

Inflation Monitor

April 2012



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 11.3 percent on year-on-year basis in April 2012 as compared to 10.8 percent in the previous month and 12.5 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 1.8 percent in April 2012 as compared to 1.2 percent in the previous month and 1.4 percent in the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation remained at 1.2 percent in April 2012 at the level of previous month.
3. Core inflation (trimmed) on year-on-year basis increased to 11.0 percent in April 2012 as compared to 10.5 percent in the previous month while it was 12.0 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) increased to 1.3 percent in April 2012 as compared to 0.8 percent in March 2012 and 1.0 percent in April 2011.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis remained at the level of 10.9 percent in April 2012 as observed in earlier month while it was 9.5 percent in April 2011.
6. Core NFNE inflation on month-on-month basis increased to 1.4 percent in April 2012 as compared to 1.0 percent a month earlier. The rate of change in Core NFNE in April 2012 was same as in April 2011.
7. WPI inflation on year-on-year basis decreased to 3.8 percent in April 2012 when compared to 4.5 percent a month earlier. During April 2011, WPI inflation was recorded at 24.9%.

8. WPI inflation on month-on-month basis increased to 1.8 percent in April 2012 as compared to 0.7 percent a month earlier. It was 2.4 percent in April 2011.
9. SPI inflation on year-on-year basis is recorded at 9.7 percent in April 2012 as compared to 8.4 percent a month earlier and 14.5 percent in corresponding month of the last year.
10. SPI inflation on month-on-month basis increased to 1.8 percent in April 2012 when compared to 1.2 percent a month earlier and 0.6 percent in April 2011.

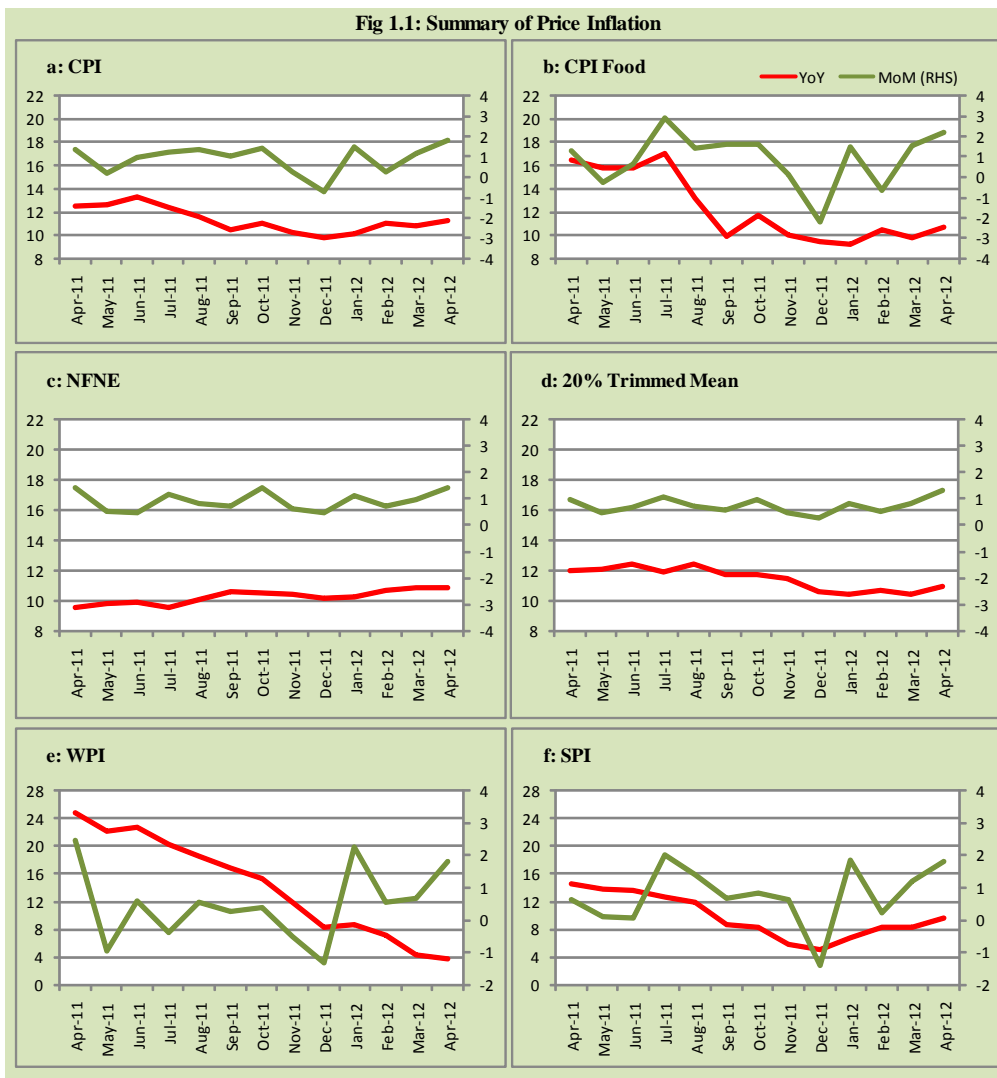
Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)

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
Apr-11	12.5	1.4	16.5	1.3	9.8	1.5	9.5	1.4	12.0	1.0	24.9	2.5	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
Apr-12	11.3	1.8	10.7	2.2	11.6	1.6	10.9	1.4	11.0	1.3	3.8	1.8	9.7	1.8

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



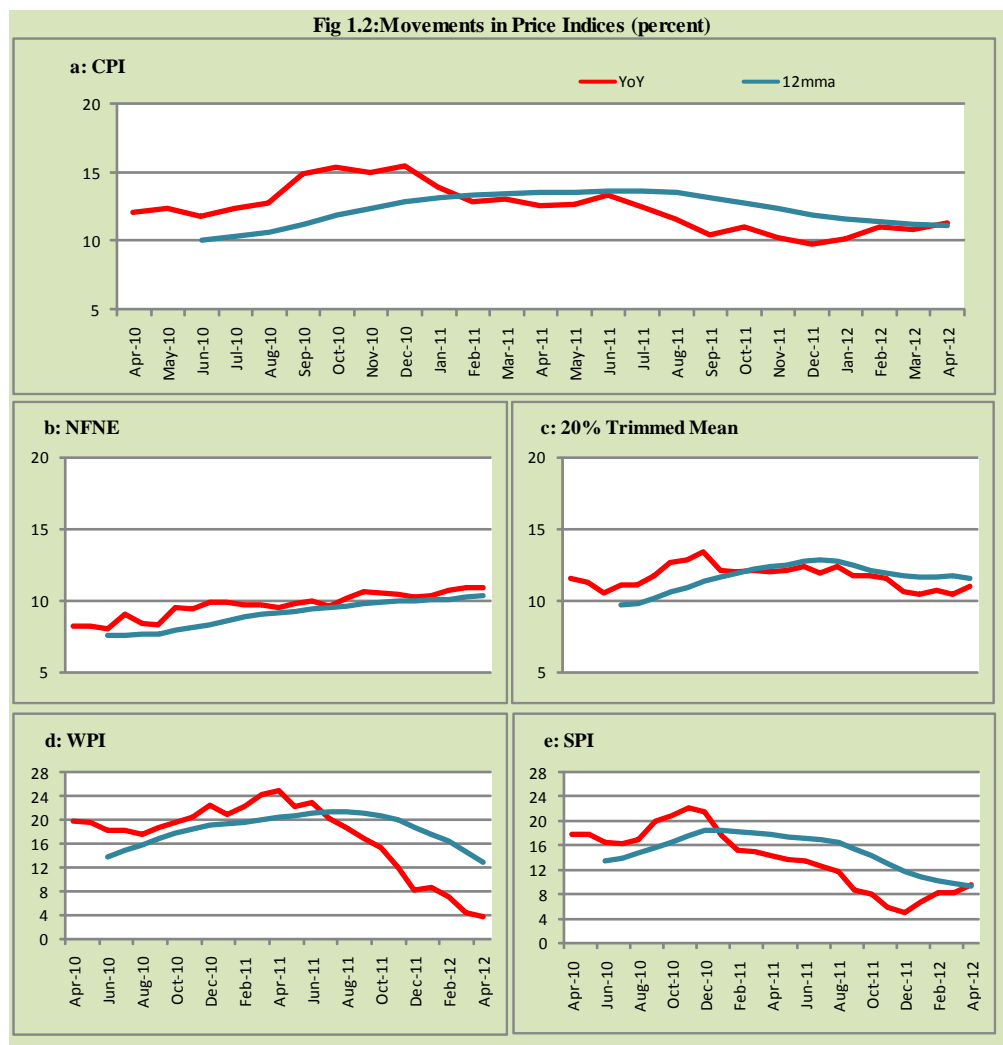


Fig 1.3: Movements in Price Indices -MoM (percent)

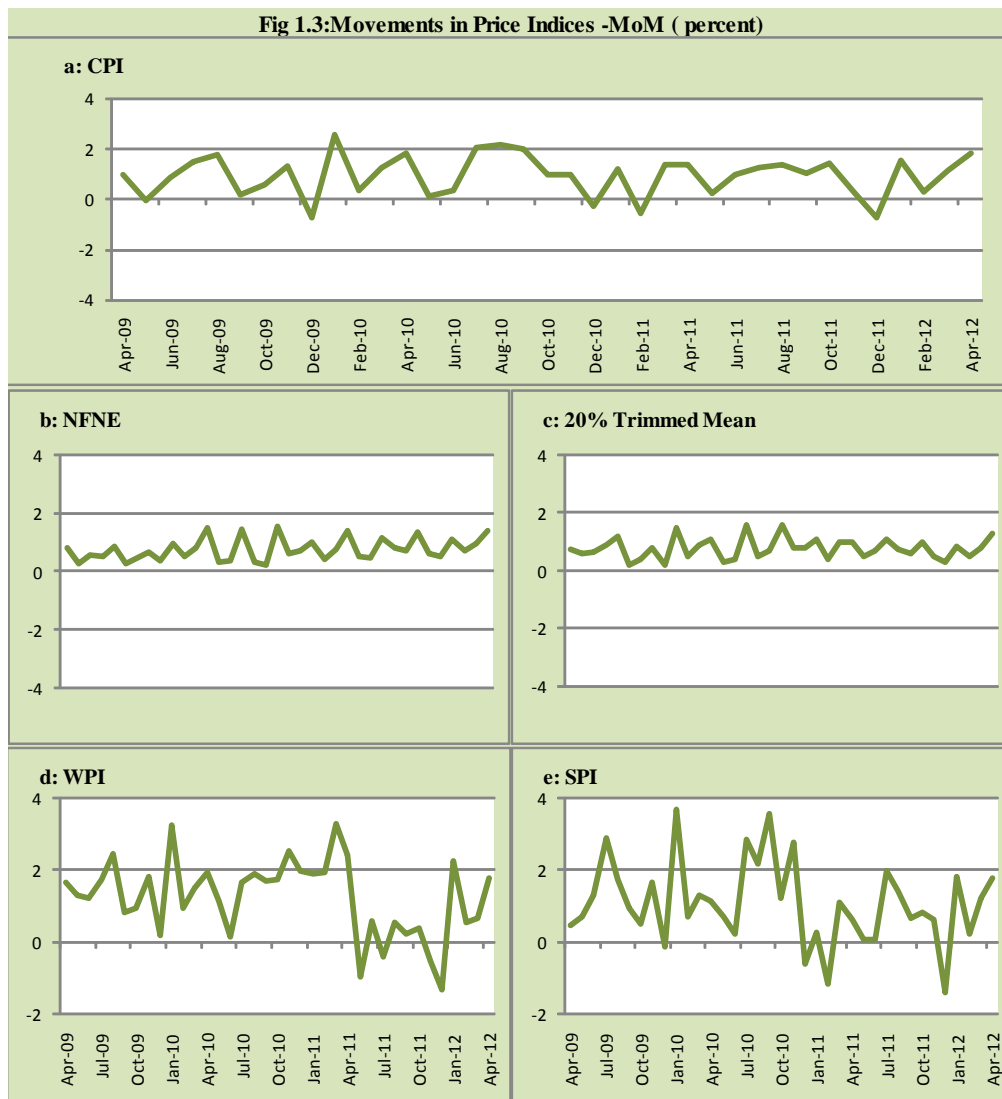
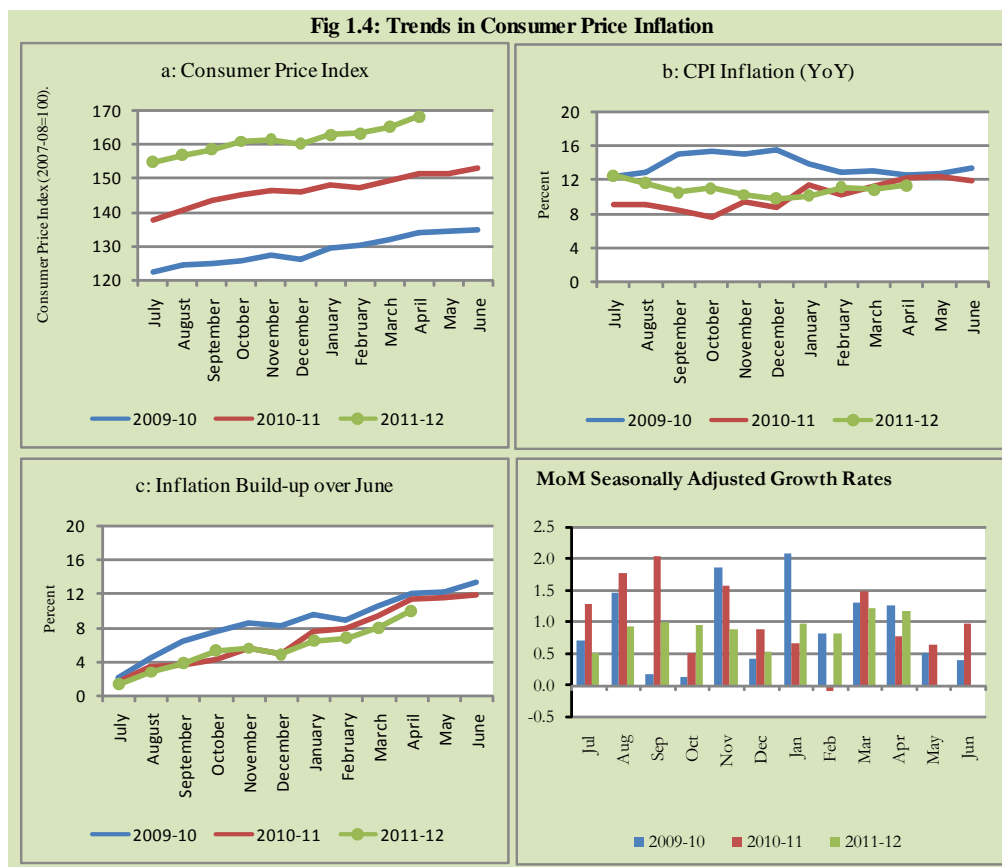


