

Inflation Monitor

May 2012



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 12.3 percent on year-on-year basis in May 2012 as compared to 11.3 percent in the previous month and 12.6 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 1.1 percent in May 2012 as compared to 1.8 percent in the previous month and 0.2 percent in the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation increased to 1.4 percent in May 2012 as compared to 1.3 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis increased to 11.7 percent in May 2012 as compared to 11.0 percent in the previous month while it was 12.1 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) recorded at 0.5 percent in May 2012 as compared to 1.3 percent in April 2012 and 0.5 percent in May 2011.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis increased to 11.2 percent in May 2012 as compared to 10.9 percent in April 2012 and 9.8 percent in May 2011.
6. Core NFNE inflation on month-on-month basis decreased to 0.8 percent in May 2012 when compared to 1.4 percent a month earlier. The rate of change in Core NFNE in May 2011 was 0.5 percent.
7. WPI inflation on year-on-year basis increased to 7.1 percent in May 2012 when compared to 3.8 percent a month earlier. During May 2011, WPI inflation was recorded at 22.3%.

8. WPI inflation on month-on-month basis increased to 2.1 percent in May 2012 as compared to 1.8 percent a month earlier. It was -1.0 percent in May 2011.
9. SPI inflation on year-on-year basis is recorded at 10.1 percent in May 2012 as compared to 9.7 percent a month earlier and 13.8 percent in corresponding month of the last year.
10. SPI inflation on month-on-month basis is recorded at 0.5 percent in May 2012 as compared to 1.8 percent a month earlier and 0.1 percent in May 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
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
May-12	12.3	1.1	11.3	0.2	13.0	1.9	11.2	0.8	11.7	0.5	7.1	2.1	10.1	0.5

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation

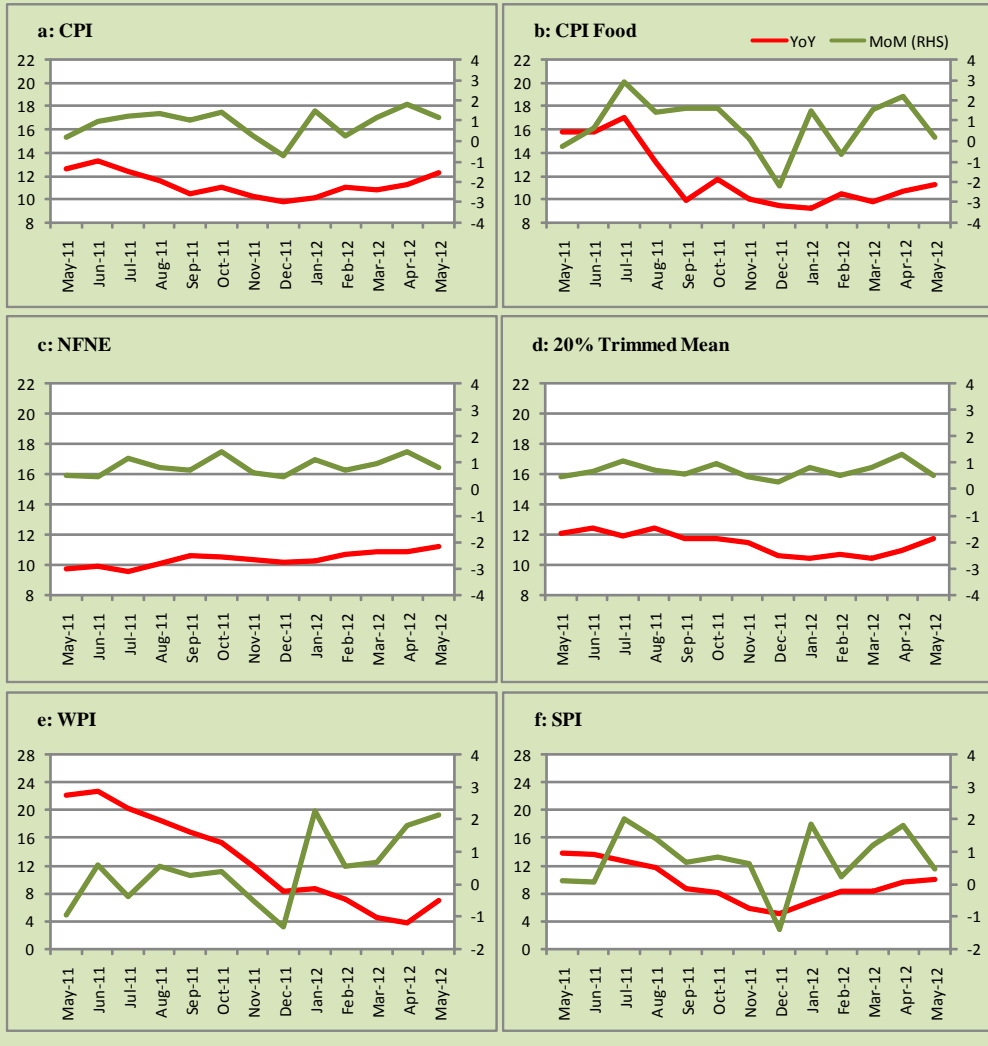


Fig 1.2: Movements in Price Indices (percent)

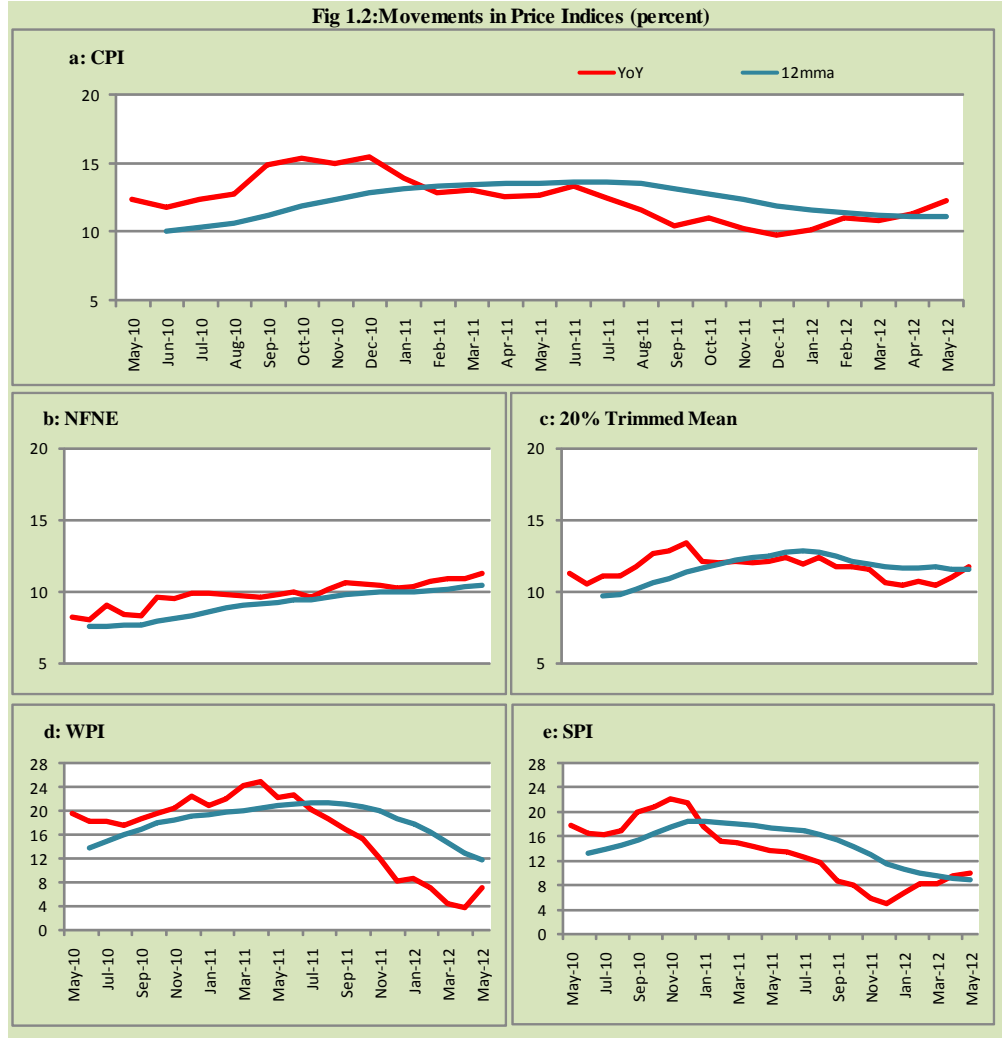


Fig 1.3: Movements in Price Indices -MoM (percent)

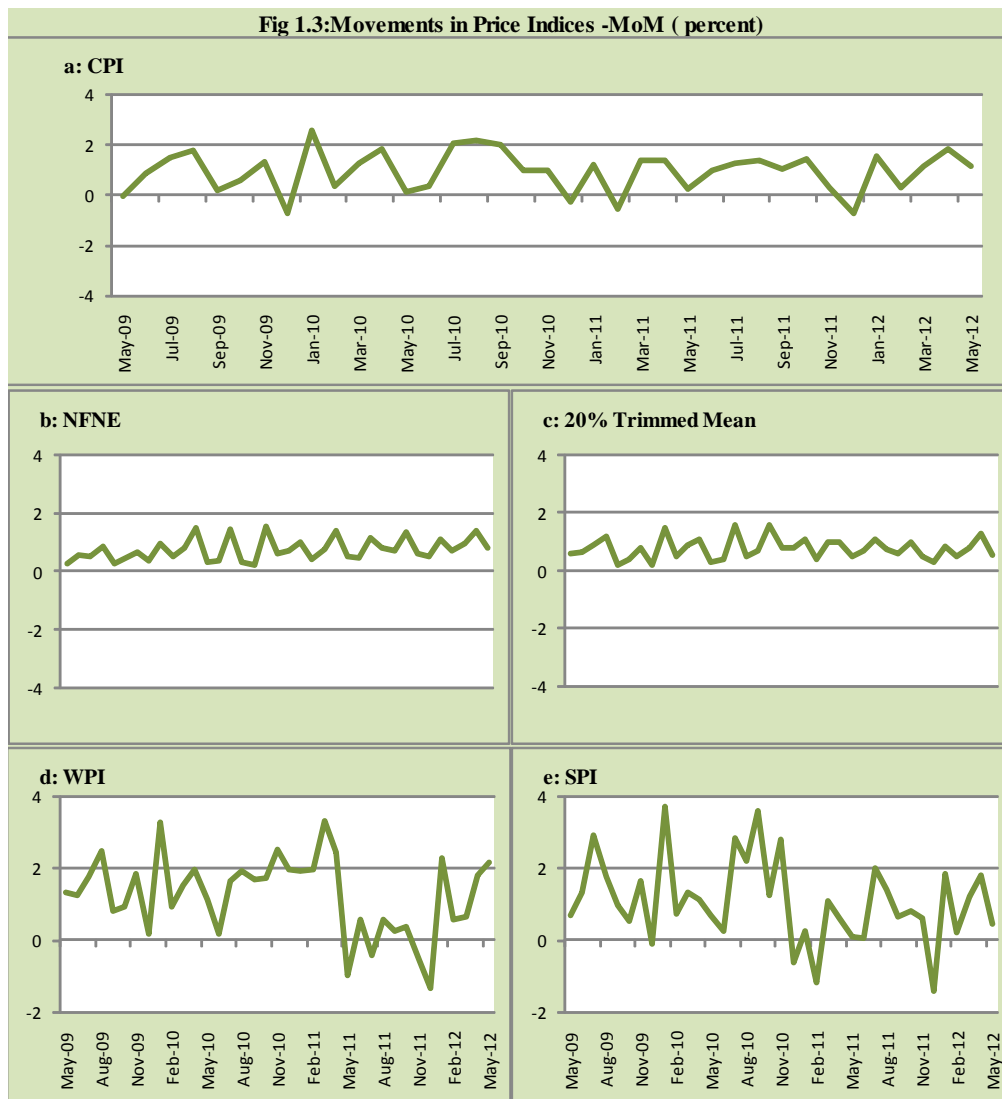
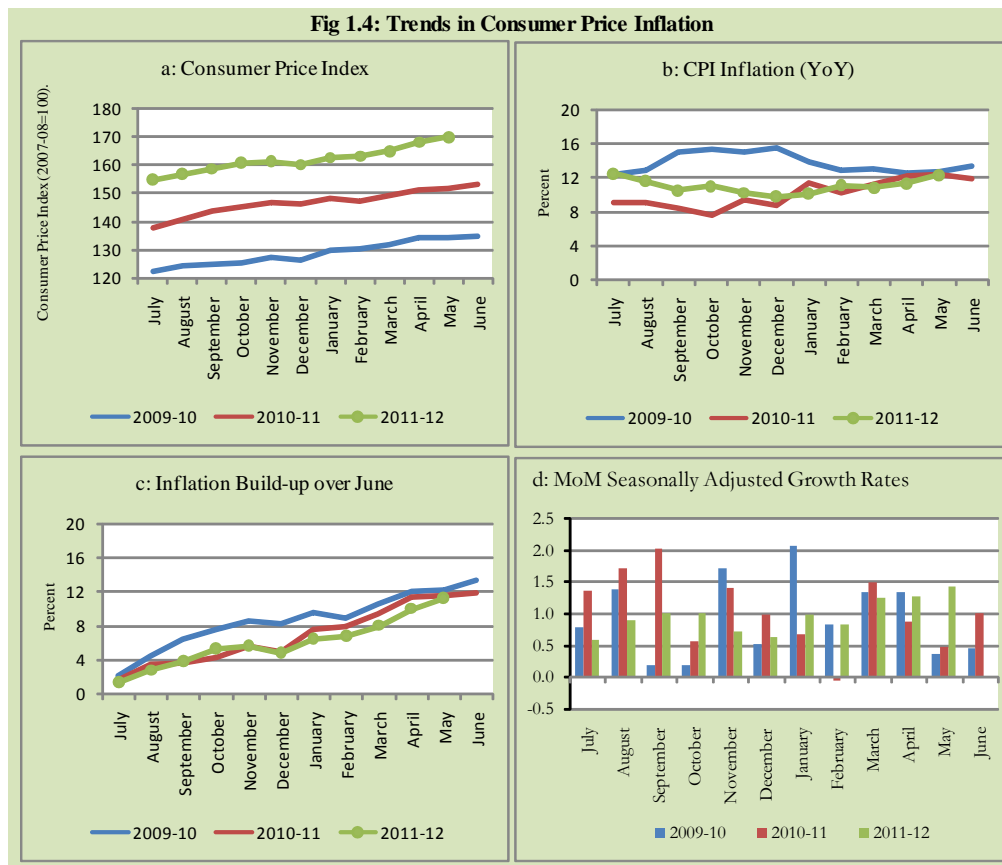


