

Inflation Monitor

March 2012



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 10.8 percent on year-on-year basis in March 2012 as compared to 11.0 percent in the previous month and 13.0 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis recorded at 1.2 percent in March 2012 as compared to 0.3 percent in the previous month and 1.4 percent in the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation comes to 1.2 percent in March 2012 as compared to 0.8 percent in previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 10.5 percent in March 2012 as compared to 10.7 percent in the previous month and 12.1 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) was 0.8 percent in March 2012 as compared to 0.5 percent in February 2012 and 1.0 percent in March 2011.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis is recorded at 10.9 percent in March 2012 as compared to 10.7 percent a month earlier and 9.7 percent in March 2011.
6. Core NFNE inflation on month-on-month basis increased to 1.0 percent in March 2012 as compared to 0.7 percent a month earlier. Core NFNE was 0.8 percent in March 2011.
7. WPI inflation on year-on-year basis decreased to 4.5 percent in March 2012 when compared to 7.2 percent a month earlier. During March 2011, WPI inflation was recorded at 24.3%.

8. WPI inflation on month-on-month basis increased to 0.7 percent in March 2012 as compared to 0.6 percent a month earlier. It was 3.3 percent in March 2011.
9. SPI inflation on year-on-year basis is recorded at 8.4 percent in March 2012 as compared to 8.3 percent a month earlier and 15.1 percent in corresponding month of the last year.
10. SPI inflation on month-on-month basis increased to 1.2 percent in March 2012 when compared to 0.2 percent a month earlier and 1.1 percent in March 2011.

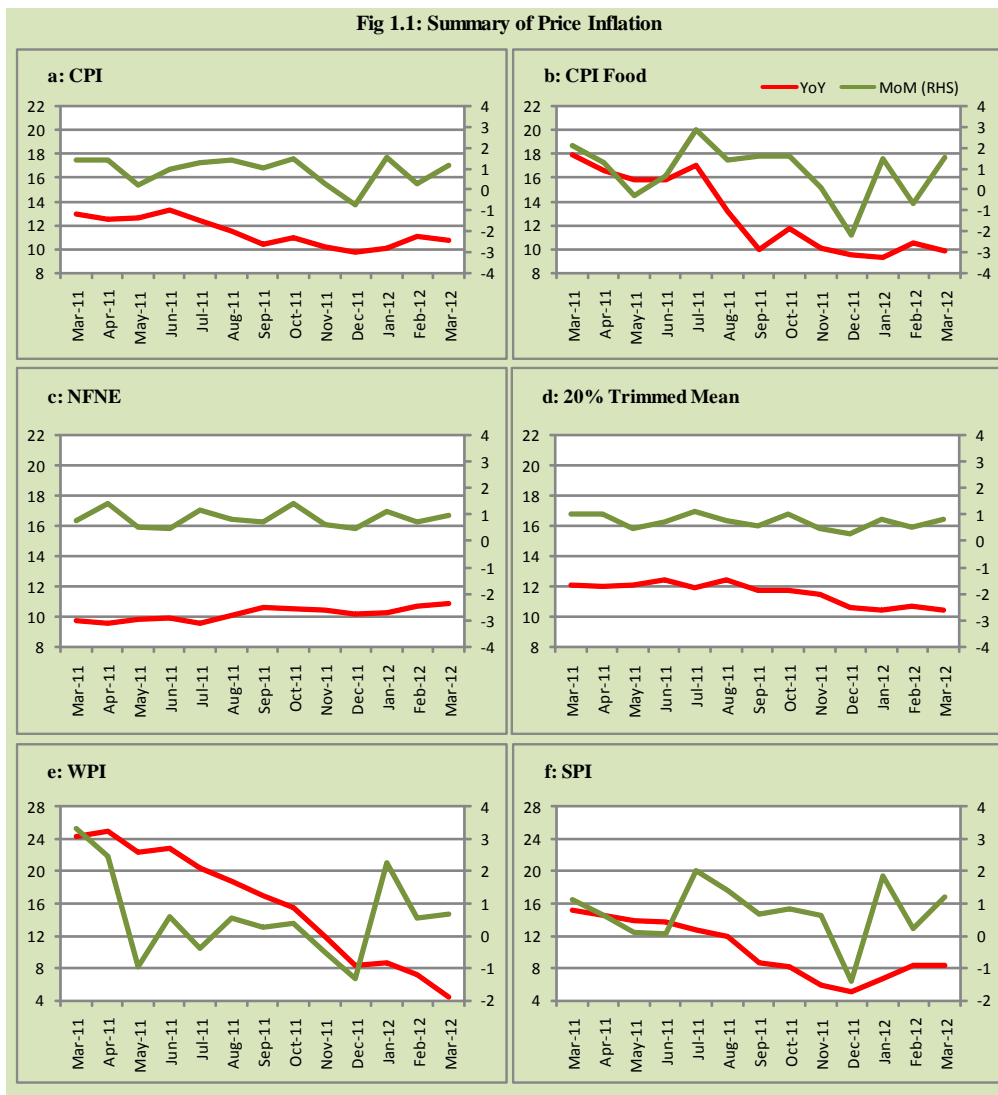
Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)

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
Mar-11	13.0	1.4	17.9	2.2	9.7	0.9	9.7	0.8	12.1	1.0	24.3	3.3	15.1	1.1
Apr-11	12.5	1.4	16.5	1.3	9.8	1.5	9.5	1.4	12.0	1.0	24.9	2.4	14.5	0.6
May-11	12.6	0.2	15.8	-0.3	10.5	0.6	9.8	0.5	12.1	0.5	22.3	-1.0	13.8	0.1
Jun-11	13.3	1.0	15.9	0.7	11.6	1.2	9.9	0.5	12.4	0.7	22.8	0.6	13.7	0.1
Jul-11	12.4	1.3	17.1	2.9	9.3	0.1	9.6	1.2	11.9	1.1	20.3	-0.4	12.7	2.0
Aug-11	11.6	1.4	13.2	1.4	10.4	1.4	10.1	0.8	12.4	0.7	18.7	0.6	11.9	1.4
Sep-11	10.5	1.0	9.9	1.6	10.9	0.6	10.6	0.7	11.7	0.6	17.0	0.2	8.7	0.7
Oct-11	11.0	1.4	11.7	1.6	10.4	1.3	10.5	1.4	11.7	1.0	15.4	0.4	8.2	0.8
Nov-11	10.2	0.3	10.0	0.1	10.3	0.4	10.4	0.6	11.5	0.5	12.0	-0.5	5.9	0.6
Dec-11	9.7	-0.7	9.5	-2.2	9.9	0.4	10.2	0.5	10.6	0.3	8.3	-1.3	5.1	-1.4
Jan-12	10.1	1.5	9.2	1.5	10.7	1.6	10.3	1.1	10.4	0.8	8.7	2.3	6.8	1.8
Feb-12	11.0	0.3	10.5	-0.7	11.5	1.0	10.7	0.7	10.7	0.5	7.2	0.6	8.3	0.2
Mar-12	10.8	1.2	9.8	1.5	11.5	0.9	10.9	1.0	10.5	0.8	4.5	0.7	8.4	1.2

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



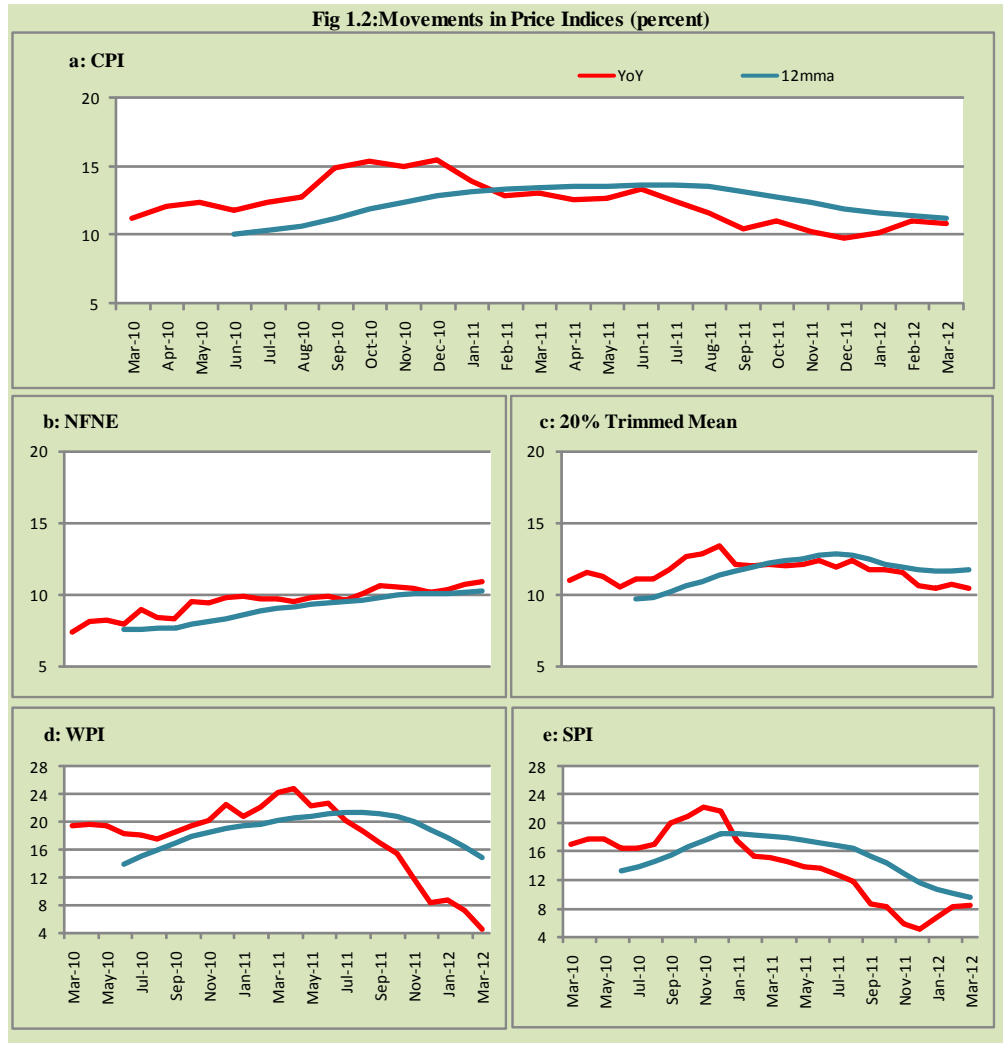


Fig 1.3: Movements in Price Indices -MoM (percent)