Fig 1.4: Trends in Consumer Price Inflation



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 April 2012 except Quetta. Among these five cities, the lowest inflation was observed in Karachi which is 10.3 percent while the highest inflation was observed in Quetta which is 12.5 percent (Table A6 of annexure-A).

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

	Apr-11		Mar-12		Apr-12	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.4	12.5	1.2	10.8	1.8	11.3
Islamabad	0.8	12.6	1.0	9.1	2.2	10.6
Karachi	2.1	12.2	1.0	11.5	1.0	10.3
Lahore	1.0	8.9	1.5	10.2	1.4	10.7
Peshawar	1.6	12.6	2.1	10.3	2.0	10.6
Quetta	0.6	13.1	1.0	10.0	2.9	12.5

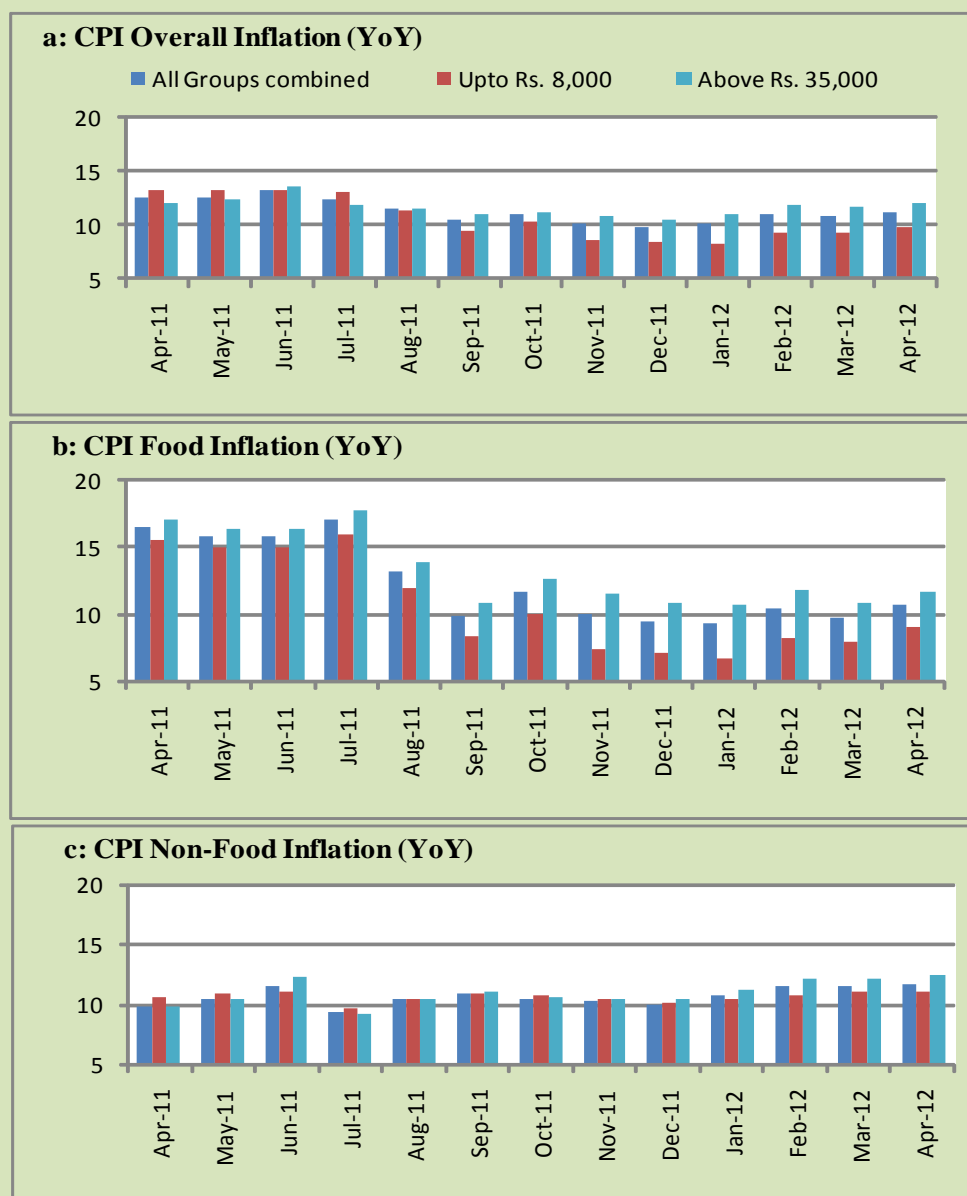
3. Income Group wise Inflation

Income group- wise data showed that income group above Rs. 35,000 has higher inflation than the overall inflation in CPI basket during April 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 April 2012 (Table A7 of annexure-A).

Table 3.1 Income Group- wise Inflation (YoY)

Income Groups	General			Food			Non-food		
	Apr-11	Mar-12	Apr-12	Apr-11	Mar-12	Apr-12	Apr-11	Mar-12	Apr-12
All Groups Combined	12.5	10.8	11.3	16.5	9.8	10.7	9.8	11.5	11.6
Up to Rs. 8,000	13.3	9.3	9.9	15.5	8.0	9.0	10.5	11.0	11.0
Rs. 8,001- 12,000	13.3	9.7	10.2	15.9	8.6	9.7	10.5	10.9	10.8
Rs. 12,001- 18,000	12.0	9.8	10.3	16.2	9.1	10.2	8.0	10.5	10.4
Rs. 18,001- 35,000	13.6	10.5	11.0	16.4	9.7	10.7	11.3	11.2	11.1
Above Rs. 35,000	12.1	11.7	12.1	17.1	10.8	11.7	9.8	12.1	12.4

Fig 3.1: Income Group- wise Inflation



4. Weighted Contribution

The weighted contribution of food group in the overall inflation increased to 40.06 percent during April 2012 from 38.15 percent in March 2012 while it was 53.46 percent in April 2011.

The weighted contribution of non-food group showed decrease to touch 59.94 percent in April 2012 from 61.85 percent in March 2012.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Apr-12	40.06	9.63	18.88	12.79	4.01	14.62

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
General	42.7	52.8	38.2	51.3	53.4	56.1	52.2	47.3	37.7	51.5	51.0	57.6	53.1
Food & Non-Alcoholic Beverages	27.9	24.3	28.9	63.2	51.7	57.8	60.9	15.3	9.4	34.2	41.6	40.2	37.6
Alcoholic Beverages & Tobacco	50.0	16.7	83.3	66.7	83.3	33.3	33.3	50.0	16.7	16.7	-16.7	33.3	66.7
Clothing & Footwear	62.7	64.4	66.1	49.2	62.7	54.2	47.5	76.3	69.5	59.3	49.2	74.6	62.7
Housing, Water, Elect, Gas & other Fuels	61.1	47.2	41.7	58.3	33.3	25.0	61.1	41.7	27.8	69.4	36.1	36.1	58.3
Furnishing & Household Equip. Maintenance etc	50.7	89.9	46.4	81.2	78.3	87.0	89.9	89.9	88.4	87.0	82.6	85.5	92.8
Health	38.5	30.8	17.9	43.6	35.9	23.1	25.6	33.3	28.2	33.3	41.0	38.5	25.6
Transport	53.5	55.8	16.3	39.5	41.9	53.5	48.8	32.6	41.9	53.5	55.8	79.1	48.8
Communication	16.7	41.7	-8.3	0.0	50.0	8.3	25.0	25.0	0.0	8.3	33.3	16.7	41.7
Recreation & Culture	20.5	51.3	41.0	28.2	41.0	51.3	7.7	25.6	12.8	38.5	28.2	46.2	35.9
Education	43.8	68.8	56.3	31.3	43.8	37.5	31.3	62.5	-43.8	25.0	50.0	56.3	50.0
Restaurant & Hotels	66.7	83.3	66.7	100.0	83.3	100.0	66.7	100.0	83.3	83.3	100.0	83.3	100.0
Miscellaneous	40.0	80.0	42.9	14.3	57.1	91.4	51.4	77.1	68.6	65.7	77.1	74.3	51.4
NFNE	47.3	63.3	40.8	48.2	53.8	55.6	49.7	59.8	47.3	58.3	54.7	63.9	57.4

