potatoes	Kg.	22.0	-10.6	8.2
23	Onions	Kg.	43.5	88.4	-15.8
24	Tomatoes	Kg.	46.4	81.3	-2.9
25	Sugar	Kg.	53.3	-2.1	0.3
26	Gur	Kg.	77.7	10.4	6.9
27	Salt Powdered Loose (Lahori)	Kg.	9.0	6.0	0.6
28	Red Chillies Powder Loose	Kg.	217.6	-29.4	-2.2
29	Garlic	Kg.	134.2	42.8	-2.7
30	Tea (Yellow Label)	200Gm.	165.5	16.5	2.5
31	Cooked Beef Plate	Each	70.9	11.0	0.0
32	Cooked Dal Plate	Each	41.6	7.1	0.8
33	Tea Prepared (Sada)	Cup	15.8	5.8	0.5
34	Cigarettes K-2 (20'S)	20'S	32.3	9.9	0.0
35	Long Cloth (Coarse Latha)	Mtr.	167.2	23.7	0.5
36	Shirting	Mtr.	133.9	18.1	1.2
37	Lawn	Mtr.	179.6	14.1	0.8
38	Georgette (Voil Printed)	Mtr.	107.9	12.7	1.8
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	5.3	0.0
43	Gas Charges upto 3.3719	Mmbtu	123.1	-13.7	0.0
44	Kerosene	Litr	114.9	-0.6	-2.1
45	Firewood	40Kg	504.1	6.4	0.1
46	Energy Savor 14 Watts	Each	158.5	8.8	0.7
47	Washing Soap (200-250 Gm.)	Cake	21.4	9.2	0.2
48	Match Box	Each	1.2	7.5	4.5
49	Petrol	Litr	98.8	-5.5	-4.6
50	Diesel	Litr	107.1	-0.8	-2.4
51	L.P.G.(11 Kg Cylinder.)	Each	1276.7	2.6	-5.8
52	Tele. Local Call	Call	3.9	9.7	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	33.2	4.0	3.9
Maximum				88.4	8.2
Median				6.9	0.2
Minimum				-29.4	-15.8

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

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

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		May-12	Apr-13	May-13
General	100.00	169.93	177.74	178.65
Food & Non-Alcoholic Beverages.	34.83	188.29	197.62	200.01
1 Wheat	0.35	158.80	189.08	183.40
2 Wheat Flour	4.16	166.09	193.86	194.69
3 Wheat Product	0.10	164.11	187.22	184.94
4 Besan	0.15	233.03	213.94	203.36
5 Rice	1.58	165.29	182.84	184.12
6 Cereals	0.16	193.20	213.49	214.75
7 Bakery & Confectionary	1.16	168.77	182.03	182.58
8 Nimco	0.46	193.14	202.35	203.68
9 Meat	2.43	213.99	221.88	222.80
10 Chicken	1.36	202.55	167.42	171.66
11 Fish	0.30	198.34	202.61	199.39
12 Milk Fresh	6.68	204.07	221.39	222.36
13 Milk Product	0.63	201.63	212.73	213.82
14 Milk Powder	0.11	172.44	188.72	189.99
15 Egg	0.46	171.49	163.02	157.44
16 Mustard Oil	0.10	159.53	159.80	158.01
17 Cooking Oil	1.75	154.79	161.31	162.20
18 Vegetable Ghee	2.07	163.69	155.79	155.64
19 Dry Fruits	0.25	200.77	211.97	213.78
20 Fresh Fruits	1.86	265.88	204.67	229.20
21 Pulse Masoor	0.27	146.82	147.84	151.79
22 Pulse Moong	0.23	238.26	218.26	219.09
23 Pulse Mash (Washed)	0.21	204.12	186.25	186.56
24 Pulse Gram	0.24	243.09	202.23	191.83
25 Gram Whole	0.16	232.76	201.43	195.02
26 Beans	0.03	198.78	218.55	217.45
27 Potatoes	0.48	162.26	131.30	141.92
28 Onion	0.54	135.14	317.39	279.29
29 Tomatoes	0.45	81.94	154.84	145.46
30 Fresh Vegetable	1.66	165.22	191.46	214.19
31 Sugar	1.04	197.07	191.97	191.51
32 Gur	0.02	216.41	220.37	230.64
33 Honey	0.04	222.38	256.45	256.65
34 Sweet Meet	0.25	201.63	208.42	208.64
35 Beverages	1.20	163.72	176.35	177.89
36 Jam, Tomato Ketchup & Pickle	0.25	172.01	182.85	184.90
37 Condiments	0.27	211.56	215.20	216.21
38 Spices	0.54	272.62	221.37	220.03
39 Tea	0.84	208.98	241.26	245.66
Alcoholic Beverages, Tobacco	1.41	169.22	191.16	191.19
40 Cigarette	1.39	169.08	191.31	191.31
41 Betel Leaves & Nuts	0.02	177.91	182.06	183.85
Clothing & Footwear	7.57	163.22	182.25	183.74
42 Cotton Cloth	1.73	152.16	172.40	174.94
43 Woolen Cloth	0.88	183.68	203.59	205.17
44 Ready Made Garment	0.97	160.68	179.98	181.43
45 Woolen Readymade Garments	0.40	161.01	192.45	192.45
46 Hosiery	0.51	171.86	192.69	193.46
47 Dopatta	0.44	173.73	201.18	202.98
48 Cleaning & Laundering	0.21	177.51	202.08	206.24

