

Inflation Monitor

June 2012



State Bank of Pakistan

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Team Leader

- Behzad Ali Ahmad

Sr. Joint Director
behzad.ali@sbp.org.pk

Team Members

- Muhammad Ashfaq
- Syed Salman Bukhari

Assistant Director
muhammad.ashfaqch@sbp.org.pk
Assistant Director
salman.bukhari@sbp.org.pk

Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 11.3 percent on year-on-year basis in June 2012 as compared to 12.3 percent in the previous month and 13.3 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.0 percent in June 2012 as compared to 1.1 percent in the previous month and 1.0 percent in the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation decreased to 0.2 percent in June 2012 as compared to 1.6 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 11.1 percent in June 2012 as compared to 11.7 percent in the previous month and it was 12.4 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) remained at the level of 0.5 percent in June 2012 as observed in earlier month while it was 0.7 percent in corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis increased to 11.5 percent in June 2012 as compared to 11.2 percent in May 2012 and 9.9 percent in June 2011.
6. Core NFNE inflation on month-on-month basis decreased to 0.7 percent in June 2012 when compared to 0.8 percent a month earlier. The rate of change in Core NFNE in June 2011 was 0.5 percent.
7. WPI inflation on year-on-year basis decreased to 6.4 percent in June 2012 when compared to 7.1 percent a month earlier. During June 2011, WPI inflation was recorded at 22.8%.

8. WPI inflation on month-on-month basis decreased to 0.0 percent in June 2012 as compared to 2.1 percent a month earlier. It was 0.6 percent in June 2011.
9. SPI inflation on year-on-year basis is recorded at 11.9 percent in June 2012 as compared to 10.1 percent a month earlier and 13.7 percent in corresponding month of the last year.
10. SPI inflation on month-on-month basis is recorded at 1.8 percent in June 2012 as compared to 0.5 percent a month earlier and 0.1 percent in June 2011.

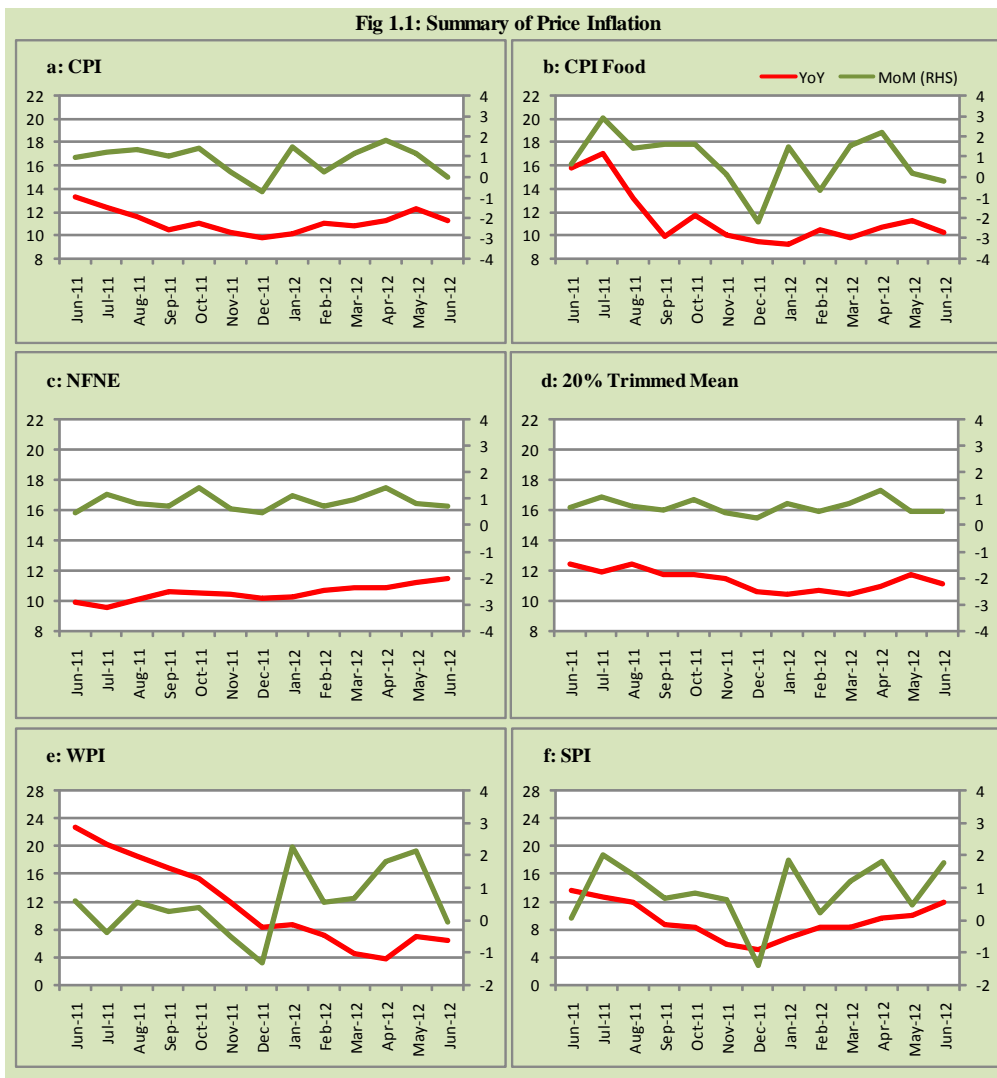
Table 1.1 Inflation Trends (percent) (Base 2007- 08 = 100)

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				
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
Jun-12	11.3	0.0	10.3	-0.2	12.0	0.2	11.5	0.7	11.1	0.5	6.4	0.0	11.9	1.8

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation



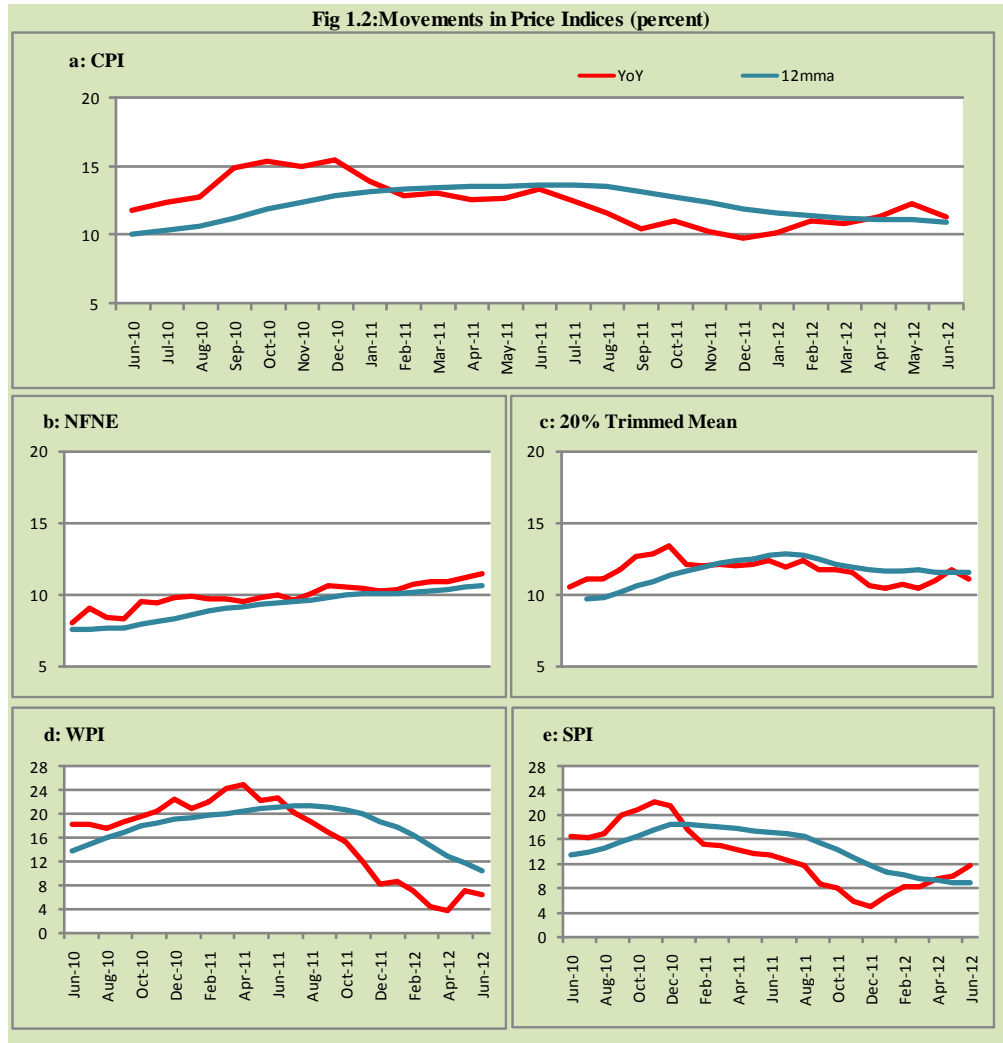


Fig 1.3: Movements in Price Indices -MoM (percent)

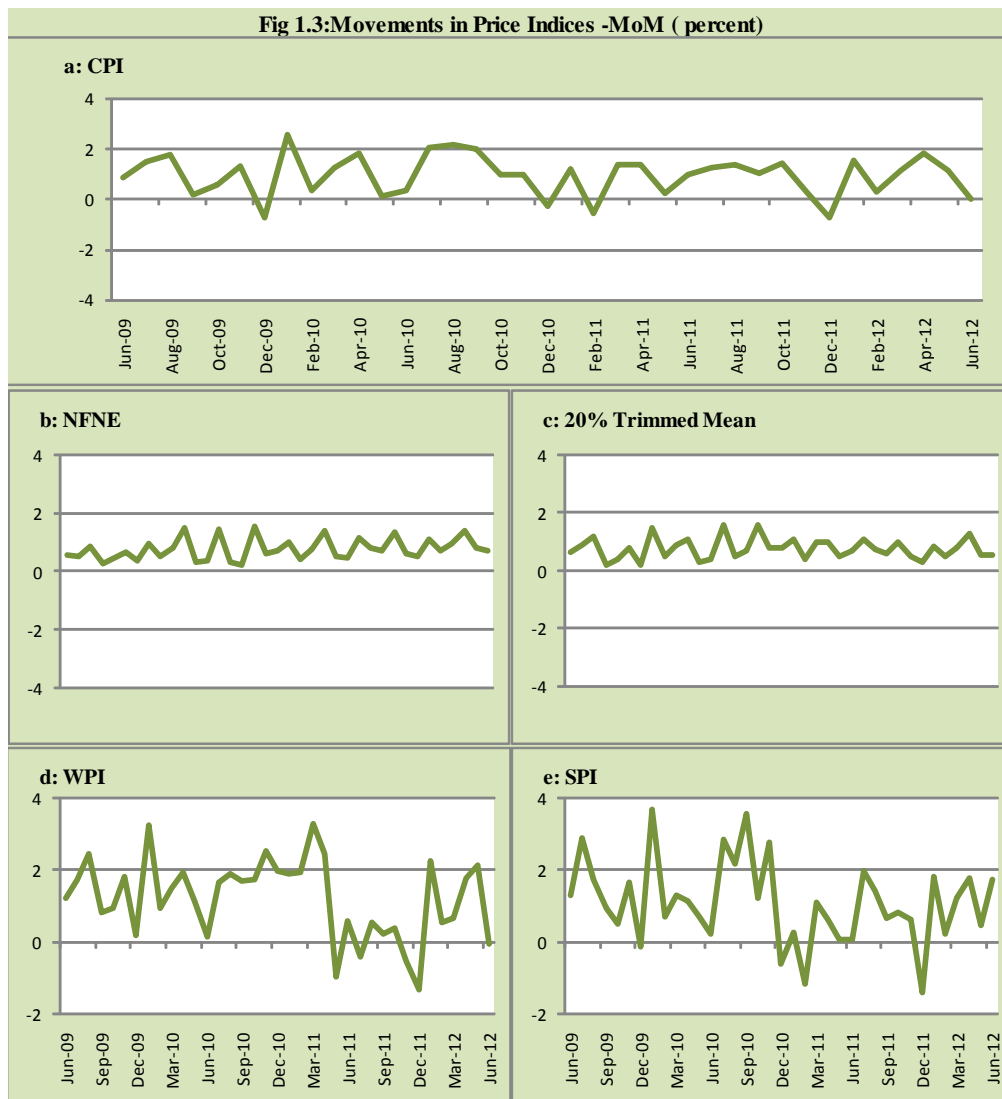
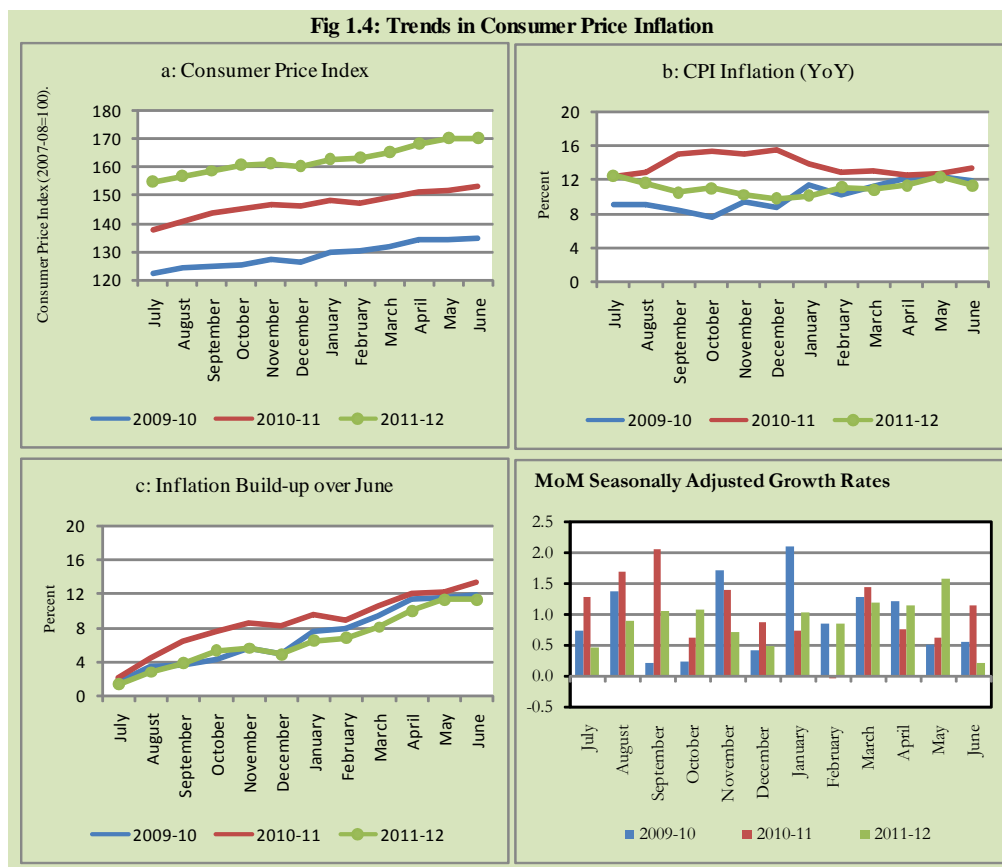