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	Apr-11		Mar-12		Apr-12	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	9.92	-1.05	-0.12	-0.11	1.37	0.43
2	Wheat Flour Bag	10 Kg	5.26	-1.04	0.40	0.36	1.92	0.46
3	Rice Basmati Sup. Qlty.	Kg	12.11	-0.55	8.21	2.50	11.41	2.40
4	Pulse Masoor (Washed)	Kg	-3.99	-0.96	-13.85	-2.49	-12.80	0.25
5	Pulse Moong (Washed)	Kg	47.51	0.01	-10.94	2.54	-11.44	-0.56
6	Pulse Mash (Washed)	Kg	7.24	0.38	-9.25	-0.12	-11.15	-1.72
7	Pulse Gram	Kg	23.42	-1.72	32.57	33.47	35.55	0.49
8	Vegetable Ghee (Loose)	Kg	43.27	-0.36	4.20	4.85	5.73	1.10
9	Sugar Refined	Kg	8.92	0.28	-15.77	11.80	-15.88	0.16
10	Milk Fresh (Unboiled)	Ltr	19.97	1.46	16.15	1.15	16.13	1.44
11	Tea- Tapal Danedar	200 Gm	10.39	-0.11	6.83	0.00	6.95	0.00
12	Beef With Bone Av. Qlty.	Kg	21.21	0.15	14.95	1.85	16.04	1.09
13	Mutton Av. Qlty.	Kg	27.83	1.41	16.90	1.00	15.75	0.42
14	Chicken Farm Broiler (Live)	Kg	0.87	-4.25	4.65	-6.50	22.58	12.15
15	Eggs Farm	Doz	35.11	-11.52	20.18	-6.56	5.58	-22.27
16	Potatoes	Kg	18.25	8.31	-4.05	3.07	8.05	21.97
17	Onion	Kg	-41.90	-11.46	44.93	-13.88	17.96	-27.94
18	Tomatoes	Kg	21.46	-11.10	-18.48	-32.12	62.31	77.01
19	Ginger	Kg	-4.15	1.13	-31.90	-7.17	-36.32	-5.44
20	Garlic	Kg	24.82	-1.57	-47.55	2.40	-49.81	-5.79

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Apr-11		Mar-12		Apr-12	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	36.1	4.6	0.9	2.7	-5.7	-2.3
Food	32.6	3.4	-5.9	2.4	-8.5	0.6
Metals	41.9	2.4	-15.3	-0.1	-18.6	-1.7
Energy	36.1	6.1	8.8	3.4	-0.7	-3.2
Agricultural	37.0	-1.0	-18.4	1.6	-17.7	0.0
Cotton	145.9	-5.7	-56.7	-1.2	-53.8	0.6

Source: IMF

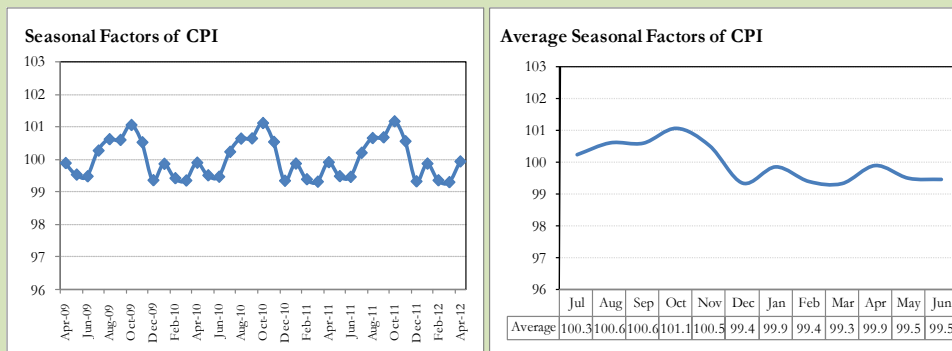
8. Seasonal Adjustment in CPI

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

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

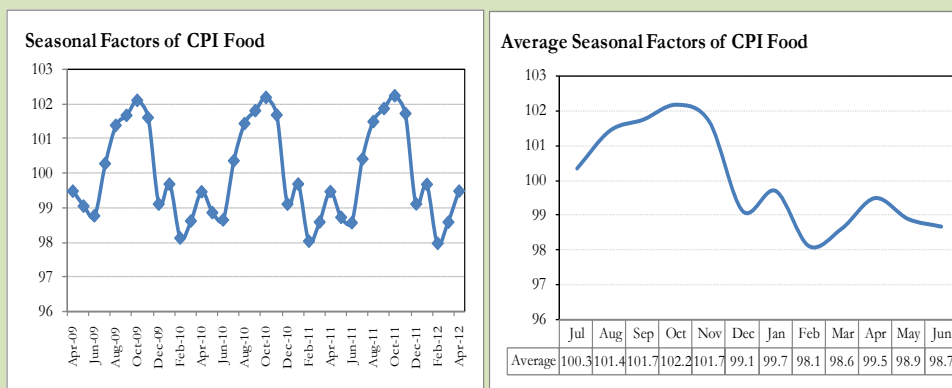
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months July to November and downward seasonality in the remaining months of the year.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



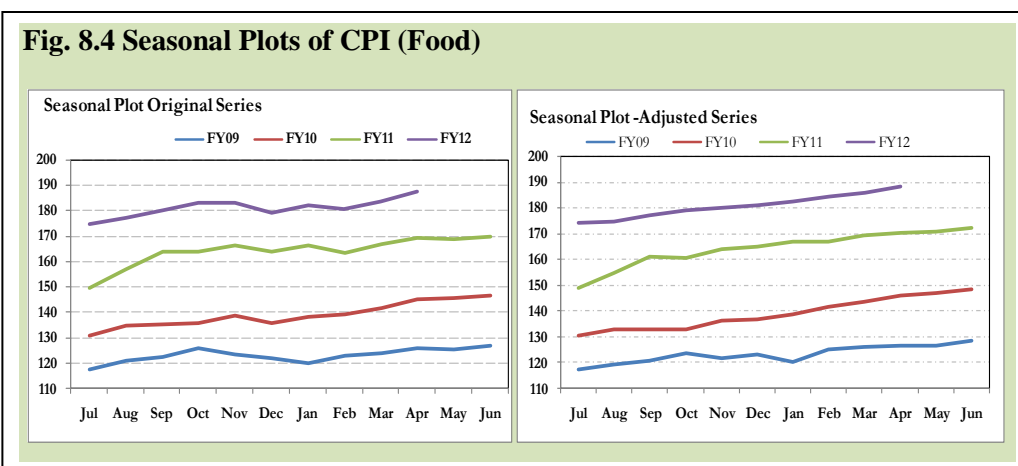
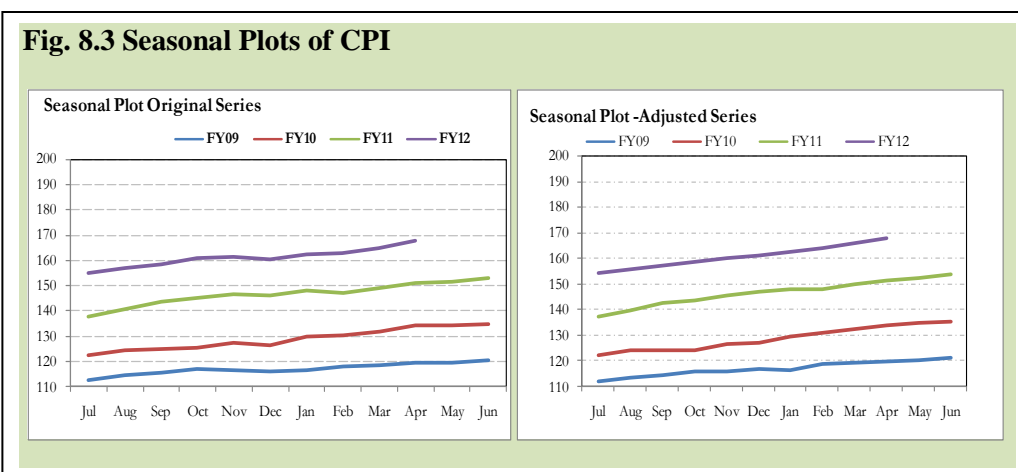
Note: Data Available in Annex Table 16.

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.



Seasonally adjusted CPI for April 2012 stood at 168.11 against 168.00 in original series showing an increase of 0.11 on account of adjustment of downward seasonality in April 2012.

Seasonally adjusted CPI food group for April 2012 stood at 188.39 against 187.43 in original series showing an increase of 0.96 on account of adjustment of downward seasonality in April 2012.

Month-on-month change of seasonally adjusted CPI series stood at 1.18% reflecting an increase during April 2012 over March 2012 and increase of 1.83% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 1.24% reflecting an increase during April 2012 over March 2012 and increase of 2.16% 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 April 2012 (corresponding to the seasonally adjusted month-on-month rate) is 15.14 percent.

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

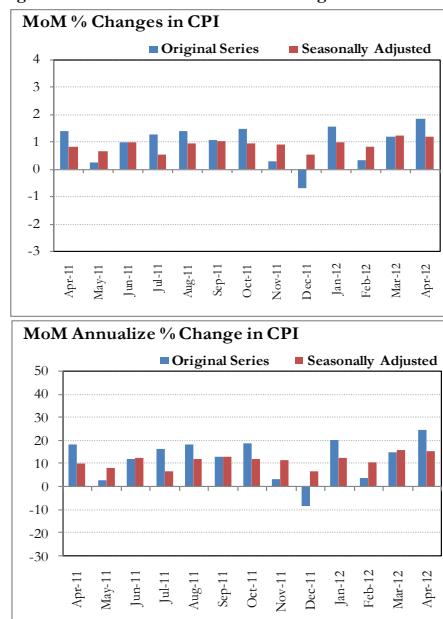
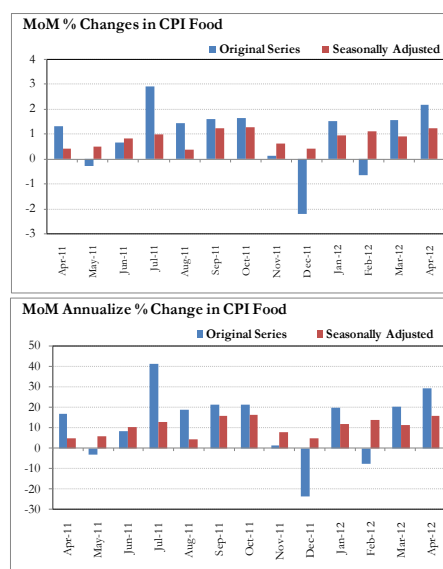


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

	Weights	MoM change			YoY change		
		Apr-11	Mar-12	Apr-12	Apr-11	Mar-12	Apr-12
I. Food Group	37.5	1.3	1.5	2.2	16.5	9.8	10.7
Food & Non-Alcoholic Beverages	34.8	1.4	1.5	2.2	16.9	9.8	10.7
Alcoholic Beverages & Tobacco	1.4	0.1	1.4	3.2	6.0	8.0	11.4
Restaurant & Hotels	1.2	0.4	1.5	0.6	18.3	11.2	11.4
II. Non-Food Group	62.5	1.5	0.9	1.6	9.8	11.5	11.6
Clothing & Footwear	7.6	2.5	3.3	1.5	14.4	16.6	15.5
Housing, Water, Elect, Gas & other	29.4	0.6	0.0	1.0	9.7	7.5	7.9
Furnishing & Household Equip. Maint	4.2	0.5	0.8	1.1	10.5	19.6	20.3
Health	2.2	1.0	1.0	0.5	8.6	12.0	11.5
Transport	7.2	4.0	1.9	4.2	7.9	19.1	19.4
Communication	3.2	0.0	0.1	0.0	2.1	-0.6	-0.6
Recreation & Culture	2.0	0.7	1.0	1.5	4.1	6.5	7.3
Education	3.9	3.4	0.9	4.3	10.5	11.9	12.9
Miscellaneous	2.8	2.1	1.0	0.1	16.7	20.1	17.7
Headline	100.0	1.4	1.2	1.8	12.5	10.8	11.3

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)	
		Apr-11	Apr-12	Apr-11	Apr-12	Apr-11	Apr-12	Apr-11	Apr-12	Apr-11	Apr-12
I. Food Group	10.7	126	125	11	15	9	12	17	24	89	74
Food & Non-Alcoholic Beverages	10.7	114	113	11	15	8	12	14	21	81	65
Alcoholic Beverages & Tobacco	11.4	6	6	0	0	1	0	3	2	2	4
Restaurant & Hotels	11.4	6	6	0	0	0	0	0	1	6	5
II. Non-Food Group	11.6	348	348	58	39	46	37	86	60	158	212
Clothing & Footwear	15.5	59	59	6	5	1	0	11	8	41	46
Housing, Water, Elect, Gas & other Fuels	7.9	36	36	2	2	2	4	12	10	20	20
Furnishing & Household Equip. Maintenance etc	20.3	69	69	6	2	4	2	26	12	33	53
Health	11.5	39	39	13	16	9	5	4	2	13	16
Transport	19.4	43	43	4	0	7	6	9	6	23	31
Communication	-0.6	12	12	4	6	4	1	3	3	1	2
Recreation & Culture	7.3	39	39	14	5	13	14	8	6	4	14
Education	12.9	16	16	4	2	3	1	3	4	6	9
Miscellaneous	17.7	35	35	5	1	3	4	10	9	17	21
Overall	11.3	474	473	69	54	55	49	103	84	247	286

Note: Prices of 14 seasonal items were not reported during the month.