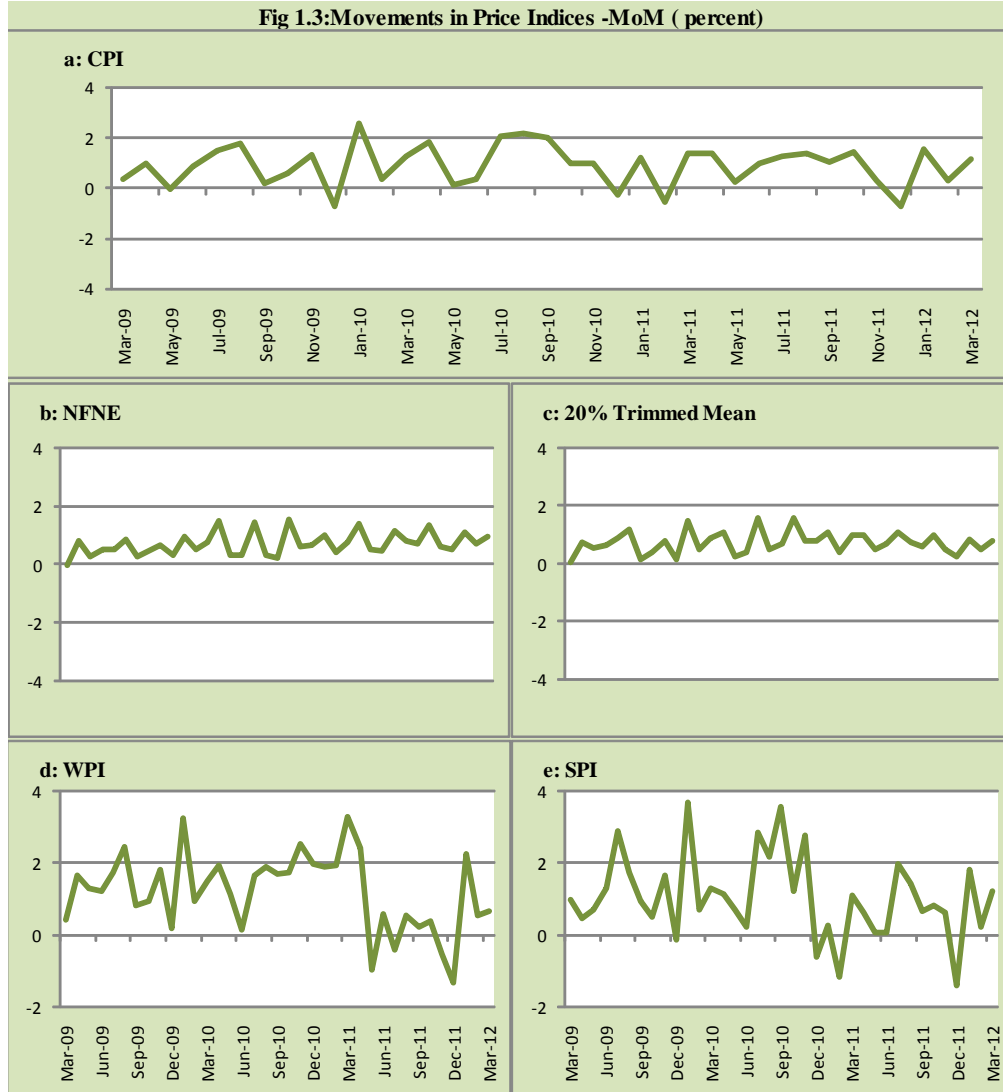
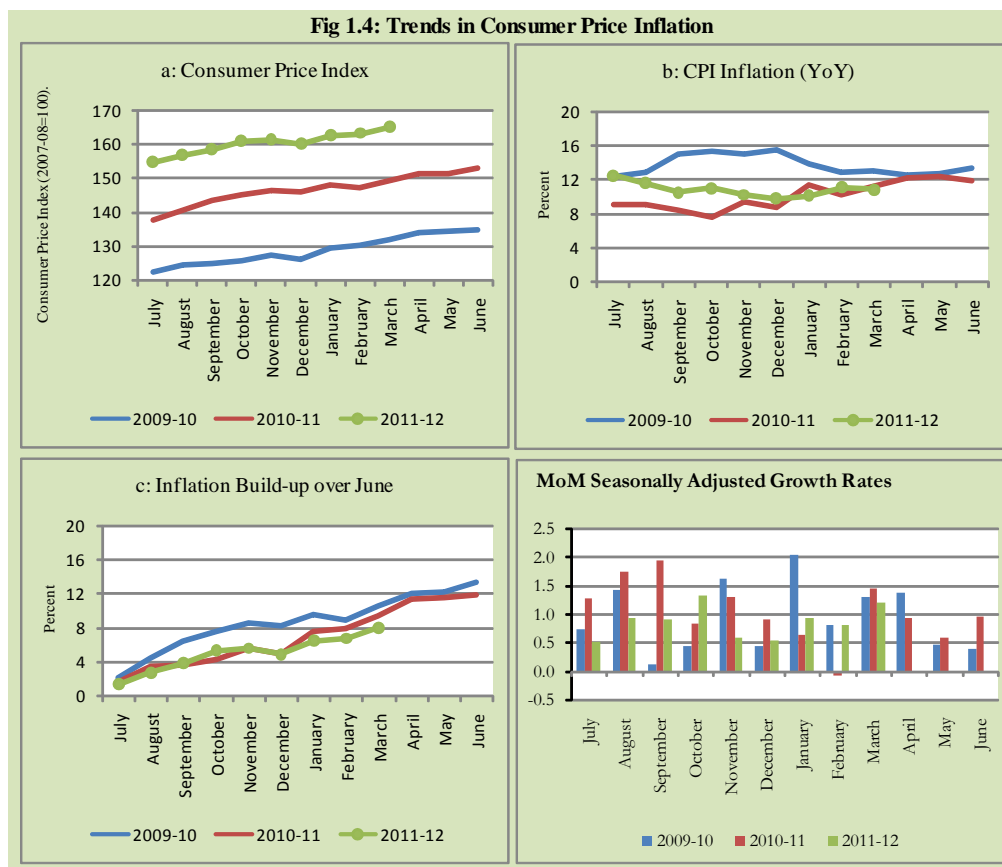


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan was lower than overall inflation observed during March 2012 except Karachi. Among these five cities, the lowest inflation was observed in Islamabad which is 9.1 percent while the highest inflation was observed in Karachi which is 11.5 percent (Table A6 of annexure-A).

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

	Mar-11		Feb-12		Mar-12	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.4	13.0	0.3	11.0	1.2	10.8
Islamabad	1.5	13.5	0.3	9.6	1.0	9.1
Karachi	1.3	11.1	0.7	11.8	1.0	11.5
Lahore	0.8	8.5	0.1	9.5	1.5	10.2
Peshawar	1.0	12.8	1.3	9.1	2.1	10.3
Quetta	1.7	14.7	0.5	10.8	1.0	10.0

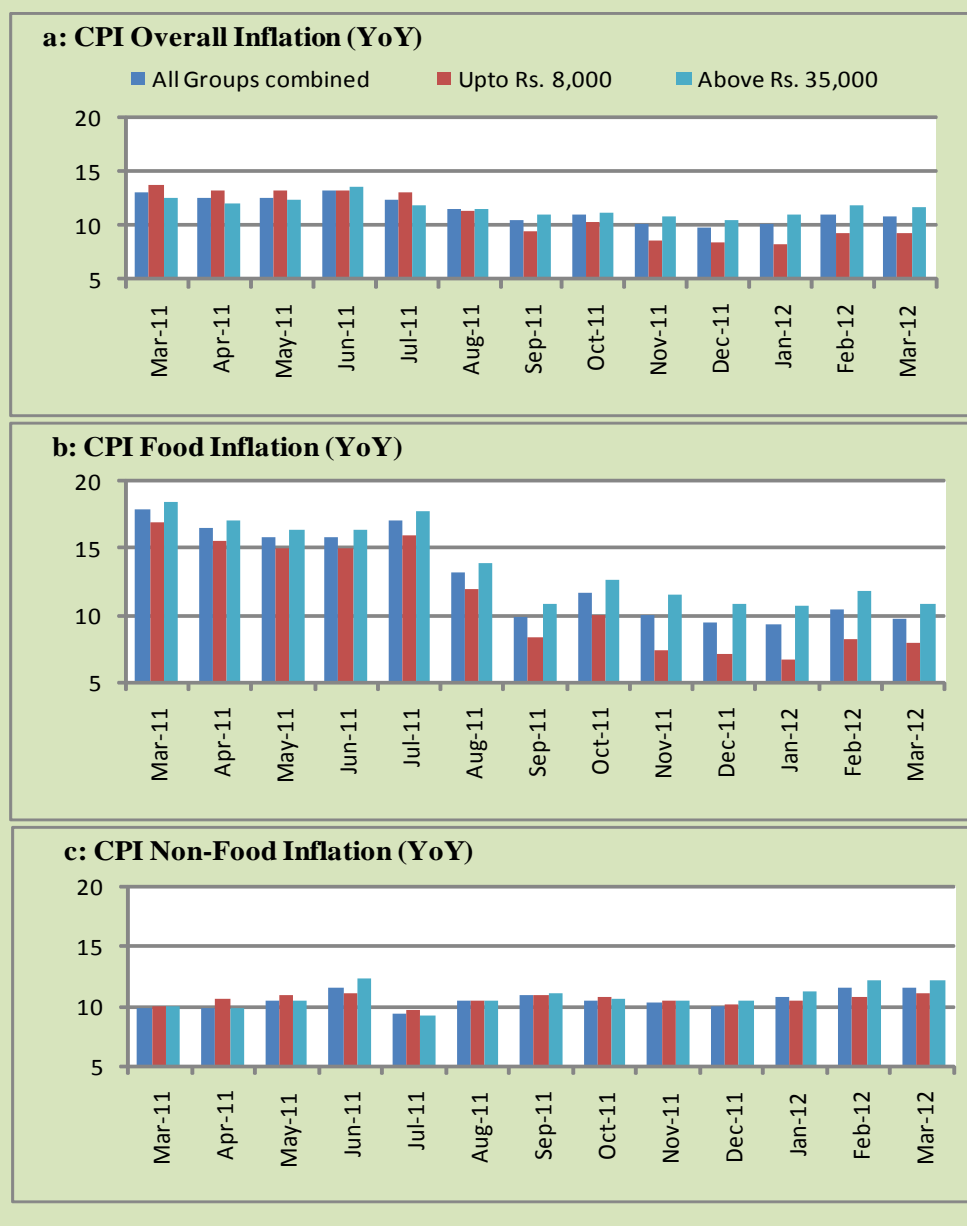
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 has higher inflation than the overall inflation in CPI basket during March 2012 for general, food and non-food groups. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in general and food groups during the month of March 2012 (Table A7 of annexure-A).

Table 3.1 Income Group- wise Inflation (YoY)

Income Groups	General			Food			Non-food		
	Mar-11	Feb-12	Mar-12	Mar-11	Feb-12	Mar-12	Mar-11	Feb-12	Mar-12
All Groups Combined	13.0	11.0	10.8	17.9	10.5	9.8	9.7	11.5	11.5
Up to Rs. 8,000	13.8	9.3	9.3	16.9	8.2	8.0	9.9	10.7	11.0
Rs. 8,001- 12,000	13.8	9.8	9.7	17.3	9.0	8.6	9.9	10.8	10.9
Rs. 12,001- 18,000	12.4	10.0	9.8	17.6	9.7	9.1	7.5	10.4	10.5
Rs. 18,001- 35,000	14.0	10.7	10.5	17.9	10.4	9.7	10.9	11.0	11.2
Above Rs. 35,000	12.7	12.0	11.7	18.4	11.7	10.8	10.0	12.1	12.1

Fig 3.1: Income Group- wise Inflation



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 38.15 percent during March 2012 from 39.57 percent in February 2012 while it was 55.44 percent in March 2011.

The weighted contribution of non-food group showed increase to touch 61.85 percent in March 2012 from 60.43 percent in February 2012.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
Mar-11	55.44	7.17	19.99	3.76	2.21	11.43
Apr-11	53.46	7.93	21.27	4.85	2.98	9.51
May-11	50.91	7.31	21.02	8.14	2.92	9.71
Jun-11	48.53	7.57	19.80	11.33	3.02	9.76
Jul-11	55.81	7.49	15.60	7.29	3.41	10.39
Aug-11	47.56	8.12	18.86	9.01	4.24	12.21
Sep-11	40.43	9.57	20.32	10.15	4.56	14.96
Oct-11	45.19	9.37	18.53	9.18	3.71	14.02
Nov-11	41.90	9.98	19.57	9.28	3.97	15.30
Dec-11	40.91	10.44	18.07	10.09	3.95	16.54
Jan-12	38.66	10.37	20.73	10.51	3.64	16.08
Feb-12	39.57	9.23	19.19	12.30	3.73	15.99
Mar-12	38.15	10.69	18.96	12.82	3.79	15.59

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12
General	61.7	42.7	52.8	38.2	51.3	53.4	56.1	52.2	47.3	37.7	51.5	51.0	57.6
Food & Non-Alcoholic Beverages	66.1	27.9	24.3	28.9	63.2	51.7	57.8	60.9	15.3	9.4	34.2	41.6	40.2
Alcoholic Beverages & Tobacco	33.3	50.0	16.7	83.3	66.7	83.3	33.3	33.3	50.0	16.7	16.7	-16.7	33.3
Clothing & Footwear	74.6	62.7	64.4	66.1	49.2	62.7	54.2	47.5	76.3	69.5	59.3	49.2	74.6
Housing, Water, Elect, Gas & other Fuels	55.6	61.1	47.2	41.7	58.3	33.3	25.0	61.1	41.7	27.8	69.4	36.1	36.1
Furnishing & Household Equip. Maintenance etc	85.5	50.7	89.9	46.4	81.2	78.3	87.0	89.9	89.9	88.4	87.0	82.6	85.5
Health	23.1	38.5	30.8	17.9	43.6	35.9	23.1	25.6	33.3	28.2	33.3	41.0	38.5
Transport	51.2	53.5	55.8	16.3	39.5	41.9	53.5	48.8	32.6	41.9	53.5	55.8	79.1
Communication	25.0	16.7	41.7	-8.3	0.0	50.0	8.3	25.0	25.0	0.0	8.3	33.3	16.7
Recreation & Culture	35.9	20.5	51.3	41.0	28.2	41.0	51.3	7.7	25.6	12.8	38.5	28.2	46.2
Education	43.8	43.8	68.8	56.3	31.3	43.8	37.5	31.3	62.5	-43.8	25.0	50.0	56.3
Restaurant & Hotels	83.3	66.7	83.3	66.7	100.0	83.3	100.0	66.7	100.0	83.3	83.3	100.0	83.3
Miscellaneous	91.4	40.0	80.0	42.9	14.3	57.1	91.4	51.4	77.1	68.6	65.7	77.1	74.3
NFNE	60.1	47.3	63.3	40.8	48.2	53.8	55.6	49.7	59.8	47.3	58.3	54.7	63.9