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

Items and specification	Weights	Index		
		May-12	Apr-13	May-13
49 Tailoring	0.88	191.94	215.10	217.30
50 Footwear	1.55	142.00	149.73	149.78
Housing, Water, Elect, Gas & Other Fuel	29.41	153.27	154.54	154.54
51 House Rent	21.81	135.02	144.57	144.57
52 Construction Input Item	0.56	194.21	208.77	209.12
53 Construction Wage Rate	0.33	163.21	178.65	179.47
54 Water Supply	0.50	133.23	138.79	139.65
55 Electricity	4.40	196.37	196.37	196.37
56 Gas	1.58	264.42	142.58	142.58
57 Kerosene Oil	0.01	267.60	273.79	266.68
58 Fire Wood Whole	0.23	225.28	247.13	242.88
Furnished H.Hold Equip. & Maint. Etc	4.21	171.52	183.59	184.71
59 Furniture	0.33	161.27	174.01	174.07
60 Household Textile	0.65	167.77	178.84	179.92
61 Household Equipment	0.59	153.84	161.13	161.74
62 Utensils	0.32	166.02	182.00	184.02
63 Plastic Products	0.25	171.46	179.07	180.43
64 Washing Soap & Detergent	0.79	187.61	199.93	201.05
65 Sewing Needle & Dry Cell	0.15	145.24	153.11	163.49
66 Household Servant	1.04	179.61	195.10	195.10
67 Marriage Hall Charges	0.08	183.23	195.33	197.82
Health	2.19	144.07	159.34	160.24
68 Drug Medicine	1.27	128.29	140.48	140.91
69 Medical Equipment	0.01	183.13	203.09	205.49
70 Doctor (MBBS) Clinic Fee	0.59	175.66	199.07	201.10
71 Medical Test	0.32	147.23	159.58	160.23
Transport	7.20	185.93	187.70	185.52
72 Motor Vehicle	0.66	145.44	155.55	156.00
73 Motor Vehicle Accessories	0.24	200.36	213.27	213.55
74 Motor Fuel	3.03	193.20	181.16	175.32
75 Mechanical Service	0.46	176.50	187.08	188.19
76 Motor Vehicle Tax	0.11	152.02	153.74	153.74
77 Transport Services	2.70	189.38	202.08	202.50
Communication	3.22	122.38	128.64	128.71
78 Postal Services	0.07	168.66	174.59	175.16
79 Communication & Apparatus	3.15	121.41	127.67	127.73
Recreation & Culture	2.02	163.95	175.62	176.58
80 Recreation & Culture	0.86	121.05	122.39	122.42
81 Text Books	0.57	229.88	254.82	256.86
82 News Papers	0.19	149.97	170.49	170.49
83 Stationery	0.40	169.32	180.09	181.96
Education	3.94	151.31	161.66	162.17
84 Education	3.94	151.31	161.66	162.17
Restaurants And Hotels	1.23	193.79	208.62	209.95
85 Ready Made Food	1.23	193.79	208.62	209.95
Miscellaneous Goods And Services	2.76	188.15	202.51	202.61
86 Personal Care	1.49	171.42	183.31	185.67
87 Cosmetics	0.39	146.40	151.21	152.60
88 Blades	0.03	169.53	174.81	174.81
89 Personal Equipments	0.84	237.54	260.98	256.47