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan showed mix trend during June 2012. Among these five cities, Karachi and Quetta were above average inflation while the remaining capitals were below average inflation. Among these five cities, the lowest inflation was observed in Peshawar which is 9.6 percent while the highest inflation was observed in Quetta which is 11.8 percent (Table A6 of annexure-A).

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

	Jun-11		May-12		Jun-12	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.0	13.3	1.1	12.3	0.0	11.3
Islamabad	0.8	13.7	1.4	12.0	-0.3	10.8
Karachi	0.8	11.3	1.3	11.6	0.6	11.4
Lahore	0.8	10.8	0.9	10.4	1.2	10.8
Peshawar	0.0	12.4	0.7	11.0	-1.3	9.6
Quetta	1.2	14.3	-0.2	12.2	0.8	11.8

3. Income Group wise Inflation

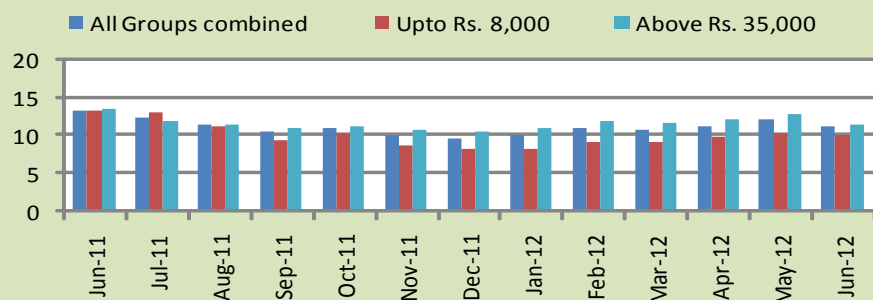
Income group- wise data showed that income group above Rs. 35,000 has higher inflation than the overall inflation in CPI basket during June 2012 for general and food groups. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in general and food groups during the month of June 2012 (Table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

Table 3.1 Income Group- wise Inflation (YoY)

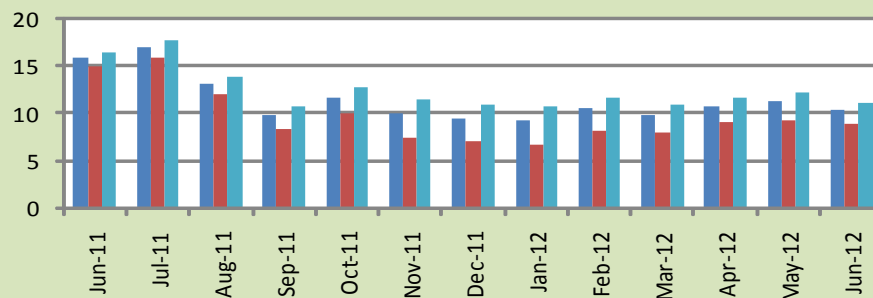
Income Groups	General			Food			Non-food		
	Jun-11	May-12	Jun-12	Jun-11	May-12	Jun-12	Jun-11	May-12	Jun-12
All Groups Combined	13.3	12.3	11.3	15.9	11.3	10.3	11.6	13.0	12.0
Up to Rs. 8,000	13.2	10.3	10.1	15.0	9.2	8.8	11.0	11.8	11.9
Rs. 8,001- 12,000	13.4	11.8	11.4	15.3	10.0	9.3	11.2	13.9	13.7
Rs. 12,001- 18,000	12.1	11.5	11.1	15.5	10.6	9.8	8.8	12.5	12.3
Rs. 18,001- 35,000	13.7	12.0	11.5	15.7	11.2	10.3	12.1	12.6	12.5
Above Rs. 35,000	13.6	13.0	11.4	16.4	12.3	11.0	12.2	13.3	11.6

Fig 3.1: Income Group- wise Inflation

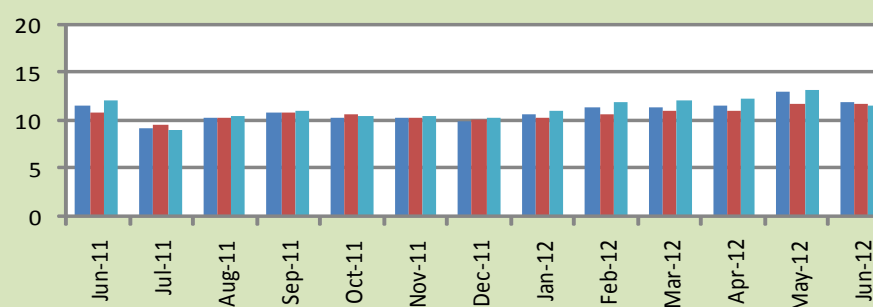
a: CPI Overall Inflation (YoY)



b: CPI Food Inflation (YoY)



c: CPI Non-Food Inflation (YoY)



4. Weighted Contribution

The weighted contribution of food group in the overall inflation decreased to 38.05 percent during June 2012 from 38.26 percent in May 2012 while it was 48.53 percent in June 2011.

The weighted contribution of non-food group showed increase to touch 61.95 percent in June 2012 from 61.74 percent in May 2012.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Jun-12	38.05	9.65	25.43	6.22	3.60	17.04

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
General	38.2	51.3	53.4	56.1	52.2	47.3	37.7	51.5	51.0	57.6	53.1	55.6	27.0
Food & Non-Alcoholic Beverages	28.9	63.2	51.7	57.8	60.9	15.3	9.4	34.2	41.6	40.2	37.6	43.4	-23.4
Alcoholic Beverages & Tobacco	83.3	66.7	83.3	33.3	33.3	50.0	16.7	16.7	-16.7	33.3	66.7	50.0	33.3
Clothing & Footwear	66.1	49.2	62.7	54.2	47.5	76.3	69.5	59.3	49.2	74.6	62.7	76.3	44.1
Housing, Water, Elect, Gas & other Fuels	41.7	58.3	33.3	25.0	61.1	41.7	27.8	69.4	36.1	36.1	58.3	38.9	33.3
Furnishing & Household Equip. Maintenance etc	46.4	81.2	78.3	87.0	89.9	89.9	88.4	87.0	82.6	85.5	92.8	87.0	78.3
Health	17.9	43.6	35.9	23.1	25.6	33.3	28.2	33.3	41.0	38.5	25.6	30.8	41.0
Transport	16.3	39.5	41.9	53.5	48.8	32.6	41.9	53.5	55.8	79.1	48.8	44.2	20.9
Communication	-8.3	0.0	50.0	8.3	25.0	25.0	0.0	8.3	33.3	16.7	41.7	8.3	50.0
Recreation & Culture	41.0	28.2	41.0	51.3	7.7	25.6	12.8	38.5	28.2	46.2	35.9	74.4	17.9
Education	56.3	31.3	43.8	37.5	31.3	62.5	-43.8	25.0	50.0	56.3	50.0	31.3	0.0
Restaurant & Hotels	66.7	100.0	83.3	100.0	66.7	100.0	83.3	83.3	100.0	83.3	100.0	100.0	66.7
Miscellaneous	42.9	14.3	57.1	91.4	51.4	77.1	68.6	65.7	77.1	74.3	51.4	54.3	48.6
NFNE	40.8	48.2	53.8	55.6	49.7	59.8	47.3	58.3	54.7	63.9	57.4	57.7	44.7

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	Jun-11		May-12		Jun-12	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	2.26	-0.16	8.82	-2.88	8.95	-0.04
2	Wheat Flour Bag	10 Kg	4.58	-1.37	6.15	-0.84	7.80	0.17
3	Rice Basmati Sup. Qlty.	Kg	11.77	-0.28	18.34	6.47	18.17	-0.42
4	Pulse Masoor (Washed)	Kg	-8.27	-2.39	-9.43	0.18	-7.79	-0.62
5	Pulse Moong (Washed)	Kg	21.86	0.14	-10.74	-0.20	-13.22	-2.64
6	Pulse Mash (Washed)	Kg	-4.43	-1.23	-9.52	-0.13	-11.41	-3.29
7	Pulse Gram	Kg	19.58	0.13	57.32	12.29	55.75	-0.87
8	Vegetable Ghee (Loose)	Kg	43.24	0.77	6.66	-0.08	4.92	-0.88
9	Sugar Refined	Kg	8.43	5.20	-16.04	-2.23	-19.55	0.80
10	Milk Fresh (Unboiled)	Ltr	20.71	2.44	13.19	1.14	13.22	2.47
11	Tea- Tapal Danedar	200 Gm	17.24	0.00	0.00	0.00	5.87	5.87
12	Beef With Bone Av. Qlty.	Kg	19.40	1.62	15.39	0.53	13.83	0.25
13	Mutton Av. Qlty.	Kg	24.28	1.55	15.82	1.02	14.69	0.56
14	Chicken Farm Broiler (Live)	Kg	4.66	3.15	33.47	0.01	16.85	-9.70
15	Eggs Farm	Doz	13.71	10.06	34.25	15.78	6.42	-12.76
16	Potatoes	Kg	16.15	14.12	-3.86	5.10	-12.06	4.39
17	Onion	Kg	-33.01	-8.35	32.69	-7.82	36.72	-5.57
18	Tomatoes	Kg	-9.60	25.33	17.99	-56.37	-8.53	-2.83
19	Ginger	Kg	-11.65	0.91	-31.59	0.64	-30.49	2.54
20	Garlic	Kg	3.71	-2.39	-41.51	0.46	-45.97	-9.84