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

	Item	Unit	Mar-11		Feb-12		Mar-12	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	1.08	0.73	0.72	0.81	-0.12	-0.11
2	Wheat Flour Bag	10 Kg	2.73	0.46	0.50	0.19	0.40	0.36
3	Rice Basmati Sup. Qlty.	Kg	12.76	0.24	5.82	0.50	8.21	2.50
4	Pulse Masoor (Washed)	Kg	-3.29	-1.02	-12.55	-0.46	-13.85	-2.49
5	Pulse Moong (Washed)	Kg	62.31	1.08	-12.21	-2.69	-10.94	2.54
6	Pulse Mash (Washed)	Kg	21.46	-1.50	-10.51	-1.64	-9.25	-0.12
7	Pulse Gram	Kg	29.11	-1.10	-1.77	0.32	32.57	33.47
8	Vegetable Ghee (Loose)	Kg	43.86	1.16	0.53	0.91	4.20	4.85
9	Sugar Refined	Kg	2.28	-0.19	-24.81	-3.72	-15.77	11.80
10	Milk Fresh (Unboiled)	Ltr	21.26	3.30	18.61	0.31	16.15	1.15
11	Tea- Tapal Danedar	200 Gm	10.97	2.48	9.48	0.00	6.83	0.00
12	Beef With Bone Av. Qlty.	Kg	24.18	2.01	15.12	0.53	14.95	1.85
13	Mutton Av. Qlty.	Kg	29.20	2.63	18.78	1.27	16.90	1.00
14	Chicken Farm Broiler (Live)	Kg	2.23	7.20	19.98	3.32	4.65	-6.50
15	Eggs Farm	Doz	26.82	8.09	39.02	-12.23	20.18	-6.56
16	Potatoes	Kg	8.14	4.11	-3.08	-1.91	-4.05	3.07
17	Onion	Kg	-8.66	-18.15	37.74	-8.08	44.93	-13.88
18	Tomatoes	Kg	132.29	-1.18	18.67	-4.67	-18.48	-32.12
19	Ginger	Kg	-1.07	-6.76	-31.60	1.59	-31.90	-7.17
20	Garlic	Kg	37.16	0.04	-48.76	1.03	-47.55	2.40

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Mar-11		Feb-12		Mar-12	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	38.2	5.0	3.2	3.9	1.1	2.8
Food	31.8	-2.6	-10.5	3.5	-5.6	2.7
Metals	56.2	-4.7	-19.2	2.5	-15.3	-0.1
Energy	36.0	9.4	15.1	4.6	9.0	3.6
Agricultural	44.8	6.6	-14.4	1.9	-18.7	1.3
Cotton	167.7	7.7	-52.8	-0.4	-56.7	-1.2

Source: IMF

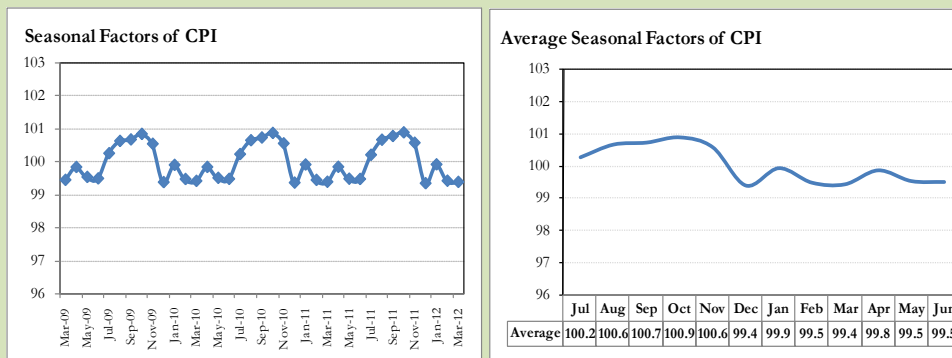
8. Seasonal Adjustment in CPI

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

The changes in consumer prices are normally reported in terms of year-on-year and month-on-month basis. Seasonal adjustment is particularly useful for analyzing month-on-month changes. The monthly data series of Consumer Price Index (CPI) from July 2008 to March 2012 has been taken for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

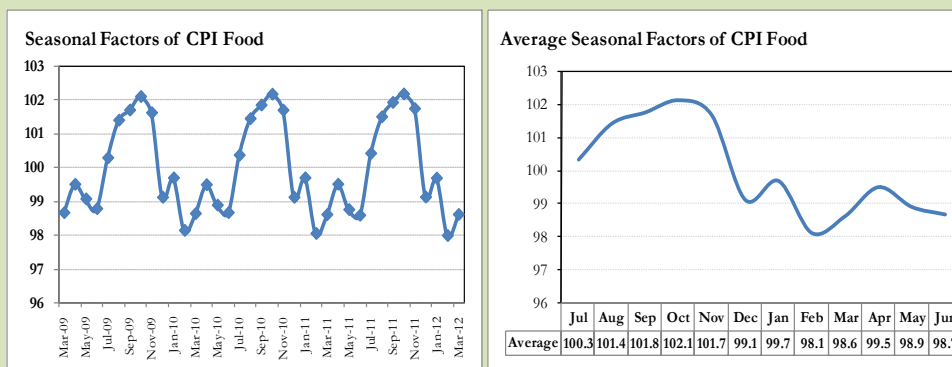
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months of July to November and downward seasonality in the remaining months of the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

Figure 8.3 & 8.4 shows that seasonally adjusted series are relatively smoother than the original series due to the removal of the seasonal variations. The trend follows the long-term movement in original series, and is smoother than the original series because some irregular fluctuations have been removed.

Fig. 8.3 Seasonal Plots of CPI

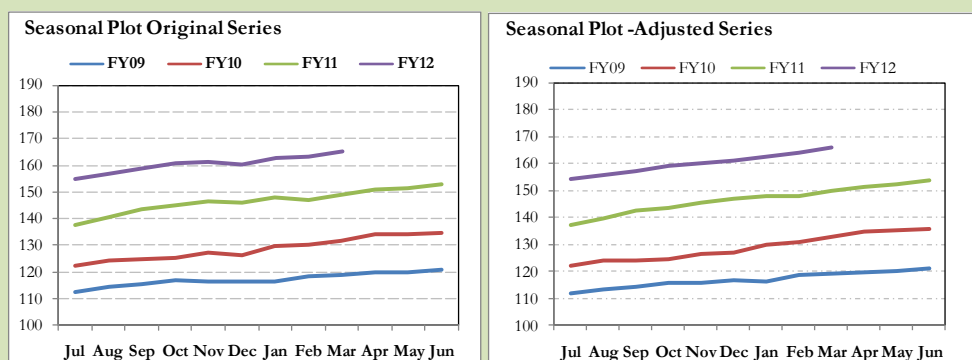
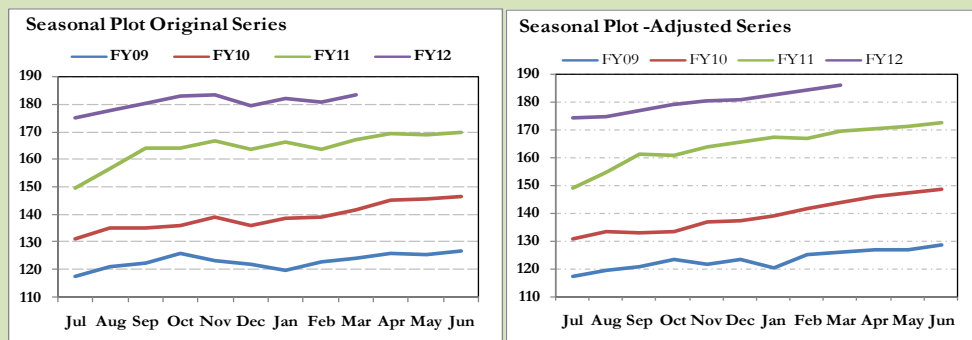


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for March 2012 stood at 166.01 against 164.98 in original series showing an increase of 1.03 on account of adjustment of downward seasonality in March 2012.

Seasonally adjusted CPI food group for March 2012 stood at 186.07 against 183.46 in original series showing an increase of 2.61 on account of adjustment of downward seasonality in March 2012.

Month-on-month change of seasonally adjusted CPI series stood at 1.21% reflecting an increase during March 2012 over February 2012 and increase of 1.17% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 0.89% reflecting a decrease during March 2012 over February 2012 and increase of 1.53% in original series.

It is important to note that inflation rates should be analyzed on the basis of seasonally adjusted rates. This is especially needed for inflation rates on month-on-month basis. The most recent annual rate of inflation is usually indicated by annualizing the seasonally adjusted month-on-month rate. Annualized rate of CPI inflation in March 2012 (corresponding to the seasonally adjusted month-on-month rate) is 15.50 percent.

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

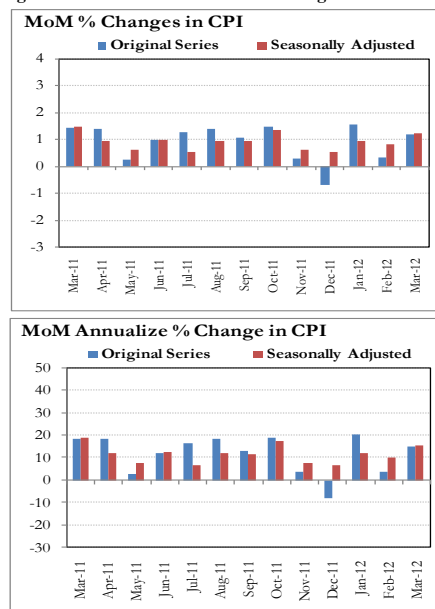
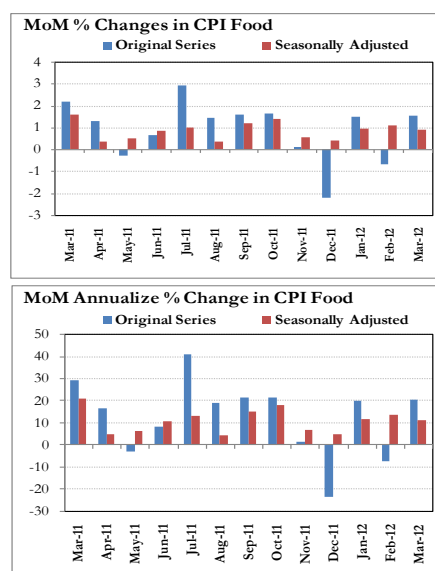


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weights	MoM change			YoY change		
		Mar-11	Feb-12	Mar-12	Mar-11	Feb-12	Mar-12
I. Food Group	37.5	2.2	-0.7	1.5	17.9	10.5	9.8
Food & Non-Alcoholic Beverages	34.8	2.3	-0.8	1.5	18.3	10.6	9.8
Alcoholic Beverages & Tobacco	1.4	0.0	-0.3	1.4	5.9	6.5	8.0
Restaurant & Hotels	1.2	1.7	1.9	1.5	19.6	11.5	11.2
II. Non-Food Group	62.5	0.9	1.0	0.9	9.7	11.5	11.5
Clothing & Footwear	7.6	1.9	0.4	3.3	13.8	15.0	16.6
Housing, Water, Elect, Gas & other Fuels	29.4	0.2	0.1	0.0	9.3	7.7	7.5
Furnishing & Household Equip. Maint	4.2	2.3	1.6	0.8	11.8	21.3	19.6
Health	2.2	0.5	0.8	1.0	8.4	11.4	12.0
Transport	7.2	1.7	3.9	1.9	6.4	18.8	19.1
Communication	3.2	0.1	0.0	0.1	12.7	-0.6	-0.6
Recreation & Culture	2.0	0.5	0.7	1.0	4.3	6.0	6.5
Education	3.9	0.9	1.9	0.9	8.0	11.9	11.9
Miscellaneous	2.8	2.4	2.2	1.0	15.1	21.7	20.1
Headline	100.0	1.4	0.3	1.2	13.0	11.0	10.8

Table A2: Distribution of Price changes (YoY) of CPI basket											
Groups	% changes	No of items in each inflation range									
		Total number of items		Decrease or no change (0% or less)		Subdued increase (>0% but <5%)		Moderate increase (5% but less than 10%)		Double digit increase (10% or more)	
		Mar-12	Mar-11	Mar-12	Mar-11	Mar-12	Mar-11	Mar-12	Mar-11	Mar-12	Mar-11
I. Food Group	9.8	124	123	8	15	15	12	15	22	86	74
Food & Non-Alcoholic Beverages	9.8	112	111	8	15	14	12	12	18	78	66
Alcoholic Beverages & Tobacco	8.0	6	6	0	0	1	0	3	2	2	4
Restaurant & Hotels	11.2	6	6	0	0	0	0	0	2	6	4
II. Non-Food Group	11.5	348	348	58	36	43	39	85	60	162	213
Clothing & Footwear	16.6	59	59	6	4	0	0	13	6	40	49
Housing, Water, Elect, Gas & other Fuels	7.5	36	36	2	1	2	5	9	11	23	19
Furnishing & Household Equip. Maintenance etc	19.6	69	69	6	2	4	3	21	12	38	52
Health	12.0	39	39	14	15	9	5	4	2	12	17
Transport	19.1	43	43	5	0	7	5	12	6	19	32
Communication	-0.6	12	12	3	6	4	1	2	3	3	2
Recreation & Culture	6.5	39	39	14	6	11	16	8	7	6	10
Education	11.9	16	16	5	2	2	1	5	3	4	10
Miscellaneous	20.1	35	35	3	0	4	3	11	10	17	22
Overall	10.8	472	471	66	51	58	51	100	82	248	287