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities			
Items and Specifications	Index		
	May-12	Apr-13	May-13
General	189.46	198.09	197.23
Agriculture Forestry & Fishery	185.78	205.04	204.69
1 Wheat	163.65	197.38	191.19
2 Maize	168.27	184.91	188.15
3 Rice	154.82	171.91	172.17
4 Sorghum/Jowar	218.11	223.78	243.92
5 Millet/Bajra	163.10	174.63	183.84
6 Vegetables	172.46	240.68	264.84
7 Fresh Fruits	272.26	209.37	211.71
8 Dry Fruits	172.32	188.91	192.74
9 Cotton Seeds	173.84	170.47	167.16
10 Other Oil Seeds	171.79	168.04	171.25
11 Edible Roots/ Potatoes	150.79	120.83	135.38
12 Stimulant And Spice Crops	165.35	193.64	197.49
13 Pulses	228.41	190.02	186.89
14 Sugar Crops	267.92	267.92	267.92
15 Fibre Crops	170.95	219.37	205.61
16 Unmanufactured Tobacco	166.81	175.97	176.41
17 Poultry	177.51	167.35	176.50
18 Milk From Bovine Animals	197.20	212.51	215.36
19 Eggs	166.54	163.42	153.52
20 Raw Animal Material/Wool	136.50	139.39	146.46
21 Hides And Fur Skins, Raw	138.05	141.22	140.56
22 Fuel Wood In Logs	203.06	228.51	228.51
23 Fishes Live Fresh Or Chilled	155.33	209.12	215.28
Ores/Minerals, Gas & Elect.	214.79	213.96	213.53
24 Coal Not Agglomerated	188.24	223.53	223.53
25 Natural Gas Liquefied	207.95	201.27	200.30
26 Salt & Pure Sodium Chloride	165.87	195.37	203.88
27 Electrical Energy	226.10	226.10	226.10
Food, Beverages, Tobacco, Textiles	179.06	191.67	191.52
28 Meat Of Animals	224.02	231.85	232.03
29 Vegetables & Fruit Juices	178.36	189.33	189.97
30 Dried Fruits & Nuts	198.46	222.72	221.30
31 Fruit Juices	158.18	159.33	162.75
32 Vegetable Oil Refined	156.41	159.96	159.34
33 Vegetable Ghee	145.16	140.80	141.08
34 Oil Cakes	139.41	164.12	169.06
35 Processed Liquid Milk	191.19	208.43	208.43
36 Milk And Cream In Solid Form	167.14	171.40	171.72
37 Ice Cream	161.68	173.49	176.81
38 Dairy Products N.E.C	198.75	211.73	212.62
39 Wheat Flour	153.57	178.37	179.64
40 Other Cereal Flour	214.25	173.25	170.46
41 Sugar Refined	200.47	201.52	204.62
42 Chocolate	100.26	99.19	99.19
43 Sugar Confectionary	100.40	102.28	102.28
44 Coffee And Tea	196.69	217.19	219.00
45 Spices	303.53	251.26	238.45
46 Other Food Products	318.54	316.35	314.63
47 Mineral Water	165.88	170.88	171.58
48 Beverages	135.21	137.86	139.24
49 Tobacco Products	175.85	208.80	208.80
50 Cotton Yarn	200.04	216.90	209.33
51 Nylon Yarn	183.81	187.63	189.60
52 Blended Yarn	187.07	199.68	198.67
53 Woven Fabrics	171.55	208.98	208.98
54 Cotton Fabrics	175.89	178.26	182.84
55 Other Fabrics	165.23	169.83	172.31

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

Items and Specifications		Index		
		May-12	Apr-13	May-13
56	Silk And Rayon Fabrics	141.30	156.87	157.86
57	Towels	189.19	210.01	210.01
58	Blankets	161.28	185.21	185.21
59	Bed Sheets	175.92	212.73	212.73
60	Quilts	147.05	153.32	153.32
61	Woolen Carpets	104.76	106.55	106.55
62	Synthetic Carpets	144.07	114.41	114.41
63	Hosiery Products	163.84	185.14	185.14
64	Ready Made Garments	127.25	142.83	145.39
65	Leather With Out Hairs	109.83	109.83	115.62
66	Other Leather N.E.C	122.57	122.57	160.40
67	Footwear's	128.50	139.49	139.49
Other Transportable Goods		207.39	205.35	201.98
68	Timber	144.35	152.98	153.36
69	Printing Paper	141.99	168.66	169.17
70	Hard Board	168.75	187.50	187.50
71	Coke	163.45	163.45	163.45
72	Motor Sprit	174.61	172.82	164.86
73	Diesel Oil	263.04	257.92	249.51
74	Kerosene Oil	266.52	262.00	251.08
75	Furnace Oil	210.94	174.79	169.52
76	Mobil Oil	181.11	187.49	186.04
77	Chemicals	145.79	160.14	159.30
78	Dying Materials	104.26	107.23	107.23
79	Fertilizers	268.05	261.31	260.13
80	Pesticides	165.53	197.49	199.65
81	Insecticides	121.64	123.20	123.02
82	Paints & Varnishes	211.83	241.08	241.85
83	Medicines	122.49	139.66	139.19
84	Soaps & Detergent	156.58	170.95	174.25
85	Auto Tyres	175.62	181.43	181.43
86	Plastic Products	185.12	196.56	196.65
87	Glass Sheets	172.43	201.02	201.02
88	Other Glass Articles	222.06	199.53	206.09
89	Ceramics And Sanitary	144.28	161.77	161.77
90	Bricks Blocks And Tiles	170.86	180.18	184.29
91	Cement	177.41	188.24	189.16
92	Bed Foams	131.00	142.83	144.33
93	Matches	122.82	142.72	142.72
Metal Product Machinery & Equip		156.46	159.93	160.87
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	136.32	133.52	133.53
96	Pipe Fittings	142.31	148.98	148.98
97	Steel Products	159.13	166.25	166.25
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	170.33	176.43	179.78
101	Cultivators	184.66	189.23	189.23
102	Chuff Cutter	134.28	144.94	144.94
103	Tractors	172.36	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	164.93	171.52	174.07
107	Electrical Wires	165.49	159.57	160.12
108	Lighting Equipments	145.49	148.26	147.94
109	Radio And Television	132.73	126.49	126.49
110	Motor Vehicles	160.28	173.75	173.75
111	Motor Cycles	124.02	125.07	124.56
112	Bicycles	171.52	177.09	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
2010	Aug	140.63	156.70	131.00	150.19	152.48	148.74	155.44
	Sep	143.49	163.96	131.22	152.74	155.52	150.98	161.00
	Oct	144.90	163.90	133.51	155.40	156.03	155.00	163.01
	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