Fig 1.4: Trends in Consumer Price Inflation



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 May 2012. Among these five cities, the lowest inflation was observed in Lahore which is 10.4 percent while the highest inflation was observed in Quetta which is 12.2 percent (Table A6 of annexure-A).

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

	May-11		Apr-12		May-12	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	0.2	12.6	1.8	11.3	1.1	12.3
Islamabad	0.1	12.7	2.2	10.6	1.4	12.0
Karachi	0.1	12.1	1.0	10.3	1.3	11.6
Lahore	1.1	9.5	1.4	10.7	0.9	10.4
Peshawar	0.3	12.9	2.0	10.6	0.7	11.0
Quetta	0.0	13.9	2.9	12.5	-0.2	12.2

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 May 2012 for general and food groups. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in general, food and non-food groups during the month of May 2012 (Table A7 of annexure-A).

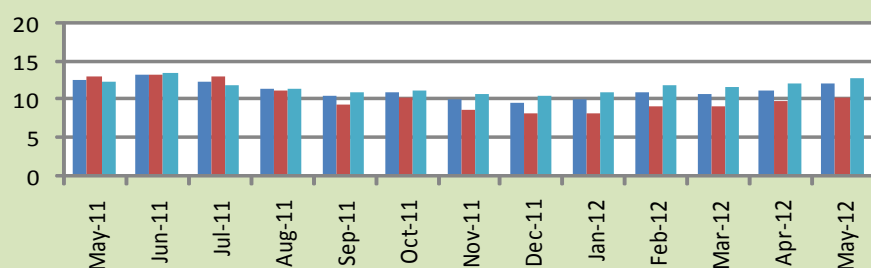
Table 3.1 Income Group- wise Inflation (YoY)

Income Groups	General			Food			Non-food		
	May-11	Apr-12	May-12	May-11	Apr-12	May-12	May-11	Apr-12	May-12
All Groups Combined	12.6	11.3	12.3	15.8	10.7	11.3	10.5	11.6	13.0
Up to Rs. 8,000	13.2	9.9	10.3	15.1	9.0	9.2	10.9	11.0	11.8
Rs. 8,001- 12,000	13.2	10.2	11.8	15.4	9.7	10.0	10.9	10.8	13.9
Rs. 12,001- 18,000	11.9	10.3	11.5	15.5	10.2	10.6	8.5	10.4	12.5
Rs. 18,001- 35,000	13.7	11.0	12.0	15.7	10.7	11.2	12.0	11.1	12.6
Above Rs. 35,000	12.4	12.1	13.0	16.3	11.7	12.3	10.4	12.4	13.3

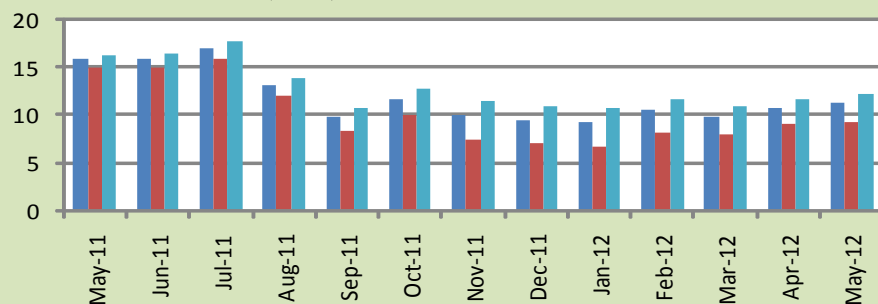
Fig 3.1: Income Group- wise Inflation

a: CPI Overall Inflation (YoY)

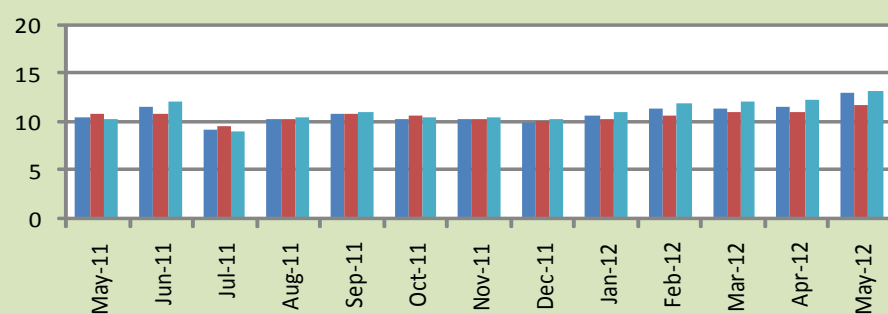
■ All Groups combined ■ Upto Rs. 8,000 ■ Above Rs. 35,000



b: CPI Food Inflation (YoY)



c: CPI Non-Food Inflation (YoY)



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 38.26 percent during May 2012 from 40.06 percent in April 2012 while it was 50.91 percent in May 2011.

The weighted contribution of non-food group showed increase to touch 61.74 percent in May 2012 from 59.94 percent in April 2012.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)						
Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
May-12	38.26	9.17	23.72	10.54	3.49	14.82

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12
General	52.8	38.2	51.3	53.4	56.1	52.2	47.3	37.7	51.5	51.0	57.6	53.1	55.6
Food & Non-Alcoholic Beverages	24.3	28.9	63.2	51.7	57.8	60.9	15.3	9.4	34.2	41.6	40.2	37.6	43.4
Alcoholic Beverages & Tobacco	16.7	83.3	66.7	83.3	33.3	33.3	50.0	16.7	16.7	-16.7	33.3	66.7	50.0
Clothing & Footwear	64.4	66.1	49.2	62.7	54.2	47.5	76.3	69.5	59.3	49.2	74.6	62.7	76.3
Housing, Water, Elect, Gas & other Fuels	47.2	41.7	58.3	33.3	25.0	61.1	41.7	27.8	69.4	36.1	36.1	58.3	38.9
Furnishing & Household Equip. Maintenance etc	89.9	46.4	81.2	78.3	87.0	89.9	89.9	88.4	87.0	82.6	85.5	92.8	87.0
Health	30.8	17.9	43.6	35.9	23.1	25.6	33.3	28.2	33.3	41.0	38.5	25.6	30.8
Transport	55.8	16.3	39.5	41.9	53.5	48.8	32.6	41.9	53.5	55.8	79.1	48.8	44.2
Communication	41.7	-8.3	0.0	50.0	8.3	25.0	25.0	0.0	8.3	33.3	16.7	41.7	8.3
Recreation & Culture	51.3	41.0	28.2	41.0	51.3	7.7	25.6	12.8	38.5	28.2	46.2	35.9	74.4
Education	68.8	56.3	31.3	43.8	37.5	31.3	62.5	-43.8	25.0	50.0	56.3	50.0	31.3
Restaurant & Hotels	83.3	66.7	100.0	83.3	100.0	66.7	100.0	83.3	83.3	100.0	83.3	100.0	100.0
Miscellaneous	80.0	42.9	14.3	57.1	91.4	51.4	77.1	68.6	65.7	77.1	74.3	51.4	54.3
NFNE	63.3	40.8	48.2	53.8	55.6	49.7	59.8	47.3	58.3	54.7	63.9	57.4	57.7

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

6. Domestic Commodity Prices

Table 6.1 Inflation in Domestic CPI Food Commodities

Sr. No	Item	Unit	May-11		Apr-12		May-12	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	2.21	-9.53	1.37	0.43	8.82	-2.88
2	Wheat Flour Bag	10 Kg	5.25	-4.79	1.92	0.46	6.15	-0.84
3	Rice Basmati Sup. Qlty.	Kg	12.46	0.24	11.41	2.40	18.34	6.47
4	Pulse Masoor (Washed)	Kg	-7.03	-3.54	-12.80	0.25	-9.43	0.18
5	Pulse Moong (Washed)	Kg	41.18	-0.98	-11.44	-0.56	-10.74	-0.20
6	Pulse Mash (Washed)	Kg	-0.79	-1.92	-11.15	-1.72	-9.52	-0.13
7	Pulse Gram	Kg	19.96	-3.26	35.55	0.49	57.32	12.29
8	Vegetable Ghee (Loose)	Kg	42.49	-0.96	5.73	1.10	6.66	-0.08
9	Sugar Refined	Kg	7.29	-2.04	-15.88	0.16	-16.04	-2.23
10	Milk Fresh (Unboiled)	Ltr	19.37	3.77	16.13	1.44	13.19	1.14
11	Tea- Tapal Danedar	200 Gm	17.59	6.95	6.95	0.00	0.00	0.00
12	Beef With Bone Av. Qlty.	Kg	19.80	1.10	16.04	1.09	15.39	0.53
13	Mutton Av. Qlty.	Kg	26.50	0.96	15.75	0.42	15.82	1.02
14	Chicken Farm Broiler (Live)	Kg	-2.28	-8.15	22.58	12.15	33.47	0.01
15	Eggs Farm	Doz	10.92	-8.95	5.58	-22.27	34.25	15.78
16	Potatoes	Kg	14.02	18.12	8.05	21.97	-3.86	5.10
17	Onion	Kg	-40.92	-18.06	17.96	-27.94	32.69	-7.82
18	Tomatoes	Kg	-20.24	-39.98	62.31	77.01	17.99	-56.37
19	Ginger	Kg	-8.52	-6.33	-36.32	-5.44	-31.59	0.64
20	Garlic	Kg	9.49	-13.79	-49.81	-5.79	-41.51	0.46

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	May-11		Apr-12		May-12	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	39.9	-5.0	-5.5	-2.1	-6.7	-6.2
Food	34.2	-1.9	-8.4	0.6	-9.1	-2.7
Metals	50.5	-4.3	-18.6	-1.7	-19.3	-5.0
Energy	40.8	-5.7	-0.3	-2.8	-2.3	-7.5
Agricultural	29.3	-7.6	-18.0	-0.5	-13.2	-2.1
Cotton	83.8	-23.6	-53.8	0.6	-46.5	-11.6