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Apr-11	Apr-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	20.01	16.12	11.00
2	House Rent	21.81	8.77	6.59	10.71
3	Motor Fuel	3.03	10.76	28.87	7.75
4	Gas	1.58	8.87	29.41	5.57
5	Meat	2.43	23.32	15.95	4.18
6	Education	3.94	10.46	12.90	4.01
7	Fresh Fruits	1.86	40.90	15.93	3.50
8	Transport Services	2.70	7.86	11.38	3.06
9	Chicken	1.36	0.87	22.58	2.98
10	Household Servant	1.04	11.67	32.68	2.65
Total		46.44			55.40
B. Ranked by Percentage Change					
1	Tomatoes	0.46	21.47	62.31	1.95
2	Motor Vehicle Tax	0.11	-0.29	52.02	0.34
3	Pulse Gram	0.24	23.42	35.54	0.79
4	Household Servant	1.04	11.67	32.68	2.65
5	Gram Whole	0.16	19.78	32.55	0.53
6	Besan	0.15	25.87	30.78	0.45
7	Fire Wood Whole	0.23	21.27	29.49	0.69
8	Gas	1.58	8.87	29.41	5.57
9	Motor Fuel	3.03	10.76	28.87	7.75
10	Condiments	0.27	11.49	25.56	0.67
Total		7.26			21.37
C. Ranked by Weights					
1	House Rent	21.81	8.77	6.59	10.71
2	Milk Fresh	6.68	20.01	16.12	11.00
3	Electricity	4.40	12.63	0.54	0.24
4	Wheat Flour	4.16	4.94	1.84	0.74
5	Education	3.94	10.46	12.90	4.01
6	Communication & Apparatus	3.15	2.05	-0.77	-0.17
7	Motor Fuel	3.03	10.76	28.87	7.75
8	Transport Services	2.70	7.86	11.38	3.06
9	Meat	2.43	23.32	15.95	4.18
10	Vegetable Ghee	2.07	36.34	5.35	1.01
Total		54.39			42.52
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 11.3 percent in April, 2012.					

Table A3.1: Top Ten Contributors to CPI Food Inflation (YoY) in April 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Apr-11	Apr-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	20.01	16.12	11.00
2	Meat	2.43	23.32	15.95	4.18
3	Fresh Fruits	1.86	40.90	15.93	3.50
4	Chicken	1.36	0.87	22.58	2.98
5	Tomatoes	0.46	21.47	62.31	1.95
6	Rice	1.58	17.55	12.99	1.70
7	Ready Made Food	1.23	18.33	11.40	1.42
8	Cigarette	1.39	5.80	11.27	1.40
9	Spices	0.54	48.53	17.99	1.33
10	Beverages	1.20	14.03	12.55	1.27
Total		18.74			30.73
B. Ranked by Percentage Change					
1	Tomatoes	0.46	21.47	62.31	1.95
2	Pulse Gram	0.24	23.42	35.54	0.79
3	Gram Whole	0.16	19.78	32.55	0.53
4	Besan	0.15	25.87	30.78	0.45
5	Condiments	0.27	11.49	25.56	0.67
6	Chicken	1.36	0.87	22.58	2.98
7	Milk Powder	0.11	11.91	18.69	0.18
8	Milk Product	0.63	17.30	18.18	1.14
9	Spices	0.54	48.53	17.99	1.33
10	Onion	0.55	-41.90	17.96	0.73
Total		4.48			10.74
C. Ranked by Weights					
1	Milk Fresh	6.68	20.01	16.12	11.00
2	Wheat Flour	4.16	4.94	1.84	0.74
3	Meat	2.43	23.32	15.95	4.18
4	Vegetable Ghee	2.07	36.34	5.35	1.01
5	Fresh Fruits	1.86	40.90	15.93	3.50
6	Cooking Oil	1.75	29.55	7.76	1.14
7	Fresh Vegetable	1.62	16.07	4.97	0.85
8	Rice	1.58	17.55	12.99	1.70
9	Cigarette	1.39	5.80	11.27	1.40
10	Chicken	1.36	0.87	22.58	2.98
Total		24.92			28.48
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 10.7 percent in April, 2012.					

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Apr-11	Apr-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.77	6.59	10.71
2	Motor Fuel	3.03	10.76	28.87	7.75
3	Gas	1.58	8.87	29.41	5.57
4	Education	3.94	10.46	12.90	4.01
5	Transport Services	2.70	7.86	11.38	3.06
6	Household Servant	1.04	11.67	32.68	2.65
7	Personal Care	1.49	11.64	16.84	2.16
8	Personal Equipments	0.84	27.84	20.05	1.99
9	Footwear	1.55	3.79	16.15	1.80
10	Woolen Cloth	0.88	19.48	23.63	1.79
Total		38.87			41.49
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	-0.29	52.02	0.34
2	Household Servant	1.04	11.67	32.68	2.65
3	Fire Wood Whole	0.23	21.27	29.49	0.69
4	Gas	1.58	8.87	29.41	5.57
5	Motor Fuel	3.03	10.76	28.87	7.75
6	Woolen Cloth	0.88	19.48	23.63	1.79
7	Dopatta	0.44	17.32	22.07	0.80
8	Mechanical Service	0.46	9.88	21.24	0.82
9	Motor Vehicle Accessories	0.24	12.85	20.75	0.49
10	Washing Soap & Detergent	0.79	13.51	20.13	1.44
Total		8.79			22.33
C. Ranked by Weights					
1	House Rent	21.81	8.77	6.59	10.71
2	Electricity	4.40	12.63	0.54	0.24
3	Education	3.94	10.46	12.90	4.01
4	Communication & Apparatus	3.15	2.05	-0.77	-0.17
5	Motor Fuel	3.03	10.76	28.87	7.75
6	Transport Services	2.70	7.86	11.38	3.06
7	Cotton Cloth	1.73	21.91	6.07	0.88
8	Gas	1.58	8.87	29.41	5.57
9	Footwear	1.55	3.79	16.15	1.80
10	Personal Care	1.49	11.64	16.84	2.16
Total		45.39			35.99
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 11.6 percent in April, 2012.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: April 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, Kinnu, Sugar Refined, Pulse Masoor (Whole), Pulse Masoor (Washed), Gur Av.Qlty	Vegetable Ghee Tin, Cooking Oil (Dalda), Pistachio Av.Qlty., Maida, Wheat Flour Fine/Superior, Suji, Malta/Mosambi	Bread Plain Medium Size, Lactogen 400 gm, Rice Basmati 385/386, Chips, Tomato Ketchup Ahmed/Mitchells	Cloves Loose Av.Qlty, Carrot, Tomatoes, Pepper Black National, Chillies Powd.National 200 gm, Lemon, Peas, Bottle gourd, Bananas, Ice Cream Walls, Pulse Gram, Gram Whole Yellow Av.Qlty, Besan Av. Qlty.
Alcoholic Beverages & Tobacco			Cigarettes Gold Leaf 20,S, Cigarettes Morven Gold 20,S	Cigarettes K-20,S, Betel Nuts, Cigarettes Capstan 20,S, Betel Leaves
Clothing & Footwear	Shirting Av.Qlty., Heavy Wt Suiting Law.Pur Av. Qlty, Gents Shoe, Art 1109 Servis, Child Shoe Power Lite Bata, Sports Shoes		Shoe Repair Half Sole, Lawn Printed Gul Ahmed/Al Karam, Secondhand Winter Jacket, Tailoring Charges Pant (Men), Gloves Av.Qlty, Washing Charges Paint & Shirt	Heavy Wt Suiting Law.Pur Sup. Qlty, Brassier Av.Qlty, Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Linen Av.Qlty, Georgette Av.Qlty, Ladies Sandal Bata, Dopatta Georgette Av.Qlty, Brassier Sup. Qlty, Frock W/Wear Girls, Awami-Suit W&W (Gents) Av.Qlty
Housing, Water, Elect, Gas & other Fuels	Elect. Charges upto 50 units, Elect. Charges Above 1000 units	Elect. Charges 01 - 100 units, Elect. Charges 101 - 300 units, Elect. Charges Overall/ Combined, Elect. Charges 301 - 1000 units	Iron Bar (M.S. Bar) 1/2", Water Charges Per House, Electrician Wage Rate, Cement Blocks (6"X8"X12"), House Rent For Q-1	Firewood Whole, Gas Chrg upto 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	Match Box (Small), Washing Machine (Singer)	Bulb Philips 100-Watt, Tube Light Philips 40 Watt	Cleanser Powder Vim 1000 Gms, S. Steel Plate Avg. Qlty, Refg. Dawlance 10 Cft., Aluminum Cooking Pan, Gizer Large Size 30 Gallon	Robin Blue (35 gm), Tawa Iron (Medium Size) Avg. Qlty, Electric Blubs "0" Watt, Household Servant Female (Part Time), Dinner Set Plastic 72 Pcs, Washing Soap 250 gm, Hand Stitching Needle, Chair Shesham Wood
Health	Jauhar Joshanda, Amoxil Capsole 250 mg., Betnesol Eye Drops, Calcium Syrup Sandoz, Dettol (Medium), Sancos Syrup (50 ml.)	Ventolin Tab. 2mg, Daonil Tab. 5mg, Lederplex Syrup, Galxos-D (450 gm), Renitec Tab. 5 mg.	Brufen Tabs 200-mg., Ear Drops (Cardisporine)	Cac. 1000 Tab, O.R.S. (Nimcol), Panadol Tab. Extra/Plain, Saniplast (1 Putty), Glycerin Small Bottle, Doctor (MBBS) Clinic Fee, Cotton Bandage 2" - 4", Trisil Tab., Vicks Vaporub/ Balm, X-Ray (Chest) Charges
Transport		Motorcycle Yamaha 100 CC, Suzuki Fare Min.Within City, Minibus Fare Max. Within City, Motorcycle Honda Cd-70, Motor Cycle Hero 70 CC	Car Suzuki 800 CC (W/O. Ac), Car Toyota 1300 CC, Minibus Fare Min.Within City, Suzuki Fare Maximum Within City	Platform Ticket, Car Tax For 800 CC To 1300 CC, CNG, Tyre Car W/O Tube, Petrol Super, Tyre Puncture Charges, Cycle Overhauling Charges, Train Fare Eco. 1-100 Km., Air Fare Economy Class
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	Daily "Dawn", English Book BA/B.Sc. TV License Fee Domestic, Daily "Nawa-e-Waqt", Daily "Jang"	Ball Pen (Local), Tape Recorder Cassette (Blank), T.V 20" Color China/Korea, Computer CD (Tdk/Imation), Urdu Book BA/B.Sc. Eng. Book Ist. Year Complete Set	Maths Book Cals V (T.B.Board), Urdu Book Class IX/X (T.B.Board), Video Cassette Blank. Tdk/Sony, Radio With C.Player National, Cable Charges	Weekly "Mag", Cinema A/C High Class, Cinema Non-A/C High Class, Monthly "Naunehal Digest", Maths Book Class IX or X, Urdu Book Class V (T.B.Board), Pakistan Studies Book BA/B.Sc, Fountain Pen Hero/Wings/China, Photostat Paper 70 gm
Education	Pvt Eng.College Fee (1st Year), Govt. College Fee Ist. Year	Govt. College Fee 4Th. Year	I.T. Tuition Fees, Pvt Med. College Fee MBBS (1st Year), MBA Tuition Fee, Govt. University Fee M.Sc/ MA	Govt. Med. College Fee MBBS 1st Year, Govt. Engg. College. Fee 1st Year, Pvt School Fee Eng. Med (Class-VI), Coaching Fee For Class IX/ X, Coaching Ch. For Class XI/ XII Science Group
Restaurant & Hotels			Bread Tandoori St. Size	Chicken Biryani Full/Double, Cooked Mutton (Av. Hotel), Cooked Beef (Av. Hotel), Tea Prepared (Ordinary), Cooked Dal (Av. Hotel)
Miscellaneous	Silver Tezabi 24 Ct	Toilet Soap Lux 95 gm, Hair Color Bigen, Disposable Razor Gillette-II, Lipstick S. Miss/Medora	Talc Powder Viceroy/ Black Cat, Toothbrush Shield, Shampoo Sunsilk/Pantene 100 ml, Blade 7-o-Clock Steel (5)	Toothpaste Med Size Colgate 70gm, Gel Medium Size, Face Cream Ponds (Medium), Gold Tezabi 24 Ct, Artificial Jewellery Set, Toilet Soap Safeguard Bath Size