*: all groups combined

Table A13: International Commodity Prices/ Indices

	Feb-13	Mar-13	Apr-13	May-13
Energy				
Crude Oil (US\$ per barrel) *	107.7	102.6	98.9	99.3
IMF Energy Index (2005 = 100)	198.7	190.6	184.7	185.1
WB Energy Index (2005 = 100) @	192.0	183.9	178.5	178.8
Food				
Rice (\$/MT)	574.1	564.5	553.7	552.1
Wheat (\$/MT)	318.9	309.9	308.7	319.1
Sugar (US cent/ pound)	18.2	18.3	17.7	17.1
Palm Oil (\$/MT)	792.4	771.9	756.5	763.4
Soybean Oil (\$/MT)	1,132.0	1,102.9	1,086.7	1,082.8
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	89.7	94.4	92.5	92.6
IMF Metal Price Index (2005 = 100)	205.2	190.6	183.5	176.4
Copper (\$/MT)	8,060.9	7,652.4	7,221.2	7,248.7
Aluminum (\$/MT)	2,053.6	1,911.3	1,861.0	1,832.6
Iron Ore (\$ cents/dry MT)	154.6	139.9	137.4	124.0
Tin (\$/MT)	24,211.7	23,302.0	21,589.6	20,781.6
Nickle (\$/MT)	17,690.1	16,731.7	15,629.3	14,948.2
Zinc (\$/MT)	2,128.7	1,929.2	1,855.6	1,831.0
Lead (\$/MT)	2,365.8	2,173.4	2,024.4	2,031.9
Uranium (\$/MT)	43.4	42.3	41.4	40.6
DAP (\$/MT)	482.3	507.5	508.3	485.1
Urea (\$/MT)	411.5	385.0	361.5	344.4

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	FY10	FY11	FY12	FY13
Jul	122.46	137.62	154.72	169.57
Aug	124.68	140.63	156.88	171.09
Sep	124.89	143.49	158.50	172.44
Oct	125.64	144.90	160.79	173.10
Nov	127.30	146.34	161.25	172.42
Dec	126.37	145.90	160.12	172.82
Jan	129.64	147.67	162.58	175.70
Feb	130.13	146.85	163.07	175.11
Mar	131.75	148.91	164.98	175.82
Apr	134.16	150.99	168.00	177.74
May	134.34	151.33	169.93	178.65
Jun	134.83	152.78	169.99	
Seasonally Adjusted Series				
Jul	122.39	137.60	154.71	169.55
Aug	123.99	139.82	155.94	170.02
Sep	124.14	142.52	157.42	171.28
Oct	124.67	143.67	159.38	171.59
Nov	126.69	145.61	160.43	171.51
Dec	127.04	146.73	161.08	173.92
Jan	129.80	147.79	162.66	175.74
Feb	131.08	148.03	164.43	176.59
Mar	132.46	149.78	165.98	176.91
Apr	134.13	150.96	167.90	177.60
May	134.67	151.72	170.41	179.18
Jun	135.35	153.39	170.69	