Source: IMF

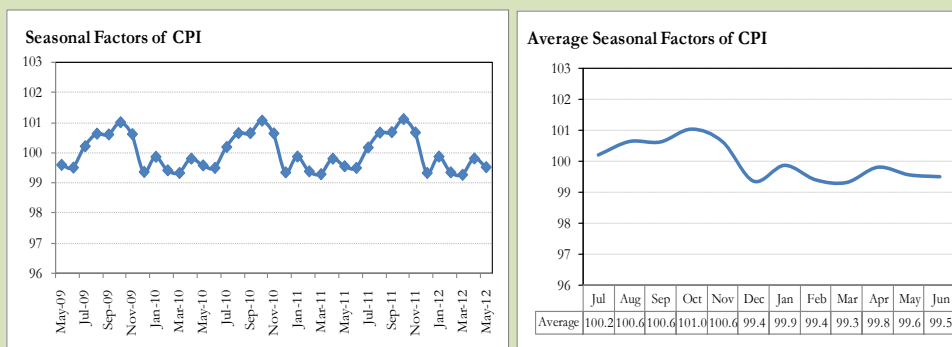
8. Seasonal Adjustment in CPI

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 May 2012 has been taken for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

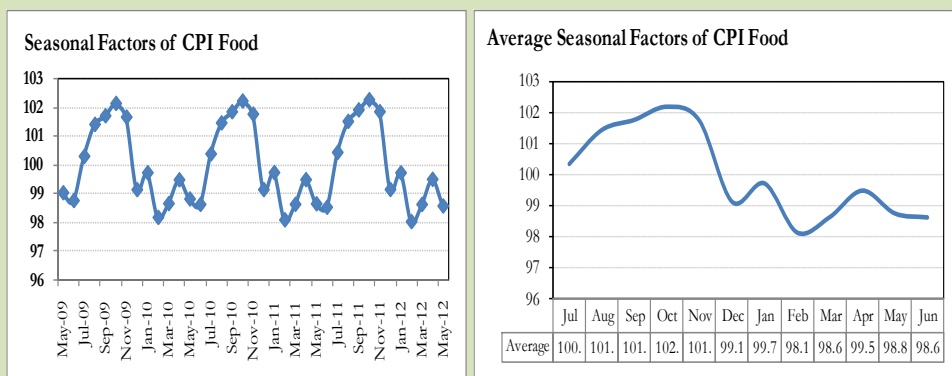
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months July to November and downward seasonality in the remaining months of the year.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

Fig. 8.3 Seasonal Plots of CPI

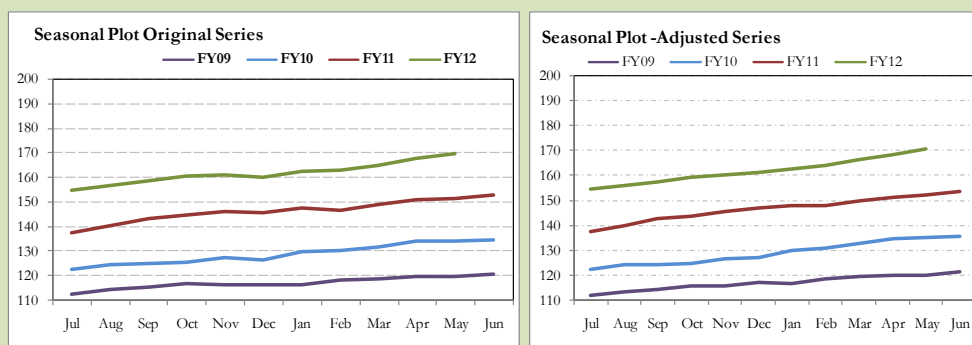
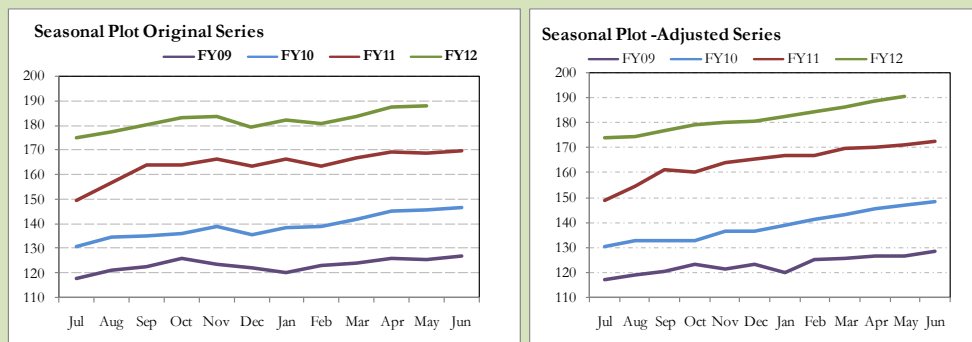


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for May 2012 stood at 170.75 against 169.93 in original series showing an increase of 0.82 on account of adjustment of downward seasonality in May 2012.

Seasonally adjusted CPI food group for May 2012 stood at 190.50 against 187.75 in original series showing an increase of 2.75 on account of adjustment of downward seasonality in May 2012.

Month-on-month change of seasonally adjusted CPI series stood at 1.44% reflecting an increase during May 2012 over April 2012 and increase of 1.15% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 1.12% reflecting a decrease during May 2012 over April 2012 and increase of 0.17% in original series.

It is important to note that inflation rates should be analyzed on the basis of seasonally adjusted rates. This is especially needed for inflation rates on month-on-month basis. The most recent annual rate of inflation is usually indicated by annualizing the seasonally adjusted month-on-month rate. Annualized rate of CPI inflation in May 2012 (corresponding to the seasonally adjusted month-on-month rate) is 18.74 percent.

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

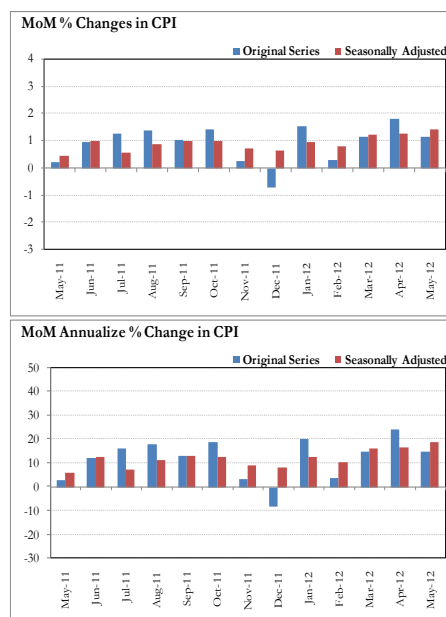
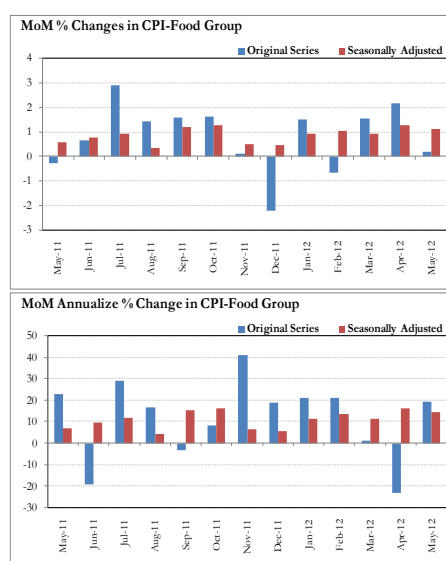


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weights	MoM change			YoY change		
		May-11	Apr-12	May-12	May-11	Apr-12	May-12
I. Food Group	37.5	-0.3	2.2	0.2	15.8	10.7	11.3
Food & Non-Alcoholic Beverages	34.8	-0.3	2.2	0.2	16.1	10.7	11.2
Alcoholic Beverages & Tobacco	1.4	0.0	3.2	0.3	5.9	11.4	11.6
Restaurant & Hotels	1.2	0.8	0.6	0.5	18.4	11.4	11.1
II. Non-Food Group	62.5	0.6	1.6	1.9	10.5	11.6	13.0
Clothing & Footwear	7.6	0.5	1.5	1.0	13.2	15.5	16.0
Housing, Water, Elect, Gas & other	29.4	0.1	1.0	2.8	9.6	7.9	10.8
Furnishing & Household Equip. Maint	4.2	0.6	1.1	1.6	9.0	20.3	21.5
Health	2.2	1.1	0.5	1.6	9.4	11.5	12.1
Transport	7.2	1.9	4.2	0.0	13.8	19.4	17.2
Communication	3.2	0.5	0.0	0.0	2.6	-0.6	-1.1
Recreation & Culture	2.0	0.9	1.5	11.9	5.0	7.3	19.0
Education	3.9	0.6	4.3	0.0	10.3	12.9	12.2
Miscellaneous	2.8	1.8	0.1	-0.3	17.8	17.7	15.3
Headline	100.0	0.2	1.8	1.1	12.6	11.3	12.3

Table A2: Distribution of Price changes (YoY) of CPI basket											
Groups	% changes	No of items in each inflation range									
		Total number of items		Decrease or no change (0% or less)		Subdued increase (>0% but <5%)		Moderate increase (5% but less than 10%)		Double digit increase (10% or more)	
		May-11	May-12	May-11	May-12	May-11	May-12	May-11	May-12	May-11	May-12
I. Food Group	11.3	126	124	11	17	7	10	18	26	90	71
Food & Non-Alcoholic Beverages	11.2	114	112	11	17	6	10	15	22	82	63
Alcoholic Beverages & Tobacco	11.6	6	6	0	0	1	0	3	2	2	4
Restaurant & Hotels	11.1	6	6	0	0	0	0	0	2	6	4
II. Non-Food Group	13.0	348	348	45	37	51	30	81	64	171	217
Clothing & Footwear	16.0	59	59	6	3	1	0	11	8	41	48
Housing, Water, Elect, Gas & other Fuels	10.8	36	36	2	0	1	0	11	12	22	24
Furnishing & Household Equip. Maintenance etc	21.5	69	69	2	2	8	3	17	12	42	52
Health	12.1	39	39	11	16	11	6	4	1	13	16
Transport	17.2	43	43	2	1	5	6	13	8	23	28
Communication	-1.1	12	12	3	6	5	1	3	3	1	2
Recreation & Culture	19.0	39	39	13	5	13	9	8	7	5	18
Education	12.2	16	16	3	3	4	1	3	3	6	9
Miscellaneous	15.3	35	35	3	1	3	4	11	10	18	20
Overall	12.3	474	472	56	54	58	40	99	90	261	288

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

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-11	May-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.53	6.59	9.79
2	Milk Fresh	6.68	19.61	13.04	8.45
3	Fresh Fruits	1.86	36.77	35.24	6.95
4	Electricity	4.40	12.63	17.03	6.76
5	Motor Fuel	3.03	19.52	24.33	6.15
6	Gas	1.58	8.87	29.41	5.09
7	Meat	2.43	21.93	15.53	3.76
8	Chicken	1.36	-2.29	33.48	3.71
9	Education	3.94	10.28	12.21	3.49
10	Household Servant	1.04	1.96	39.15	2.83
Total		48.14			56.99
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	19.96	57.32	1.12
2	Motor Vehicle Tax	0.11	2.68	48.05	0.29
3	Besan	0.15	23.05	45.64	0.59
4	Text Books	0.57	2.36	42.70	2.11
5	Household Servant	1.04	1.96	39.15	2.83
6	Gram Whole	0.16	20.28	37.48	0.55
7	Fresh Fruits	1.86	36.77	35.24	6.95
8	Egg	0.46	10.91	34.25	1.07
9	Chicken	1.36	-2.29	33.48	3.71
10	Onion	0.54	-40.92	32.69	0.97
Total		6.49			20.20
C. Ranked by Weights					
1	House Rent	21.81	8.53	6.59	9.79
2	Milk Fresh	6.68	19.61	13.04	8.45
3	Electricity	4.40	12.63	17.03	6.76
4	Wheat Flour	4.16	6.54	3.20	1.15
5	Education	3.94	10.28	12.21	3.49
6	Communication & Apparatus	3.15	2.57	-1.24	-0.26
7	Motor Fuel	3.03	19.52	24.33	6.15
8	Transport Services	2.70	11.02	10.46	2.61
9	Meat	2.43	21.93	15.53	3.76
10	Vegetable Ghee	2.07	37.38	5.33	0.92
Total		54.39			42.83
Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 12.3 percent in May, 2012.					