Table A5: City- wise CPI Inflation by Income Groups, April 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	2.5	9.3	3.3	9.0	1.5	9.7	2.5	9.8	3.3	9.7	1.6	9.9
2 Islamabad	2.0	10.4	3.0	11.6	0.7	8.8	2.1	10.2	3.2	10.9	0.9	9.4
3 Lahore	1.5	10.3	2.5	13.6	0.1	5.8	1.6	10.5	2.6	14.4	0.3	6.0
4 Gujranwala	0.8	11.8	1.0	13.1	0.7	10.1	1.2	12.2	1.6	13.7	0.8	10.5
5 Sialkot	1.1	6.9	1.2	8.2	0.9	5.1	1.3	7.4	1.5	8.8	1.0	5.9
6 Faisalabad	2.2	7.9	3.5	7.9	0.6	7.9	2.4	8.3	3.9	8.6	0.7	7.9
7 Multan	1.9	10.3	2.7	9.6	0.9	11.2	1.9	10.6	2.8	10.3	1.0	11.0
8 Sargodha	2.5	9.0	3.2	5.3	1.6	13.6	2.4	9.5	3.2	5.7	1.6	13.5
9 Bahawalpur	2.5	12.3	2.9	10.7	2.1	14.2	2.7	12.6	2.9	11.2	2.4	14.1
10 Karachi	0.6	8.8	0.6	9.3	0.5	8.2	0.7	9.2	0.7	10.2	0.7	8.1
11 Hyderabad	2.8	10.4	3.9	10.9	1.4	9.7	2.7	10.9	3.9	11.6	1.3	10.0
12 Sukkur	1.8	8.0	2.6	6.0	0.9	10.6	1.7	8.7	2.4	6.9	0.9	10.7
13 Larkana	0.9	13.8	1.1	10.7	0.6	17.9	0.8	14.8	0.9	11.4	0.8	18.7
14 Peshawar	2.1	10.0	3.5	9.9	0.5	10.1	2.0	9.9	3.4	10.0	0.5	9.7
15 Bannu	2.7	12.4	2.9	8.2	2.4	17.7	2.3	11.7	2.7	8.8	1.8	15.0
16 Quetta	3.2	12.2	4.5	11.3	1.4	13.4	3.0	12.1	4.4	11.2	1.3	13.1
17 Khuzdar	1.5	10.4	2.1	7.2	0.7	14.6	1.5	9.7	1.9	7.2	1.0	12.4
	Rs 12001-18000						Rs 18001-35000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	2.6	10.6	3.4	10.2	1.9	11.1	2.6	10.9	3.7	10.8	1.7	11.0
2 Islamabad	2.2	10.6	3.5	11.3	1.0	9.9	2.1	10.4	3.6	12.0	0.8	8.9
3 Lahore	1.6	11.1	2.5	14.7	0.6	7.3	1.5	10.8	2.4	15.4	0.6	6.8
4 Gujranwala	1.4	13.4	1.9	14.9	1.0	12.0	1.6	13.2	2.2	15.4	1.0	11.4
5 Sialkot	1.4	8.0	1.7	8.9	1.1	7.1	1.4	7.9	1.8	9.3	1.1	6.8
6 Faisalabad	2.6	8.9	4.1	9.3	1.0	8.5	2.5	9.2	4.4	10.2	0.9	8.2
7 Multan	2.1	11.3	2.9	10.8	1.2	11.8	2.0	11.1	3.2	11.4	1.1	10.9
8 Sargodha	2.6	10.6	3.6	6.5	1.7	14.5	2.5	11.0	3.7	7.5	1.6	13.9
9 Bahawalpur	2.9	13.7	2.9	11.8	2.9	15.5	2.9	13.4	2.9	12.0	2.8	14.6
10 Karachi	0.8	9.8	0.7	10.8	0.8	8.9	0.8	9.8	0.8	11.0	0.8	8.8
11 Hyderabad	2.6	11.4	3.8	11.8	1.5	11.0	2.5	11.3	3.8	12.3	1.3	10.4
12 Sukkur	1.6	8.9	2.4	7.0	0.9	10.8	1.8	9.3	2.8	7.5	0.9	10.7
13 Larkana	0.8	16.1	0.9	12.0	0.8	20.1	0.7	16.7	0.6	12.8	0.7	20.2
14 Peshawar	2.0	10.3	3.7	10.1	0.4	10.4	2.0	10.3	3.7	10.6	0.6	10.2
15 Bannu	2.3	12.1	2.8	9.1	1.8	15.1	2.0	11.6	2.9	9.9	1.2	13.1
16 Quetta	3.1	12.6	4.5	11.3	1.6	14.0	3.0	12.5	4.6	11.4	1.5	13.5
17 Khuzdar	1.3	10.2	1.6	8.0	1.1	12.4	1.2	9.9	1.6	8.5	0.8	11.1
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	2.7	12.0	3.8	11.2	2.2	12.3	2.7	11.5	3.7	10.9	2.0	11.9
2 Islamabad	2.2	10.6	3.2	12.0	1.6	9.9	2.2	10.6	3.3	12.0	1.3	9.5
3 Lahore	1.4	10.6	2.1	16.9	0.9	7.4	1.4	10.7	2.3	15.8	0.7	6.9
4 Gujranwala	1.6	13.6	2.7	16.2	1.1	12.3	1.4	13.1	2.1	15.0	1.0	11.7
5 Sialkot	1.6	8.4	2.2	10.4	1.3	7.5	1.5	8.0	1.9	9.5	1.2	7.0
6 Faisalabad	2.3	11.4	4.6	11.9	1.2	11.2	2.4	9.6	4.2	9.9	1.1	9.3
7 Multan	1.7	11.4	3.0	11.6	1.1	11.4	1.9	11.1	2.9	11.0	1.1	11.2
8 Sargodha	2.0	13.3	3.4	9.2	1.4	15.3	2.4	11.0	3.5	7.1	1.6	13.6
9 Bahawalpur	3.0	13.2	2.9	12.4	3.0	13.5	2.8	13.0	2.9	11.6	2.7	13.9
10 Karachi	1.1	10.7	0.8	11.5	1.3	10.2	1.0	10.3	0.8	11.1	1.1	9.6
11 Hyderabad	2.3	11.6	3.7	12.6	1.6	11.1	2.5	11.3	3.8	12.0	1.6	10.7
12 Sukkur	1.8	10.2	3.0	7.9	1.2	11.4	1.7	9.2	2.6	7.2	1.1	10.6
13 Larkana	0.7	16.9	0.6	13.3	0.8	18.8	0.8	15.6	0.9	12.1	0.7	18.1
14 Peshawar	2.0	11.3	3.8	11.5	1.1	11.2	2.0	10.6	3.6	10.6	0.9	10.7
15 Bannu	1.5	11.1	3.6	10.1	0.6	11.6	2.1	11.6	2.9	9.2	1.6	13.3
16 Quetta	2.7	12.8	4.4	11.2	1.8	13.6	2.9	12.5	4.5	11.3	1.7	13.4
17 Khuzdar	1.0	12.2	1.6	10.0	0.7	13.2	1.3	10.1	1.8	7.7	1.0	11.9

Table A6: City- wise CPI Inflation (YoY) April, 2012							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Larkana	15.6	12.1	18.1	Multan	11.1	11.0	11.2
Loralai & Cantt	15.5	17.2	14.3	Jhang	11.1	7.8	13.3
Mir Pur Khas	13.4	13.3	13.6	Muzaffargarh	11.0	11.0	11.0
Gujranwala	13.1	15.0	11.7	Sargodha	11.0	7.1	13.6
Bahawalpur	13.0	11.6	13.9	Jehlum	11.0	9.8	11.8
Bahawalnagar	12.9	10.1	14.9	Attock	11.0	10.7	11.2
Sahiwal	12.9	11.0	14.2	Abbotabad	10.8	10.3	11.0
Quetta	12.5	11.3	13.4	Lahore	10.7	15.8	6.9
Mardan	12.4	11.3	13.1	Peshawar	10.6	10.6	10.7
Rahim Yar Khan	12.4	11.2	13.3	Islamabad	10.6	12.0	9.5
Mithi	12.4	7.6	15.8	Karachi	10.3	11.1	9.6
Mingora	12.2	12.4	12.1	Khuzdar	10.1	7.7	11.9
Nawabshah	12.2	10.3	13.6	Faisalabad	9.6	9.9	9.3
Dadu	11.8	13.1	10.8	D.G. Khan	9.5	9.4	9.6
Bannu	11.6	9.2	13.3	Sukkur	9.2	7.2	10.6
Dera Mrd.Jamali	11.5	11.7	11.4	Wazirabad	8.9	8.2	9.4
Rawalpindi	11.5	10.9	11.9	Vehari	8.4	6.4	9.8
Mianwali	11.3	10.3	12.1	Sialkot	8.0	9.5	7.0
Hyderabad	11.3	12.0	10.7	Gawadar	7.9	5.2	9.8
				Turbat	7.1	5.4	8.1
				D.I.Khan	3.7	10.6	-0.7
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		
	Apr-11	Mar-12	Apr-12	Apr-11	Mar-12	Apr-12
<u>Up to Rs. 8000</u>						
General	1.1	1.3	1.7	13.3	9.3	9.9
Food	1.0	1.5	2.0	15.5	8.0	9.0
Non-food	1.3	1.0	1.3	10.5	11.0	11.0
<u>Rs. 8001- 12000</u>						
General	1.2	1.3	1.7	13.3	9.7	10.2
Food	1.1	1.5	2.1	15.9	8.6	9.7
Non-food	1.4	1.0	1.3	10.5	10.9	10.8
<u>Rs. 12001- 18000</u>						
General	1.3	1.2	1.8	12.0	9.8	10.3
Food	1.2	1.5	2.1	16.2	9.1	10.2
Non-food	1.5	1.0	1.4	8.0	10.5	10.4
<u>Rs. 18001- 35000</u>						
General	1.4	1.2	1.8	13.6	10.5	11.0
Food	1.3	1.5	2.2	16.4	9.7	10.7
Non-food	1.5	0.9	1.4	11.3	11.2	11.1
<u>Above Rs. 35000</u>						
General	1.5	1.1	1.9	12.1	11.7	12.1
Food	1.5	1.6	2.2	17.1	10.8	11.7
Non-food	1.5	0.9	1.7	9.8	12.1	12.4
<u>All income groups</u>						
General	1.4	1.2	1.8	12.5	10.8	11.3
Food	1.3	1.5	2.2	16.5	9.8	10.7
Non-food	1.5	0.9	1.6	9.8	11.5	11.6