Table 15. CPI Food Data Series Original and Seasonally Adjusted

Original Series				
Period	FY10	FY11	FY12	FY13
Jul	130.97	149.33	174.80	190.72
Aug	134.95	156.70	177.32	192.47
Sep	135.20	163.96	180.16	193.80
Oct	135.98	163.91	183.07	193.66
Nov	138.87	166.59	183.26	193.03
Dec	135.81	163.69	179.21	192.97
Jan	138.54	166.52	181.90	196.58
Feb	139.06	163.56	180.69	194.05
Mar	141.71	167.10	183.46	195.06
Apr	145.24	169.25	187.43	197.74
May	145.69	168.77	187.75	200.00
Jun	146.63	169.88	187.35	
Seasonally Adjusted Series				
Jul	130.69	149.09	174.52	190.31
Aug	133.30	154.72	175.00	189.85
Sep	133.18	161.32	177.17	190.56
Oct	133.48	160.79	179.53	189.99
Nov	136.93	164.30	180.70	190.19
Dec	136.91	165.06	180.80	194.76
Jan	139.06	167.01	182.34	196.98
Feb	141.52	166.62	184.17	197.83
Mar	143.41	169.20	185.85	197.67
Apr	145.82	169.99	188.18	198.51
May	146.72	170.01	189.27	201.70
Jun	148.29	171.81	189.58	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY10	FY11	FY12	FY13	Average
Jul	100.06	100.02	100.00	100.01	100.02
Aug	100.55	100.58	100.61	100.63	100.59
Sep	100.60	100.68	100.69	100.68	100.66
Oct	100.78	100.85	100.89	100.88	100.85
Nov	100.48	100.50	100.51	100.53	100.51
Dec	99.47	99.44	99.40	99.37	99.42
Jan	99.88	99.92	99.95	99.98	99.93
Feb	99.27	99.20	99.17	99.16	99.20
Mar	99.46	99.42	99.40	99.38	99.42
Apr	100.02	100.02	100.06	100.08	100.04
May	99.76	99.74	99.72	99.70	99.73
Jun	99.62	99.61	99.59		99.60

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY10	FY11	FY12	FY13	Average
Jul	100.22	100.16	100.16	100.22	100.19
Aug	101.24	101.28	101.33	101.38	101.31
Sep	101.51	101.63	101.69	101.70	101.63
Oct	101.87	101.94	101.97	101.93	101.93
Nov	101.41	101.40	101.42	101.49	101.43
Dec	99.19	99.17	99.12	99.08	99.14
Jan	99.63	99.71	99.76	99.80	99.72
Feb	98.26	98.17	98.11	98.09	98.16
Mar	98.82	98.76	98.72	98.68	98.74
Apr	99.60	99.57	99.60	99.61	99.60
May	99.29	99.27	99.20	99.16	99.23
Jun	98.88	98.88	98.82		98.86

Table 18: CPI Month-on-Month Change Original & Seasonally Adjusted				
Original Series				
Period	FY10	FY11	FY12	FY13
Jul		2.07	1.27	-0.25
Aug	1.81	2.19	1.40	0.90
Sep	0.17	2.03	1.03	0.79
Oct	0.60	0.98	1.44	0.38
Nov	1.32	0.99	0.29	-0.39
Dec	-0.73	-0.30	-0.70	0.23
Jan	2.59	1.21	1.54	1.67
Feb	0.38	-0.56	0.30	-0.34
Mar	1.24	1.40	1.17	0.41
Apr	1.83	1.40	1.83	1.09
May	0.13	0.23	1.15	0.51
Jun	0.36	0.96	0.04	
Seasonally Adjusted Series				
Jul		1.66	0.87	-0.67
Aug	1.31	1.61	0.79	0.27
Sep	0.12	1.94	0.95	0.74
Oct	0.42	0.81	1.25	0.18
Nov	1.62	1.35	0.66	-0.05
Dec	0.28	0.77	0.40	1.40
Jan	2.17	0.73	0.98	1.05
Feb	0.99	0.16	1.09	0.48
Mar	1.05	1.18	0.94	0.18
Apr	1.26	0.79	1.16	0.39
May	0.40	0.50	1.49	0.89
Jun	0.51	1.09	0.17	

Table 19: CPI Food Month-on-Month Change Original & Seasonally Adjusted Series				
Original Series				
Period	FY10	FY11	FY12	FY13
Jul		1.84	2.90	1.80
Aug	3.04	4.93	1.44	0.92
Sep	0.19	4.64	1.60	0.69
Oct	0.58	-0.04	1.62	-0.07
Nov	2.12	1.64	0.10	-0.33
Dec	-2.20	-1.74	-2.21	-0.03
Jan	2.01	1.73	1.50	1.87
Feb	0.38	-1.77	-0.66	-1.29
Mar	1.91	2.16	1.53	0.52
Apr	2.49	1.28	2.16	1.37
May	0.31	-0.28	0.17	1.14
Jun	0.65	0.66	-0.21	
Seasonally Adjusted Series				
Jul		0.54	1.58	0.38
Aug	2.00	3.78	0.27	-0.24
Sep	-0.08	4.27	1.24	0.38
Oct	0.22	-0.33	1.33	-0.30
Nov	2.58	2.18	0.65	0.11
Dec	-0.01	0.46	0.06	2.40
Jan	1.57	1.18	0.85	1.14
Feb	1.77	-0.24	1.01	0.43
Mar	1.33	1.55	0.91	-0.08
Apr	1.68	0.47	1.26	0.43
May	0.61	0.01	0.58	1.61
Jun	1.07	1.06	0.17	