Table A3.1: Top Ten Contributors to CPI Food Inflation (YoY) in May 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-11	May-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	19.61	13.04	8.45
2	Fresh Fruits	1.86	36.77	35.24	6.95
3	Meat	2.43	21.93	15.53	3.76
4	Chicken	1.36	-2.29	33.48	3.71
5	Rice	1.58	17.73	17.58	2.10
6	Cigarette	1.39	5.74	11.58	1.31
7	Ready Made Food	1.23	18.38	11.07	1.28
8	Wheat Flour	4.16	6.54	3.20	1.15
9	Pulse Gram	0.24	19.96	57.32	1.12
10	Spices	0.54	50.95	16.20	1.11
Total		21.48			30.95
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	19.96	57.32	1.12
2	Besan	0.15	23.05	45.64	0.59
3	Gram Whole	0.16	20.28	37.48	0.55
4	Fresh Fruits	1.86	36.77	35.24	6.95
5	Egg	0.46	10.91	34.25	1.07
6	Chicken	1.36	-2.29	33.48	3.71
7	Onion	0.54	-40.92	32.69	0.97
8	Condiments	0.27	14.71	22.79	0.56
9	Fish	0.30	12.90	20.34	0.54
10	Tomatoes	0.45	-20.25	17.98	0.30
Total		5.78			16.36
C. Ranked by Weights					
1	Milk Fresh	6.68	19.61	13.04	8.45
2	Wheat Flour	4.16	6.54	3.20	1.15
3	Meat	2.43	21.93	15.53	3.76
4	Vegetable Ghee	2.07	37.38	5.33	0.92
5	Fresh Fruits	1.86	36.77	35.24	6.95
6	Cooking Oil	1.75	30.63	7.40	1.01
7	Fresh Vegetable	1.66	10.99	-1.56	-0.23
8	Rice	1.58	17.73	17.58	2.10
9	Cigarette	1.39	5.74	11.58	1.31
10	Chicken	1.36	-2.29	33.48	3.71
Total		24.96			29.13
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 11.3 percent in May, 2012.					

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			May-11	May-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.53	6.59	9.79
2	Electricity	4.40	12.63	17.03	6.76
3	Motor Fuel	3.03	19.52	24.33	6.15
4	Gas	1.58	8.87	29.41	5.09
5	Education	3.94	10.28	12.21	3.49
6	Household Servant	1.04	1.96	39.15	2.83
7	Transport Services	2.70	11.02	10.46	2.61
8	Text Books	0.57	2.36	42.70	2.11
9	Personal Care	1.49	13.74	15.71	1.87
10	Footwear	1.55	3.87	16.07	1.64
Total		42.12			42.34
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	2.68	48.05	0.29
2	Text Books	0.57	2.36	42.70	2.11
3	Household Servant	1.04	1.96	39.15	2.83
4	Gas	1.58	8.87	29.41	5.09
5	Fire Wood Whole	0.23	24.04	25.95	0.57
6	Motor Fuel	3.03	19.52	24.33	6.15
7	Dopatta	0.44	18.37	21.42	0.73
8	Woolen Cloth	0.88	19.45	21.05	1.50
9	Mechanical Service	0.46	8.90	20.58	0.74
10	Doctor (MBBS) Clinic Fee	0.59	16.05	20.24	0.94
Total		8.92			20.96
C. Ranked by Weights					
1	House Rent	21.81	8.53	6.59	9.79
2	Electricity	4.40	12.63	17.03	6.76
3	Education	3.94	10.28	12.21	3.49
4	Communication & Apparatus	3.15	2.57	-1.24	-0.26
5	Motor Fuel	3.03	19.52	24.33	6.15
6	Transport Services	2.70	11.02	10.46	2.61
7	Cotton Cloth	1.73	14.80	10.21	1.31
8	Gas	1.58	8.87	29.41	5.09
9	Footwear	1.55	3.87	16.07	1.64
10	Personal Care	1.49	13.74	15.71	1.87
Total		45.39			38.45
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 13.0 percent in May, 2012.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: May 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, Sugar Refined, Pulse Masoor (Whole), Gur Av.Qlty, Pulse Moong (Washed), Turai	Cold Drink (Standard Size), Pistachio Av.Qlty., Vegetable Ghee Tin, Cooking Oil (Dalda), Jam-e-Shireen	Pumpkin, Vermicelli, Chillies Green, Rusk (Papay), Tomato Ketchup Ahmed/Mitchells, Salt Powdered (National/Shan)	Bananas, Cloves Loose Av.Qlty, Pulse Gram, Chillies Powd.National 200 gm, Pepper Black National, Besan Av. Qlty., Lemon, Gram Whole Black Av Qlty., Brinjal, Gram Whole Yellow Av.Qlty, Apple, Eggs Farm
Alcoholic Beverages & Tobacco			Cigarettes Gold Leaf 20,S, Cigarettes Morven Gold 20,S	Cigarettes K-20,S, Cigarettes Capstan 20,S, Betel Nuts, Betel Leaves
Clothing & Footwear	Gents Shoe, Art 1109 Servis, Child Shoe Power Lite Bata, Sports Shoes		Handkerchief Sup. Qlty Pak, Handkerchief Avg. Qlty Pak, Gloves Av.Qlty, Lawn Printed Gul Ahmed/Al Karam, Shoe Repair Half Sole, Tailoring Coat-Pant Suit	Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Linen Av.Qlty, Ladies Sandal Bata, Brassier Sup. Qlty, Brassier Av.Qlty, Awami-Suit W&W (Gents)Av.Qlty, Dopatta Georgette Av.Qlty, Tailoring Shirt, Foot Wear Local (Children), Frock W/Wear Girls
Housing, Water, Elect, Gas & other Fuels			Bajree, Iron Bar (M.S. Bar) 1/2", Water Charges Per House, Electrician Wage Rate, Elect. Charges Upto 50 Units, House Rent For Q-1	Elect. Charges 01 - 100 Units, 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	Match Box (Small), Washing Machine (Singer)	Tube Light Philips 40 Watt, Surf Excel 400 gm Poly Bag, Bulb Philips 100-Watt	Bucket (Balti) Plastic Med, Cleanser Powder Vim 1000 Gms, Sewing Machine (Singer), Aluminum Cooking Pan, S. Steel Plate Avg. Qlty	Robin Blue (35 gm), Tawa Iron (Medium Size) Avg. Qlty, Household Servant Female (Part Time), Dinner Set Plastic 72 Pcs, Washing Soap 250 gm, Electric Blubs "0" Watt, Elect. Iron Philips, Towel(3'X2') Av. Qlty
Health	Disprin Tab., Amoxil Capsole 250 mg., Septran Tablets, Jouhar Joshanda, Calcium Syrup Sandoz, Dettol (Medium)	Ventolin Tab. 2mg., Betnesol Eye Drops, Daonil Tab. 5 mg., Lederplex Syrup, Flagyl Tab. 200 Mg., Renitec Tab. 5 mg	Ear Drops (Cardisorpine)	Cac. 1000 Tab, Panadol Tab. Extra/Plain, Doctor (MBBS) Clinic Fee, Saniplast (1 Putty), Brufen Tabs 200-mg., Gripe-Water Woodward's, X-Ray (Chest) Charges, Blood Test (Cp) Charges, Cotton Bandage 2" - 4", Trisil Tab
Transport	Gas Cylinder S. Size (L.P.G)	Motorcycle Yamaha 100 cc, Minibus Fare Max. Within City, Car Honda Civic 1500 Cc, Motorcycle Honda Cd-70, Motor Cycle Hero 70 cc	Car Suzuki 800 Cc (W/O. Ac), Bicycle With Tyres & Tube, Car Suzuki 1000 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, Cycle Overhauling Charges, Air Fare Economy Class., Tyre Puncture Charges, Train Fare Eco. 1-100 Km., Train Fare Eco. > 500 Km
Communication	Mobile Set Nokia/Sony/Ericsson Av.Qlty, Mobile Cell Charges	T.C.S. Ch. 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"	T.V 20" Color China/Korea, Computer CD (Tdk/Imation), DVD/VCD Player Panasonic/LG, Ball Pen (Local), Tape Recorder Cassette (Blank)	Pencil Goldfish/Deer, Pen Ink Dollor 57 ml Bottle, Eng. Book Ist. Year Complete Set, Radio With C.Player National, Video Cassette Blank Tdk/Sony	English Book Class V1, English Book Class IX or X, Urdu Book Class V (T.B.Board), Maths Book Class IX or X, Weekly "Mag", Cinema A/C High Class, Maths Book Calss V (T.B.Board), Monthly "Naunehal Digest", Urdu Book Ist Year/ Inter, Pakistan Studies Book BA/B.Sc
Education	Pvt Eng. College Fee (1st Year), Govt. College Fee Ist. Year, Govt. College Fee 4Th. Year	Govt. University Fee MSc/ MA	I.T. Tuition Fees, MBA Tuition Fee, Pvt Med. College Fee MBBS (1st Year),	Govt. Med. College Fee MBBS 1st Year, Govt. Engg. Coll. Fee 1st Year, Pvt School Fee Eng. Med (Class-VI), Coaching Charges For Class XI/ XII Science Group
Restaurant & Hotels			Cooked Dal (Av. Hotel), Bread Tandoori St. Size	Chicken Biryani Full/Double, Cooked Mutton (Av. Hotel), Cooked Beef (Av. Hotel), Tea Prepared (Ordinary)
Miscellaneous	Silver Tezabi 24 ct	Toilet Soap Lux 95 gm, Hair Color Bigen, Disposable Razor Gillette-II, Lipstick S. Miss/Medora	Purse Ladies (Leather) Av. Qlty, Blade 7-o-Clock Steel (5), Toothbrush Shield, Talc Powder Viceroy/ Black Cat	Toothpaste Med Size Colgate 70 gm, Gel Medium Size, Face Cream Ponds (Medium), Artificial Jewellery Set, Toilet Soap Safeguard Bath Size, Blade Treet Ordinary (10)