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

Table A3: Top Ten Contributors to CPI Inflation (YoY) in March 2012

Table 10: Top Ten Contributors to CPI Inflation (2011) in March 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-11	Mar-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	21.25	16.15	11.51
2	House Rent	21.81	8.17	6.12	10.44
3	Motor Fuel	3.03	6.30	27.53	7.36
4	Gas	1.58	8.87	29.41	5.89
5	Fresh Fruits	1.86	33.39	22.54	4.47
6	Meat	2.43	25.78	15.59	4.30
7	Education	3.94	8.00	11.91	3.79
8	Transport Services	2.70	5.53	12.18	3.36
9	Household Servant	1.04	12.80	32.48	2.77
10	Personal Equipments	0.84	24.47	25.48	2.60
Total		45.93			56.47
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	52.02	0.36
2	Onion	0.56	-8.67	44.93	2.18
3	Gram Whole	0.16	18.64	33.27	0.56
4	Pulse Gram	0.24	29.12	32.57	0.78
5	Household Servant	1.04	12.80	32.48	2.77
6	Kerosene Oil	0.01	12.12	29.86	0.02
7	Gas	1.58	8.87	29.41	5.89
8	Condiments	0.27	9.43	29.07	0.78
9	Motor Fuel	3.03	6.30	27.53	7.36
10	Fire Wood Whole	0.23	21.03	26.46	0.65
Total		7.21			21.34
C. Ranked by Weights					
1	House Rent	21.81	8.17	6.12	10.44
2	Milk Fresh	6.68	21.25	16.15	11.51
3	Electricity	4.40	12.63	0.54	0.25
4	Wheat Flour	4.16	2.50	0.92	0.40
5	Education	3.94	8.00	11.91	3.79
6	Communication & Apparatus	3.15	12.94	-0.68	-0.16
7	Motor Fuel	3.03	6.30	27.53	7.36
8	Transport Services	2.70	5.53	12.18	3.36
9	Meat	2.43	25.78	15.59	4.30
10	Vegetable Ghee	2.07	39.85	3.67	0.73
Total		54.39			41.96
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 10.8 percent in March, 2012.					

Table A3.1: Top Ten Contributors to CPI Food Inflation (YoY) in March 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-11	Mar-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	21.25	16.15	11.51
2	Fresh Fruits	1.86	33.39	22.54	4.47
3	Meat	2.43	25.78	15.59	4.30
4	Onion	0.56	-8.67	44.93	2.18
5	Spices	0.54	47.21	21.29	1.64
6	Rice	1.58	18.32	10.74	1.48
7	Ready Made Food	1.23	19.63	11.21	1.48
8	Fresh Vegetable	1.62	24.87	8.91	1.48
9	Beverages	1.20	17.61	12.88	1.36
10	Milk Product	0.63	18.14	18.03	1.18
Total		18.33			31.08
B. Ranked by Percentage Change					
1	Onion	0.56	-8.67	44.93	2.18
2	Gram Whole	0.16	18.64	33.27	0.56
3	Pulse Gram	0.24	29.12	32.57	0.78
4	Condiments	0.27	9.43	29.07	0.78
5	Besan	0.15	29.66	24.38	0.38
6	Fresh Fruits	1.86	33.39	22.54	4.47
7	Spices	0.54	47.21	21.29	1.64
8	Egg	0.46	26.83	20.18	0.91
9	Betel Leaves & Nuts	0.02	18.78	18.55	0.04
10	Milk Product	0.63	18.14	18.03	1.18
Total		4.89			12.91
C. Ranked by Weights					
1	Milk Fresh	6.68	21.25	16.15	11.51
2	Wheat Flour	4.16	2.50	0.92	0.40
3	Meat	2.43	25.78	15.59	4.30
4	Vegetable Ghee	2.07	39.85	3.67	0.73
5	Fresh Fruits	1.86	33.39	22.54	4.47
6	Cooking Oil	1.75	32.64	5.48	0.84
7	Fresh Vegetable	1.62	24.87	8.91	1.48
8	Rice	1.58	18.32	10.74	1.48
9	Cigarette	1.39	5.74	7.81	1.02
10	Chicken	1.36	2.23	4.65	0.68
Total		24.91			26.90
Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI Food, which is 9.8 percent in March, 2012.					

Table A3.2: Top Ten Contributors to CPI Non-food Inflation (YoY) in March 2012

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Mar-11	Mar-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.17	6.12	10.44
2	Motor Fuel	3.03	6.30	27.53	7.36
3	Gas	1.58	8.87	29.41	5.89
4	Education	3.94	8.00	11.91	3.79
5	Transport Services	2.70	5.53	12.18	3.36
6	Household Servant	1.04	12.80	32.48	2.77
7	Personal Equipments	0.84	24.47	25.48	2.60
8	Personal Care	1.49	10.79	17.60	2.35
9	Woolen Cloth	0.88	16.25	25.11	1.97
10	Footwear	1.55	3.72	15.88	1.87
Total		38.87			42.39
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	0.00	52.02	0.36
2	Household Servant	1.04	12.80	32.48	2.77
3	Kerosene Oil	0.01	12.12	29.86	0.02
4	Gas	1.58	8.87	29.41	5.89
5	Motor Fuel	3.03	6.30	27.53	7.36
6	Fire Wood Whole	0.23	21.03	26.46	0.65
7	Personal Equipments	0.84	24.47	25.48	2.60
8	Woolen Cloth	0.88	16.25	25.11	1.97
9	Dopatta	0.44	17.55	22.05	0.83
10	Motor Vehicle Accessories	0.24	13.69	21.24	0.53
Total		8.39			22.97
C. Ranked by Weights					
1	House Rent	21.81	8.17	6.12	10.44
2	Electricity	4.40	12.63	0.54	0.25
3	Education	3.94	8.00	11.91	3.79
4	Communication & Apparatus	3.15	12.94	-0.68	-0.16
5	Motor Fuel	3.03	6.30	27.53	7.36
6	Transport Services	2.70	5.53	12.18	3.36
7	Cotton Cloth	1.73	19.99	11.18	1.59
8	Gas	1.58	8.87	29.41	5.89
9	Footwear	1.55	3.72	15.88	1.87
10	Personal Care	1.49	10.79	17.60	2.35
Total		45.39			36.74
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 11.5 percent in March, 2012.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: March 2012

Groups	Decrease or no change	Subdued increase (Up to 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food & Non-Alcoholic Beverages	Garlic, Ginger, Tomatoes, Sugar Refined, Pulse Masoor (Washed), Gur Av.Qlty, Pulse Masoor (Whole)	Chicken Farm Broiler (Live), Vegetable Ghee (Loose), Pistachio Av.Qlty., Vegetable Ghee Tin, Cooking Oil (Dalda), Maida	Chips, Tomato Ketchup Ahmed/Mitchells, Mustard Oil Av.Qlty., Honey Langanese 500 gm., Tea Lipton Yellow Label 200 gm, Rusk (Papay)	Peas, Cloves Loose Av.Qlty, Pepper Black National, Carrot, Chillies Powd.National 200 gm, Onion, Turnip, Apple, Gram Whole Yellow Av.Qlty, Pulse Gram, Radish, Gram Whole Black Av Qlty., Milo 200 gm
Alcoholic Beverages & Tobacco			Cigarettes Gold Leaf 20,S, Cigarettes Morven Gold 20,S	Cigarettes K-20,S, Betel Nuts, Betel Leaves, Cigarettes Capstan 20,S
Clothing & Footwear	Heavy Wt Suiting Law.Pur Av. Qlty, Child Shoe Power Lite Bata, Sports Shoes, Gents Shoe, Art 1109 Servis		Lawn Printed Gul Ahmed/Al Karam, Gloves Av.Qlty, Shoe Polish Charges Avg, Tailoring Coat-Pant Suit, Long Cloth 57" Gul Ahmed/Al Karam	Heavy Wt Suiting Law.Pur Sup. Qlty, Brassier Av.Qlty, Linen Av.Qlty, Georgette Av.Qlty, Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Dopatta Georgette Av.Qlty, Frock W/Wear Girls, Ladies Sandal Bata, Awami-Suit W&W (Gents)Av.Qlty
Housing, Water, Elect, Gas & other Fuels	Elect. Charges Upto 50 Units,	Elect. Charges 01 - 100 Units, Elect. Charges 101 - 300 Units, Elect. Charges Overall/ Combined, Elect. Charges 301 - 1000 Units	Electrician Wage Rate p/day, Timber Shesham Log, Electrician Wage Rate p/point, Cement Blocks (6"X8"X12"), Water Charges Per House	Kerosene Oil, Gas Chrg Up To 100 Cub Mmbtu, Gas Chrg All Over 500 Mmbtu, Gas Chrg Overall/ Combined, Gas Chrg Over 300 - 500 Mmbtu, Gas Chrg Over 200 - 300 Mmbtu, Gas Chrg Over 100 - 200 Mmbtu
Furnishing & Household Equip. Maintenance etc	Washing Machine (Singer), Match Box (Small)	Gizer Large Size 30 Gallon, Bulb Philips 100-Watt, Tube Light Philips 40 Watt	Washing Powder (Wheel/ Bonus), Non Stick Cooking Pan, Pedestal Fan 22" Super Qlty, Air Cooler Super Asia, Refg. Dawlance 10 cft.	Robin Blue (35 gms), Tawa Iron (Medium Size) Avg. Qlty, Household Servant Female (Part Time), Electric Blubs "0" Watt, Hand Stitching Needle, Chair Shesham Wood, Towel(3'X2') Av. Qlty, Dinner Set Plastic 72 Pcs
Health	Betnesol Eye Drops, Amoxil Capsule 250 mg., Calcium Syrup Sandoz, Dettol (Medium), Sancos Syrup (50 ml.)	Ventolin Tab. 2 mg., Daonil Tab. 5 mg., Lederplex Syrup, Renitec Tab. 5 mg., Phenergan Syrup 120 ml	Brufen Tabs 200-mg., Ear Drops (Cardisorpine)	Cac. 1000 Tab, Gripe-Water Woodward's, Saniplast (1 Putty), Galxos-D (450 gm), O.R.S. (Nimcol), Cotton Bandage 2" - 4", Glycerin Small Bottle, Doctor (MBBS) Clinic Fee, Trisil Tab., X-Ray (Chest) Charges
Transport		Car Suzuki 1000 cc, Motorcycle Honda cd-70, Suzuki Fare Min.Within City, Motor Cycle Hero 70 cc, Car Honda Civic 1500 cc	Bus Fare Max (Within City), Car Toyota 1300 cc, Suzuki Fare Maximum Within City, Minibus Fare Min.Within City	Platform Ticket, Car Tax For 800 cc To 1300 cc, Gas Cylinder S. Size (L.P.G), Bus Fare Outside City (A/C), CNG, Petrol Super, High Speed Diesel HSD, Tyre Car w/o Tube, Tyre Puncture Charges, Cycle Overhauling Charges
Communication	Mobile Set Nokia/Sony/Ericsson Av.Qlty, Mobile Cell Charges	T.C.S. Charges. Min.Within Zone	Postal Envelope For Saudi Arabia, Telephone Set Av. Qlty, Fax Charges (Local)	Postal Registration Charges, Internet Charges
Recreation & Culture	English Book Class V1, English Book BA/B.Sc, TV License Fee Domestic, Daily "Nawa-e-Waqt", Daily "Jang", Daily "Dawn"	Ball Pen (Local), DVD/VCD Player Panasonic/LG, T.V 20" Color China/ Korea, English Book Class IX or X, Personnel Computer (Branded), Urdu Book Class V (T.B.Board)	Paper Fool Scape (27"X17"), Video Cassette Blank. TDK/Sony, Maths Book Class IX or X, Radio With C.Player National, Pen Ink Dollor 57 ml Bottle	Weekly "Mag", Monthly "Naunehal Digest", Cinema Non-A/C High Class, Cinema A/C High Class, Pakistan Studies Book BA/B.Sc, Fountain Pen Hero/Wings/China, Exercise Book Lined 80/10, Weekly "Akhbar-e-Jahan", Photostat Paper 70 gm, Pencil Goldfish/ Deer
Education	Pvt Eng. College Fee (1st Year), Govt. College Fee 1st. Year	Govt. College Fee 4th. Year	I.T. Tuition Fees, Pvt Med. College Fee MBBS (1st Year), MBA Tuition Fee	Govt. Med. College Fee MBBS 1st Year, Govt. Eng. College. Fee 1st Year, Coaching Charges For Class XI/ XII Commerce Group, Pvt School Fee Eng. Med (Class-VI)
Restaurant & Hotels			Cooked Dal (Av. Hotel), Bread Tandoori St. Size	Chicken Biryani Full/Double, Cooked Beef (Av. Hotel), Cooked Mutton (Av. Hotel), Tea Prepared (Ordinary)
Miscellaneous		Hair Color Bigen, Disposable Razor Gillette-II, Lipstick S. Miss/Medora	Toothbrush Shield, Talc Powder Viceroy/ Black Cat, Silver Tezabi 24 ct, Blade 7-O-Clock Steel (5)	Toothpaste Med Size Colgate 70 gm, Gold Tezabi 24 ct, Artificial Jewellery Set, Gel Medium Size, Blade Treet Ordinary (10), Face Cream Ponds (Medium)