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices	Percentage change	
			Apr-12	YoY	MoM
1	Wheat	10Kg.	273.9	0.6	-0.6
2	Wheat Flour Bag	10Kg.	310.3	1.7	0.4
3	Rice Basmati Broken	Kg.	62.1	15.2	3.3
4	Rice Irri-6	Kg.	46.9	12.1	2.0
5	Bread Plain Med. Size (340-400 Gm.)	Each	31.3	9.7	0.0
6	Beef	Kg.	261.0	15.7	0.6
7	Mutton	Kg.	499.9	14.6	0.3
8	Chicken Live (Farm)	Kg.	166.5	26.2	6.1
9	Milk Fresh	Litr	60.2	14.2	2.1
10	Curd	Kg.	70.1	15.4	1.7
11	Milk Powdered Nido	500G	268.4	34.2	6.9
12	Egg Hen (Farm)	Doz.	72.4	10.9	-19.9
13	Mustard Oil	Kg.	183.9	9.3	2.1
14	Cooking Oil (Tin)	2.5Ltr	512.4	4.8	3.0
15	Veg. Ghee (Tin)	2.5Kg.	512.4	4.8	3.0
16	Veg. Ghee Loose	Kg.	174.2	5.4	2.3
17	Bananas	Doz.	77.2	42.0	18.5
18	Masoor Pulse Washed	Kg.	100.9	-12.0	-0.7
19	Moong Pulse Washed	Kg.	122.6	-13.0	0.0
20	Mash Pulse Washed	Kg.	141.8	-10.4	-1.1
21	Gram Pulse Washed	Kg.	98.7	39.5	1.5
22	Potatoes	Kg.	23.5	4.5	24.4
23	Onions	Kg.	25.6	30.7	-19.6
24	Tomatoes	Kg.	50.2	81.0	50.9
25	Sugar	Kg.	55.6	-16.6	1.2
26	Gur	Kg.	69.1	-14.1	1.0
27	Salt Powdered Loose (Lahori)	Kg.	8.4	10.8	0.6
28	Red Chilies Powder Loose	Kg.	308.4	18.7	0.3
29	Garlic	Kg.	96.3	-47.5	-8.2
30	Tea (Yellow Label)	200Gm.	142.1	8.0	1.5
31	Cooked Beef Plate	Each	63.1	13.0	2.1
32	Cooked Dal Plate	Each	38.3	7.2	0.5
33	Tea Prepared (Sada)	Cup	14.8	9.9	0.7
34	Cigarettes K-2 (20'S)	20'S	29.4	7.8	0.2
35	Long Cloth (Coarse Latha)	Mtr.	133.5	-16.3	4.7
36	Shirting	Mtr.	113.0	17.7	1.4
37	Lawn	Mtr.	151.8	-8.4	9.5
38	Georgette (Voil Printed)	Mtr.	93.6	17.5	2.2
39	Sandal Gents Bata	Pair	499.0	0.0	0.0
40	Chappal Spong. Bata (Gents)	Pair	179.0	28.8	4.7
41	Sandal Ladies Bata	Pair	399.0	0.0	0.0
42	Electric Charges 1-50	Unit	1.9	0.0	0.0
43	Gas Charges upto 3.3719	Mmbtu	142.6	29.4	0.0
44	Kerosene	Litr	115.5	21.6	3.9
45	Firewood	40Kg	471.6	21.6	0.6
46	Energy Savor 14 Watts	Each	144.8	15.5	0.5
47	Washing Soap (200-250 Gm.)	Cake	19.5	18.0	1.4
48	Match Box	Each	1.1	6.0	0.0
49	Petrol	Litr	104.5	23.8	6.1
50	Diesel	Litr	108.0	15.4	3.5
51	L.P.G.(11 Kg Cylinder.)	Each	1418.0	16.9	-11.7
52	Tele. Local Call	Call	3.6	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	31.6	12.7	3.9
Maximum				81.0	50.9
Median				10.9	1.2
Minimum				-47.5	-19.9

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

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Items and specification	Weights	Index		
		Apr-11	Mar-12	Apr-12
General	100.00	150.99	164.98	168.00
Food & Non-Alcoholic Beverages.	34.83	169.83	183.98	188.00
1 Wheat	0.35	161.30	162.81	163.51
2 Wheat Flour	4.16	165.10	167.36	168.13
3 Wheat Product	0.10	160.52	163.97	164.35
4 Besan	0.15	164.34	205.06	214.92
5 Rice	1.58	140.41	155.23	158.65
6 Cereals	0.16	173.84	192.75	192.61
7 Bakery & Confectionary	1.16	150.94	165.69	166.14
8 Nimco	0.46	166.97	187.51	189.59
9 Meat	2.43	183.29	210.69	212.52
10 Chicken	1.36	165.22	180.59	202.52
11 Fish	0.30	167.88	196.38	197.20
12 Milk Fresh	6.68	173.82	199.07	201.84
13 Milk Product	0.63	168.45	196.59	199.07
14 Milk Powder	0.11	142.21	164.68	168.79
15 Egg	0.46	140.29	190.55	148.11
16 Mustard Oil	0.10	142.99	156.73	158.20
17 Cooking Oil	1.75	142.08	148.95	153.10
18 Vegetable Ghee	2.07	154.54	159.70	162.81
19 Dry Fruits	0.25	177.51	196.60	198.12
20 Fresh Fruits	1.86	200.15	209.17	232.03
21 Pulse Masoor	0.27	168.84	147.20	146.30
22 Pulse Moong	0.23	269.59	240.08	238.74
23 Pulse Mash (Washed)	0.21	230.03	207.96	204.38
24 Pulse Gram	0.24	159.72	215.44	216.49
25 Gram Whole	0.16	170.05	224.72	225.40
26 Beans	0.03	167.55	193.78	194.89
27 Potatoes	0.49	142.88	126.58	154.38
28 Onion	0.55	124.29	203.45	146.61
29 Tomatoes	0.46	115.71	106.10	187.81
30 Fresh Vegetable	1.62	178.52	179.57	187.39
31 Sugar	1.04	239.61	201.25	201.57
32 Gur	0.02	247.97	217.68	219.17
33 Honey	0.04	197.69	216.13	218.72
34 Sweet Meet	0.25	178.55	199.50	200.06
35 Beverages	1.20	144.11	160.08	162.19
36 Jam, Tomato Ketchup & Pickle	0.25	157.87	171.27	171.32
37 Condiments	0.27	167.71	209.35	210.58
38 Spices	0.54	231.36	276.44	272.99
39 Tea	0.84	195.38	205.86	208.58
Alcoholic Beverages, Tobacco	1.41	151.54	163.53	168.74
40 Cigarette	1.39	151.55	163.36	168.63
41 Betel Leaves & Nuts	0.02	150.88	173.78	175.76
Clothing & Footwear	7.57	140.04	159.35	161.68
42 Cotton Cloth	1.73	142.25	147.42	150.89
43 Woolen Cloth	0.88	147.46	179.75	182.30
44 Ready Made Garment	0.97	134.41	155.86	159.03
45 Woolen Readymade Garments	0.40	141.02	160.51	160.53
46 Hosiery	0.51	143.57	167.21	169.17
47 Dopatta	0.44	139.81	168.00	170.66
48 Cleaning & Laundering	0.21	149.44	169.96	174.86

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

Items and specification	Weights	Index		
		Apr-11	Mar-12	Apr-12
49 Tailoring	0.88	161.44	186.09	188.75
50 Footwear	1.55	122.08	141.30	141.80
Housing, Water, Elect, Gas & Other Fuel	29.41	138.15	147.65	149.07
51 House Rent	21.81	126.67	133.31	135.02
52 Construction Input Item	0.56	163.00	189.81	192.40
53 Construction Wage Rate	0.33	142.65	158.77	160.84
54 Water Supply	0.50	121.12	131.65	132.90
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	224.06	257.13	266.00
58 Fire Wood Whole	0.23	174.27	219.01	225.67
Furnished H.Hold Equip.& Maint. Etc	4.21	140.28	166.88	168.78
59 Furniture	0.33	136.77	158.53	159.39
60 Household Textile	0.65	138.82	163.28	165.26
61 Household Equipment	0.59	140.27	151.29	152.27
62 Utensils	0.32	136.65	159.27	162.84
63 Plastic Products	0.25	149.43	168.43	169.80
64 Washing Soap & Detergent	0.79	154.09	182.05	185.11
65 Sewing Needle & Dry Cell	0.15	125.01	142.03	144.15
66 Household Servant	1.04	132.02	173.93	175.17
67 Marriage Hall Charges	0.08	152.62	177.26	181.77
Health	2.19	127.13	141.01	141.74
68 Drug Medicine	1.27	118.16	125.72	126.54
69 Medical Equipment	0.01	155.75	178.64	181.03
70 Doctor (MBBS) Clinic Fee	0.59	144.34	171.20	171.60
71 Medical Test	0.32	130.14	144.84	145.82
Transport	7.20	155.73	178.37	185.94
72 Motor Vehicle	0.66	136.02	144.33	144.48
73 Motor Vehicle Accessories	0.24	165.53	198.01	199.88
74 Motor Fuel	3.03	150.76	180.88	194.29
75 Mechanical Service	0.46	144.66	173.42	175.38
76 Motor Vehicle Tax	0.11	100.00	152.02	152.02
77 Transport Services	2.70	169.38	184.05	188.65
Communication	3.22	123.14	122.42	122.36
78 Postal Services	0.07	161.82	167.62	168.53
79 Communication & Apparatus	3.15	122.33	121.47	121.39
Recreation & Culture	2.02	136.53	144.41	146.51
80 Recreation & Culture	0.86	114.34	119.99	120.03
81 Text Books	0.57	160.34	164.74	171.48
82 News Papers	0.19	137.78	149.97	149.97
83 Stationery	0.40	150.01	165.68	166.61
Education	3.94	134.06	145.10	151.36
84 Education	3.94	134.06	145.10	151.36
Restaurants And Hotels	1.23	173.04	191.63	192.76
85 Ready Made Food	1.23	173.04	191.63	192.76
Miscellaneous Goods And Services	2.76	160.35	188.59	188.70
86 Personal Care	1.49	146.11	169.03	170.72
87 Cosmetics	0.39	128.82	145.76	146.27
88 Blades	0.03	145.21	166.54	166.64
89 Personal Equipments	0.84	200.52	243.60	240.72

Table A11: Wholesale Price Index Numbers by Major Groups and Selected Commodities			
Items and Specifications	Index		
	Apr-11	Mar-12	Apr-12
General	178.69	182.20	185.48
Agriculture Forestry & Fishery	200.14	178.44	183.68
1 Wheat	164.42	169.14	168.38
2 Maize	164.09	162.14	163.16
3 Rice	123.67	148.82	149.83
4 Sorghum/Jowar	208.55	211.70	215.59
5 Millet/Bajra	135.98	156.94	157.66
6 Vegetables	157.33	187.90	212.58
7 Fresh Fruits	147.97	154.45	212.67
8 Dry Fruits	175.33	175.59	174.24
9 Cotton Seeds	186.49	176.87	174.03
10 Other Oil Seeds	152.61	163.21	167.61
11 Edible Roots/ Potatoes	153.19	123.27	134.95
12 Stimulant And Spice Crops	214.10	174.14	170.44
13 Pulses	189.02	225.40	225.64
14 Sugar Crops	301.89	272.71	272.71
15 Fibre Crops	352.82	170.95	173.25
16 Unmanufactured Tobacco	158.63	167.22	166.99
17 Poultry	169.04	188.45	206.42
18 Milk From Bovine Animals	162.38	192.38	194.99
19 Eggs	132.77	196.73	139.52
20 Raw Animal Material/Wool	118.44	135.15	136.50
21 Hides And Fur Skins, Raw	111.84	137.83	138.42
22 Fuel Wood In Logs	172.91	200.22	201.97
23 Fishes Live Fresh Or Chilled	115.47	153.31	154.52
Ores/Minerals, Gas & Elect.	162.00	188.10	188.10
24 Coal Not Agglomerated	125.49	172.55	180.39
25 Natural Gas Liquefied	158.76	211.43	210.36
26 Salt & Pure Sodium Chloride	132.38	161.56	164.89
27 Electrical Energy	170.70	166.13	166.13
Food, Beverages, Tobacco, Textiles	181.25	174.81	177.32
28 Meat Of Animals	186.05	222.31	223.72
29 Vegetables & Fruit Juices	158.47	176.97	177.93
30 Dried Fruits & Nuts	186.31	199.39	196.91
31 Fruit Juices	143.61	155.41	157.86
32 Vegetable Oil Refined	145.32	152.59	154.59
33 Vegetable Ghee	139.12	141.42	143.93
34 Oil Cakes	162.30	136.93	135.09
35 Processed Liquid Milk	162.86	185.56	187.39
36 Milk And Cream In Solid Form	185.05	165.25	166.51
37 Ice Cream	139.45	154.89	161.68
38 Dairy Products N.E.C	154.61	194.44	197.89
39 Wheat Flour	151.37	153.85	154.79
40 Other Cereal Flour	143.92	184.58	191.42
41 Sugar Refined	248.63	207.29	207.78
42 Chocolate	100.26	100.26	100.26
43 Sugar Confectionary	100.00	100.40	100.40
44 Coffee And Tea	184.41	194.82	195.35
45 Spices	199.47	302.75	303.48
46 Other Food Products	288.54	320.25	318.94
47 Mineral Water	132.63	165.82	165.82
48 Beverages	133.27	135.24	135.24
49 Tobacco Products	178.22	169.40	174.93
50 Cotton Yarn	273.32	185.82	193.36
51 Nylon Yarn	193.14	195.64	195.64
52 Blended Yarn	216.88	183.03	183.85
53 Woven Fabrics	143.20	171.48	171.55
54 Cotton Fabrics	154.93	172.66	175.67
55 Other Fabrics	133.21	159.00	161.72
56 Silk And Rayon Fabrics	132.16	140.05	141.18