Table A5: City- wise CPI Inflation by Income Groups, May 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	0.9	10.3	-0.4	9.3	2.5	11.7	1.4	11.2	-0.2	10.0	3.1	12.6
2 Islamabad	1.7	12.9	-0.2	13.4	4.3	12.2	1.5	12.6	0.3	13.5	3.0	11.6
3 Lahore	0.6	10.2	-1.1	11.0	3.1	9.0	0.9	10.4	-1.0	11.4	3.2	9.3
4 Gujranwala	1.2	12.9	0.1	13.2	2.7	12.5	1.6	13.6	0.2	13.9	3.2	13.3
5 Sialkot	2.2	10.2	1.8	12.0	2.8	7.8	2.4	10.9	1.7	12.6	3.2	9.0
6 Faisalabad	0.9	9.6	-0.2	9.5	2.5	9.8	1.3	10.1	0.0	10.1	2.8	10.0
7 Multan	-0.2	10.8	-2.3	9.4	2.6	12.5	0.2	11.0	-2.3	9.7	2.9	12.5
8 Sargodha	0.8	10.7	-0.5	7.0	2.3	15.1	1.1	11.2	-0.3	7.4	2.5	15.2
9 Bahawalpur	-0.1	13.7	-2.2	11.7	2.4	16.0	0.6	14.4	-1.5	12.7	2.7	16.2
10 Karachi	0.9	10.1	-0.1	10.3	2.3	9.9	1.1	10.7	-0.2	11.3	2.6	10.1
11 Hyderabad	-0.2	9.4	-1.7	8.1	1.9	11.4	0.2	10.4	-1.5	8.9	2.3	12.2
12 Sukkur	1.2	7.6	0.8	4.3	1.7	11.8	1.4	8.7	0.9	5.6	2.0	12.2
13 Larkana	1.9	14.0	1.8	10.4	2.0	18.8	2.0	15.0	1.8	10.9	2.2	19.8
14 Peshawar	0.0	10.4	-2.0	9.4	2.3	11.5	0.4	10.6	-1.6	9.9	2.5	11.4
15 Bannu	-0.8	11.9	-2.1	7.4	0.7	17.6	-0.2	11.8	-1.5	8.7	1.1	15.1
16 Quetta	-0.7	11.7	-2.5	9.3	1.6	15.0	-0.1	12.1	-2.2	9.4	2.3	15.3
17 Khuzdar	0.6	9.6	0.1	7.9	1.2	11.7	0.9	9.4	0.5	8.4	1.3	10.5
	Rs 12001-18000						Rs 18001-35000					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.5	11.0	-0.2	10.5	1.1	11.6	1.0	12.0	-0.2	11.3	2.0	12.5
2 Islamabad	0.7	12.1	0.3	13.9	1.3	10.3	1.2	12.2	0.2	14.4	2.2	10.4
3 Lahore	0.1	9.9	-0.9	11.5	1.2	8.2	1.1	10.6	-0.7	12.1	2.8	9.4
4 Gujranwala	0.7	13.6	0.2	14.5	1.2	12.6	1.6	14.4	0.5	15.4	2.6	13.6
5 Sialkot	1.5	10.5	1.3	12.2	1.6	8.7	2.2	11.0	1.3	12.4	3.0	9.8
6 Faisalabad	0.6	9.7	0.1	10.6	1.0	8.8	1.4	10.4	0.2	11.3	2.4	9.7
7 Multan	-0.6	10.7	-2.3	10.2	1.0	11.2	0.3	11.4	-2.4	10.8	2.6	11.9
8 Sargodha	0.4	11.5	-0.2	8.5	0.9	14.3	1.1	12.5	-0.2	9.3	2.0	15.0
9 Bahawalpur	-0.3	14.3	-1.6	13.0	1.0	15.6	0.9	15.0	-1.2	13.4	2.7	16.3
10 Karachi	0.4	10.6	-0.2	11.8	1.1	9.4	1.2	11.3	-0.1	12.2	2.3	10.5
11 Hyderabad	-0.4	10.3	-1.2	9.6	0.5	11.1	0.6	11.4	-1.0	10.4	2.1	12.2
12 Sukkur	0.9	8.2	1.2	5.8	0.6	10.6	1.9	9.4	1.8	6.5	2.0	12.0
13 Larkana	1.5	15.7	1.9	11.5	1.2	19.9	2.1	17.1	1.9	12.3	2.3	21.3
14 Peshawar	-0.2	10.2	-1.4	10.1	1.0	10.2	0.9	11.2	-1.2	10.6	2.6	11.7
15 Bannu	-1.0	11.2	-1.6	8.7	-0.4	13.7	-0.2	11.5	-1.3	9.6	0.7	13.1
16 Quetta	-0.5	12.0	-2.1	9.5	1.0	14.6	-0.1	12.4	-2.2	9.5	1.8	14.9
17 Khuzdar	0.7	9.1	0.7	8.6	0.7	9.6	1.3	9.6	0.5	8.8	1.9	10.3
	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	12.7	-0.1	11.7	1.4	13.1	0.9	12.2	-0.2	11.3	1.6	12.8
2 Islamabad	1.5	12.1	0.9	14.3	1.9	11.0	1.4	12.0	0.7	14.3	2.0	10.3
3 Lahore	1.1	10.6	-0.6	13.7	2.0	9.1	0.9	10.4	-0.7	12.6	2.2	8.9
4 Gujranwala	1.4	14.6	0.8	16.7	1.8	13.6	1.4	14.0	0.4	15.1	2.1	13.3
5 Sialkot	2.1	10.9	1.4	13.2	2.4	9.8	2.0	10.8	1.4	12.7	2.5	9.5
6 Faisalabad	1.4	12.3	0.5	12.6	1.8	12.1	1.2	10.8	0.1	11.1	1.9	10.6
7 Multan	0.5	11.3	-2.0	11.1	1.7	11.4	0.2	11.1	-2.2	10.5	1.9	11.6
8 Sargodha	1.0	14.3	0.1	10.9	1.4	15.9	0.9	12.3	-0.2	8.9	1.6	14.6
9 Bahawalpur	1.4	14.7	-0.6	14.0	2.4	15.1	0.7	14.4	-1.3	13.0	2.1	15.4
10 Karachi	1.6	12.2	0.1	12.5	2.4	12.0	1.3	11.6	0.0	12.2	2.3	11.2
11 Hyderabad	0.8	12.0	-0.4	11.8	1.5	12.1	0.4	11.1	-1.0	10.2	1.5	11.8
12 Sukkur	2.2	10.8	2.5	7.6	2.0	12.3	1.6	9.2	1.6	6.2	1.7	11.4
13 Larkana	2.1	17.3	2.2	13.0	2.0	19.5	1.9	15.8	1.9	11.6	2.0	18.8
14 Peshawar	1.1	11.5	-0.5	12.0	1.9	11.3	0.7	11.0	-1.2	10.7	2.0	11.3
15 Bannu	-0.2	10.6	-1.4	9.9	0.4	11.0	-0.4	11.4	-1.5	8.9	0.4	13.1
16 Quetta	-0.1	12.4	-2.0	9.4	1.0	14.0	-0.2	12.2	-2.2	9.4	1.3	14.3
17 Khuzdar	1.8	12.0	1.9	10.8	1.7	12.7	1.0	9.6	0.5	8.4	1.3	10.5

Table A6: City- wise CPI Inflation (YoY) May, 2012							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Larkana	15.8	11.6	18.8	Quetta	12.2	9.4	14.3
Mardan	14.6	12.1	16.1	Rawalpindi	12.2	11.3	12.8
Bahawalpur	14.4	13.0	15.4	Islamabad	12.0	14.3	10.3
Bahawalnagar	14.3	14.0	14.5	D.I.Khan	11.8	10.5	12.7
Gujranwala	14.0	15.1	13.3	Karachi	11.6	12.2	11.2
Mir Pur Khas	13.9	12.0	15.2	Wazirabad	11.5	10.9	12.0
Rahim Yar Khan	13.7	11.3	15.5	Dadu	11.4	10.1	12.4
Loralai & Cantt	13.7	13.6	13.7	Bannu	11.4	8.9	13.1
Mithi	13.7	8.5	17.4	Mingora	11.2	10.1	12.0
Sahiwal	13.2	9.2	16.0	Muzaffargarh	11.2	9.9	12.2
Abbotabad	12.8	13.4	12.4	Multan	11.1	10.5	11.6
Nawabshah	12.8	9.5	15.0	Hyderabad	11.1	10.2	11.8
Mianwali	12.6	11.3	13.5	Peshawar	11.0	10.7	11.3
Jehlum	12.5	12.8	12.3	D.G. Khan	10.9	10.7	11.0
Attock	12.4	12.4	12.4	Faisalabad	10.8	11.1	10.6
Sargodha	12.3	8.9	14.6	Sialkot	10.8	12.7	9.5
Jhang	12.3	10.0	13.9	Lahore	10.4	12.6	8.9
				Vehari	10.1	9.8	10.2
				Khuzdar	9.6	8.4	10.5
				Sukkur	9.2	6.2	11.4
				Dera Mrd.Jamali	9.1	7.0	10.8
				Gawadar	8.4	5.7	10.3
				Turbat	7.3	5.3	8.6
Note: High inflation refers to equal or above average inflation, and low inflation refers to below average							

Table A7: Income Group-wise Inflation (percent)

	MoM			YoY		
	May-11	Apr-12	May-12	May-11	Apr-12	May-12
<u>Up to Rs. 8000</u>						
General	-0.1	1.7	0.4	13.2	9.9	10.3
Food	-0.6	2.0	-0.4	15.1	9.0	9.2
Non-food	0.6	1.3	1.3	10.9	11.0	11.8
<u>Rs. 8001- 12000</u>						
General	0.0	1.7	1.5	13.2	10.2	11.8
Food	-0.5	2.1	-0.2	15.4	9.7	10.0
Non-food	0.6	1.3	3.4	10.9	10.8	13.9
<u>Rs. 12001- 18000</u>						
General	0.1	1.8	1.2	11.9	10.3	11.5
Food	-0.4	2.1	0.0	15.5	10.2	10.6
Non-food	0.6	1.4	2.6	8.5	10.4	12.5
<u>Rs. 18001- 35000</u>						
General	0.2	1.8	1.1	13.7	11.0	12.0
Food	-0.3	2.2	0.1	15.7	10.7	11.2
Non-food	0.6	1.4	2.0	12.0	11.1	12.6
<u>Above Rs. 35000</u>						
General	0.3	1.9	1.1	12.4	12.1	13.0
Food	-0.1	2.2	0.5	16.3	11.7	12.3
Non-food	0.6	1.7	1.4	10.4	12.4	13.3
<u>All income groups</u>						
General	0.2	1.8	1.1	12.6	11.3	12.3
Food	-0.3	2.2	0.2	15.8	10.7	11.3
Non-food	0.6	1.6	1.9	10.5	11.6	13.0

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices	Percentage change	
			May-12	YoY	MoM
1	Wheat	10Kg.	269.3	10.3	-1.7
2	Wheat Flour Bag	10Kg.	307.9	7.1	-0.7
3	Rice Basmati Broken	Kg.	64.0	18.2	3.1
4	Rice Irri-6	Kg.	47.5	12.4	1.2
5	Bread Plain Med. Size (340-400 Gm.)	Each	31.8	6.4	1.4
6	Beef	Kg.	261.8	15.5	0.3
7	Mutton	Kg.	502.1	14.2	0.4
8	Chicken Live (Farm)	Kg.	148.0	18.4	-11.1
9	Milk Fresh	Litr	60.9	10.5	1.1
10	Curd	Kg.	71.5	12.3	1.9
11	Milk Powdered Nido	500G	270.0	21.3	0.6
12	Egg Hen (Farm)	Doz.	77.8	29.7	7.4
13	Mustard Oil	Kg.	185.0	10.4	0.6
14	Cooking Oil (Tin)	2.5Ltr	518.3	4.7	1.2
15	Veg. Ghee (Tin)	2.5Kg.	517.4	4.5	1.0
16	Veg. Ghee Loose	Kg.	174.0	5.6	-0.1
17	Bananas	Doz.	93.5	60.0	21.1
18	Masoor Pulse Washed	Kg.	100.1	-11.0	-0.8
19	Moong Pulse Washed	Kg.	122.8	-11.9	0.2
20	Mash Pulse Washed	Kg.	141.5	-9.7	-0.2
21	Gram Pulse Washed	Kg.	108.5	56.9	9.9
22	Potatoes	Kg.	24.6	-7.3	4.8
23	Onions	Kg.	23.1	44.7	-9.7
24	Tomatoes	Kg.	25.6	51.5	-49.1
25	Sugar	Kg.	54.4	-16.9	-2.1
26	Gur	Kg.	70.4	-13.4	1.9
27	Salt Powdered Loose (Lahori)	Kg.	8.5	11.0	1.2
28	Red Chilies Powder Loose	Kg.	308.2	19.4	-0.1
29	Garlic	Kg.	94.0	-41.6	-2.5
30	Tea (Yellow Label)	200Gm.	142.1	8.0	0.0
31	Cooked Beef Plate	Each	63.9	12.8	1.2
32	Cooked Dal Plate	Each	38.9	8.5	1.4
33	Tea Prepared (Sada)	Cup	14.9	10.0	0.5
34	Cigarettes K-2 (20'S)	20'S	29.4	7.5	0.0
35	Long Cloth (Coarse Latha)	Mtr.	135.2	-16.8	1.2
36	Shirting	Mtr.	113.4	17.2	0.4
37	Lawn	Mtr.	157.4	-8.7	3.6
38	Georgette (Voil Printed)	Mtr.	95.7	15.2	2.2
39	Sandal Gents Bata	Pair	499.0	0.0	0.0
40	Chappal Spong. Bata (Gents)	Pair	179.0	28.8	0.0
41	Sandal Ladies Bata	Pair	399.0	0.0	0.0
42	Electric Charges 1-50	Unit	1.9	1.6	1.6
43	Gas Charges upto 3.3719	Mmbtu	142.6	29.4	0.0
44	Kerosene	Litr	115.5	14.6	0.0
45	Firewood	40Kg	473.6	21.5	0.4
46	Energy Savor 14 Watts	Each	145.6	15.6	0.6
47	Washing Soap (200-250 Gm.)	Cake	19.6	16.8	0.5
48	Match Box	Each	1.1	5.9	0.9
49	Petrol	Litr	104.5	17.1	0.0
50	Diesel	Litr	108.0	10.1	0.0
51	L.P.G.(11 Kg Cylinder.)	Each	1244.7	-1.3	-12.2
52	Tele. Local Call	Call	3.6	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	32.0	13.6	1.2
Maximum				60.0	21.1
Median				10.4	0.4
Minimum				-41.6	-49.1