Table A5: City- wise CPI Inflation by Income Groups, March 2012

	Up to Rs: 8000						Rs 8001- 12000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	1.0	7.1	1.2	5.5	0.8	9.1	1.0	7.7	1.3	6.2	0.7	9.3
2 Islamabad	1.4	8.3	2.0	8.0	0.6	8.8	1.3	8.1	1.7	7.2	0.8	9.2
3 Lahore	1.6	9.7	2.4	12.2	0.4	6.4	1.6	9.9	2.4	12.7	0.6	6.6
4 Gujranwala	0.9	12.3	0.9	13.2	1.0	11.1	0.9	12.3	0.9	13.0	1.0	11.5
5 Sialkot	1.6	6.9	2.7	8.6	0.2	4.7	1.5	7.3	2.6	8.8	0.1	5.5
6 Faisalabad	1.6	7.7	2.1	7.1	0.9	8.6	1.5	8.0	2.1	7.4	0.7	8.6
7 Multan	1.7	9.5	2.5	8.2	0.7	11.2	1.7	10.0	2.6	9.0	0.7	11.1
8 Sargodha	0.5	7.8	-0.2	4.0	1.4	12.6	0.6	8.5	-0.1	4.4	1.3	12.9
9 Bahawalpur	1.0	11.4	1.1	9.2	0.8	14.2	0.9	11.5	1.1	9.5	0.7	13.7
10 Karachi	1.1	10.5	1.1	10.5	1.0	10.4	0.9	10.8	0.8	11.6	1.1	9.9
11 Hyderabad	1.3	7.4	1.5	6.1	1.0	9.2	1.3	8.0	1.5	6.8	1.1	9.5
12 Sukkur	1.4	7.4	1.0	5.2	1.8	10.1	1.5	8.1	1.2	6.2	1.7	10.2
13 Larkana	0.8	14.5	0.5	10.6	1.2	19.8	0.9	15.8	1.0	11.5	0.7	20.6
14 Peshawar	2.7	9.4	3.5	7.4	1.7	11.8	2.6	9.4	3.6	7.8	1.6	11.2
15 Bannu	1.8	10.9	2.4	6.2	1.0	17.0	1.4	10.8	2.0	6.9	0.8	15.3
16 Quetta	1.1	8.8	1.3	6.0	0.8	12.6	1.2	9.1	1.5	6.3	0.9	12.5
17 Khuzdar	-0.5	9.6	-1.9	6.9	1.3	13.1	-0.5	9.7	-1.7	7.1	0.8	12.6
	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	1.0	8.6	1.2	6.8	0.8	10.4	1.0	9.2	1.3	7.5	0.8	10.6
2 Islamabad	1.4	8.5	1.8	7.4	0.9	9.6	1.3	8.6	1.9	8.1	0.8	8.9
3 Lahore	1.6	10.5	2.4	13.3	0.8	7.7	1.5	10.3	2.4	14.0	0.7	7.1
4 Gujranwala	0.9	13.3	0.8	13.7	0.9	13.0	0.9	13.0	1.0	14.0	0.8	12.2
5 Sialkot	1.4	7.8	2.5	8.8	0.3	6.8	1.1	7.6	2.3	8.9	0.1	6.6
6 Faisalabad	1.4	8.5	2.1	7.9	0.7	9.2	1.2	8.7	2.1	8.4	0.5	9.1
7 Multan	1.6	10.7	2.4	9.5	0.8	11.9	1.4	10.6	2.4	10.1	0.7	11.1
8 Sargodha	0.8	9.7	0.2	5.1	1.3	14.1	0.7	10.3	0.2	5.9	1.2	13.8
9 Bahawalpur	0.8	12.3	0.9	9.9	0.7	14.7	0.6	12.1	0.7	10.0	0.5	13.9
10 Karachi	1.0	11.5	0.8	12.1	1.1	10.8	1.0	11.3	0.9	12.3	1.2	10.5
11 Hyderabad	1.4	8.9	1.7	7.4	1.1	10.5	1.3	9.1	1.7	8.0	1.0	10.1
12 Sukkur	1.6	8.7	1.4	6.7	1.9	10.8	2.0	9.5	2.0	7.5	1.9	11.0
13 Larkana	0.9	17.1	1.0	12.1	0.8	22.2	1.0	18.0	1.5	13.3	0.7	22.2
14 Peshawar	2.5	10.0	3.6	7.8	1.6	12.1	2.3	10.0	3.6	8.5	1.3	11.3
15 Bannu	1.3	11.4	1.8	7.2	0.8	15.6	1.1	11.2	1.6	8.0	0.6	13.9
16 Quetta	1.2	9.8	1.4	6.4	0.9	13.4	0.9	10.1	1.2	6.7	0.7	13.2
17 Khuzdar	-0.3	10.4	-1.4	7.8	0.8	13.0	-0.4	10.2	-1.5	8.4	0.6	11.7
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.9	10.5	1.2	8.0	0.7	11.8	0.9	9.9	1.2	7.6	0.7	11.4
2 Islamabad	1.0	9.2	1.9	9.2	0.5	9.3	1.0	9.1	1.9	8.9	0.4	9.2
3 Lahore	1.4	10.2	2.6	16.1	0.7	7.2	1.5	10.2	2.5	14.6	0.7	7.0
4 Gujranwala	0.8	13.5	0.9	14.4	0.7	13.1	0.9	13.0	0.9	13.8	0.8	12.5
5 Sialkot	1.1	8.0	2.2	9.7	0.5	7.1	1.2	7.7	2.3	9.2	0.4	6.7
6 Faisalabad	1.0	11.1	2.1	9.8	0.5	11.8	1.2	9.2	2.1	8.3	0.6	9.9
7 Multan	1.1	11.4	2.4	10.9	0.5	11.7	1.4	10.8	2.4	9.9	0.6	11.4
8 Sargodha	0.8	13.1	0.6	8.1	0.9	15.5	0.7	10.3	0.2	5.8	1.1	13.3
9 Bahawalpur	0.7	12.1	1.2	10.6	0.4	12.9	0.8	11.9	1.0	9.9	0.6	13.3
10 Karachi	1.0	11.6	0.9	13.1	1.1	10.9	1.0	11.5	0.9	12.6	1.1	10.6
11 Hyderabad	1.1	10.0	1.5	8.8	0.9	10.6	1.2	9.1	1.6	7.7	1.0	10.1
12 Sukkur	2.2	10.5	2.6	8.2	1.9	11.6	1.8	9.1	1.7	7.0	1.8	10.6
13 Larkana	1.1	18.7	1.7	14.0	0.8	21.2	0.9	16.7	1.1	12.3	0.8	20.0
14 Peshawar	1.6	10.9	3.2	9.6	0.9	11.6	2.1	10.3	3.4	8.5	1.1	11.5
15 Bannu	0.9	12.5	1.7	8.5	0.6	14.4	1.2	11.2	1.8	7.3	0.8	14.0
16 Quetta	0.9	10.8	1.1	6.9	0.9	12.8	1.0	10.0	1.3	6.6	0.9	12.6
17 Khuzdar	-0.2	12.7	-1.7	9.8	0.5	14.1	-0.4	10.1	-1.6	7.5	0.5	11.9

Table A6: City- wise CPI Inflation (YoY) March, 2012							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Larkana	16.7	12.3	20.0	Rahim Yar Khan	10.3	7.8	12.2
Loralai&Cantt	16.1	16.6	15.7	Sargodha	10.3	5.8	13.3
D.I.Khan	13.1	11.7	14.2	Peshawar	10.3	8.5	11.5
Gujranwala	13.0	13.8	12.5	Mithi	10.2	5.8	13.5
Dera Mrd.Jamali	12.9	14.2	12.0	Lahore	10.2	14.6	7.0
Mardan	12.9	10.3	14.5	Wazirabad	10.2	9.7	10.4
Bahawalnagar	12.2	7.9	15.2	Khuzdar	10.1	7.5	11.9
Sahiwal	12.1	10.7	13.1	Quetta	10.0	6.6	12.6
Mingora	12.1	11.5	12.5	Abbotabad	10.0	5.9	12.8
Bahawalpur	11.9	9.9	13.3	Attock	9.9	9.8	9.9
Mir Pur Khas	11.6	10.9	12.0	Rawalpindi	9.9	7.6	11.4
Karachi	11.5	12.6	10.6	Vehari	9.8	7.1	11.8
Muzaffargarh	11.4	11.9	11.0	Nawabshah	9.6	7.3	11.2
Bannu	11.2	7.3	14.0	Faisalabad	9.2	8.3	9.9
Jhelum	11.1	10.8	11.4	Islamabad	9.1	8.9	9.2
Mianwali	10.9	8.3	12.9	Sukkur	9.1	7.0	10.6
Jhang	10.9	7.3	13.4	Hyderabad	9.1	7.7	10.1
Dadu	10.9	11.2	10.7	D.G. Khan	8.3	8.7	8.1
Multan	10.8	9.9	11.4	Sialkot	7.7	9.2	6.7
				Gawadar	7.6	4.9	9.6
				Turbat	6.7	3.7	8.7
Note: High inflation refers to equal or above average inflation, and low inflation refers to below average							

Table A7: Income Group-wise Inflation (percent)

	MoM			YoY		
	Mar-11	Feb-12	Mar-12	Mar-11	Feb-12	Mar-12
<u>Up to Rs. 8000</u>						
General	1.3	-0.1	1.3	13.8	9.3	9.3
Food	1.7	-0.8	1.5	16.9	8.2	8.0
Non-food	0.8	0.8	1.0	9.9	10.7	11.0
<u>Rs. 8001- 12000</u>						
General	1.4	0.0	1.3	13.8	9.8	9.7
Food	1.9	-0.7	1.5	17.3	9.0	8.6
Non-food	0.9	0.7	1.0	9.9	10.8	10.9
<u>Rs. 12001- 18000</u>						
General	1.5	0.0	1.2	12.4	10.0	9.8
Food	2.0	-0.7	1.5	17.6	9.7	9.1
Non-food	0.9	0.7	1.0	7.5	10.4	10.5
<u>Rs. 18001- 35000</u>						
General	1.4	0.1	1.2	14.0	10.7	10.5
Food	2.1	-0.7	1.5	17.9	10.4	9.7
Non-food	0.7	0.8	0.9	10.9	11.0	11.2
<u>Above Rs. 35000</u>						
General	1.4	0.6	1.1	12.7	12.0	11.7
Food	2.4	-0.6	1.6	18.4	11.7	10.8
Non-food	0.8	1.2	0.9	10.0	12.1	12.1
<u>All income groups</u>						
General	1.4	0.3	1.2	13.0	11.0	10.8
Food	2.2	-0.7	1.5	17.9	10.5	9.8
Non-food	0.9	1.0	0.9	9.7	11.5	11.5