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Jun-11		May-12		Jun-12	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	40.8	-1.2	-6.4	-6.0	-13.2	-8.3
Food	33.3	-2.9	-9.3	-2.8	-7.0	-0.5
Metals	55.9	-1.6	-19.3	-5.0	-21.2	-4.0
Energy	40.6	-1.1	-2.0	-7.3	-12.2	-11.4
Agricultural	41.3	3.7	-11.9	-0.7	-17.9	-3.3
Cotton	75.2	-2.9	-46.5	-11.6	-48.8	-7.2

Source: IMF

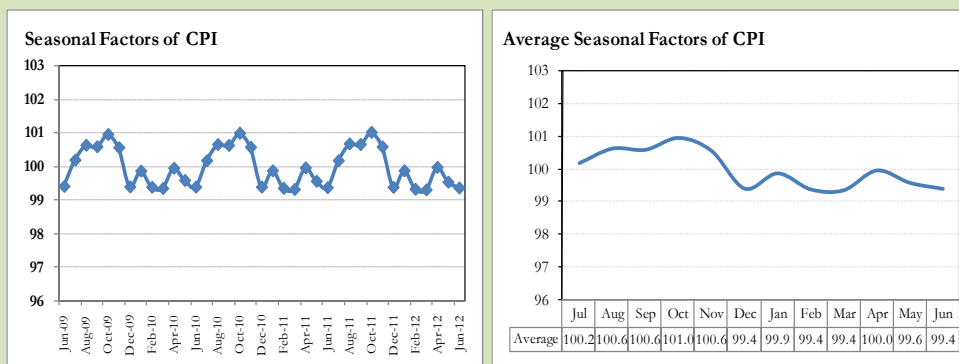
8. Seasonal Adjustment in CPI

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

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

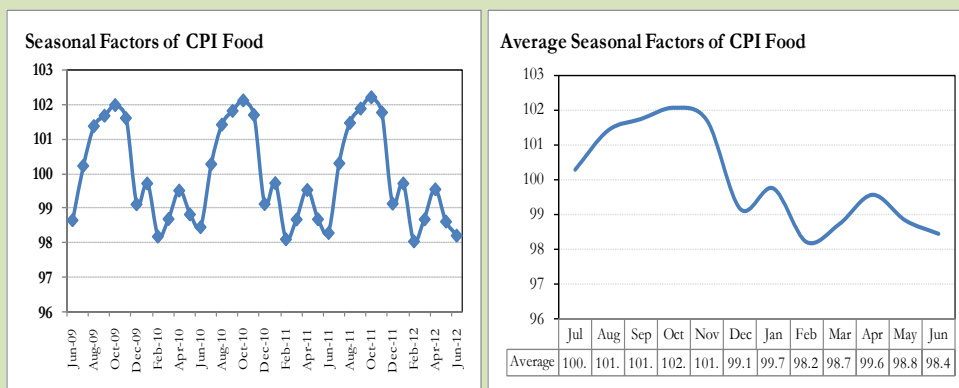
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months July to November and downward seasonality in the remaining months of the year.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

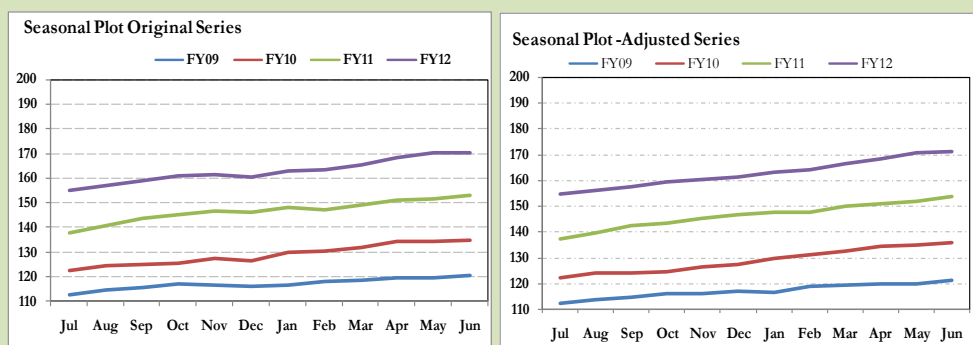
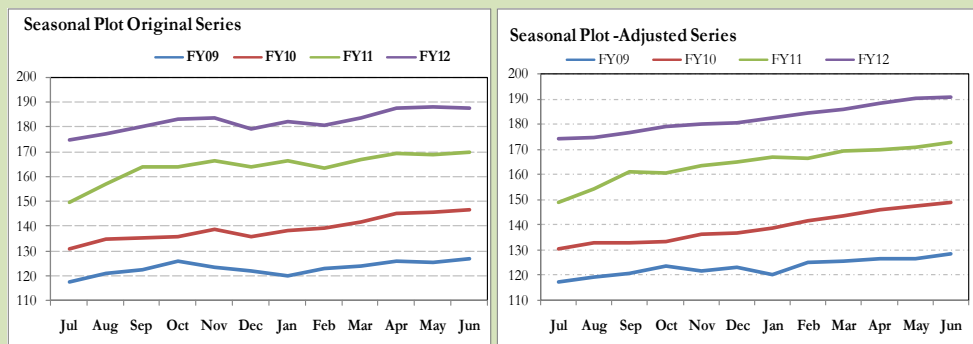


Fig. 8.4 Seasonal Plots of CPI (Food)



Seasonally adjusted CPI for June 2012 stood at 171.05 against 169.99 in original series showing an increase of 1.06 on account of adjustment of downward seasonality in June 2012.

Seasonally adjusted CPI food group for June 2012 stood at 190.72 against 187.35 in original series showing an increase of 3.37 on account of adjustment of downward seasonality in June 2012.

Month-on-month change of seasonally adjusted CPI series stood at 0.21% reflecting decrease during June 2012 over May 2012 and increase of 0.04% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at 0.20% reflecting a decrease during June 2012 over May 2012 and a decrease of 0.21% 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 June 2012 (corresponding to the seasonally adjusted month-on-month rate) is 2.53 percent.

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

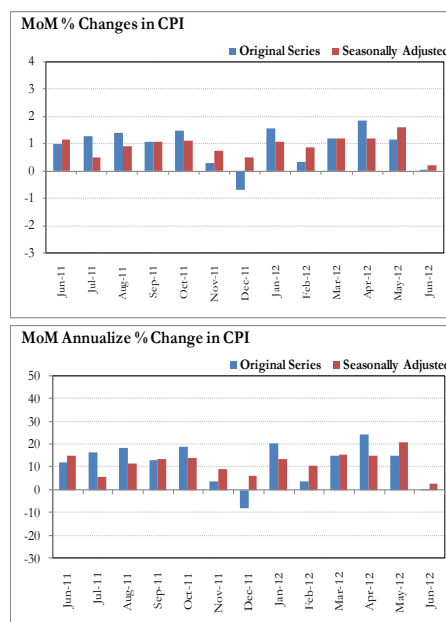
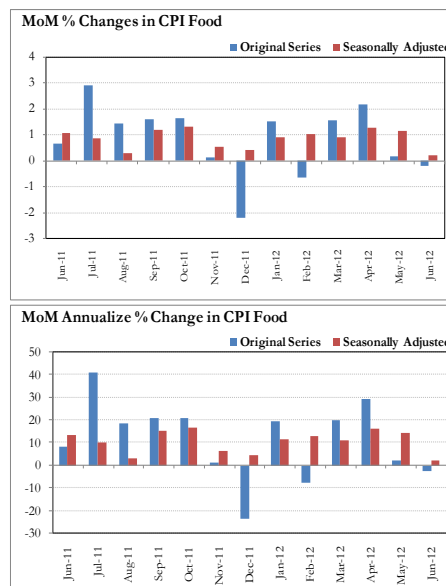


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weights	MoM change			YoY change		
		Jun-11	May-12	Jun-12	Jun-11	May-12	Jun-12
I. Food Group	37.5	0.7	0.2	-0.2	15.9	11.3	10.3
Food & Non-Alcoholic Beverages	34.8	0.5	0.2	-0.7	16.1	11.2	9.9
Alcoholic Beverages & Tobacco	1.4	4.5	0.3	11.1	7.8	11.6	18.7
Restaurant & Hotels	1.2	0.7	0.5	0.7	18.6	11.1	11.1
II. Non-Food Group	62.5	1.2	1.9	0.2	11.6	13.0	12.0
Clothing & Footwear	7.6	1.0	1.0	0.5	14.4	16.0	15.4
Housing, Water, Elect, Gas & other	29.4	0.1	2.8	0.1	9.6	10.8	10.7
Furnishing & Household Equip. Maint	4.2	0.4	1.6	1.0	11.3	21.5	22.3
Health	2.2	0.4	1.6	2.3	8.7	12.1	14.3
Transport	7.2	5.9	0.0	-1.6	20.2	17.2	8.8
Communication	3.2	0.0	0.0	1.0	2.2	-1.1	-0.1
Recreation & Culture	2.0	0.5	11.9	0.3	5.4	19.0	18.7
Education	3.9	1.3	0.0	0.6	11.2	12.2	11.5
Miscellaneous	2.8	1.4	-0.3	1.3	17.8	15.3	15.1
Headline	100.0	1.0	1.1	0.0	13.3	12.3	11.3

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)	
		Jun-11	Jun-12	Jun-11	Jun-12	Jun-11	Jun-12	Jun-11	Jun-12	Jun-11	Jun-12
I. Food Group	10.3	126	126	12	18	11	14	17	31	86	63
Food & Non-Alcoholic Beverages	9.9	114	114	12	18	11	14	13	27	78	55
Alcoholic Beverages & Tobacco	18.7	6	6	0	0	0	0	4	2	2	4
Restaurant & Hotels	11.1	6	6	0	0	0	0	0	2	6	4
II. Non-Food Group	12.0	348	348	45	35	44	35	81	57	178	221
Clothing & Footwear	15.4	59	59	6	2	1	2	10	7	42	48
Housing, Water, Elect, Gas & other Fuels	10.7	36	36	2	0	1	1	9	9	24	26
Furnishing & Household Equip. Maintenance etc	22.3	69	69	1	1	6	4	22	9	40	55
Health	14.3	39	39	12	14	10	7	4	2	13	16
Transport	8.8	43	43	1	1	6	4	11	10	25	28
Communication	-0.1	12	12	5	6	4	1	1	2	2	3
Recreation & Culture	18.7	39	39	14	6	11	8	9	8	5	17
Education	11.5	16	16	2	4	3	3	3	2	8	7
Miscellaneous	15.1	35	35	2	1	2	5	12	8	19	21
Overall	11.3	474	474	57	53	55	49	98	88	264	284

Note: Prices of 13 seasonal items were not reported during the month.

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

Table 1: Top Ten Contributors to CPI Inflation (2011 to June 2012)					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jun-11	Jun-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.29	6.59	10.58
2	Milk Fresh	6.68	20.90	13.29	9.54
3	Electricity	4.40	13.24	16.39	7.07
4	Fresh Fruits	1.86	31.00	30.07	5.82
5	Gas	1.58	8.87	29.41	5.50
6	Meat	2.43	20.97	14.11	3.75
7	Education	3.94	11.20	11.51	3.60
8	Transport Services	2.70	8.25	13.16	3.57
9	Household Servant	1.04	7.49	39.99	3.13
10	Wheat Flour	4.16	5.23	6.70	2.53
Total		50.62			55.09
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	19.58	55.75	1.18
2	Motor Vehicle Tax	0.11	2.68	48.05	0.32
3	Besan	0.15	19.58	46.53	0.64
4	Text Books	0.57	3.80	41.15	2.23
5	Household Servant	1.04	7.49	39.99	3.13
6	Gram Whole	0.16	22.75	36.84	0.58
7	Onion	0.53	-33.01	36.73	1.06
8	Fresh Fruits	1.86	31.00	30.07	5.82
9	Gas	1.58	8.87	29.41	5.50
10	Fire Wood Whole	0.23	25.03	24.00	0.58
Total		6.47			21.04
C. Ranked by Weights					
1	House Rent	21.81	8.29	6.59	10.58
2	Milk Fresh	6.68	20.90	13.29	9.54
3	Electricity	4.40	13.24	16.39	7.07
4	Wheat Flour	4.16	5.23	6.70	2.53
5	Education	3.94	11.20	11.51	3.60
6	Communication & Apparatus	3.15	2.18	-0.24	-0.05
7	Motor Fuel	3.03	39.24	2.14	0.66
8	Transport Services	2.70	8.25	13.16	3.57
9	Meat	2.43	20.97	14.11	3.75
10	Vegetable Ghee	2.07	37.74	5.75	1.08
Total		54.39			42.33
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 June, 2012.					