Table A9: Distribution of Price Changes (YoY) - WPI Items: May 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, Cotton Seeds, Maize, Dry Fruits	Unmanufactured Tobacco	Wheat, Millet/Bajra, Raw Animal Material/Wool	Fresh Fruits, Sugar Crops, Eggs, Fish Live Fresh Or Chilled, Hides And Fur Skins, Raw, Pulses, Rice, Fuel Wood In Logs, Sorghum/Jowar, Milk From Bovine Animals, Poultry, Other Oil Seeds, Vegetables
Ores & Minerals, Electricity Gas & Water				Coal Not Agglomerated, Electrical Energy, Natural Gas Liquefied, Salt & Pure Sodium Chloride,
Food Products, Beverages and Tobacco, Textiles, Apparel and Leather Products	Sugar Refined, Cotton Yarn, Blended Yarn, Oil Cakes, Milk And Cream In Solid Form, Nylon Yarn, Synthetic Carpets, Woolen Carpets, Tobacco Products	Dried Fruits & Nuts, Vegetable Oil Refined, Coffee And Tea, Other Leather N.E.C, Vegetable Ghee, Leather With Out Hairs, Beverages, Chocolate, Sugar Confectionary	Vegetables & Fruit Juices, Other Food Products, Ice Cream, Quilts, Ready Made Garments, Fruit Juices, Silk And Rayon Fabrics	Other Cereal Flour, Spices, Footwear's, Dairy Products N.E.C, Other Fabrics, Bed Sheets, Woven Fabrics, Meat Of Animals, Blankets, Towels, Mineral Water, Processed Liquid Milk, Hosiery Products, Cotton Fabrics, Wheat Flour
Other Transportable Goods except Metal Products, Machinery and Equipments	Insecticides, Dying Materials		Matches, Mobil Oil, Soaps & Detergent, Bed Foams, Chemicals, Timber, Pesticides, Medicines, Coke	Printing Paper, Hard Board, Paints & Varnishes, Fertilizers, Motor Sprit, Plastic Products, Bricks Blocks And Tiles, Cement, Furnace Oil, Glass Sheets, Other Glass Articles, Kerosene Oil, Ceramics And Sanitary, Diesel Oil, Auto Tyres
Metal Product Machinery & Equipment	Tractors, Pig Iron, Engines And Motors, Vacuum Pumps, Concrete Mixer	Motor Cycles, Cultivators, Chuff Cutter, Radio And Television, Lathe Machines	Bicycles, Electrical Wires, Steel Bars & Sheets, Refrige,Wash& Sew Mach,Iron,Fan, Air Conditioners, Motor Vehicles, Pipe Fittings	Steel Products, Lighting Equipments

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Items and specification	Weights	Index		
		May-11	Apr-12	May-12
General	100.00	151.33	168.00	169.93
Food & Non-Alcoholic Beverages.	34.83	169.26	188.00	188.29
1 Wheat	0.35	145.92	163.51	158.80
2 Wheat Flour	4.16	160.94	168.13	166.09
3 Wheat Product	0.10	159.60	164.35	164.12
4 Besan	0.15	160.00	214.92	233.03
5 Rice	1.58	140.58	158.65	165.29
6 Cereals	0.16	175.65	192.61	193.20
7 Bakery & Confectionary	1.16	153.49	166.14	168.77
8 Nimco	0.46	167.62	189.59	193.14
9 Meat	2.43	185.23	212.52	213.99
10 Chicken	1.36	151.75	202.52	202.55
11 Fish	0.30	164.82	197.20	198.34
12 Milk Fresh	6.68	180.53	201.84	204.07
13 Milk Product	0.63	174.82	199.07	201.64
14 Milk Powder	0.11	151.79	168.79	172.44
15 Egg	0.46	127.74	148.11	171.49
16 Mustard Oil	0.10	142.22	158.20	159.53
17 Cooking Oil	1.75	144.12	153.10	154.79
18 Vegetable Ghee	2.07	155.40	162.81	163.69
19 Dry Fruits	0.25	179.32	198.12	200.77
20 Fresh Fruits	1.86	196.60	232.03	265.88
21 Pulse Masoor	0.27	164.42	146.30	146.82
22 Pulse Moong	0.23	266.94	238.74	238.27
23 Pulse Mash (Washed)	0.21	225.60	204.38	204.12
24 Pulse Gram	0.24	154.52	216.49	243.09
25 Gram Whole	0.16	169.30	225.40	232.76
26 Beans	0.03	169.66	194.89	198.78
27 Potatoes	0.48	168.77	154.38	162.26
28 Onion	0.54	101.85	146.61	135.14
29 Tomatoes	0.45	69.45	187.81	81.94
30 Fresh Vegetable	1.66	167.84	187.39	165.22
31 Sugar	1.04	234.73	201.57	197.07
32 Gur	0.02	249.90	219.17	216.41
33 Honey	0.04	198.85	218.72	222.38
34 Sweet Meet	0.25	179.91	200.06	201.63
35 Beverages	1.20	151.44	162.19	163.72
36 Jam, Tomato Ketchup & Pickle	0.25	160.90	171.32	172.01
37 Condiments	0.27	172.30	210.58	211.56
38 Spices	0.54	234.61	272.99	272.61
39 Tea	0.84	199.71	208.58	208.98
Alcoholic Beverages, Tobacco	1.41	151.57	168.74	169.22
40 Cigarette	1.39	151.53	168.63	169.08
41 Betel Leaves & Nuts	0.02	153.73	175.76	177.92
Clothing & Footwear	7.57	140.69	161.68	163.22
42 Cotton Cloth	1.73	138.06	150.89	152.16
43 Woolen Cloth	0.88	151.74	182.30	183.68
44 Ready Made Garment	0.97	136.38	159.03	160.68
45 Woolen Readymade Garments	0.40	141.20	160.53	161.01
46 Hosiery	0.51	148.82	169.17	171.86
47 Dopatta	0.44	143.08	170.66	173.73
48 Cleaning & Laundering	0.21	151.03	174.86	177.51

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

Items and specification	Weights	Index		
		May-11	Apr-12	May-12
49 Tailoring	0.88	163.21	188.75	191.94
50 Footwear	1.55	122.34	141.80	142.00
Housing, Water, Elect, Gas & Other Fuel	29.41	138.27	149.07	153.27
51 House Rent	21.81	126.67	135.02	135.02
52 Construction Input Item	0.56	166.34	192.40	194.21
53 Construction Wage Rate	0.33	143.81	160.84	163.21
54 Water Supply	0.50	121.80	132.90	133.23
55 Electricity	4.40	167.80	168.71	196.37
56 Gas	1.58	204.32	264.42	264.42
57 Kerosene Oil	0.01	234.95	266.00	267.61
58 Fire Wood Whole	0.23	178.86	225.67	225.28
Furnished H.Hold Equip. & Maint. Etc	4.21	141.13	168.78	171.52
59 Furniture	0.33	138.72	159.39	161.27
60 Household Textile	0.65	140.33	165.26	167.77
61 Household Equipment	0.59	142.15	152.27	153.84
62 Utensils	0.32	138.29	162.84	166.02
63 Plastic Products	0.25	151.86	169.80	171.46
64 Washing Soap & Detergent	0.79	156.59	185.11	187.61
65 Sewing Needle & Dry Cell	0.15	129.76	144.15	145.25
66 Household Servant	1.04	129.08	175.17	179.61
67 Marriage Hall Charges	0.08	153.57	181.77	183.23
Health	2.19	128.55	141.74	144.07
68 Drug Medicine	1.27	119.78	126.54	128.29
69 Medical Equipment	0.01	161.43	181.03	183.11
70 Doctor (MBBS) Clinic Fee	0.59	146.09	171.60	175.66
71 Medical Test	0.32	130.09	145.82	147.23
Transport	7.20	158.71	185.94	185.93
72 Motor Vehicle	0.66	136.69	144.48	145.44
73 Motor Vehicle Accessories	0.24	166.97	199.88	200.36
74 Motor Fuel	3.03	155.39	194.29	193.20
75 Mechanical Service	0.46	146.38	175.38	176.50
76 Motor Vehicle Tax	0.11	102.68	152.02	152.02
77 Transport Services	2.70	171.44	188.65	189.38
Communication	3.22	123.74	122.36	122.38
78 Postal Services	0.07	161.99	168.53	168.66
79 Communication & Apparatus	3.15	122.94	121.39	121.41
Recreation & Culture	2.02	137.72	146.51	163.95
80 Recreation & Culture	0.86	115.16	120.03	121.05
81 Text Books	0.57	161.09	171.48	229.88
82 News Papers	0.19	137.66	149.97	149.97
83 Stationery	0.40	153.29	166.61	169.33
Education	3.94	134.85	151.36	151.31
84 Education	3.94	134.85	151.36	151.31
Restaurants And Hotels	1.23	174.47	192.76	193.79
85 Ready Made Food	1.23	174.47	192.76	193.79
Miscellaneous Goods And Services	2.76	163.19	188.70	188.15
86 Personal Care	1.49	148.14	170.72	171.42
87 Cosmetics	0.39	129.77	146.27	146.40
88 Blades	0.03	147.18	166.64	169.53
89 Personal Equipments	0.84	205.70	240.72	237.54

Table A11: Wholesale Price Index Numbers by Major Groups and Selected Commodities			
Items and Specifications	Index		
	May-11	Apr-12	May-12
General	176.97	185.48	189.46
Agriculture Forestry & Fishery	189.83	183.68	185.78
1 Wheat	149.46	168.38	163.65
2 Maize	175.90	163.16	168.27
3 Rice	132.65	149.83	154.82
4 Sorghum/Jowar	189.29	215.59	218.11
5 Millet/Bajra	149.84	157.66	163.10
6 Vegetables	156.56	212.58	172.46
7 Fresh Fruits	179.39	212.67	272.26
8 Dry Fruits	178.21	174.24	172.32
9 Cotton Seeds	193.07	174.03	173.84
10 Other Oil Seeds	154.75	167.61	171.79
11 Edible Roots/ Potatoes	190.67	134.95	150.79
12 Stimulant And Spice Crops	210.22	170.44	165.35
13 Pulses	194.49	225.64	228.41
14 Sugar Crops	201.25	272.71	267.92
15 Fibre Crops	291.20	173.25	170.95
16 Unmanufactured Tobacco	165.41	166.99	166.81
17 Poultry	158.96	206.42	177.51
18 Milk From Bovine Animals	171.97	194.99	197.20
19 Eggs	125.30	139.52	166.54
20 Raw Animal Material/Wool	127.01	136.50	136.50
21 Hides And Fur Skins, Raw	115.18	138.42	138.05
22 Fuel Wood In Logs	176.18	201.97	203.06
23 Fishes Live Fresh Or Chilled	128.25	154.52	155.33
Ores/Minerals, Gas & Elect.	162.41	188.10	214.79
24 Coal Not Agglomerated	125.49	180.39	188.24
25 Natural Gas Liquefied	159.56	210.36	207.95
26 Salt & Pure Sodium Chloride	136.81	164.89	165.87
27 Electrical Energy	170.70	166.13	226.10
Food, Beverages, Tobacco, Textiles	177.44	177.32	179.06
28 Meat Of Animals	188.66	223.72	224.02
29 Vegetables & Fruit Juices	163.07	177.93	178.36
30 Dried Fruits & Nuts	189.01	196.91	198.46
31 Fruit Juices	147.90	157.86	158.18
32 Vegetable Oil Refined	149.08	154.59	156.41
33 Vegetable Ghee	139.13	143.93	145.16
34 Oil Cakes	162.72	135.09	139.41
35 Processed Liquid Milk	169.01	187.39	191.19
36 Milk And Cream In Solid Form	189.48	166.51	167.14
37 Ice Cream	148.72	161.68	161.68
38 Dairy Products N.E.C	158.61	197.89	198.75
39 Wheat Flour	137.90	154.79	153.57
40 Other Cereal Flour	136.55	191.42	214.25
41 Sugar Refined	245.79	207.78	200.47
42 Chocolate	99.45	100.26	100.26
43 Sugar Confectionary	100.00	100.40	100.40
44 Coffee And Tea	187.89	195.35	196.69
45 Spices	203.89	303.48	303.53
46 Other Food Products	292.41	318.94	318.54
47 Mineral Water	146.29	165.82	165.88
48 Beverages	133.62	135.24	135.21
49 Tobacco Products	178.22	174.93	175.85
50 Cotton Yarn	244.76	193.36	200.04
51 Nylon Yarn	201.74	195.64	183.81
52 Blended Yarn	224.89	183.85	187.07
53 Woven Fabrics	144.44	171.55	171.55
54 Cotton Fabrics	155.96	175.67	175.89
55 Other Fabrics	136.36	161.72	165.23
56 Silk And Rayon Fabrics	134.18	141.18	141.30