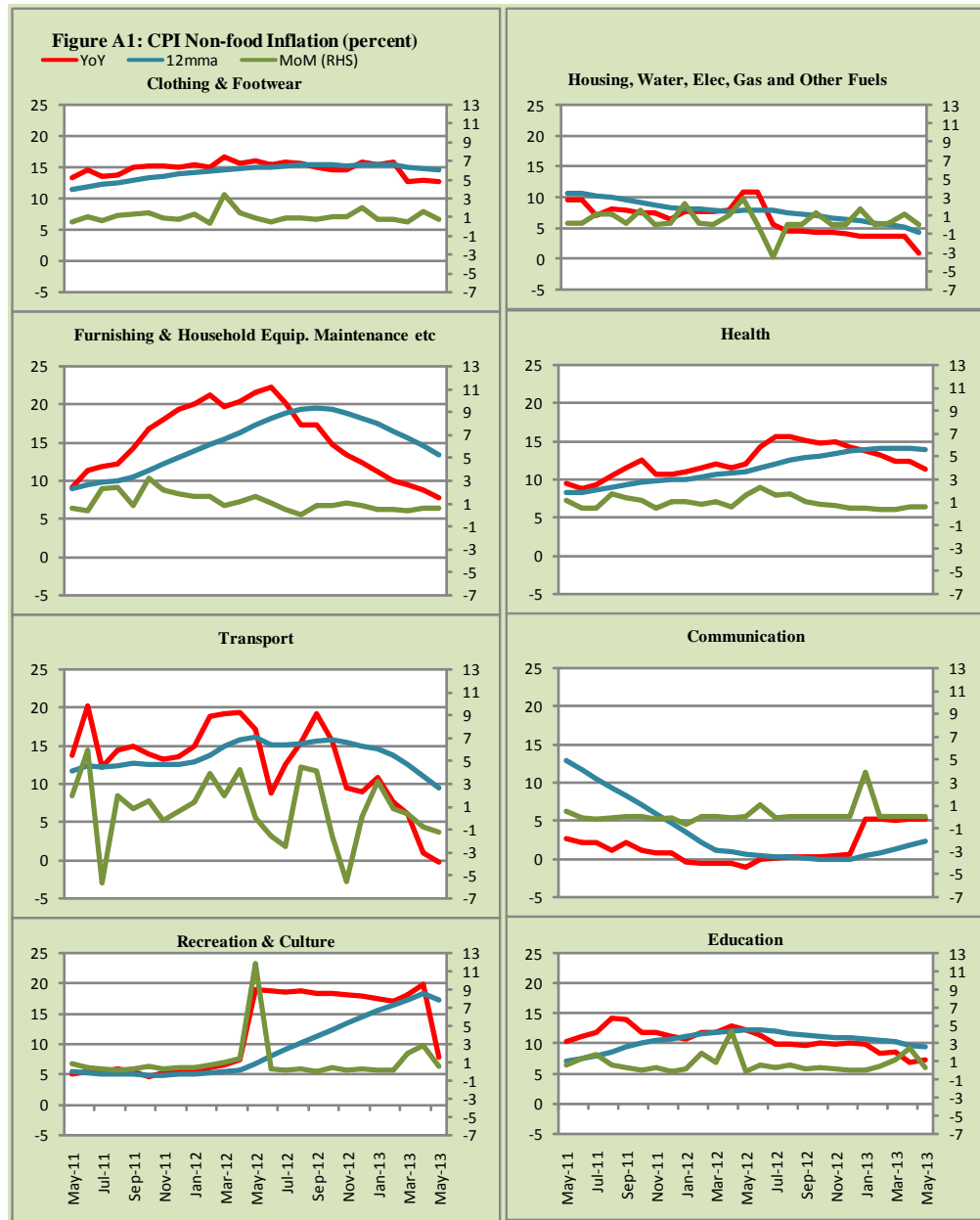


Figure A2: Frequency Distribution of Price Changes of CPI Items, May 2013