Table A3.1: Top Ten Contributors to CPI Food Inflation (YoY) in June 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jun-11	Jun-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	20.90	13.29	9.54
2	Fresh Fruits	1.86	31.00	30.07	5.82
3	Meat	2.43	20.97	14.11	3.75
4	Wheat Flour	4.16	5.23	6.70	2.53
5	Cigarette	1.39	7.61	18.83	2.41
6	Rice	1.58	18.79	17.51	2.28
7	Chicken	1.36	4.65	16.85	2.08
8	Ready Made Food	1.23	18.62	11.09	1.39
9	Cooking Oil	1.75	30.12	9.30	1.37
10	Pulse Gram	0.24	19.58	55.75	1.18
Total		22.69			32.35
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	19.58	55.75	1.18
2	Besan	0.15	19.58	46.53	0.64
3	Gram Whole	0.16	22.75	36.84	0.58
4	Onion	0.53	-33.01	36.73	1.06
5	Fresh Fruits	1.86	31.00	30.07	5.82
6	Condiments	0.27	14.84	21.34	0.57
7	Honey	0.04	23.71	19.06	0.10
8	Cigarette	1.39	7.61	18.83	2.41
9	Beans	0.03	19.93	18.62	0.05
10	Rice	1.58	18.79	17.51	2.28
Total		6.26			14.69
C. Ranked by Weights					
1	Milk Fresh	6.68	20.90	13.29	9.54
2	Wheat Flour	4.16	5.23	6.70	2.53
3	Meat	2.43	20.97	14.11	3.75
4	Vegetable Ghee	2.07	37.74	5.75	1.08
5	Fresh Fruits	1.86	31.00	30.07	5.82
6	Cooking Oil	1.75	30.12	9.30	1.37
7	Fresh Vegetable	1.68	2.46	-4.12	-0.67
8	Rice	1.58	18.79	17.51	2.28
9	Cigarette	1.39	7.61	18.83	2.41
10	Chicken	1.36	4.65	16.85	2.08
Total		24.98			30.19
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 10.3 percent in June, 2012.					

Table A3.2: Top Ten Contributors to CPI Non-food Inflation (YoY) in June 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Jun-11	Jun-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	8.29	6.59	10.58
2	Electricity	4.40	13.24	16.39	7.07
3	Gas	1.58	8.87	29.41	5.50
4	Education	3.94	11.20	11.51	3.60
5	Transport Services	2.70	8.25	13.16	3.57
6	Household Servant	1.04	7.49	39.99	3.13
7	Text Books	0.57	3.80	41.15	2.23
8	Personal Care	1.49	13.71	15.87	2.07
9	Footwear	1.55	3.96	16.19	1.78
10	Personal Equipments	0.84	26.64	15.03	1.54
Total		39.94			41.08
B. Ranked by Percentage Change					
1	Motor Vehicle Tax	0.11	2.68	48.05	0.32
2	Text Books	0.57	3.80	41.15	2.23
3	Household Servant	1.04	7.49	39.99	3.13
4	Gas	1.58	8.87	29.41	5.50
5	Fire Wood Whole	0.23	25.03	24.00	0.58
6	Utensils	0.32	11.55	23.38	0.61
7	Doctor (Mbbs) Clinic Fee	0.59	13.44	22.58	1.14
8	Marriage Hall Charges	0.08	14.11	20.68	0.14
9	Household Textile	0.65	13.51	20.44	1.08
10	Motor Vehicle Accessories	0.24	13.69	19.82	0.47
Total		5.41			15.19
C. Ranked by Weights					
1	House Rent	21.81	8.29	6.59	10.58
2	Electricity	4.40	13.24	16.39	7.07
3	Education	3.94	11.20	11.51	3.60
4	Communication & Apparatus	3.15	2.18	-0.24	-0.05
5	Motor Fuel	3.03	39.24	2.14	0.66
6	Transport Services	2.70	8.25	13.16	3.57
7	Cotton Cloth	1.73	19.84	8.44	1.20
8	Gas	1.58	8.87	29.41	5.50
9	Footwear	1.55	3.96	16.19	1.78
10	Personal Care	1.49	13.71	15.87	2.07
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 12.0 percent in June, 2012.					

Table A4: Distribution of Price Changes (YoY) - Selected CPI Items: June 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, Aloo Bukhara, Cardamom Small Av.Qlty, Gur Av.Qlty, Pulse Moong (Washed)	Vegetable Ghee (Loose), Squash-Mitchells, Tomato Ketchup Ahmed/Mitchells, Maida, Cold Drink (Standard Size), Suji, Tinda	Mustard Oil Av.Qlty., Samosa (Vegetable), Brinjal, Wheat, Arvi, Rusk (Papay), Bread Plain Medium Size, Mango Kalmi	Cloves Loose Av.Qlty, Bananas, Pulse Gram, Chillies Powd.National 200 Gm, Pepper Black National, Besan Av. Qlty., Gram Whole Black Av Qlty., Onion, Gram Whole Yellow Av.Qlty, Ice, Lemon, Milo 200 Gm., Apple
Alcoholic Beverages & Tobacco			Cigarettes Gold Leaf 20,S, Betel Leaves	Cigarettes K-20,S, Cigarettes Capstan 20,S, Betel Nuts, Cigarettes Morven Gold 20,S
Clothing & Footwear	Sports Shoes, Gents Shoe, Art 1109 Servis	Long Cloth 57" Gul Ahmed/Al Karam, Child Shoe Power Lite Bata	Handkerchief Sup. Qlty Pak, Handkerchief Avg.Qlty Pak, Gloves Av.Qlty, Azarband Cotton Avg.Qlty, Lawn Printed Gul Ahmed/Al Karam, Tailoring Coat-Pant Suit	Ladies Spoung Chappal Bata, Gents Spoung Chappal Bata, Ladies Sandal Bata, Linen Av.Qlty, Brassier Av.Qlty, Awami-Suit W&W (Gents)Av.Qlty, Dopatta Georgette Av.Qlty, Gents Sandal Bata, Washing Ch. (Kamiz-Shalwar), Tailoring Shirt, Brassier Sup.Qlty
Housing, Water, Elect, Gas & other Fuels		Cement Blocks (6"X8"X12")	Iron Bar (M.S. Bar) 1/2", Timber Shesham Log, Elect. Charges Upto 50 Units, House Rent For Q-I, House Rent For Q-II	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, Elect. Charges 01 - 100 Units
Furnishing & Household Equip. Maintenance etc	Match Box (Small)	Tube Light Philips 40 Watt, Surf Excel 400 Gms Poly Bag, Bulb Philips 100-Watt, Washing Machine (Singer)	Aluminum Cooking Pan, S.Steel Plate Avg. Qlty, D-Freezer Waves 8 Cft., Electric Juicer, Sewing Machine (Singer)	Dinner Set Plastic 72 Pcs, Tawa Iron (Medium Size) Avg. Qlty, Household Servant Female (Part Time), Robin Blue (35 Gms), Washing Soap 250 Gm, Dari Cotton (6X2 1/2), Hand Stitching Needle, Elect. Iron Philips
Health	Amoxil Capsule 250 Mg., Septran Tablets, Jouhar Joshanda, Calcium Syrup Sandoz, Dettol (Medium), Sancos Syrup (50 ML)	Ventolin Tab. 2Mg., Betnesol Eye Drops, Burnol Cream 30 Gm, Daonil Tab. 5 Mg., Lederplex Syrup, Renitec Tab. 5 Mg., Polyfax Eye Ointment	Vicks Vaporub/ Balm, Ear Drops (Cardisporine)	Cac. 1000 Tab, Panadol Tab. Extra/Plain, Disprin Tab., Saniplast (1 Putty), Doctor (Mbbs) Clinic Fee, Gripe-Water Woodwards, Blood Test (Cp) Charges, Glycerin Small Bottle, Cotton Bandage 2" - 4", X-Ray (Chest) Charges
Transport	CNG	Motorcycle Yamaha 100 Cc, Bus Fare Outside City (Non A/C), Motorcycle Honda Cd-70, Motor Cycle Hero 70 Cc	Car Suzuki 1000 Cc, Suzuki Fare Min. Within City, Suzuki Fare Maximum Within City, Car Toyota 1300 Cc, Gas Cylinder S. Size (L.P.G)	Platform Ticket, Car Tax For 800 Cc To 1300 Cc, Cycle Overhauling Charges, Full Tonga Charges, Tyre Car W/O Tube, Tyre Puncture Charges, Train Fare Ist Slp.101-50, Train Fare Eco. 1-100 Km.
Communication	Mobile Set Nokia/Sony/Ericsson Av.Qlty, Mobile Cell Charges	T.C.S. Ch. Min.Within Zone	Telephone Set Av. Qlty, Fax Charges (Local)	Postal Registration Charges, Postal Envelope For Saudi Arabia, Internet Charges
Recreation & Culture	English Book BA/B.Sc., Video Game Sega 16 Byte, Daily "Dawn", TV License Fee Domestic, Daily "Nawa-E-Waqt", Daily "Jang"	V.C.P. Panasonic/Lg/National, Radio With C.Player National, Ball Pen (Local), Computer Cd (Tdk/Imation), T.V. 20" Colored Sony, T.V 20" Color China/Korea	Pencil Goldfish/Deer, Eng. Book Ist.Yr Complete Set, Pen Ink Dollor 57 MI Bottle, Cable Charges, Dvd/Vcd Player Panasonic/Lg, Urdu Book BA/B.Sc	English Book Class V1, English Book Class IX Or X, Cinema A/C High Class, Urdu Book Class V (T.B.Board), Maths Book Class IX or X, Weekly "Mag", Cinema Non-A/C High Class, Monthly "Naunehal Digest", Maths Book Calss V (T.B.Board), Urdu Book Ist Year/ Inter
Education	MBA Tuition Fee, Govt. College Fee 4th. Year, Pvt Eng.College Fee Ist Year, Govt. College Fee Ist.Yr	Govt. University Fee M.Sc/ MA, I.T. Tuition Fee, Pvt Med. College Fee MBBS Ist Year	Coaching Charges For Class XI/ XII Commerce Group, Govt. Med. College Fee MBBS Ist Year	Govt. Engg. College. Fee Ist Year, Coaching Charges For Class XI/ XII Science Group, Pvt School Fee Eng.Med (Class-VI), Coaching Fee For Class IX/ X
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	Blade 7-o-Clock Steel (5), Hair Color Bigen, Disposable Razor Gillette-II, Wrist Watch Gents Citizen	Toothbrush Shield, Shaving Charges, Shaving Cream Touch-Me/Admiral, Shampoo Sunsilk/Pantene 100 MI	Toothpaste Med Size Colgate 70Gms, Wall Clock Quartz Av.Qlty, Gel Medium Size, Face Cream Ponds (Medium), Nail Polish S.Miss/Medora, Artificial Jewellery Set