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

Items and Specifications	Index		
	May-11	Apr-12	May-12
57 Towels	164.17	189.19	189.19
58 Blankets	137.48	161.28	161.28
59 Bed Sheets	146.24	174.13	175.92
60 Quilts	136.63	147.05	147.05
61 Woolen Carpets	108.33	103.57	104.76
62 Synthetic Carpets	150.85	144.07	144.07
63 Hosiery Products	144.89	163.35	163.84
64 Ready Made Garments	118.29	126.92	127.25
65 Leather With Out Hairs	107.45	109.83	109.83
66 Other Leather N.E.C	117.25	122.57	122.57
67 Footwear's	101.48	128.50	128.50
Other Transportable Goods	182.34	208.92	207.39
68 Timber	134.66	144.14	144.35
69 Printing Paper	105.15	133.29	141.99
70 Hard Board	125.00	158.33	168.75
71 Coke	155.28	163.45	163.45
72 Motor Sprit	149.32	174.61	174.61
73 Diesel Oil	238.75	265.00	263.04
74 Kerosene Oil	239.15	266.52	266.52
75 Furnace Oil	184.35	220.75	210.94
76 Mobil Oil	165.22	178.98	181.11
77 Chemicals	135.03	145.98	145.79
78 Dying Materials	107.04	104.26	104.26
79 Fertilizers	217.45	270.34	268.05
80 Pesticides	155.00	165.53	165.53
81 Insecticides	128.84	125.52	121.64
82 Paints & Varnishes	166.88	202.50	211.83
83 Medicines	115.56	120.38	122.49
84 Soaps & Detergent	143.17	155.89	156.58
85 Auto Tyres	159.51	175.62	175.62
86 Plastic Products	159.15	186.58	185.12
87 Glass Sheets	152.76	172.43	172.43
88 Other Glass Articles	197.18	216.51	222.06
89 Ceramics And Sanitary	130.37	144.10	144.28
90 Bricks Blocks And Tiles	146.98	171.12	170.86
91 Cement	154.07	175.39	177.41
92 Bed Foams	121.17	131.00	131.00
93 Matches	111.77	120.63	122.82
Metal Product Machinery & Equip	143.65	156.18	156.46
94 Pig Iron	128.97	128.97	128.97
95 Steel Bars & Sheets	126.10	135.01	136.32
96 Pipe Fittings	135.28	142.31	142.31
97 Steel Products	135.22	158.78	159.13
98 Engines And Motors	109.07	109.07	109.07
99 Vacuum Pumps	115.39	115.39	115.39
100 Air Conditioners	160.61	168.43	170.33
101 Cultivators	180.09	184.66	184.66
102 Chuff Cutter	131.08	131.08	134.28
103 Tractors	180.89	172.36	172.36
104 Lathe Machines	147.51	147.68	147.68
105 Concrete Mixer	138.83	138.83	138.83
106 Refrige,Wash& Sew Mach, Iron,Fan	155.20	164.86	164.93
107 Electrical Wires	152.53	165.49	165.49
108 Lighting Equipments	129.62	145.49	145.49
109 Radio And Television	129.93	132.73	132.73
110 Motor Vehicles	151.29	160.28	160.28
111 Motor Cycles	118.67	124.02	124.02
112 Bicycles	156.80	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	166.96
	Feb	146.85	163.56	136.83	168.82	158.33	175.49	164.99
	Mar	148.91	167.10	138.01	174.41	162.92	181.70	166.81
	Apr	150.99	169.25	140.05	178.69	165.46	187.09	167.83
	May	151.33	168.76	140.88	176.97	167.15	183.20	167.98
	Jun	152.78	169.88	142.53	177.98	172.14	181.68	168.09
	Jul	154.72	174.80	142.68	177.26	175.45	178.41	171.45
	Aug	156.88	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
	May	169.93	187.75	159.25	189.46	186.57	191.29	184.88

*: all groups combined

Table A13: International Commodity Prices/ Indices

	Feb-12	Mar-12	Apr-12	May-12
Energy				
Crude Oil (US\$ per barrel) *	112.7	117.8	113.8	104.2
IMF Energy Index (2005 = 100)	208.9	216.1	210.0	194.2
WB Energy Index (2005 = 100) @	201.0	208.5	201.1	185.7
Food				
Rice (\$/MT)	547.5	577.1	586.0	611.1
Wheat (\$/MT)	281.1	283.9	266.3	264.4
Sugar (US cent/ pound)	24.1	23.8	22.5	20.3
Palm Oil (\$/MT)	1,047.7	1,105.7	1,157.5	1,031.1
Soybean Oil (\$/MT)	1,168.5	1,196.5	1,232.6	1,134.6
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	100.7	99.5	100.1	88.5
IMF Metal Price Index (2005 = 100)	207.1	206.9	203.5	193.3
Copper (\$/MT)	8,441.6	8,470.8	8,285.5	7,896.9
Aluminum (\$/MT)	2,208.1	2,184.2	2,048.5	2,002.5
Iron Ore (\$ cents/dry MT)	140.4	144.7	147.7	136.3
Tin (\$/MT)	24,293.4	22,985.4	22,114.5	20,295.3
Nickle (\$/MT)	20,393.7	18,660.8	17,892.8	16,968.3
Zinc (\$/MT)	2,058.0	2,035.9	2,002.7	1,928.0
Lead (\$/MT)	2,121.4	2,056.7	2,073.6	1,999.3
Uranium (\$/MT)	52.0	51.3	51.3	51.9
DAP (\$/MT)	517.3	502.5	518.1	553.0
Urea (\$/MT)	382.9	410.6	493.4	496.7

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	169.93
Jun	120.64	134.83	152.78	
Seasonally Adjusted Series				
Jul	112.09	122.20	137.36	154.45
Aug	113.64	123.89	139.72	155.84
Sep	114.60	124.13	142.56	157.42
Oct	115.72	124.38	143.37	159.01
Nov	115.77	126.52	145.40	160.17
Dec	116.90	127.18	146.86	161.20
Jan	116.62	129.81	147.86	162.79
Feb	118.71	130.89	147.76	164.14
Mar	119.24	132.64	149.98	166.19
Apr	119.91	134.42	151.29	168.32
May	120.08	134.91	152.01	170.75
Jun	121.24	135.51	153.55	

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	187.75
Jun	126.77	146.63	169.88	
Seasonally Adjusted Series				
Jul	117.30	130.59	148.78	174.06
Aug	119.36	133.08	154.46	174.69
Sep	120.59	132.94	161.00	176.79
Oct	123.43	133.14	160.36	179.03
Nov	121.54	136.61	163.71	179.94
Dec	123.24	137.01	165.13	180.78
Jan	120.18	138.94	166.98	182.43
Feb	125.11	141.67	166.77	184.36
Mar	125.76	143.66	169.45	186.04
Apr	126.56	146.02	170.15	188.40
May	126.67	147.46	171.11	190.50
Jun	128.38	148.70	172.44	

Table 16: CPI Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.23	100.22	100.19	100.18	100.2
Aug	100.60	100.63	100.65	100.67	100.6
Sep	100.55	100.61	100.65	100.69	100.6
Oct	100.96	101.01	101.07	101.12	101.0
Nov	100.60	100.62	100.64	100.67	100.6
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	99.38	99.35	99.4
Mar	99.38	99.33	99.29	99.27	99.3
Apr	99.81	99.81	99.80	99.81	99.8
May	99.60	99.58	99.55	99.52	99.6
Jun	99.51	99.50	99.50		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	101.40	101.45	101.51	101.4
Sep	101.51	101.70	101.84	101.91	101.7
Oct	102.02	102.13	102.22	102.26	102.2
Nov	101.58	101.66	101.76	101.84	101.7
Dec	99.12	99.13	99.13	99.13	99.1
Jan	99.68	99.72	99.72	99.71	99.7
Feb	98.32	98.16	98.07	98.01	98.1
Mar	98.66	98.64	98.62	98.61	98.6
Apr	99.49	99.47	99.47	99.49	99.5
May	99.02	98.80	98.63	98.56	98.8
Jun	98.75	98.61	98.51		98.6

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	1.15
Jun	0.87	0.36	0.96	
Seasonally Adjusted Series				
Jul		0.79	1.36	0.58
Aug	1.38	1.39	1.72	0.90
Sep	0.85	0.19	2.03	1.02
Oct	0.98	0.20	0.57	1.01
Nov	0.04	1.72	1.42	0.73
Dec	0.97	0.52	1.00	0.64
Jan	-0.24	2.07	0.68	0.98
Feb	1.80	0.83	-0.06	0.83
Mar	0.44	1.33	1.50	1.25
Apr	0.56	1.34	0.87	1.28
May	0.15	0.36	0.48	1.44
Jun	0.96	0.45	1.01	

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	0.17
Jun	1.07	0.65	0.66	
Seasonally Adjusted Series				
Jul		1.72	0.05	0.94
Aug	1.76	1.91	3.82	0.36
Sep	1.03	-0.11	4.23	1.20
Oct	2.35	0.15	-0.40	1.26
Nov	-1.53	2.60	2.09	0.51
Dec	1.40	0.29	0.87	0.47
Jan	-2.48	1.41	1.12	0.91
Feb	4.10	1.97	-0.13	1.06
Mar	0.52	1.41	1.60	0.91
Apr	0.63	1.64	0.41	1.27
May	0.08	0.99	0.57	1.12
Jun	1.35	0.84	0.78	