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices	Percentage change	
			Mar-12	YoY	MoM
1	Wheat	10Kg.	275.5	-0.1	0.4
2	Wheat Flour Bag	10Kg.	309.1	-0.2	0.4
3	Rice Basmati Broken	Kg.	60.1	12.5	1.9
4	Rice Irri-6/9	Kg.	46.0	11.9	1.2
5	Bread Plain Med. Size (340-400 Gm.)	Each	31.3	11.3	0.0
6	Beef	Kg.	259.6	16.5	0.9
7	Mutton	Kg.	498.6	15.7	1.4
8	Chicken Live (Farm)	Kg.	156.9	10.0	-3.3
9	Milk Fresh	Litr	59.0	15.4	1.7
10	Curd	Kg.	69.0	16.2	1.6
11	Milk Powdered Nido	500G	251.1	25.5	2.5
12	Egg Hen (Farm)	Doz.	90.4	18.0	-12.6
13	Mustard Oil	Kg.	180.2	6.9	0.7
14	Cooking Oil (Tin)	2.5Ltr	497.6	3.7	0.5
15	Veg. Ghee (Tin)	2.5Kg.	497.6	3.7	0.5
16	Veg. Ghee Loose	Kg.	170.3	2.2	5.4
17	Bananas	Doz.	65.2	24.2	16.1
18	Masoor Pulse Washed	Kg.	101.6	-14.8	3.4
19	Moong Pulse Washed	Kg.	122.5	-13.2	3.1
20	Mash Pulse Washed	Kg.	143.4	-9.9	1.4
21	Gram Pulse Washed	Kg.	97.3	34.4	29.3
22	Potatoes	Kg.	18.9	-0.8	2.8
23	Onions	Kg.	31.9	45.6	-15.3
24	Tomatoes	Kg.	33.3	-3.5	-22.7
25	Sugar	Kg.	54.9	-17.0	9.1
26	Gur	Kg.	68.4	-15.7	-0.2
27	Salt Powdered Loose (Lahori)	Kg.	8.3	10.8	2.2
28	Red Chilies Powder Loose	Kg.	307.5	16.4	-1.4
29	Garlic	Kg.	104.9	-47.5	8.4
30	Tea (Yellow Label 200 Gm.)	200Gm.	140.0	10.8	4.1
31	Cooked Beef Plate	Each	61.9	13.1	1.1
32	Cooked Dal Plate	Each	38.2	7.8	1.5
33	Tea Prepared (Sada)	Cup	14.7	10.1	1.0
34	Cigarettes K-2 (20'S)	20'S	29.4	7.5	-0.1
35	Long Cloth (Coarse Latha)	Mtr.	127.6	-19.4	14.5
36	Shirting	Mtr.	111.4	23.7	1.9
37	Lawn	Mtr.	138.6	-15.2	19.4
38	Georgette (Voil Printed)	Mtr.	91.6	24.9	2.7
39	Sandal Gents Bata	Pair	499.0	0.0	0.0
40	Chappal Spong. Bata (Gents)	Pair	171.0	23.0	23.0
41	Sandal Ladies Bata	Pair	399.0	0.0	0.0
42	Electric Charges	Unit	1.9	0.0	0.0
43	Gas Charges	Mmbtu	142.6	29.4	0.0
44	Kerosene	Litr	111.2	27.9	4.1
45	Firewood	40Kg	468.8	23.2	1.0
46	Energy Savor 14 Watts	Each	144.1	15.1	2.1
47	Washing Soap (200-250 Gm.)	Cake	19.3	17.8	5.7
48	Match Box	Each	1.1	6.0	0.0
49	Petrol	Litr	98.5	26.1	2.6
50	Diesel	Litr	104.4	24.7	0.0
51	L.P.G.(11 Kg Cylinder.)	Each	1606.1	35.4	0.5
52	Tele. Local Call	Call	3.6	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	30.4	13.9	1.2
Maximum				45.6	29.3
Median				10.8	1.2
Minimum				-47.5	-22.7

Table A9: Distribution of Price Changes (YoY) - WPI Items: March 2012

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

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Items and specification	Weights	Index		
		Mar-11	Feb-12	Mar-12
General	100.00	148.91	163.07	164.98
Food & Non-Alcoholic Beverages.	34.83	167.55	181.19	183.98
1 Wheat	0.35	163.00	162.99	162.81
2 Wheat Flour	4.16	165.83	167.16	167.36
3 Wheat Product	0.10	160.70	162.71	163.97
4 Besan	0.15	164.87	165.65	205.06
5 Rice	1.58	140.18	152.35	155.23
6 Cereals	0.16	173.24	191.31	192.75
7 Bakery & Confectionary	1.16	150.12	165.09	165.69
8 Nimco	0.46	164.40	183.59	187.51
9 Meat	2.43	182.27	207.44	210.69
10 Chicken	1.36	172.56	193.14	180.59
11 Fish	0.30	167.38	189.93	196.38
12 Milk Fresh	6.68	171.39	196.87	199.07
13 Milk Product	0.63	166.56	195.08	196.59
14 Milk Powder	0.11	140.72	163.67	164.68
15 Egg	0.46	158.56	203.93	190.55
16 Mustard Oil	0.10	143.40	154.40	156.73
17 Cooking Oil	1.75	141.21	145.95	148.95
18 Vegetable Ghee	2.07	154.05	155.95	159.70
19 Dry Fruits	0.25	177.58	196.90	196.60
20 Fresh Fruits	1.86	170.69	178.60	209.17
21 Pulse Masoor	0.27	170.09	151.21	147.20
22 Pulse Moong	0.23	269.57	234.13	240.08
23 Pulse Mash (Washed)	0.21	229.15	208.20	207.96
24 Pulse Gram	0.24	162.51	161.41	215.44
25 Gram Whole	0.16	168.62	203.24	224.72
26 Beans	0.03	167.02	183.56	193.78
27 Potatoes	0.49	131.92	122.81	126.58
28 Onion	0.56	140.38	236.25	203.45
29 Tomatoes	0.46	130.15	156.30	106.10
30 Fresh Vegetable	1.62	164.88	175.70	179.57
31 Sugar	1.04	238.94	180.01	201.25
32 Gur	0.02	250.76	222.69	217.68
33 Honey	0.04	197.92	215.89	216.13
34 Sweet Meet	0.25	177.26	197.44	199.50
35 Beverages	1.20	141.81	158.81	160.08
36 Jam, Tomato Ketchup & Pickle	0.25	157.70	170.44	171.27
37 Condiments	0.27	162.20	208.37	209.35
38 Spices	0.54	227.91	274.57	276.44
39 Tea	0.84	192.41	204.05	205.86
Alcoholic Beverages, Tobacco	1.41	151.45	161.27	163.53
40 Cigarette	1.39	151.53	161.10	163.36
41 Betel Leaves & Nuts	0.02	146.59	171.73	173.78
Clothing & Footwear	7.57	136.66	154.19	159.35
42 Cotton Cloth	1.73	132.60	146.36	147.42
43 Woolen Cloth	0.88	143.67	175.90	179.75
44 Ready Made Garment	0.97	132.90	153.30	155.86
45 Woolen Readymade Garments	0.40	140.50	162.48	160.51
46 Hosiery	0.51	142.50	166.97	167.21
47 Dopatta	0.44	137.65	163.94	168.00
48 Cleaning & Laundering	0.21	147.67	168.02	169.96

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

Items and specification	Weights	Index		
		Mar-11	Feb-12	Mar-12
49 Tailoring	0.88	159.45	183.26	186.09
50 Footwear	1.55	121.94	123.68	141.30
Housing, Water, Elect, Gas & Other Fuel	29.41	137.29	147.59	147.65
51 House Rent	21.81	125.62	133.31	133.31
52 Construction Input Item	0.56	159.80	188.18	189.81
53 Construction Wage Rate	0.33	141.93	157.11	158.77
54 Water Supply	0.50	121.15	131.65	131.65
55 Electricity	4.40	167.80	168.71	168.71
56 Gas	1.58	204.32	264.42	264.42
57 Kerosene Oil	0.01	198.00	248.56	257.13
58 Fire Wood Whole	0.23	173.19	216.88	219.01
Furnished H.Hold Equip. & Maint. Etc	4.21	139.53	165.48	166.88
59 Furniture	0.33	136.18	156.10	158.53
60 Household Textile	0.65	137.57	160.99	163.28
61 Household Equipment	0.59	139.18	150.55	151.29
62 Utensils	0.32	136.47	155.00	159.27
63 Plastic Products	0.25	148.72	167.35	168.43
64 Washing Soap & Detergent	0.79	153.84	180.92	182.05
65 Sewing Needle & Dry Cell	0.15	123.15	140.52	142.03
66 Household Servant	1.04	131.29	173.92	173.93
67 Marriage Hall Charges	0.08	152.52	172.29	177.26
Health	2.19	125.87	139.60	141.01
68 Drug Medicine	1.27	116.42	125.34	125.72
69 Medical Equipment	0.01	147.41	176.81	178.64
70 Doctor (MBBS) Clinic Fee	0.59	144.34	167.72	171.20
71 Medical Test	0.32	128.67	143.21	144.84
Transport	7.20	149.77	174.98	178.37
72 Motor Vehicle	0.66	135.39	143.40	144.33
73 Motor Vehicle Accessories	0.24	163.32	196.06	198.01
74 Motor Fuel	3.03	141.83	177.24	180.88
75 Mechanical Service	0.46	143.31	168.64	173.42
76 Motor Vehicle Tax	0.11	100.00	126.33	152.02
77 Transport Services	2.70	164.07	181.34	184.05
Communication	3.22	123.12	122.34	122.42
78 Postal Services	0.07	161.82	166.89	167.62
79 Communication & Apparatus	3.15	122.30	121.41	121.47
Recreation & Culture	2.02	135.63	143.03	144.41
80 Recreation & Culture	0.86	113.98	118.69	119.99
81 Text Books	0.57	159.22	164.41	164.74
82 News Papers	0.19	137.66	149.97	149.97
83 Stationery	0.40	147.90	161.93	165.68
Education	3.94	129.66	143.82	145.10
84 Education	3.94	129.66	143.82	145.10
Restaurants And Hotels	1.23	172.31	188.82	191.63
85 Ready Made Food	1.23	172.31	188.82	191.63
Miscellaneous Goods And Services	2.76	157.00	186.70	188.59
86 Personal Care	1.49	143.73	167.01	169.03
87 Cosmetics	0.39	128.59	144.81	145.76
88 Blades	0.03	138.57	164.07	166.54
89 Personal Equipments	0.84	194.14	241.52	243.60

Table A11: Wholesale Price Index Numbers by Major Groups and Selected Commodities			
Items and Specifications	Index		
	Mar-11	Feb-12	Mar-12
General	174.41	180.99	182.20
Agriculture Forestry & Fishery	198.54	179.07	178.44
1 Wheat	169.34	168.45	169.14
2 Maize	164.25	151.80	162.14
3 Rice	128.72	148.66	148.82
4 Sorghum/Jowar	209.05	188.29	211.70
5 Millet/Bajra	134.76	140.69	156.94
6 Vegetables	142.35	195.16	187.90
7 Fresh Fruits	120.98	135.17	154.45
8 Dry Fruits	175.37	185.62	175.59
9 Cotton Seeds	184.92	183.50	176.87
10 Other Oil Seeds	153.21	167.50	163.21
11 Edible Roots/ Potatoes	143.49	122.15	123.27
12 Stimulant And Spice Crops	204.88	182.85	174.14
13 Pulses	184.95	205.66	225.40
14 Sugar Crops	301.89	281.77	272.71
15 Fibre Crops	352.82	180.96	170.95
16 Unmanufactured Tobacco	159.11	167.94	167.22
17 Poultry	172.45	206.27	188.45
18 Milk From Bovine Animals	157.89	189.49	192.38
19 Eggs	155.42	210.88	196.73
20 Raw Animal Material/Wool	115.70	136.29	135.15
21 Hides And Fur Skins, Raw	110.07	136.91	137.83
22 Fuel Wood In Logs	170.51	196.83	200.22
23 Fishes Live Fresh Or Chilled	132.63	144.11	153.31
Ores/Minerals, Gas & Elect.	161.88	187.55	188.10
24 Coal Not Agglomerated	125.49	164.71	172.55
25 Natural Gas Liquefied	158.53	211.32	211.43
26 Salt & Pure Sodium Chloride	129.02	160.27	161.56
27 Electrical Energy	170.70	166.13	166.13
Food, Beverages, Tobacco, Textiles	179.46	173.34	174.81
28 Meat Of Animals	179.33	220.62	222.31
29 Vegetables & Fruit Juices	155.91	176.09	176.97
30 Dried Fruits & Nuts	183.68	202.14	199.39
31 Fruit Juices	140.62	155.83	155.41
32 Vegetable Oil Refined	140.27	150.92	152.59
33 Vegetable Ghee	137.71	139.02	141.42
34 Oil Cakes	157.18	142.66	136.93
35 Processed Liquid Milk	160.56	183.24	185.56
36 Milk And Cream In Solid Form	200.06	166.10	165.25
37 Ice Cream	139.17	153.30	154.89
38 Dairy Products N.E.C	150.38	188.97	194.44
39 Wheat Flour	151.11	153.12	153.85
40 Other Cereal Flour	145.74	145.92	184.58
41 Sugar Refined	246.24	184.35	207.29
42 Chocolate	100.26	100.26	100.26
43 Sugar Confectionary	100.00	100.40	100.40
44 Coffee And Tea	180.31	193.29	194.82
45 Spices	201.79	302.57	302.75
46 Other Food Products	279.10	320.96	320.25
47 Mineral Water	129.07	165.65	165.82
48 Beverages	132.42	135.24	135.24
49 Tobacco Products	178.22	167.07	169.40
50 Cotton Yarn	277.57	193.21	185.82
51 Nylon Yarn	188.18	179.97	195.64
52 Blended Yarn	212.02	184.35	183.03
53 Woven Fabrics	141.07	171.28	171.48
54 Cotton Fabrics	149.76	167.56	172.66
55 Other Fabrics	128.22	157.01	159.00
56 Silk And Rayon Fabrics	130.05	138.97	140.05