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

Items and Specifications		Index		
		Apr-11	Mar-12	Apr-12
57	Towels	151.17	187.20	189.19
58	Blankets	135.10	160.41	161.28
59	Bed Sheets	140.43	171.73	174.13
60	Quilts	134.89	147.05	147.05
61	Woolen Carpets	107.14	103.57	103.57
62	Synthetic Carpets	150.00	144.07	144.07
63	Hosiery Products	137.61	161.85	163.35
64	Ready Made Garments	118.51	127.38	126.92
65	Leather With Out Hairs	107.45	109.21	109.83
66	Other Leather N.E.C	114.81	120.85	122.57
67	Footwear's	101.48	128.50	128.50
Other Transportable Goods		175.89	204.15	208.92
68	Timber	130.95	142.25	144.14
69	Printing Paper	108.60	133.29	133.29
70	Hard Board	114.58	158.33	158.33
71	Coke	149.83	163.45	163.45
72	Motor Sprit	141.13	164.98	174.61
73	Diesel Oil	219.97	252.97	265.00
74	Kerosene Oil	224.19	257.04	266.52
75	Furnace Oil	189.88	220.76	220.75
76	Mobil Oil	160.60	174.32	178.98
77	Chemicals	132.36	147.80	145.98
78	Dying Materials	107.04	104.26	104.26
79	Fertilizers	208.12	269.47	270.34
80	Pesticides	146.40	165.36	165.53
81	Insecticides	135.80	123.86	125.52
82	Paints & Varnishes	161.74	194.20	202.50
83	Medicines	115.47	118.66	120.38
84	Soaps & Detergent	140.38	154.60	155.89
85	Auto Tyres	155.33	173.93	175.62
86	Plastic Products	149.62	184.69	186.58
87	Glass Sheets	151.57	170.73	172.43
88	Other Glass Articles	198.90	212.43	216.51
89	Ceramics And Sanitary	130.24	143.14	144.10
90	Bricks Blocks And Tiles	144.81	170.80	171.12
91	Cement	153.77	166.23	175.39
92	Bed Foams	118.67	130.50	131.00
93	Matches	111.89	120.39	120.63
Metal Product Machinery & Equip		136.30	155.23	156.18
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	123.14	132.76	135.01
96	Pipe Fittings	133.42	141.83	142.31
97	Steel Products	132.25	158.45	158.78
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	155.31	166.10	168.43
101	Cultivators	170.96	184.66	184.66
102	Chuff Cutter	131.08	131.08	131.08
103	Tractors	164.64	172.36	172.36
104	Lathe Machines	147.51	147.68	147.68
105	Concrete Mixer	136.13	138.83	138.83
106	Refrige,Wash& Sew Mach, Iron,Fan	150.54	163.54	164.86
107	Electrical Wires	151.78	163.78	165.49
108	Lighting Equipments	123.94	143.66	145.49
109	Radio And Television	129.93	131.06	132.73
110	Motor Vehicles	147.09	157.68	160.28
111	Motor Cycles	118.67	123.29	124.02
112	Bicycles	143.59	171.52	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	178.69	165.46	187.09	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
	Apr	168.00	187.43	156.35	185.48	184.45	186.13	184.03
*: all groups combined								

Table A13: International Commodity Prices/ Indices

	Jan-12	Feb-12	Mar-12	Apr-12
Energy				
Crude Oil (US\$ per barrel) *	106.9	112.7	117.8	113.8
IMF Energy Index (2005 = 100)	199.8	208.9	216.1	209.2
WB Energy Index (2005 = 100) @	192.4	201.0	208.5	200.9
Food				
Rice (\$/MT)	541.1	547.5	577.1	585.5
Wheat (\$/MT)	274.9	281.1	283.9	266.3
Sugar (US cent/ pound)	24.1	24.1	23.8	22.5
Palm Oil (\$/MT)	1,020.5	1,047.7	1,105.7	1,157.5
Soybean Oil (\$/MT)	1,131.8	1,168.5	1,196.5	1,232.6
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	101.1	100.7	99.5	100.1
IMF Metal Price Index (2005 = 100)	202.0	207.1	206.9	203.5
Copper (\$/MT)	8,061.9	8,441.6	8,470.8	8,285.5
Aluminum (\$/MT)	2,151.3	2,208.1	2,184.2	2,048.5
Iron Ore (\$ cents/dry MT)	140.4	140.4	144.7	147.7
Tin (\$/MT)	21,547.7	24,293.4	22,985.4	22,114.5
Nickle (\$/MT)	19,908.6	20,393.7	18,660.8	17,892.8
Zinc (\$/MT)	1,989.2	2,058.0	2,035.9	2,002.7
Lead (\$/MT)	2,100.2	2,121.4	2,056.7	2,073.6
Uranium (\$/MT)	52.3	52.0	51.3	51.3
DAP (\$/MT)	530.0	517.3	502.5	518.1
Urea (\$/MT)	368.4	382.9	410.6	493.4

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	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	168.00
May	119.60	134.34	151.33	
Jun	120.64	134.83	152.78	
Seasonally Adjusted Series				
Jul	112.02	122.13	137.30	154.40
Aug	113.66	123.91	139.73	155.86
Sep	114.61	124.15	142.57	157.43
Oct	115.68	124.32	143.30	158.93
Nov	115.86	126.63	145.56	160.35
Dec	116.90	127.18	146.86	161.21
Jan	116.62	129.82	147.86	162.79
Feb	118.71	130.89	147.75	164.12
Mar	119.21	132.61	149.94	166.14
Apr	119.81	134.30	151.12	168.11
May	120.16	135.00	152.11	
Jun	121.27	135.55	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	187.43
May	125.42	145.69	168.77	
Jun	126.77	146.63	169.88	
Seasonally Adjusted Series				
Jul	117.30	130.59	148.77	174.05
Aug	119.36	133.08	154.45	174.67
Sep	120.59	132.94	161.01	176.81
Oct	123.43	133.14	160.35	179.01
Nov	121.54	136.64	163.79	180.10
Dec	123.25	137.02	165.16	180.81
Jan	120.20	138.96	167.02	182.47
Feb	125.14	141.72	166.84	184.43
Mar	125.78	143.69	169.49	186.09
Apr	126.55	146.01	170.14	188.39
May	126.62	147.36	170.94	
Jun	128.35	148.63	172.34	

Table 16: CPI Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.30	100.27	100.24	100.21	100.3
Aug	100.59	100.62	100.64	100.66	100.6
Sep	100.54	100.60	100.65	100.68	100.6
Oct	100.99	101.06	101.12	101.17	101.1
Nov	100.52	100.53	100.54	100.56	100.5
Dec	99.39	99.36	99.35	99.33	99.4
Jan	99.86	99.87	99.87	99.87	99.9
Feb	99.45	99.42	99.39	99.36	99.4
Mar	99.39	99.35	99.32	99.30	99.3
Apr	99.89	99.90	99.91	99.94	99.9
May	99.53	99.51	99.49		99.5
Jun	99.48	99.47	99.46		99.5

Table 17: CPI Food Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.23	100.29	100.38	100.43	100.3
Aug	101.30	101.41	101.46	101.52	101.4
Sep	101.51	101.70	101.84	101.90	101.7
Oct	102.02	102.14	102.22	102.27	102.2
Nov	101.57	101.63	101.71	101.75	101.7
Dec	99.11	99.11	99.11	99.12	99.1
Jan	99.67	99.70	99.70	99.69	99.7
Feb	98.30	98.13	98.03	97.97	98.1
Mar	98.65	98.62	98.59	98.59	98.6
Apr	99.49	99.47	99.48	99.49	99.5
May	99.06	98.87	98.73		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	1.83
May	-0.07	0.13	0.23	
Jun	0.87	0.36	0.96	
Seasonally Adjusted Series				
Jul		0.71	1.29	0.52
Aug	1.46	1.46	1.77	0.94
Sep	0.84	0.19	2.03	1.01
Oct	0.93	0.14	0.51	0.95
Nov	0.15	1.86	1.58	0.90
Dec	0.90	0.43	0.90	0.53
Jan	-0.24	2.07	0.68	0.98
Feb	1.79	0.82	-0.07	0.82
Mar	0.43	1.32	1.48	1.23
Apr	0.50	1.27	0.79	1.18
May	0.29	0.53	0.66	
Jun	0.92	0.41	0.98	

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	2.16
May	-0.39	0.31	-0.28	
Jun	1.07	0.65	0.66	
Seasonally Adjusted Series				
Jul		1.75	0.09	0.99
Aug	1.76	1.90	3.81	0.36
Sep	1.03	-0.10	4.25	1.22
Oct	2.35	0.15	-0.41	1.24
Nov	-1.53	2.63	2.15	0.61
Dec	1.41	0.28	0.83	0.39
Jan	-2.48	1.41	1.13	0.92
Feb	4.11	1.98	-0.11	1.08
Mar	0.51	1.39	1.59	0.90
Apr	0.61	1.62	0.38	1.24
May	0.05	0.92	0.47	
Jun	1.37	0.86	0.82	