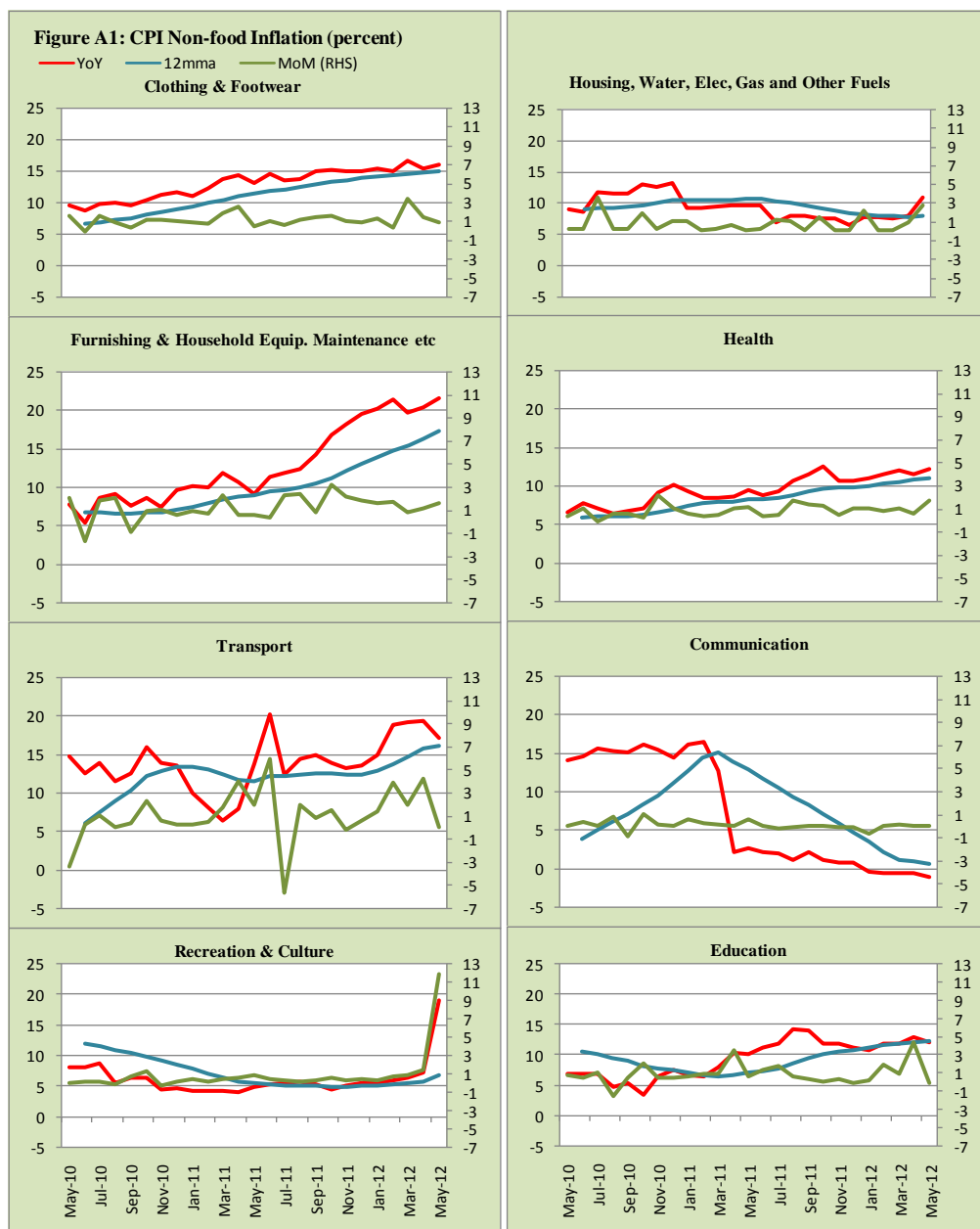


Figure A2: Frequency Distribution of Price Changes of CPI Items, May 2012

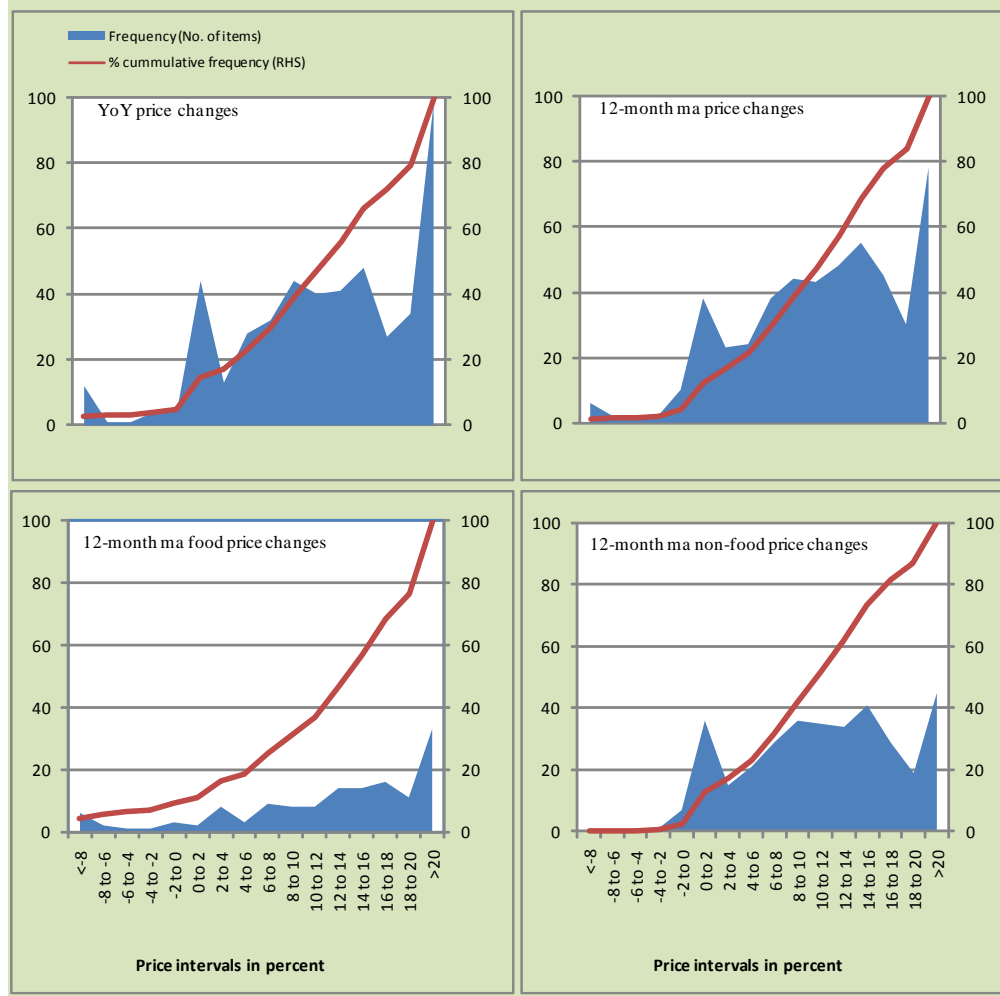
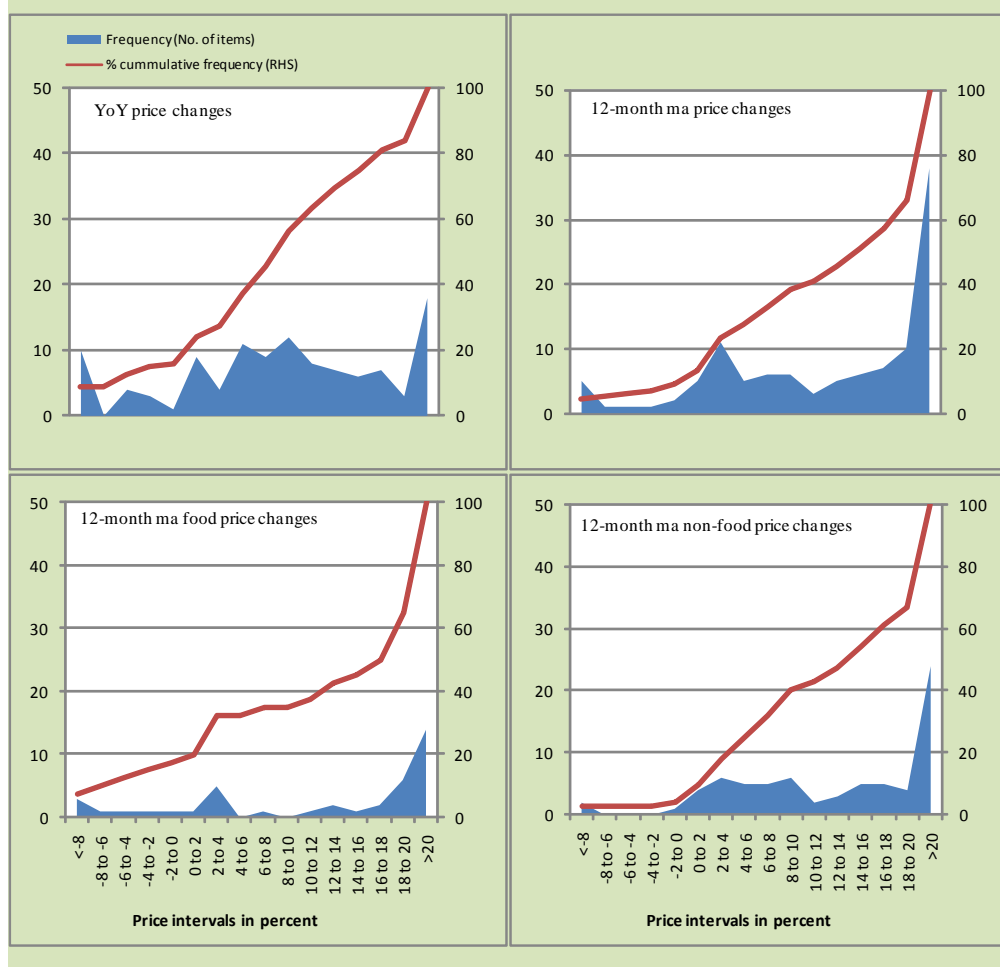
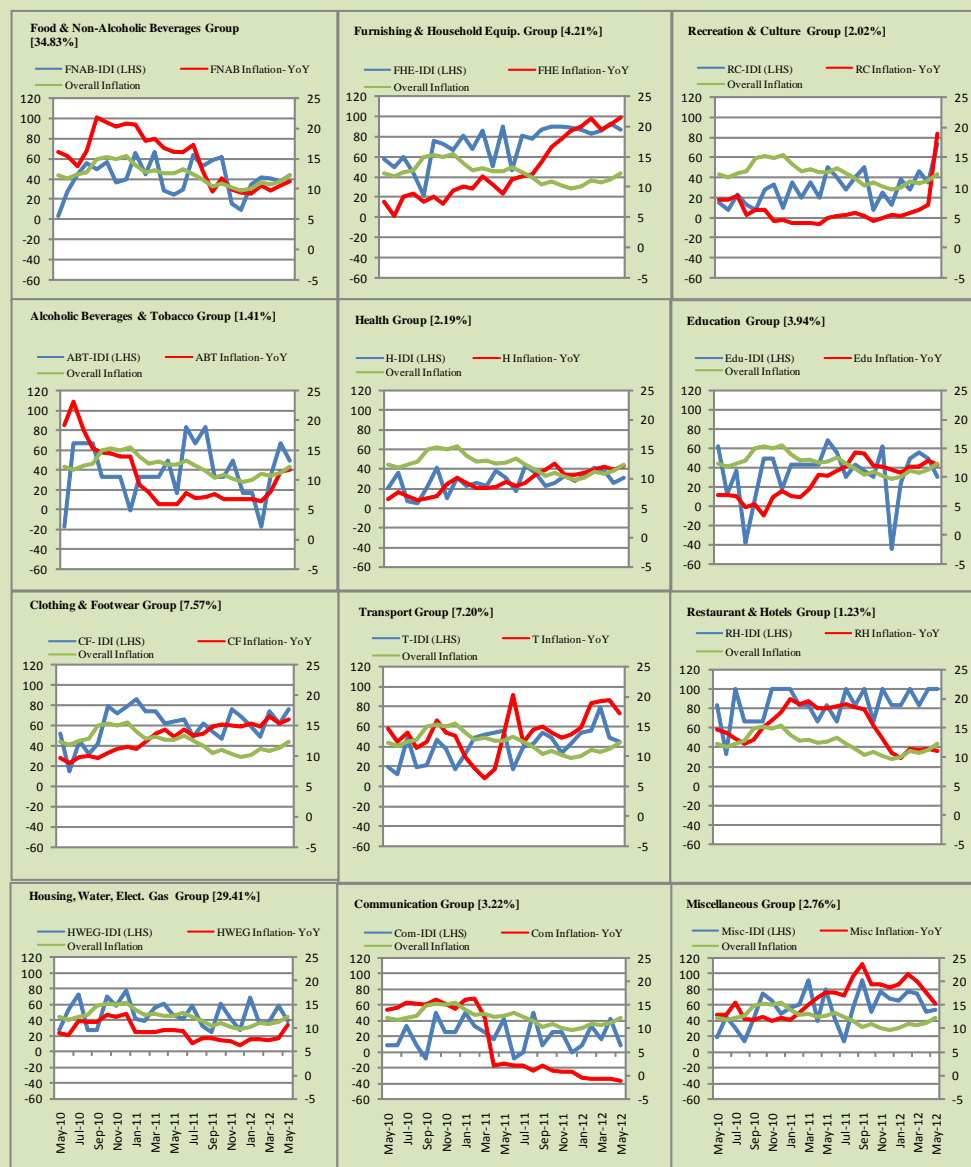


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, May 2012



Inflation Monitor, May 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.