Table A5: City- wise CPI Inflation by Income Groups, June 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	0.3	10.2	0.1	9.0	0.4	11.8	0.1	10.8	-0.1	9.2	0.3	12.6
2 Islamabad	-0.1	11.5	-1.0	10.8	1.0	12.4	-0.5	11.0	-1.3	10.8	0.5	11.3
3 Lahore	1.2	10.6	1.7	11.8	0.5	8.9	1.2	10.8	1.9	12.3	0.3	9.0
4 Gujranwala	-0.6	12.0	-0.3	13.3	-1.0	10.4	-0.8	12.6	-0.3	14.0	-1.4	11.0
5 Sialkot	0.5	9.7	1.8	12.3	-1.1	6.3	0.9	10.8	2.5	13.3	-0.9	7.8
6 Faisalabad	-0.3	9.7	-0.8	9.8	0.5	9.6	-0.4	10.1	-0.9	10.3	0.2	9.8
7 Multan	0.1	9.7	-0.2	7.6	0.5	12.4	0.1	10.1	0.0	8.1	0.2	12.3
8 Sargodha	0.3	11.2	0.2	8.9	0.4	13.9	0.3	11.8	0.2	9.3	0.3	14.2
9 Bahawalpur	1.8	14.9	2.5	13.6	1.1	16.5	1.4	14.8	1.9	13.2	0.9	16.5
10 Karachi	0.7	10.3	0.9	10.6	0.4	9.9	0.8	10.7	0.9	11.0	0.6	10.3
11 Hyderabad	0.1	7.9	-0.5	5.4	0.9	11.5	-0.1	8.7	-0.8	5.7	0.8	12.2
12 Sukkur	0.0	7.3	-0.5	3.9	0.5	11.6	0.0	8.2	-0.5	4.8	0.6	11.9
13 Larkana	0.7	13.5	1.3	9.7	-0.1	18.8	0.5	14.7	1.4	10.6	-0.3	19.4
14 Peshawar	-1.2	9.0	-2.5	6.6	0.3	11.9	-1.2	9.3	-2.5	7.0	0.2	11.6
15 Bannu	0.9	12.5	1.5	8.1	0.1	18.2	0.8	12.6	1.4	9.0	0.1	16.5
16 Quetta	1.4	11.7	2.4	9.4	0.2	14.8	1.1	11.9	2.0	9.2	0.0	15.1
17 Khuzdar	0.6	6.6	0.6	3.6	0.6	10.3	0.5	6.9	0.3	4.0	0.7	10.1
	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	0.0	10.6	-0.3	9.6	0.3	11.6	-0.2	11.2	-0.8	9.7	0.3	12.4
2 Islamabad	-0.4	10.6	-1.3	11.1	0.6	10.0	-0.3	10.5	-1.3	11.3	0.6	9.7
3 Lahore	1.3	10.5	2.2	12.7	0.3	8.1	1.1	10.9	2.3	13.2	0.0	8.9
4 Gujranwala	-0.7	12.8	-0.2	14.9	-1.3	10.7	-0.7	13.7	-0.2	16.0	-1.1	11.9
5 Sialkot	1.2	10.6	2.9	13.4	-0.5	7.8	1.3	11.2	3.5	14.1	-0.6	8.7
6 Faisalabad	-0.4	9.8	-0.8	10.9	0.0	8.7	-0.4	10.4	-0.7	11.6	-0.2	9.3
7 Multan	0.0	9.6	0.1	8.6	0.0	10.6	0.0	10.3	0.1	9.2	-0.1	11.2
8 Sargodha	0.3	12.2	0.3	10.4	0.3	13.9	0.2	13.2	0.3	11.1	0.2	14.8
9 Bahawalpur	1.4	14.5	2.0	12.9	0.9	15.9	1.8	15.6	2.0	12.9	1.7	17.8
10 Karachi	0.9	10.6	1.1	11.5	0.7	9.7	0.8	11.2	1.2	11.7	0.5	10.8
11 Hyderabad	-0.5	8.3	-1.4	5.9	0.4	10.8	-0.7	9.2	-1.7	6.4	0.2	11.6
12 Sukkur	-0.1	7.7	-0.6	5.0	0.4	10.4	-0.7	8.4	-1.5	5.0	0.1	11.3
13 Larkana	0.4	15.2	1.9	11.8	-0.9	18.9	0.0	16.2	1.8	12.8	-1.5	19.2
14 Peshawar	-1.2	8.9	-2.8	7.2	0.2	10.5	-1.5	9.6	-2.9	7.5	-0.4	11.2
15 Bannu	0.6	11.9	1.3	9.2	0.0	14.6	0.6	12.1	1.2	9.8	0.1	14.1
16 Quetta	0.9	11.6	1.9	9.1	-0.2	14.3	0.7	11.8	1.8	8.9	-0.2	14.4
17 Khuzdar	0.4	6.6	0.2	4.2	0.5	9.1	0.3	7.2	0.1	4.3	0.4	9.6
	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	-0.3	11.9	-1.2	9.9	0.1	12.8	-0.2	11.5	-1.0	9.8	0.3	12.7
2 Islamabad	-0.3	10.9	-1.5	11.4	0.3	10.7	-0.3	10.8	-1.5	11.3	0.6	10.4
3 Lahore	1.2	10.9	2.3	14.1	0.5	9.3	1.2	10.8	2.2	13.3	0.3	8.9
4 Gujranwala	-0.5	14.3	-0.1	17.6	-0.7	12.6	-0.6	13.4	-0.2	15.6	-0.9	11.9
5 Sialkot	0.9	11.0	3.2	15.0	-0.2	9.1	1.0	10.9	3.1	14.1	-0.4	8.6
6 Faisalabad	-0.5	11.9	-0.9	12.6	-0.3	11.6	-0.4	10.7	-0.8	11.3	-0.2	10.2
7 Multan	-0.2	10.3	0.0	9.5	-0.3	10.8	-0.1	10.1	0.0	8.9	-0.1	11.0
8 Sargodha	0.2	15.0	0.4	12.5	0.2	16.1	0.3	13.0	0.3	10.7	0.2	14.5
9 Bahawalpur	1.6	15.2	1.3	12.2	1.7	16.6	1.6	15.0	1.9	12.9	1.4	16.4
10 Karachi	0.5	11.9	0.9	11.6	0.2	12.1	0.6	11.4	1.0	11.5	0.3	11.4
11 Hyderabad	-1.0	9.5	-2.8	6.8	-0.1	10.9	-0.6	9.0	-1.7	6.2	0.1	11.0
12 Sukkur	-0.9	8.8	-2.5	5.1	-0.2	10.7	-0.4	8.2	-1.2	4.9	0.1	10.6
13 Larkana	0.0	16.1	1.3	13.4	-0.7	17.4	0.3	15.2	1.6	11.6	-0.6	17.7
14 Peshawar	-1.3	10.0	-3.5	8.3	-0.2	10.8	-1.3	9.6	-2.9	7.5	-0.2	11.0
15 Bannu	0.8	11.8	1.8	11.4	0.4	12.0	0.7	12.1	1.4	9.4	0.2	14.0
16 Quetta	0.5	11.7	1.4	8.7	0.1	13.3	0.8	11.8	1.8	8.9	0.1	13.9
17 Khuzdar	-0.2	9.1	-0.9	5.1	0.1	11.2	0.4	7.0	0.3	4.1	0.5	9.1

Table A6: City- wise CPI Inflation (YoY) June, 2012							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Bahawalnagar	15.9	15.9	15.9	D.I.Khan	11.1	8.9	12.7
Larkana	15.2	11.6	17.7	Sialkot	10.9	14.1	8.6
Bahawalpur	15.0	12.9	16.4	Islamabad	10.8	11.3	10.4
Gujranwala	13.4	15.6	11.9	Lahore	10.8	13.3	8.9
Sahiwal	13.3	9.1	16.3	Muzaffargarh	10.7	9.8	11.4
Mianwali	13.3	12.6	13.8	Faisalabad	10.7	11.3	10.2
Jhang	13.1	11.0	14.6	Mingora	10.4	9.0	11.4
Sargodha	13.0	10.7	14.5	Multan	10.1	8.9	11.0
Abbotabad	13.0	14.1	12.2	Turbat	9.8	10.0	9.7
Jehlum	12.8	13.6	12.2	Peshawar	9.6	7.5	11.0
Mardan	12.7	8.7	15.3	Wazirabad	9.5	7.9	10.7
Mir Pur Khas	12.7	10.3	14.4	Vehari	9.3	7.3	10.6
Mithi	12.5	7.7	15.9	Hyderabad	9.0	6.2	11.0
Loralai&Cantt	12.2	10.8	13.1	Sukkur	8.2	4.9	10.6
Bannu	12.1	9.4	14.0	Dadu	7.6	7.5	7.6
Nawabshah	12.1	10.1	13.4	Khuzdar	7.0	4.1	9.1
Gawadar	11.8	10.9	12.4	Dera Mrd.Jamali	6.6	3.8	8.6
Quetta	11.8	8.9	13.9				
Rawalpindi	11.5	9.8	12.7				
Karachi	11.4	11.5	11.4				
Rahim Yar Khan	11.3	8.3	13.7				
D.G. Khan	11.3	11.7	11.0				
Attock	11.3	10.5	11.8				
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		
	Jun-11	May-12	Jun-12	Jun-11	May-12	Jun-12
<u>Up to Rs. 8000</u>						
General	0.5	0.4	0.3	13.2	10.3	10.1
Food	0.5	-0.4	0.2	15.0	9.2	8.8
Non-food	0.4	1.3	0.5	11.0	11.8	11.9
<u>Rs. 8001- 12000</u>						
General	0.6	1.5	0.2	13.4	11.8	11.4
Food	0.6	-0.2	0.0	15.3	10.0	9.3
Non-food	0.6	3.4	0.4	11.2	13.9	13.7
<u>Rs. 12001- 18000</u>						
General	0.6	1.2	0.2	12.1	11.5	11.1
Food	0.6	0.0	-0.1	15.5	10.6	9.8
Non-food	0.6	2.6	0.4	8.8	12.5	12.3
<u>Rs. 18001- 35000</u>						
General	0.5	1.1	0.1	13.7	12.0	11.5
Food	0.7	0.1	-0.1	15.7	11.2	10.3
Non-food	0.4	2.0	0.3	12.1	12.6	12.5
<u>Above Rs. 35000</u>						
General	1.3	1.1	-0.1	13.6	13.0	11.4
Food	0.7	0.5	-0.4	16.4	12.3	11.0
Non-food	1.7	1.4	0.1	12.2	13.3	11.6
<u>All income groups</u>						
General	1.0	1.1	0.0	13.3	12.3	11.3
Food	0.7	0.2	-0.2	15.9	11.3	10.3
Non-food	1.2	1.9	0.2	11.6	13.0	12.0

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Jun-12	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	270.1	9.3	0.3
2	Wheat Flour Bag	10Kg.	309.1	9.7	0.4
3	Rice Basmati Broken	Kg.	65.4	18.9	2.1
4	Rice Irri-6	Kg.	48.2	13.4	1.5
5	Bread Plain Med. Size (340-400 Gm.)	Each	32.6	7.8	2.6
6	Beef	Kg.	263.2	14.7	0.5
7	Mutton	Kg.	504.6	13.6	0.5
8	Chicken Live (Farm)	Kg.	154.2	11.8	4.2
9	Milk Fresh	Litr	62.5	11.8	2.7
10	Curd	Kg.	73.6	13.8	3.0
11	Milk Powdered Nido	500G	275.9	19.9	2.2
12	Egg Hen (Farm)	Doz.	71.8	7.5	-7.7
13	Mustard Oil	Kg.	184.8	9.7	-0.1
14	Cooking Oil (Tin)	2.5Ltr	541.3	9.3	4.4
15	Veg. Ghee (Tin)	2.5Kg.	533.8	7.8	3.2
16	Veg. Ghee Loose	Kg.	170.8	2.5	-1.8
17	Bananas	Doz.	102.8	69.2	9.9
18	Masoor Pulse Washed	Kg.	100.7	-7.9	0.6
19	Moong Pulse Washed	Kg.	122.1	-13.0	-0.6
20	Mash Pulse Washed	Kg.	139.0	-10.6	-1.7
21	Gram Pulse Washed	Kg.	108.9	56.6	0.4
22	Potatoes	Kg.	26.4	-9.8	7.3
23	Onions	Kg.	21.5	47.7	-6.9
24	Tomatoes	Kg.	23.7	-14.5	-7.3
25	Sugar	Kg.	54.8	-20.5	0.8
26	Gur	Kg.	72.6	-12.9	3.0
27	Salt Powdered Loose (Lahori)	Kg.	8.5	9.8	0.2
28	Red Chilies Powder Loose	Kg.	303.3	19.0	-1.6
29	Garlic	Kg.	96.2	-39.6	2.3
30	Tea (Yellow Label)	200Gm.	140.9	7.1	-0.9
31	Cooked Beef Plate	Each	65.0	14.5	1.8
32	Cooked Dal Plate	Each	39.2	9.4	0.8
33	Tea Prepared (Sada)	Cup	15.0	9.5	0.3
34	Cigarettes K-2 (20'S)	20'S	31.5	8.3	6.9
35	Long Cloth (Coarse Latha)	Mtr.	139.4	53.5	3.2
36	Shirting	Mtr.	114.3	16.9	0.8
37	Lawn	Mtr.	158.5	64.4	0.8
38	Georgette (Voil Printed)	Mtr.	95.8	20.0	0.1
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	2.0	7.0	5.3
43	Gas Charges upto 3.3719	Mmbtu	142.6	29.4	0.0
44	Kerosene	Litr	109.6	13.4	-5.2
45	Firewood	40Kg	475.1	21.3	0.3
46	Energy Savor 14 Watts	Each	145.9	11.0	0.2
47	Washing Soap (200-250 Gm.)	Cake	19.7	16.4	0.8
48	Match Box	Each	1.1	5.8	1.9
49	Petrol	Litr	95.8	9.5	-8.3
50	Diesel	Litr	103.7	9.3	-4.0
51	L.P.G.(11 Kg Cylinder.)	Each	1294.7	10.2	4.0
52	Tele. Local Call	Call	3.6	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	32.0	9.3	0.2
Maximum				69.2	9.9
Median				9.7	0.5
Minimum				-39.6	-8.3