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

Items and Specifications		Index		
		Mar-11	Feb-12	Mar-12
57	Towels	146.80	183.73	187.20
58	Blankets	131.86	154.55	160.41
59	Bed Sheets	137.34	167.97	171.73
60	Quilts	133.16	147.05	147.05
61	Woolen Carpets	103.57	103.57	103.57
62	Synthetic Carpets	149.59	144.07	144.07
63	Hosiery Products	134.43	157.24	161.85
64	Ready Made Garments	117.94	126.99	127.38
65	Leather With Out Hairs	105.18	110.01	109.21
66	Other Leather N.E.C	110.66	120.85	120.85
67	Footwear's	101.48	101.48	128.50
Other Transportable Goods		163.18	200.50	204.15
68	Timber	132.55	142.03	142.25
69	Printing Paper	108.60	132.81	133.29
70	Hard Board	114.58	154.17	158.33
71	Coke	136.21	163.45	163.45
72	Motor Sprit	129.33	160.33	164.98
73	Diesel Oil	194.68	248.36	252.97
74	Kerosene Oil	198.42	245.34	257.04
75	Furnace Oil	180.88	213.47	220.76
76	Mobil Oil	156.05	172.39	174.32
77	Chemicals	130.90	146.61	147.80
78	Dying Materials	107.04	104.26	104.26
79	Fertilizers	187.57	269.00	269.47
80	Pesticides	138.68	165.30	165.36
81	Insecticides	129.81	123.86	123.86
82	Paints & Varnishes	157.55	183.02	194.20
83	Medicines	115.47	114.17	118.66
84	Soaps & Detergent	137.29	154.04	154.60
85	Auto Tyres	148.61	173.78	173.93
86	Plastic Products	142.54	181.84	184.69
87	Glass Sheets	149.52	170.66	170.73
88	Other Glass Articles	196.75	212.39	212.43
89	Ceramics And Sanitary	130.18	139.98	143.14
90	Bricks Blocks And Tiles	142.77	171.23	170.80
91	Cement	144.31	161.26	166.23
92	Bed Foams	117.50	128.83	130.50
93	Matches	111.65	120.39	120.39
Metal Product Machinery & Equip		131.15	154.87	155.23
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	115.68	132.90	132.76
96	Pipe Fittings	132.62	141.36	141.83
97	Steel Products	128.90	158.18	158.45
98	Engines And Motors	105.28	109.07	109.07
99	Vacuum Pumps	111.45	115.39	115.39
100	Air Conditioners	144.76	164.27	166.10
101	Cultivators	170.96	184.66	184.66
102	Chuff Cutter	126.82	131.08	131.08
103	Tractors	147.29	172.36	172.36
104	Lathe Machines	140.74	147.68	147.68
105	Concrete Mixer	134.63	138.83	138.83
106	Refrige,Wash& Sew Mach, Iron,Fan	147.72	163.50	163.54
107	Electrical Wires	140.77	163.34	163.78
108	Lighting Equipments	116.19	143.66	143.66
109	Radio And Television	121.92	131.06	131.06
110	Motor Vehicles	144.84	157.68	157.68
111	Motor Cycles	117.12	123.29	123.29
112	Bicycles	139.26	170.59	171.52

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
2010	Jan	129.64	138.54	124.31	136.97	138.94	135.72	141.97
	Feb	130.13	139.06	124.78	138.26	139.65	137.38	143.00
	Mar	131.75	141.71	125.78	140.35	141.71	139.49	144.87
	Apr	134.16	145.24	127.52	143.09	143.76	142.66	146.52
	May	134.34	145.68	127.54	144.73	144.13	145.11	147.54
	Jun	134.83	146.63	127.76	144.97	147.15	143.58	147.90
	Jul	137.62	149.33	130.60	147.38	149.13	146.27	152.10
	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	166.95
	Feb	146.85	163.56	136.83	168.83	158.33	175.49	164.99
	Mar	148.91	167.10	138.01	174.41	162.92	181.70	166.80
	Apr	150.99	169.25	140.05	178.68	165.46	187.07	167.83
	May	151.33	168.76	140.88	176.97	167.15	183.20	167.97
	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	156.88	177.32	144.63	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
*: all groups combined								

Table A13: International Commodity Prices/ Indices

	Dec-11	Jan-12	Feb-12	Mar-12
Energy				
Crude Oil (US\$ per barrel) *	104.3	106.9	112.7	117.8
IMF Energy Index (2005 = 100)	195.1	199.8	208.9	216.4
WB Energy Index (2005 = 100) @	187.6	192.4	201.0	208.5
Food				
Rice (\$/MT)	580.9	541.1	547.5	577.1
Wheat (\$/MT)	269.0	274.9	281.1	292.3
Sugar (US cent/ pound)	23.4	24.1	24.1	23.8
Palm Oil (\$/MT)	969.1	1,020.5	1,047.7	1,105.7
Soybean Oil (\$/MT)	1,103.0	1,131.8	1,168.5	1,197.5
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	95.5	101.1	100.7	99.5
IMF Metal Price Index (2005 = 100)	192.1	202.0	207.1	207.0
Copper (\$/MT)	7,558.9	8,061.9	8,441.6	8,471.0
Aluminum (\$/MT)	2,024.4	2,151.3	2,208.1	2,184.2
Iron Ore (\$ cents/dry MT)	136.5	140.4	140.4	144.7
Tin (\$/MT)	19,386.9	21,547.7	24,293.4	22,985.5
Nickle (\$/MT)	18,246.0	19,908.6	20,393.7	18,660.8
Zinc (\$/MT)	1,911.2	1,989.2	2,058.0	2,036.0
Lead (\$/MT)	2,024.6	2,100.2	2,121.4	2,056.8
Uranium (\$/MT)	52.2	52.3	52.0	51.3
DAP (\$/MT)	575.0	530.0	517.3	502.5
Urea (\$/MT)	353.8	368.4	382.9	410.6

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	FY09	FY10	FY11	FY12
Jul	112.35	122.46	137.62	154.72
Aug	114.32	124.68	140.63	156.88
Sep	115.23	124.89	143.49	158.50
Oct	116.83	125.64	144.90	160.79
Nov	116.46	127.30	146.34	161.25
Dec	116.18	126.37	145.90	160.12
Jan	116.46	129.64	147.67	162.58
Feb	118.06	130.13	146.85	163.07
Mar	118.49	131.75	148.91	164.98
Apr	119.68	134.16	150.99	
May	119.60	134.34	151.33	
Jun	120.64	134.83	152.78	
Seasonally Adjusted Series				
Jul	112.04	122.14	137.30	154.39
Aug	113.65	123.89	139.71	155.83
Sep	114.54	124.04	142.44	157.26
Oct	115.87	124.58	143.63	159.36
Nov	115.84	126.61	145.52	160.32
Dec	116.89	127.17	146.84	161.18
Jan	116.58	129.77	147.80	162.71
Feb	118.66	130.82	147.67	164.03
Mar	119.15	132.53	149.83	166.01
Apr	119.88	134.38	151.23	
May	120.16	135.01	152.12	
Jun	121.26	135.54	153.60	

Table 15. CPI Food Data Series Original and Seasonally Adjusted

Original Series				
Period	FY09	FY10	FY11	FY12
Jul	117.57	130.97	149.33	174.80
Aug	120.91	134.95	156.70	177.32
Sep	122.41	135.20	163.96	180.16
Oct	125.92	135.98	163.91	183.07
Nov	123.45	138.87	166.59	183.26
Dec	122.15	135.81	163.69	179.21
Jan	119.80	138.54	166.52	181.90
Feb	123.01	139.06	163.56	180.69
Mar	124.08	141.71	167.10	183.46
Apr	125.91	145.24	169.25	
May	125.42	145.69	168.77	
Jun	126.77	146.63	169.88	
Seasonally Adjusted Series				
Jul	117.30	130.60	148.78	174.07
Aug	119.35	133.08	154.45	174.68
Sep	120.59	132.92	160.97	176.73
Oct	123.43	133.16	160.41	179.14
Nov	121.54	136.64	163.79	180.10
Dec	123.25	137.03	165.16	180.81
Jan	120.21	138.97	167.04	182.48
Feb	125.15	141.72	166.84	184.43
Mar	125.78	143.68	169.48	186.07
Apr	126.55	145.99	170.10	
May	126.61	147.34	170.92	
Jun	128.35	148.63	172.34	

Table 16: CPI Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.28	100.26	100.23	100.21	100.2
Aug	100.59	100.64	100.66	100.67	100.6
Sep	100.60	100.68	100.74	100.79	100.7
Oct	100.83	100.85	100.88	100.90	100.9
Nov	100.54	100.55	100.56	100.58	100.6
Dec	99.40	99.37	99.36	99.34	99.4
Jan	99.89	99.90	99.91	99.92	99.9
Feb	99.49	99.47	99.44	99.42	99.5
Mar	99.44	99.41	99.39	99.38	99.4
Apr	99.84	99.84	99.84		99.8
May	99.53	99.51	99.48		99.5
Jun	99.49	99.47	99.47		99.5

Table 17: CPI Food Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.23	100.29	100.37	100.42	100.3
Aug	101.30	101.41	101.46	101.51	101.4
Sep	101.51	101.71	101.86	101.94	101.8
Oct	102.01	102.12	102.19	102.19	102.1
Nov	101.57	101.63	101.71	101.75	101.7
Dec	99.10	99.11	99.11	99.12	99.1
Jan	99.66	99.69	99.69	99.68	99.7
Feb	98.29	98.12	98.03	97.97	98.1
Mar	98.65	98.63	98.60	98.60	98.6
Apr	99.50	99.49	99.50		99.5
May	99.06	98.88	98.74		98.9
Jun	98.77	98.65	98.57		98.7

Table 18: CPI Month-on-Month Change Original & Seasonally Adjusted				
Original Series				
Period	FY09	FY10	FY11	FY12
Jul		1.51	2.07	1.27
Aug	1.75	1.81	2.19	1.40
Sep	0.80	0.17	2.03	1.03
Oct	1.39	0.60	0.98	1.44
Nov	-0.32	1.32	0.99	0.29
Dec	-0.24	-0.73	-0.30	-0.70
Jan	0.24	2.59	1.21	1.54
Feb	1.37	0.38	-0.56	0.30
Mar	0.36	1.24	1.40	1.17
Apr	1.00	1.83	1.40	
May	-0.07	0.13	0.23	
Jun	0.87	0.36	0.96	
Seasonally Adjusted Series				
Jul		0.73	1.30	0.52
Aug	1.43	1.43	1.76	0.93
Sep	0.79	0.12	1.95	0.92
Oct	1.16	0.43	0.84	1.33
Nov	-0.03	1.63	1.32	0.60
Dec	0.90	0.44	0.91	0.54
Jan	-0.26	2.05	0.65	0.95
Feb	1.78	0.81	-0.08	0.81
Mar	0.42	1.30	1.46	1.21
Apr	0.61	1.39	0.93	
May	0.24	0.47	0.59	
Jun	0.91	0.40	0.97	

Table 19: CPI Food Month-on-Month Change Original & Seasonally Adjusted				
Original Series				
Period	FY09	FY10	FY11	FY12
Jul		3.32	1.84	2.90
Aug	2.84	3.04	4.93	1.44
Sep	1.25	0.19	4.64	1.60
Oct	2.86	0.58	-0.04	1.61
Nov	-1.96	2.12	1.64	0.11
Dec	-1.06	-2.20	-1.74	-2.21
Jan	-1.92	2.01	1.73	1.50
Feb	2.68	0.38	-1.77	-0.67
Mar	0.87	1.91	2.16	1.53
Apr	1.47	2.49	1.28	
May	-0.39	0.31	-0.28	
Jun	1.07	0.65	0.66	
Seasonally Adjusted Series				
Jul		1.75	0.10	1.00
Aug	1.75	1.90	3.81	0.35
Sep	1.03	-0.11	4.22	1.17
Oct	2.36	0.18	-0.35	1.36
Nov	-1.54	2.61	2.11	0.54
Dec	1.41	0.29	0.84	0.39
Jan	-2.47	1.42	1.13	0.92
Feb	4.11	1.98	-0.11	1.07
Mar	0.50	1.39	1.58	0.89
Apr	0.61	1.60	0.37	
May	0.05	0.93	0.48	
Jun	1.37	0.87	0.83	