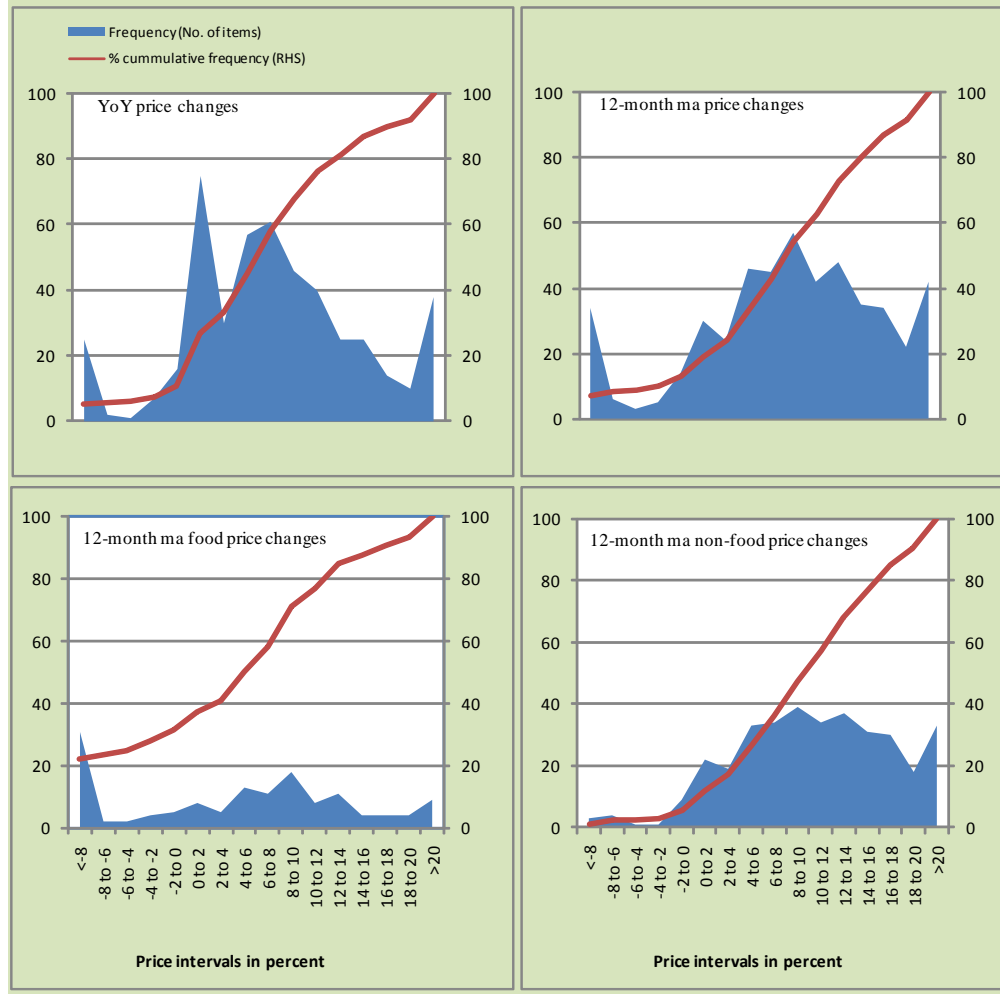
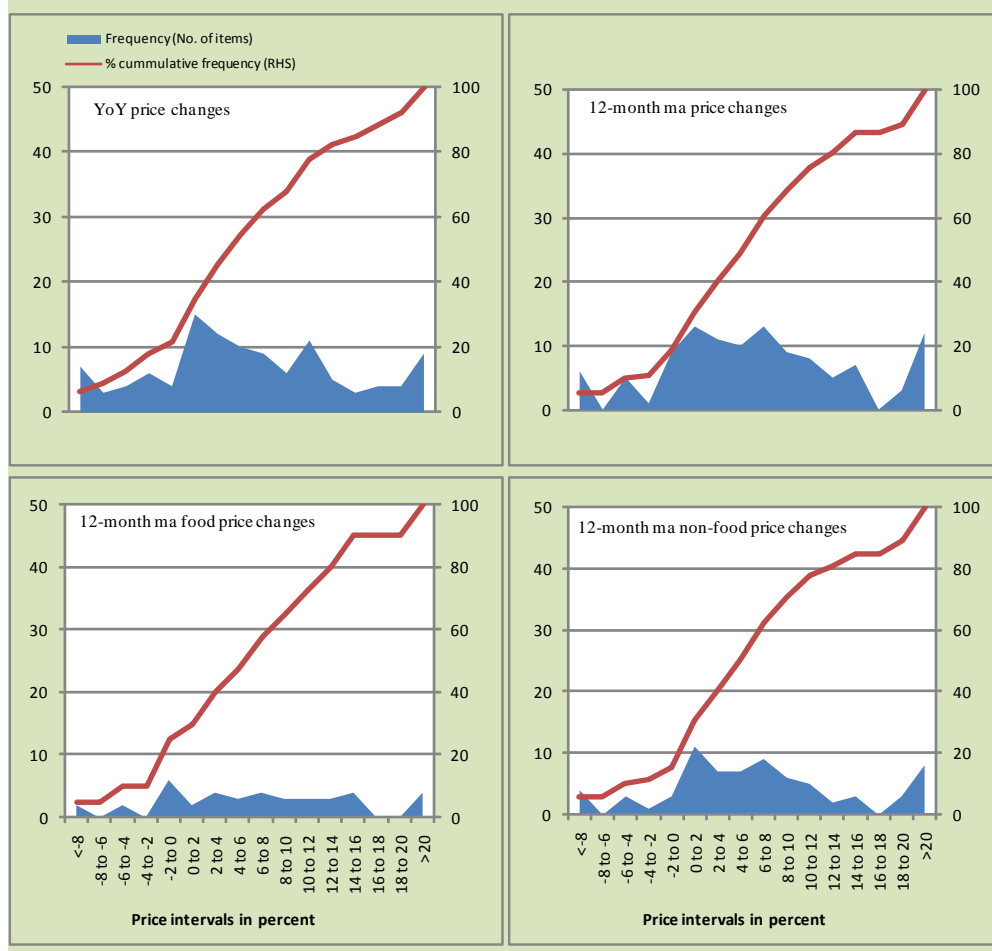
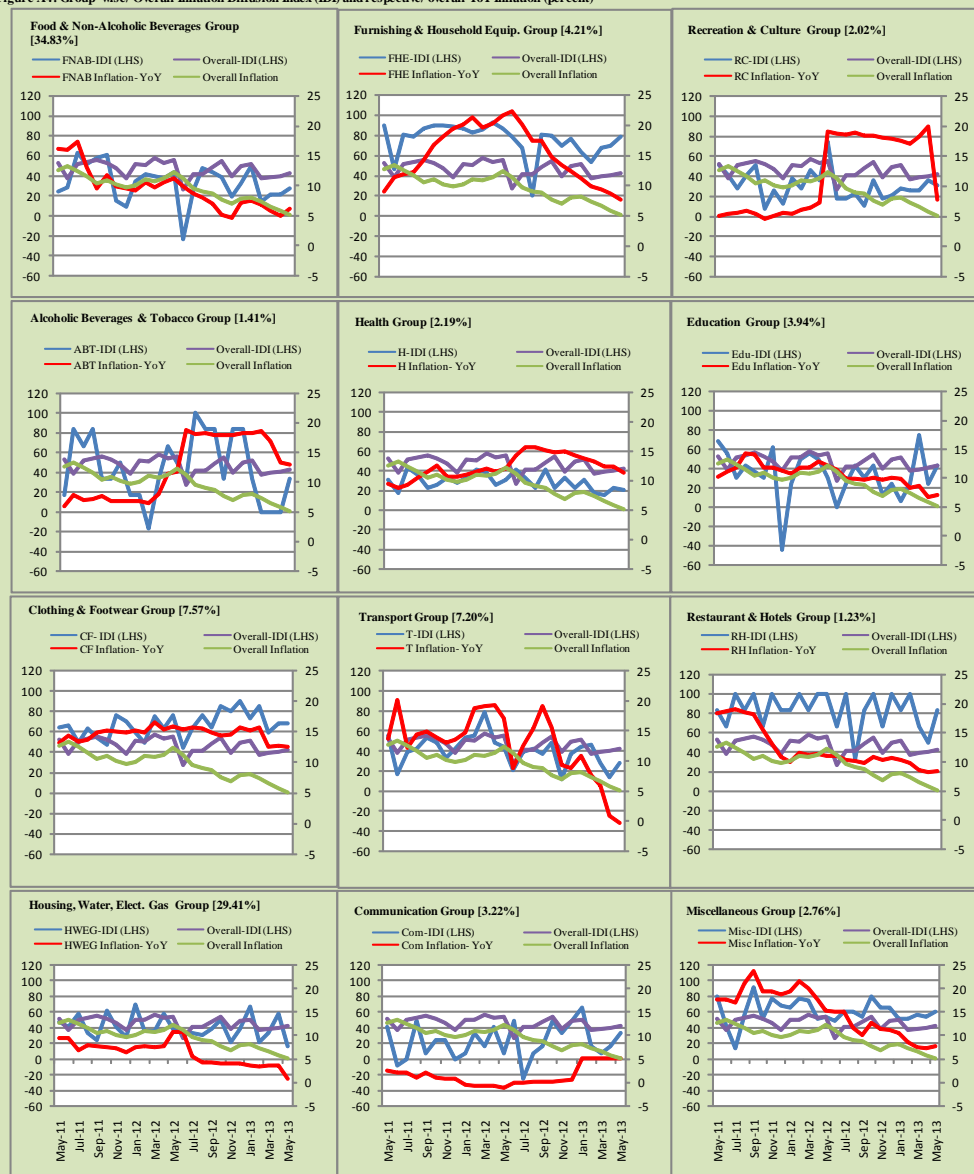


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, May 2013



Inflation Monitor, May 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.