Table A9: Distribution of Price Changes (YoY) - WPI Items: June 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, Edible Roots/Potatoes, Stimulant and Spice Crops, Cotton Seeds, Dry Fruits, Unmanufactured Tobacco, Maize	Millet/Bajra, Raw Animal Material/Wool, Vegetables, Eggs	Other Oil Seeds, Wheat, Sugar Crops	Fresh Fruits, Fish Live Fresh or Chilled, Hides and Fur Skins, Raw, Rice, Fuel Wood in Logs, Pulses, Milk From Bovine Animals, Poultry, Sorghum/Jowar
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, Oil Cakes, Blended Yarn, Milk and Cream in Solid Form, Synthetic Carpets, Nylon Yarn, Woolen Carpets	Silk and Rayon Fabrics, Mineral Water, Beverages, Fruit Juices, Vegetable Ghee, Vegetable Oil Refined, Leather With Out Hairs, Chocolate, Sugar Confectionary	Vegetables & Fruit Juices, Ready Made Garments, Dried Fruits & Nuts, Quilts, Wheat Flour, Ice Cream, Other Leather N.E.C, Coffee and Tea	Other Cereal Flour, Spices, Dairy Products N.E.C, Footwear's, Bed Sheets, Woven Fabrics, Blankets, Processed Liquid Milk, Tobacco Products, Other Fabrics, Meat of Animals, Towels, Cotton Fabrics, Hosiery Products, Other Food Products
Other Transportable Goods except Metal Products, Machinery and Equipments	Insecticides, Dying Materials	Diesel Oil, Furnace Oil	Auto Tyres, Other Glass Articles, Matches, Motor Sprit, Bed Foams, Mobil Oil, Soaps & Detergent, Kerosene Oil, Pesticides, Chemicals, Timber Coke	Printing Paper, Paints & Varnishes, Hard Board, Fertilizers, Plastic Products, Cement, Bricks Blocks and Tiles, Glass Sheets, Medicines, Ceramics and Sanitary,
Metal Product Machinery & Equipment	Tractors, Pig Iron, Engines and Motors, Vacuum Pumps, Concrete Mixer	Refrige,Wash& Sew Mach,Iron,Fan, Radio and Television, Pipe Fittings, Motor Cycles, Cultivators, Lathe Machines	Bicycles, Steel Bars & Sheets, Electrical Wires, Air Conditioners, Motor Vehicles, Chuff Cutter	Steel Products, Lighting Equipments

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Items and specification	Weights	Index		
		Jun-11	May-12	Jun-12
General	100.00	152.78	169.93	169.99
Food & Non-Alcoholic Beverages.	34.83	170.14	188.29	187.05
1 Wheat	0.35	145.69	158.80	158.74
2 Wheat Flour	4.16	156.00	166.09	166.45
3 Wheat Product	0.10	157.18	164.11	162.86
4 Besan	0.15	158.04	233.03	231.58
5 Rice	1.58	141.63	165.29	166.43
6 Cereals	0.16	176.31	193.20	193.80
7 Bakery & Confectionary	1.16	155.26	168.77	169.62
8 Nimco	0.46	168.95	193.14	190.60
9 Meat	2.43	188.19	213.99	214.75
10 Chicken	1.36	156.52	202.55	182.90
11 Fish	0.30	163.92	198.34	187.13
12 Milk Fresh	6.68	184.89	204.07	209.46
13 Milk Product	0.63	179.39	201.63	204.19
14 Milk Powder	0.11	152.46	172.44	175.97
15 Egg	0.46	140.59	171.49	149.61
16 Mustard Oil	0.10	144.34	159.53	158.54
17 Cooking Oil	1.75	144.42	154.79	157.85
18 Vegetable Ghee	2.07	155.99	163.69	164.96
19 Dry Fruits	0.25	179.10	200.77	196.87
20 Fresh Fruits	1.86	178.52	265.88	232.20
21 Pulse Masoor	0.27	160.28	146.82	145.26
22 Pulse Moong	0.23	267.30	238.26	231.97
23 Pulse Mash (Washed)	0.21	222.83	204.12	197.41
24 Pulse Gram	0.24	154.72	243.09	240.97
25 Gram Whole	0.16	168.85	232.76	231.05
26 Beans	0.03	170.49	198.78	202.24
27 Potatoes	0.47	192.60	162.26	169.38
28 Onion	0.53	93.34	135.14	127.62
29 Tomatoes	0.44	87.04	81.94	79.62
30 Fresh Vegetable	1.68	165.52	165.22	158.70
31 Sugar	1.04	246.93	197.07	198.64
32 Gur	0.02	253.35	216.41	219.21
33 Honey	0.04	195.17	222.38	232.36
34 Sweet Meet	0.25	180.81	201.63	200.28
35 Beverages	1.20	154.74	163.72	168.70
36 Jam, Tomato Ketchup & Pickle	0.25	164.50	172.01	172.20
37 Condiments	0.27	172.79	211.56	209.67
38 Spices	0.54	235.39	272.62	268.44
39 Tea	0.84	199.49	208.98	212.34
Alcoholic Beverages, Tobacco	1.41	158.40	169.22	188.05
40 Cigarette	1.39	158.43	169.08	188.26
41 Betel Leaves & Nuts	0.02	156.23	177.91	175.17
Clothing & Footwear	7.57	142.15	163.22	164.08
42 Cotton Cloth	1.73	141.62	152.16	153.57
43 Woolen Cloth	0.88	152.86	183.68	182.08
44 Ready Made Garment	0.97	138.54	160.68	163.15
45 Woolen Readymade Garments	0.40	138.42	161.01	162.45
46 Hosiery	0.51	149.42	171.86	172.27
47 Dopatta	0.44	146.86	173.73	174.75
48 Cleaning & Laundering	0.21	151.65	177.51	180.05

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

Items and specification	Weights	Index		
		Jun-11	May-12	Jun-12
49 Tailoring	0.88	164.31	191.94	193.31
50 Footwear	1.55	122.27	142.00	142.07
Housing, Water, Elect, Gas & Other Fuel	29.41	138.47	153.27	153.35
51 House Rent	21.81	126.67	135.02	135.02
52 Construction Input Item	0.56	168.77	194.21	196.25
53 Construction Wage Rate	0.33	145.67	163.21	166.44
54 Water Supply	0.50	120.34	133.23	133.23
55 Electricity	4.40	168.71	196.37	196.37
56 Gas	1.58	204.32	264.42	264.42
57 Kerosene Oil	0.01	223.00	267.60	253.30
58 Fire Wood Whole	0.23	181.69	225.28	225.29
Furnished H.Hold Equip. & Maint. Etc	4.21	141.67	171.52	173.20
59 Furniture	0.33	139.11	161.27	162.55
60 Household Textile	0.65	140.44	167.77	169.15
61 Household Equipment	0.59	142.30	153.84	154.82
62 Utensils	0.32	138.73	166.02	171.16
63 Plastic Products	0.25	151.79	171.46	172.84
64 Washing Soap & Detergent	0.79	158.59	187.61	189.05
65 Sewing Needle & Dry Cell	0.15	130.20	145.24	148.03
66 Household Servant	1.04	129.24	179.61	180.92
67 Marriage Hall Charges	0.08	154.65	183.23	186.63
Health	2.19	129.03	144.07	147.42
68 Drug Medicine	1.27	120.00	128.29	131.03
69 Medical Equipment	0.01	163.48	183.13	188.56
70 Doctor (MBBS) Clinic Fee	0.59	147.14	175.66	180.36
71 Medical Test	0.32	130.45	147.23	150.49
Transport	7.20	168.11	185.93	182.98
72 Motor Vehicle	0.66	136.92	145.44	148.81
73 Motor Vehicle Accessories	0.24	168.42	200.36	201.80
74 Motor Fuel	3.03	176.43	193.20	180.20
75 Mechanical Service	0.46	147.33	176.50	175.42
76 Motor Vehicle Tax	0.11	102.68	152.02	152.02
77 Transport Services	2.70	172.58	189.38	195.30
Communication	3.22	123.70	122.38	123.62
78 Postal Services	0.07	161.84	168.66	171.37
79 Communication & Apparatus	3.15	122.90	121.41	122.61
Recreation & Culture	2.02	138.45	163.95	164.37
80 Recreation & Culture	0.86	115.30	121.05	121.37
81 Text Books	0.57	163.10	229.88	230.22
82 News Papers	0.19	137.66	149.97	149.97
83 Stationery	0.40	153.79	169.32	170.26
Education	3.94	136.56	151.31	152.28
84 Education	3.94	136.56	151.31	152.28
Restaurants And Hotels	1.23	175.62	193.79	195.10
85 Ready Made Food	1.23	175.62	193.79	195.10
Miscellaneous Goods And Services	2.76	165.45	188.15	190.51
86 Personal Care	1.49	150.19	171.42	174.03
87 Cosmetics	0.39	130.71	146.40	147.22
88 Blades	0.03	149.97	169.53	168.23
89 Personal Equipments	0.84	208.89	237.54	240.29

Table A11: Wholesale Price Index Numbers by Major Groups and Selected Commodities			
Items and Specifications	Index		
	Jun-11	May-12	Jun-12
General	177.98	189.46	189.37
Agriculture Forestry & Fishery	192.88	185.78	189.25
1 Wheat	151.12	163.65	163.58
2 Maize	169.04	168.27	168.35
3 Rice	134.34	154.82	156.72
4 Sorghum/Jowar	186.65	218.11	206.28
5 Millet/Bajra	158.38	163.10	164.48
6 Vegetables	146.78	172.46	149.26
7 Fresh Fruits	173.84	272.26	270.29
8 Dry Fruits	180.06	172.32	171.61
9 Cotton Seeds	197.58	173.84	176.68
10 Other Oil Seeds	156.79	171.79	171.79
11 Edible Roots/ Potatoes	211.35	150.79	159.37
12 Stimulant And Spice Crops	204.06	165.35	166.94
13 Pulses	194.57	228.41	223.78
14 Sugar Crops	251.58	267.92	267.92
15 Fibre Crops	281.32	170.95	185.62
16 Unmanufactured Tobacco	167.68	166.81	166.81
17 Poultry	168.50	177.51	187.34
18 Milk From Bovine Animals	181.86	197.20	202.77
19 Eggs	141.91	166.54	143.95
20 Raw Animal Material/Wool	132.37	136.50	136.50
21 Hides And Fur Skins, Raw	116.56	138.05	137.42
22 Fuel Wood In Logs	176.84	203.06	203.50
23 Fishes Live Fresh Or Chilled	129.75	155.33	156.79
Ores/Minerals, Gas & Elect.	161.94	214.79	215.23
24 Coal Not Agglomerated	125.49	188.24	192.16
25 Natural Gas Liquefied	158.58	207.95	208.33
26 Salt & Pure Sodium Chloride	137.81	165.87	168.19
27 Electrical Energy	170.70	226.10	226.10
Food, Beverages, Tobacco, Textiles	177.71	179.06	180.94
28 Meat Of Animals	193.17	224.02	225.25
29 Vegetables & Fruit Juices	165.69	178.36	179.40
30 Dried Fruits & Nuts	187.80	198.46	201.37
31 Fruit Juices	151.44	158.18	158.11
32 Vegetable Oil Refined	152.26	156.41	157.10
33 Vegetable Ghee	140.12	145.16	145.59
34 Oil Cakes	164.00	139.41	140.07
35 Processed Liquid Milk	170.46	191.19	200.35
36 Milk And Cream In Solid Form	185.09	167.14	167.32
37 Ice Cream	153.19	161.68	161.68
38 Dairy Products N.E.C	161.27	198.75	204.27
39 Wheat Flour	144.73	153.57	153.81
40 Other Cereal Flour	135.15	214.25	215.04
41 Sugar Refined	259.41	200.47	204.92
42 Chocolate	99.45	100.26	100.26
43 Sugar Confectionary	100.00	100.40	100.40
44 Coffee And Tea	187.41	196.69	197.17
45 Spices	204.28	303.53	303.27
46 Other Food Products	288.39	318.54	318.54
47 Mineral Water	158.83	165.88	165.88
48 Beverages	129.49	135.21	135.23
49 Tobacco Products	177.72	175.85	208.80
50 Cotton Yarn	232.32	200.04	191.40
51 Nylon Yarn	192.51	183.81	179.55
52 Blended Yarn	210.24	187.07	185.75
53 Woven Fabrics	144.44	171.55	171.55
54 Cotton Fabrics	155.88	175.89	177.38
55 Other Fabrics	142.20	165.23	166.92
56 Silk And Rayon Fabrics	136.13	141.30	142.56