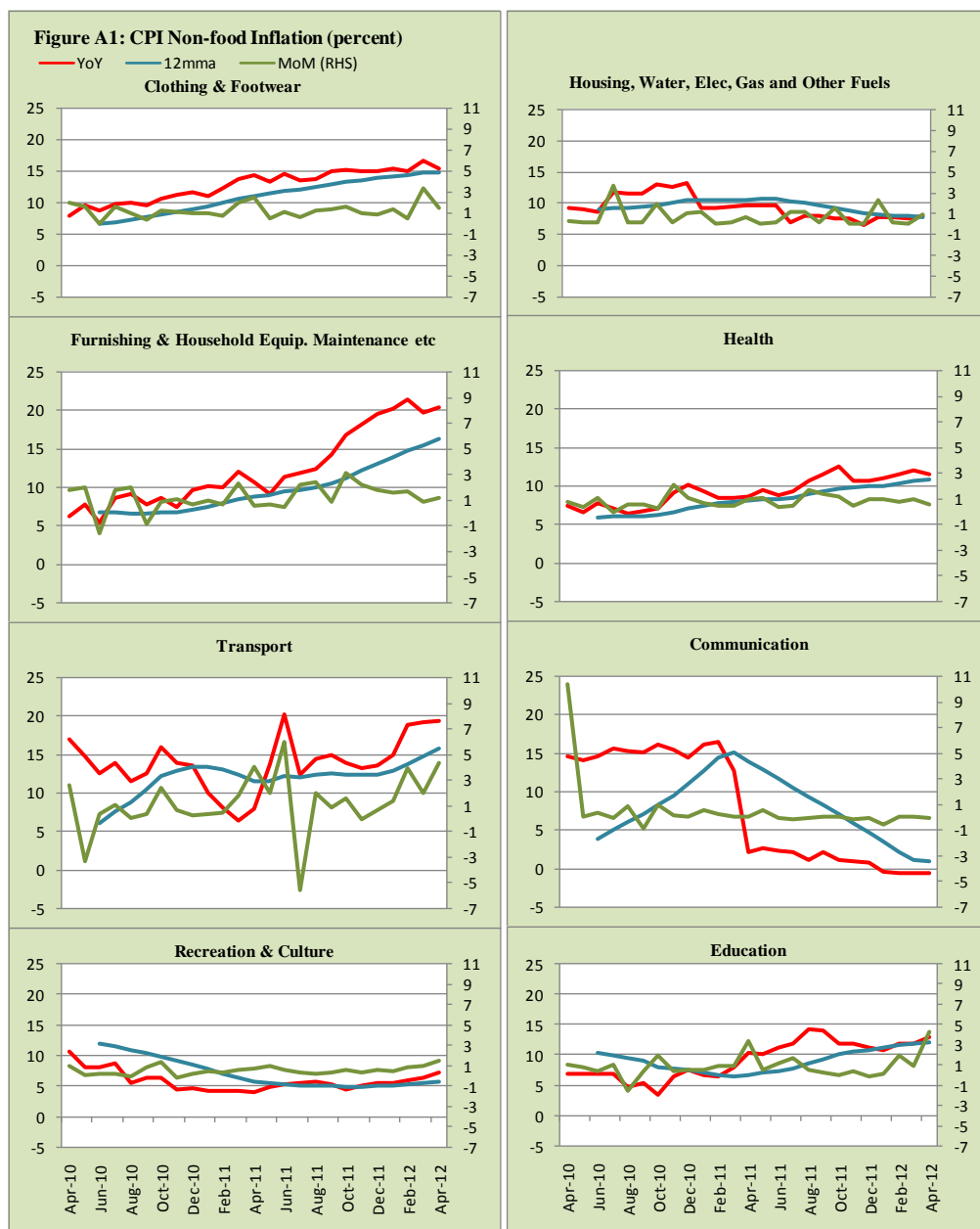


Figure A2: Frequency Distribution of Price Changes of CPI Items, April 2012

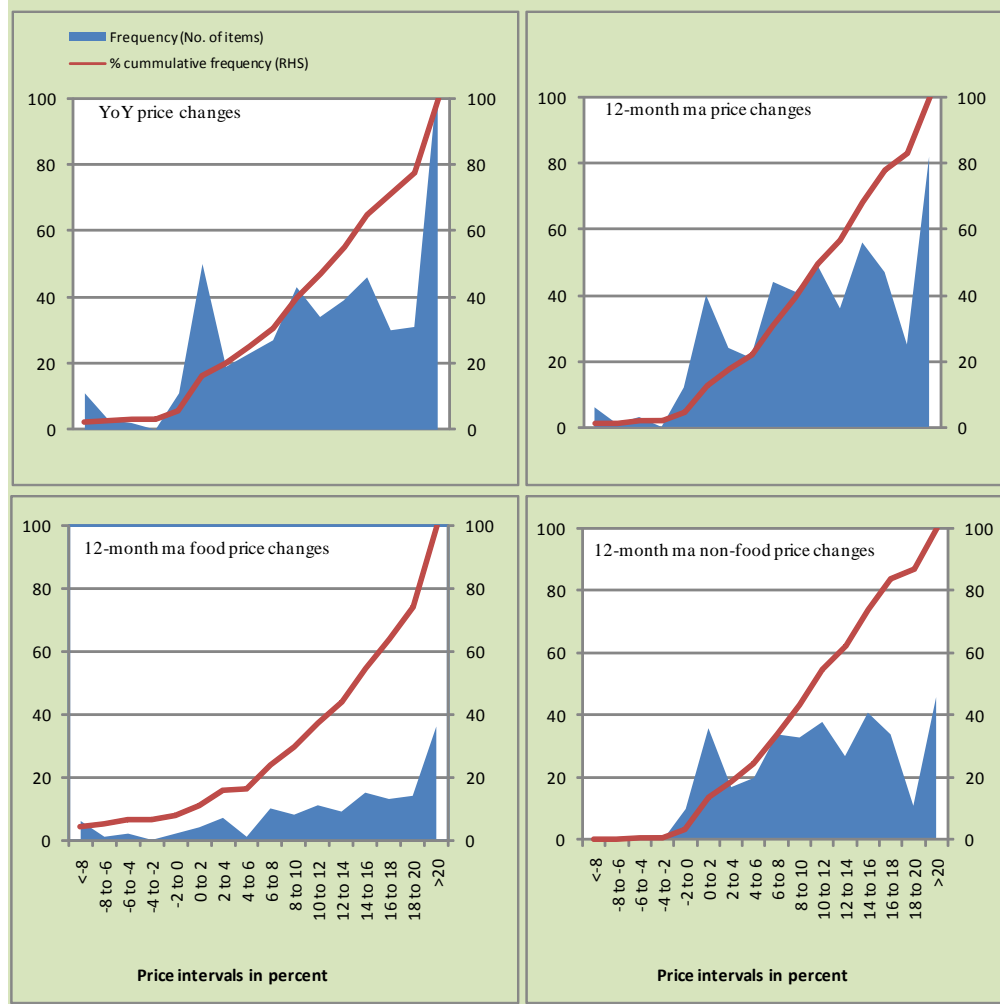


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, April 2012

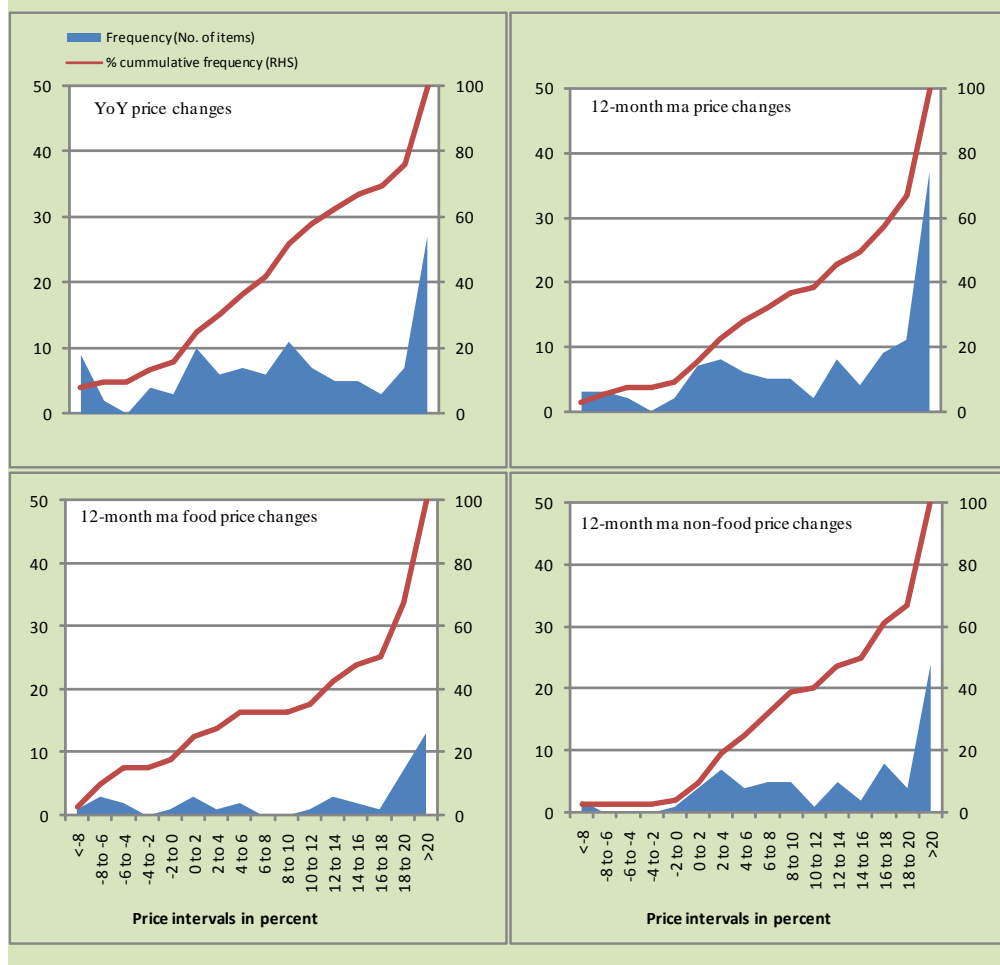
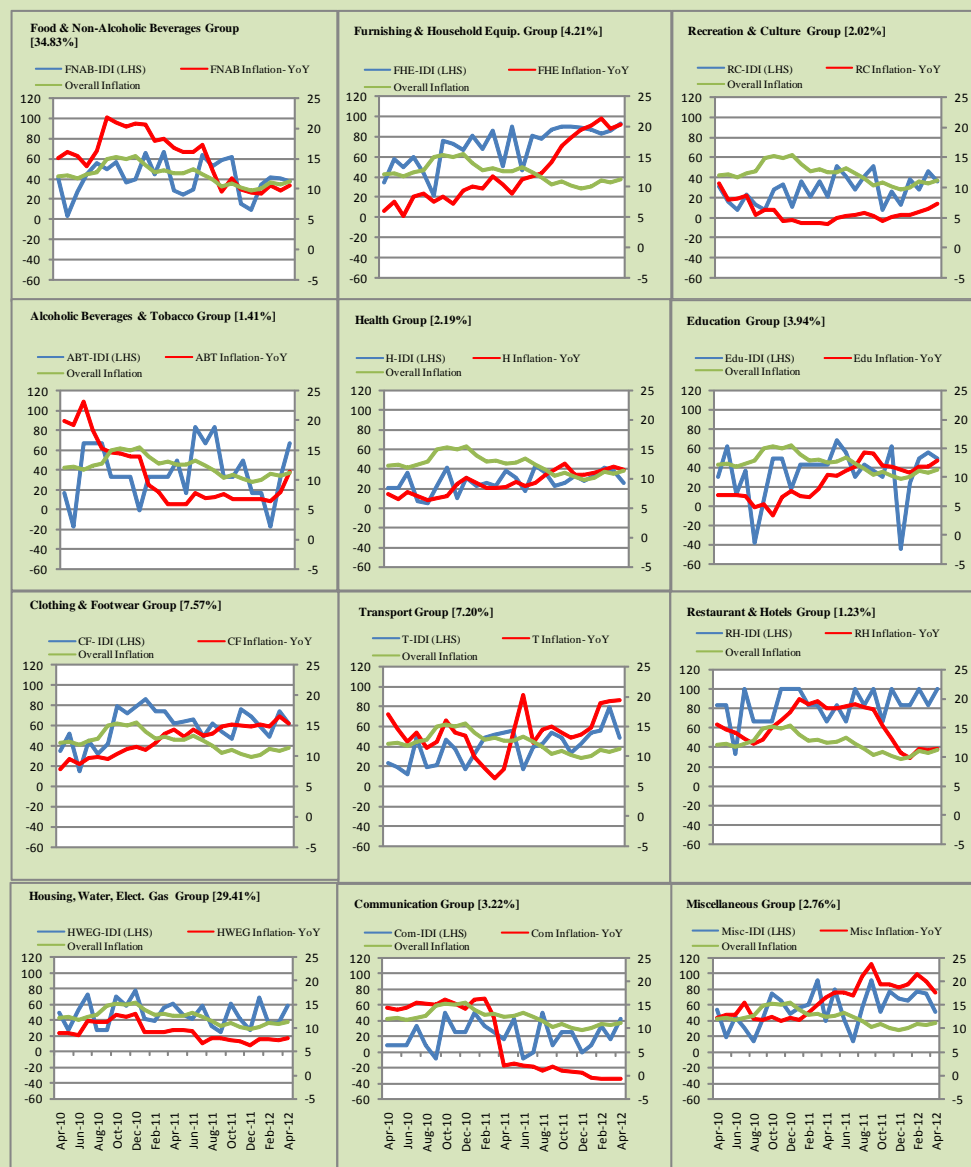


Figure A4: Group- wise Inflation Diffusion Index (IDI) and Respective/ Overall YoY Inflation (percent)



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.