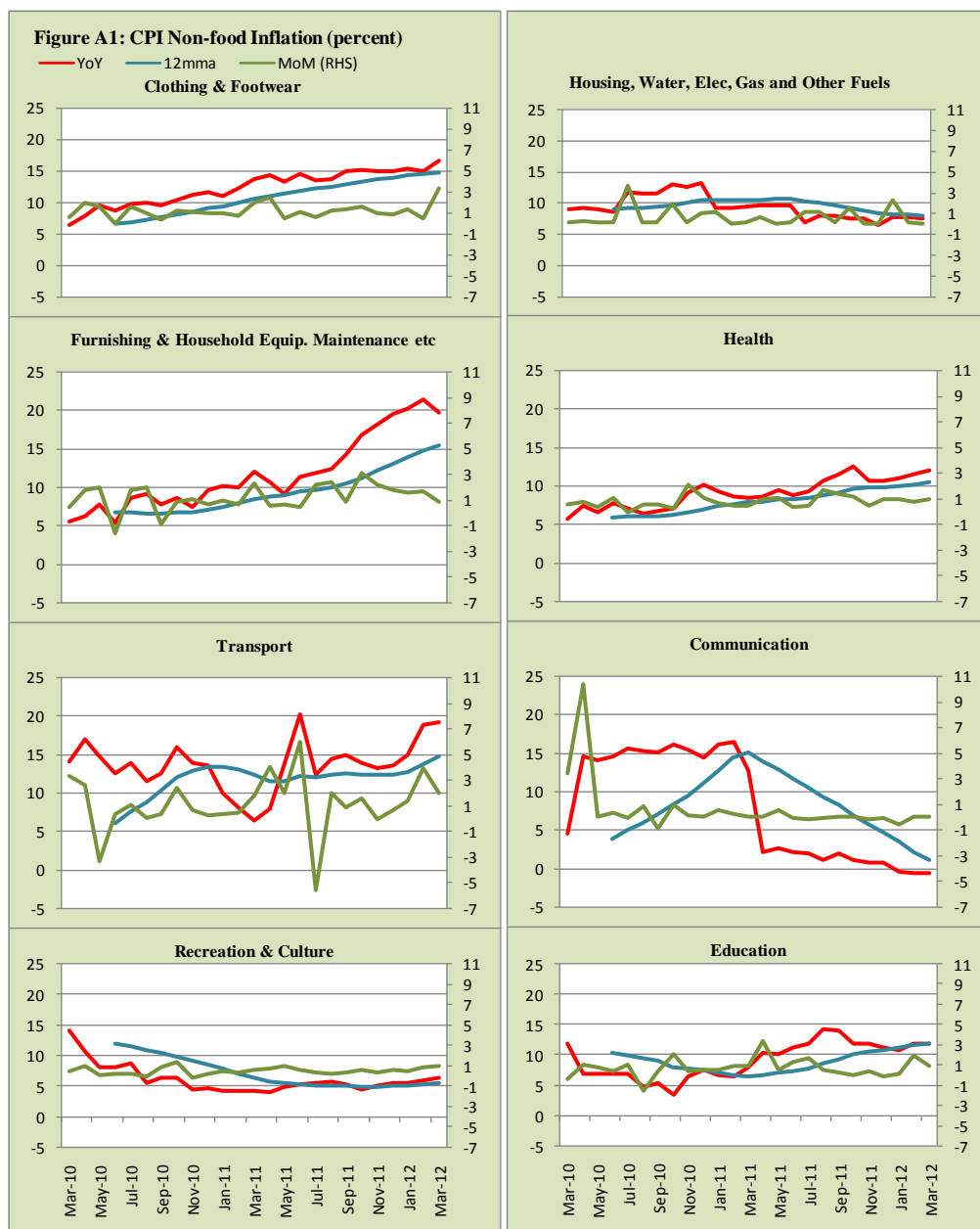


Figure A2: Frequency Distribution of Price Changes of CPI Items, March 2012

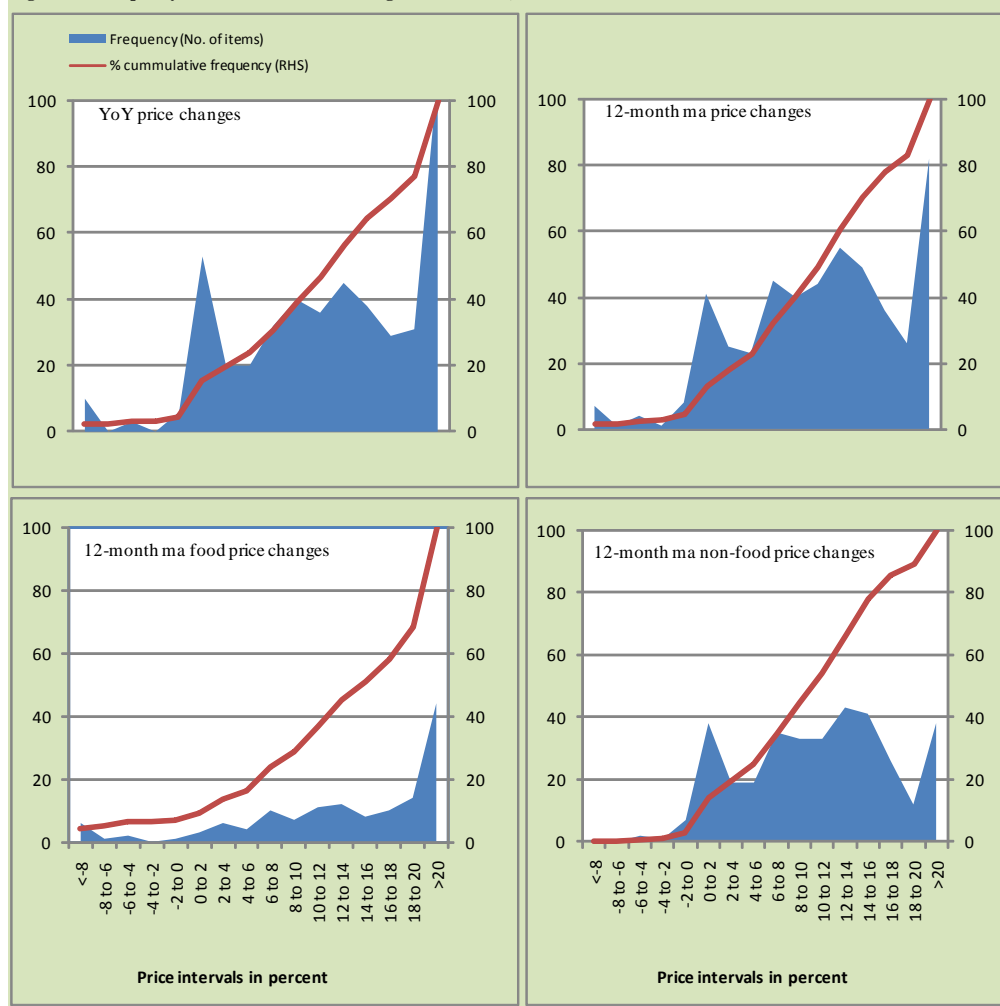
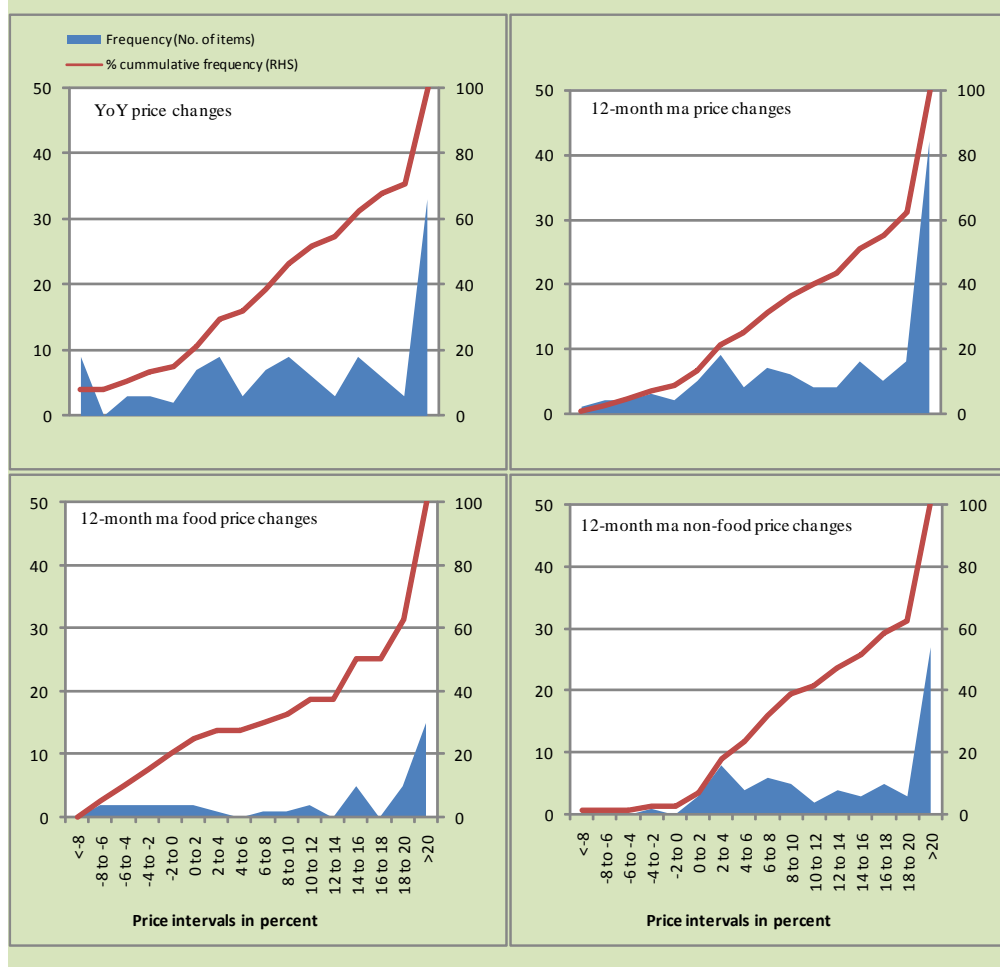
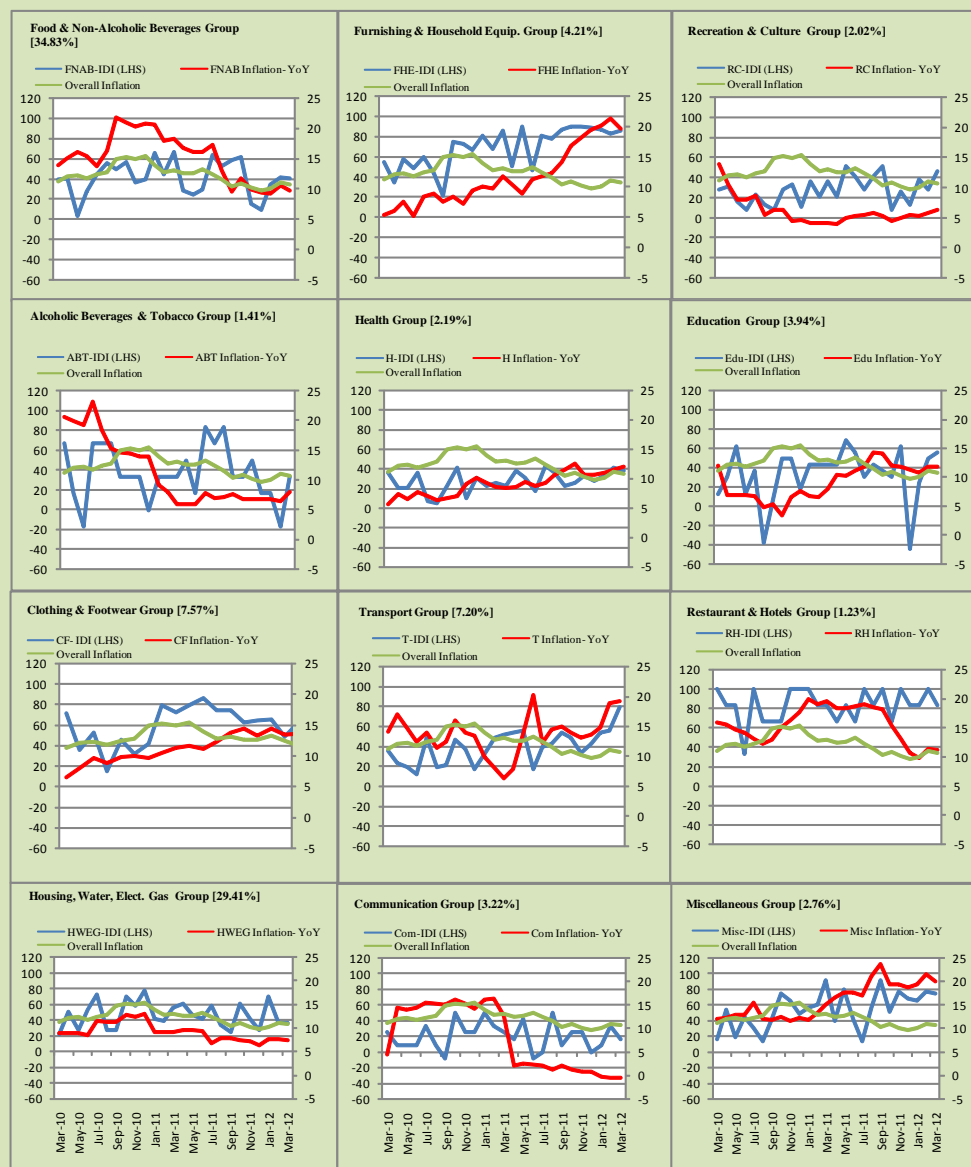


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, March 2012



Inflation Monitor, March 2012

Figure A4: Group- wise 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.