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

Items and Specifications		Index		
		Jun-11	May-12	Jun-12
57	Towels	163.98	189.19	189.19
58	Blankets	137.48	161.28	162.38
59	Bed Sheets	148.07	175.92	182.90
60	Quilts	137.32	147.05	147.05
61	Woolen Carpets	107.14	104.76	104.76
62	Synthetic Carpets	150.85	144.07	139.83
63	Hosiery Products	146.76	163.84	164.67
64	Ready Made Garments	118.04	127.25	127.25
65	Leather With Out Hairs	107.45	109.83	109.83
66	Other Leather N.E.C	116.33	122.57	122.57
67	Footwear's	101.48	128.50	128.50
Other Transportable Goods		182.86	207.39	199.83
68	Timber	136.69	144.35	144.55
69	Printing Paper	110.02	141.99	153.92
70	Hard Board	135.42	168.75	166.67
71	Coke	155.28	163.45	163.45
72	Motor Sprit	146.45	174.61	160.04
73	Diesel Oil	235.23	263.04	245.87
74	Kerosene Oil	225.66	266.52	243.74
75	Furnace Oil	189.70	210.94	194.27
76	Mobil Oil	165.14	181.11	179.12
77	Chemicals	136.83	145.79	145.80
78	Dying Materials	107.04	104.26	104.26
79	Fertilizers	220.32	268.05	263.70
80	Pesticides	156.72	165.53	167.27
81	Insecticides	126.99	121.64	118.26
82	Paints & Varnishes	167.06	211.83	215.37
83	Medicines	115.56	122.49	129.55
84	Soaps & Detergent	145.20	156.58	157.37
85	Auto Tyres	160.69	175.62	176.49
86	Plastic Products	161.08	185.12	188.26
87	Glass Sheets	156.82	172.43	177.10
88	Other Glass Articles	198.78	222.06	217.98
89	Ceramics And Sanitary	131.02	144.28	146.66
90	Bricks Blocks And Tiles	150.16	170.86	170.93
91	Cement	154.18	177.41	177.78
92	Bed Foams	120.83	131.00	131.50
93	Matches	112.26	122.82	122.82
Metal Product Machinery & Equip		144.53	156.46	157.22
94	Pig Iron	128.97	128.97	128.97
95	Steel Bars & Sheets	127.76	136.32	139.13
96	Pipe Fittings	137.87	142.31	142.31
97	Steel Products	135.22	159.13	159.73
98	Engines And Motors	109.07	109.07	109.07
99	Vacuum Pumps	115.39	115.39	115.39
100	Air Conditioners	162.24	170.33	172.67
101	Cultivators	180.09	184.66	184.66
102	Chuff Cutter	131.08	134.28	138.54
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	158.28	164.93	164.93
107	Electrical Wires	152.07	165.49	165.49
108	Lighting Equipments	130.63	145.49	146.79
109	Radio And Television	127.86	132.73	132.73
110	Motor Vehicles	151.04	160.28	160.28
111	Motor Cycles	120.78	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
2011-12		162.57	182.20	150.80	181.28	181.32	181.26	178.67
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
	Jun	169.99	187.35	159.58	189.37	189.36	189.37	188.14

*: all groups combined

Table A13: International Commodity Prices/ Indices

	Mar-12	Apr-12	May-12	Jun-12
Energy				
Crude Oil (US\$ per barrel) *	117.8	113.8	104.2	90.7
IMF Energy Index (2005 = 100)	216.1	210.0	194.7	172.5
WB Energy Index (2005 = 100) @	208.5	201.1	185.7	163.5
Food				
Rice (\$/MT)	577.1	586.0	612.4	606.1
Wheat (\$/MT)	283.9	266.3	264.4	276.2
Sugar (US cent/ pound)	23.8	22.5	20.3	20.1
Palm Oil (\$/MT)	1,105.7	1,157.5	1,031.1	927.6
Soybean Oil (\$/MT)	1,196.5	1,232.6	1,134.6	1,097.8
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	99.5	100.1	88.5	82.2
IMF Metal Price Index (2005 = 100)	206.9	203.5	193.3	185.7
Copper (\$/MT)	8,470.8	8,285.5	7,896.9	7,428.3
Aluminum (\$/MT)	2,184.2	2,048.5	2,002.5	1,885.5
Iron Ore (\$ cents/dry MT)	144.7	147.7	136.3	134.6
Tin (\$/MT)	22,985.4	22,114.5	20,295.3	19,255.4
Nickle (\$/MT)	18,660.8	17,892.8	16,968.3	16,603.7
Zinc (\$/MT)	2,035.9	2,002.7	1,928.0	1,855.9
Lead (\$/MT)	2,056.7	2,073.6	1,999.3	1,851.0
Uranium (\$/MT)	51.3	51.3	51.9	50.8
DAP (\$/MT)	502.5	518.1	553.0	564.4
Urea (\$/MT)	410.6	493.4	496.7	420.0

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	169.99
Seasonally Adjusted Series				
Jul	112.12	122.22	137.37	154.44
Aug	113.64	123.89	139.71	155.83
Sep	114.61	124.16	142.59	157.47
Oct	115.76	124.46	143.48	159.18
Nov	115.82	126.59	145.50	160.31
Dec	116.86	127.12	146.77	161.09
Jan	116.61	129.80	147.84	162.77
Feb	118.75	130.91	147.78	164.15
Mar	119.20	132.59	149.91	166.11
Apr	119.74	134.21	151.04	168.03
May	120.06	134.88	151.98	170.70
Jun	121.34	135.64	153.72	171.05

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	187.35
Seasonally Adjusted Series				
Jul	117.31	130.64	148.88	174.23
Aug	119.35	133.08	154.46	174.70
Sep	120.59	132.93	160.99	176.78
Oct	123.61	133.30	160.46	179.06
Nov	121.54	136.63	163.76	180.02
Dec	123.23	136.99	165.09	180.73
Jan	120.15	138.89	166.93	182.37
Feb	125.06	141.60	166.68	184.25
Mar	125.69	143.55	169.30	185.87
Apr	126.49	145.91	170.01	188.23
May	126.63	147.39	170.98	190.34
Jun	128.47	148.89	172.79	190.72

Table 16: CPI Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.21	100.20	100.18	100.18	100.2
Aug	100.60	100.64	100.66	100.67	100.6
Sep	100.54	100.59	100.63	100.66	100.6
Oct	100.92	100.95	100.99	101.02	101.0
Nov	100.55	100.56	100.58	100.59	100.6
Dec	99.42	99.41	99.40	99.40	99.4
Jan	99.87	99.88	99.89	99.89	99.9
Feb	99.42	99.40	99.37	99.34	99.4
Mar	99.41	99.37	99.34	99.32	99.4
Apr	99.95	99.96	99.97	99.99	100.0
May	99.62	99.60	99.58	99.55	99.6
Jun	99.43	99.40	99.39	99.38	99.4

Table 17: CPI Food Monthly & Average Seasonal Factors

Period	FY09	FY10	FY11	FY12	Average
Jul	100.22	100.25	100.30	100.33	100.3
Aug	101.31	101.40	101.45	101.50	101.4
Sep	101.51	101.71	101.85	101.91	101.7
Oct	101.87	102.01	102.15	102.24	102.1
Nov	101.57	101.64	101.73	101.80	101.7
Dec	99.12	99.14	99.15	99.16	99.1
Jan	99.71	99.75	99.76	99.74	99.7
Feb	98.36	98.21	98.13	98.07	98.2
Mar	98.72	98.72	98.70	98.71	98.7
Apr	99.54	99.54	99.56	99.58	99.6
May	99.04	98.85	98.71	98.64	98.8
Jun	98.68	98.48	98.31	98.24	98.4

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	0.04
Seasonally Adjusted Series				
Jul		0.73	1.28	0.47
Aug	1.36	1.37	1.70	0.90
Sep	0.86	0.21	2.06	1.05
Oct	1.00	0.24	0.62	1.09
Nov	0.05	1.71	1.41	0.71
Dec	0.90	0.42	0.87	0.49
Jan	-0.21	2.11	0.73	1.04
Feb	1.83	0.86	-0.04	0.85
Mar	0.38	1.28	1.44	1.19
Apr	0.45	1.22	0.75	1.16
May	0.27	0.50	0.62	1.59
Jun	1.06	0.56	1.15	0.21

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	-0.21
Seasonally Adjusted Series				
Jul		1.69	-0.01	0.83
Aug	1.74	1.87	3.75	0.27
Sep	1.03	-0.11	4.22	1.19
Oct	2.51	0.27	-0.33	1.29
Nov	-1.68	2.50	2.05	0.54
Dec	1.39	0.26	0.81	0.39
Jan	-2.50	1.39	1.11	0.91
Feb	4.09	1.95	-0.15	1.03
Mar	0.50	1.38	1.57	0.88
Apr	0.63	1.64	0.42	1.27
May	0.11	1.01	0.57	1.12
Jun	1.45	1.02	1.06	0.20

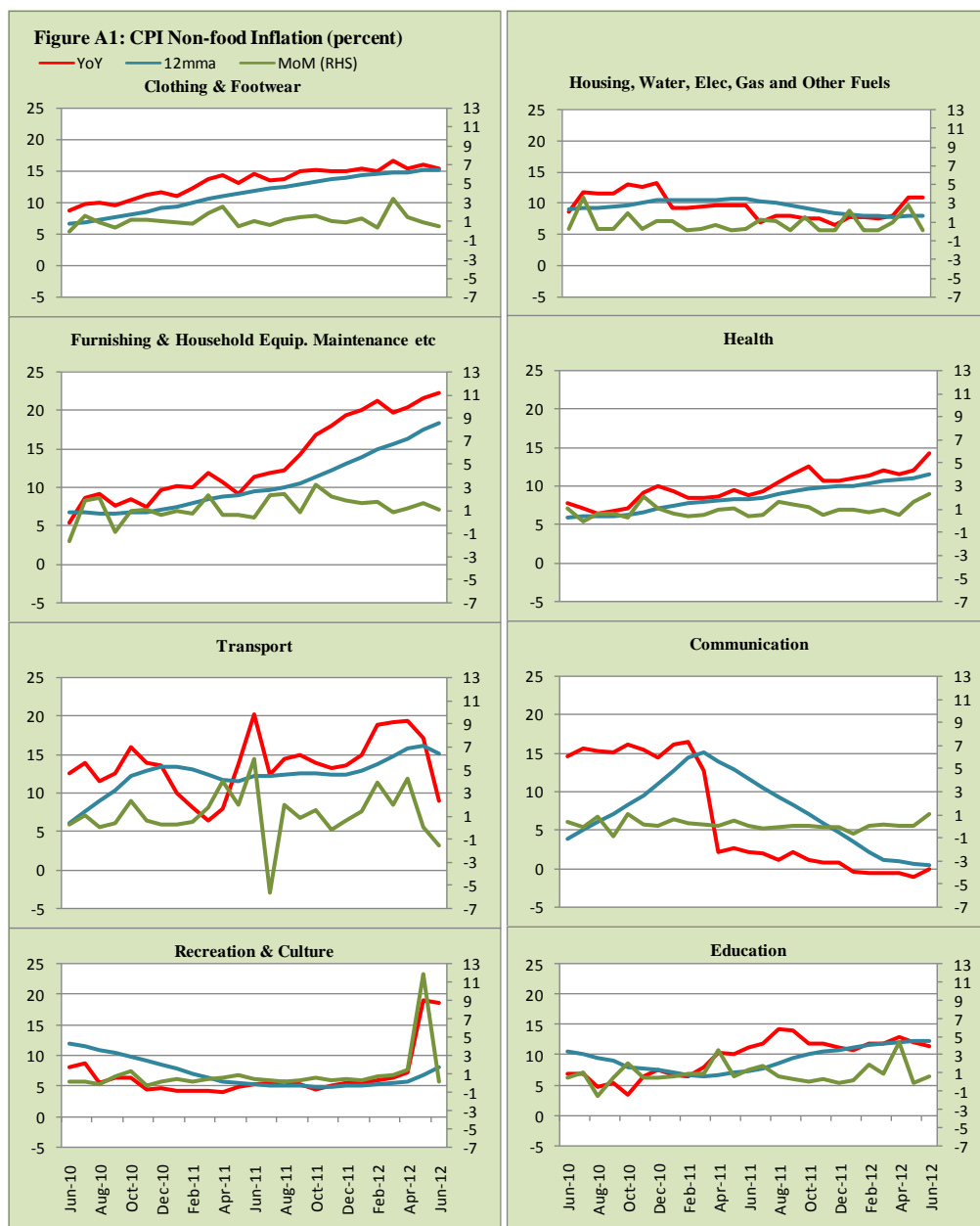


Figure A2: Frequency Distribution of Price Changes of CPI Items, June 2012

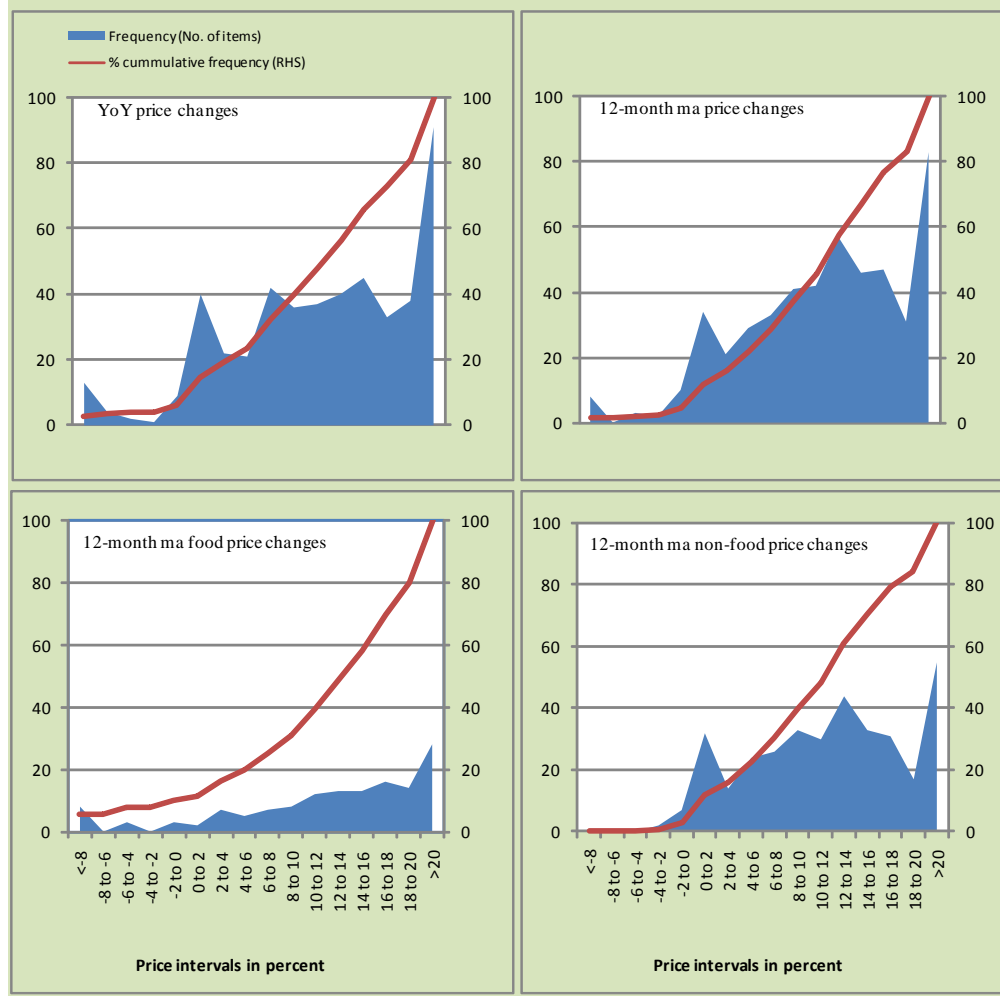
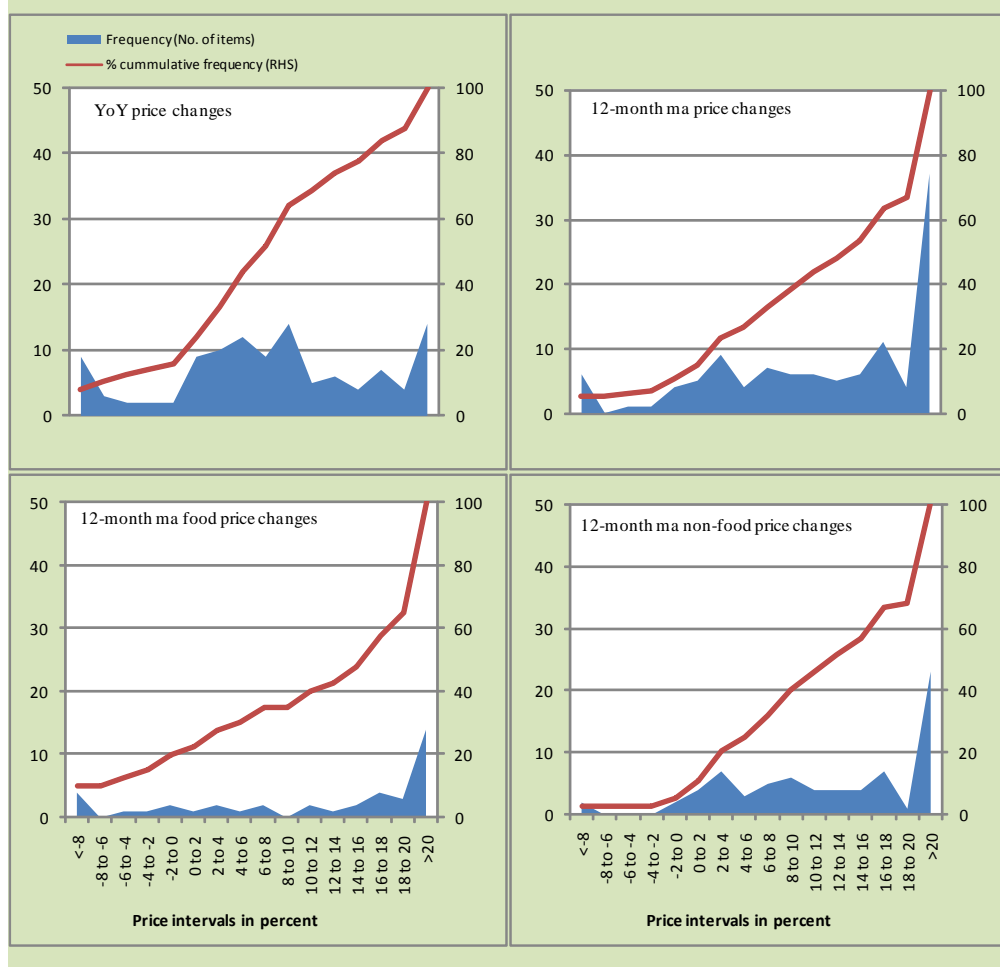
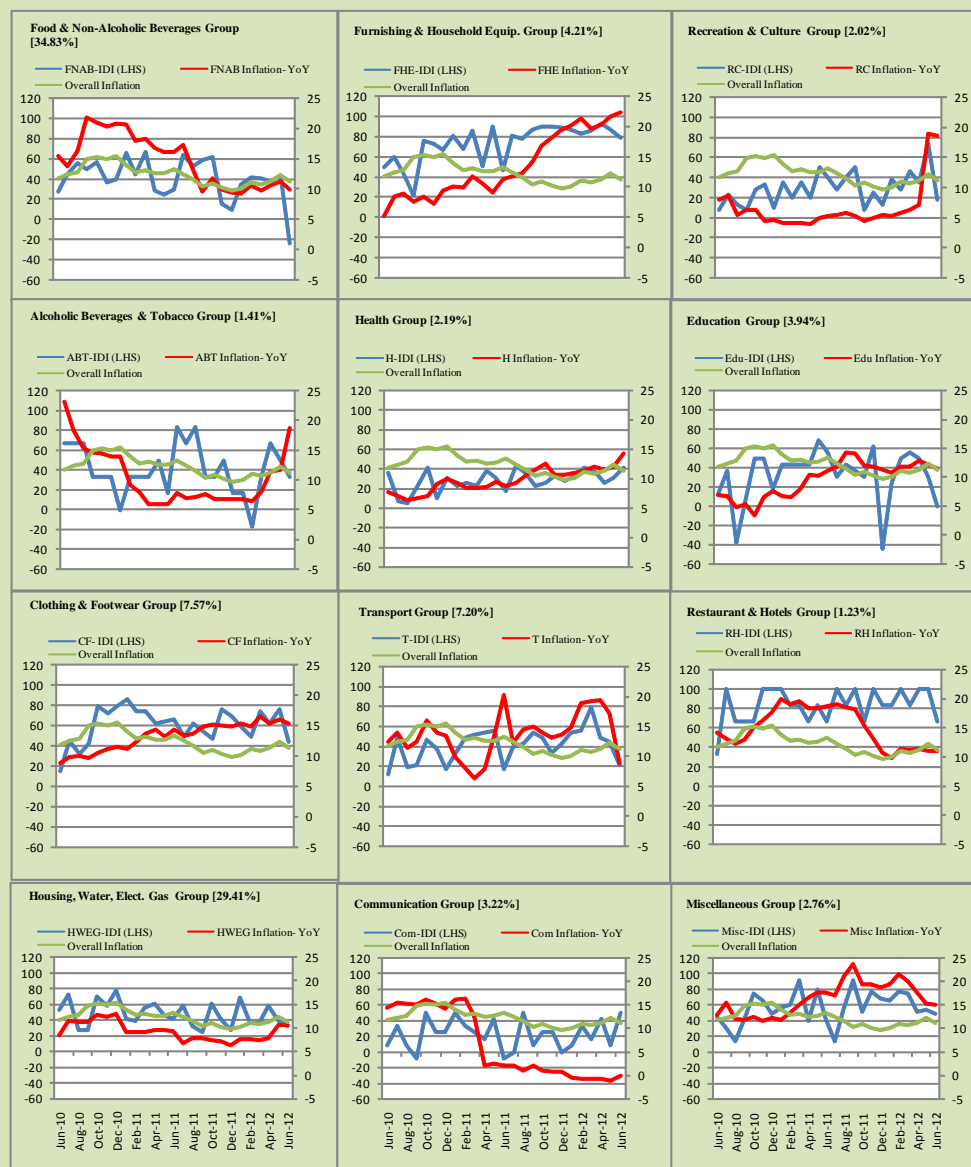


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, June 2012



Inflation Monitor, June 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.