

Inflation Monitor

October 2012



State Bank of Pakistan

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Review

Inflation in Brief

1. Headline CPI inflation (2007-08=100) is recorded at 7.7 percent on year-on-year basis in October 2012 as compared to 8.8 percent in the previous month and 11.0 percent in the corresponding month of last year.
2. CPI inflation on month-on-month basis is recorded at 0.4 percent in October 2012 as compared to 0.8 percent in the previous month and 1.4 percent in the corresponding month of last year. Seasonally adjusted month-on-month CPI inflation decreased to 0.2 percent in October 2012 as compared to 0.7 percent in the previous month.
3. Core inflation (trimmed) on year-on-year basis decreased to 9.7 percent in October 2012 as compared to 10.4 percent in the previous month and it was 11.7 percent in the corresponding month of last year.
4. On month-on-month basis, the Core inflation (trimmed) increased to 0.7 percent in October 2012 as compared to 0.5 percent in previous month. It was 1.0 percent in the corresponding month of last year.
5. Non-food, non-energy inflation measured by CPI Core (NFNE) on year-on-year basis decreased to 10.2 percent in October 2012 as compared to 10.5 percent in the previous month as well as in the corresponding month of last year.
6. Core NFNE inflation on month-on-month basis increased to 1.2 percent in October 2012 when compared to 0.4 percent a month earlier. The rate of change in Core NFNE in October 2011 was 1.4 percent.
7. WPI inflation on year-on-year basis decreased to 7.5 percent in October 2012 when compared to 7.8 percent a month earlier. During October 2011, WPI inflation was recorded at 15.4%.

8. WPI inflation on month-on-month basis decreased to 0.1 percent in October 2012 as compared to 0.3 percent a month earlier. It was 0.4 percent in October 2011.
9. SPI inflation on year-on-year basis decreased to 6.2 percent in October 2012 as compared to 7.5 percent in the previous month. It was 8.2 percent in the corresponding month of last year.
10. SPI inflation on month-on-month basis is recorded at -0.5 percent in October 2012 as compared to 0.9 percent a month earlier and 0.8 percent in October 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				
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
Jul-12	9.6	-0.2	9.1	1.8	10.0	-1.7	11.3	1.0	10.7	0.7	7.2	0.4	7.3	-2.2
Aug-12	9.1	0.9	8.5	0.9	9.4	0.9	10.8	0.3	10.6	0.4	7.7	1.0	7.3	1.4
Sep-12	8.8	0.8	7.6	0.7	9.7	0.9	10.5	0.4	10.4	0.5	7.8	0.3	7.5	0.9
Oct-12	7.7	0.4	5.8	-0.1	9.0	0.7	10.2	1.2	9.7	0.7	7.5	0.1	6.2	-0.5

* NFNE is Non-food non-energy

** SPI for all income groups combined

Fig 1.1: Summary of Price Inflation

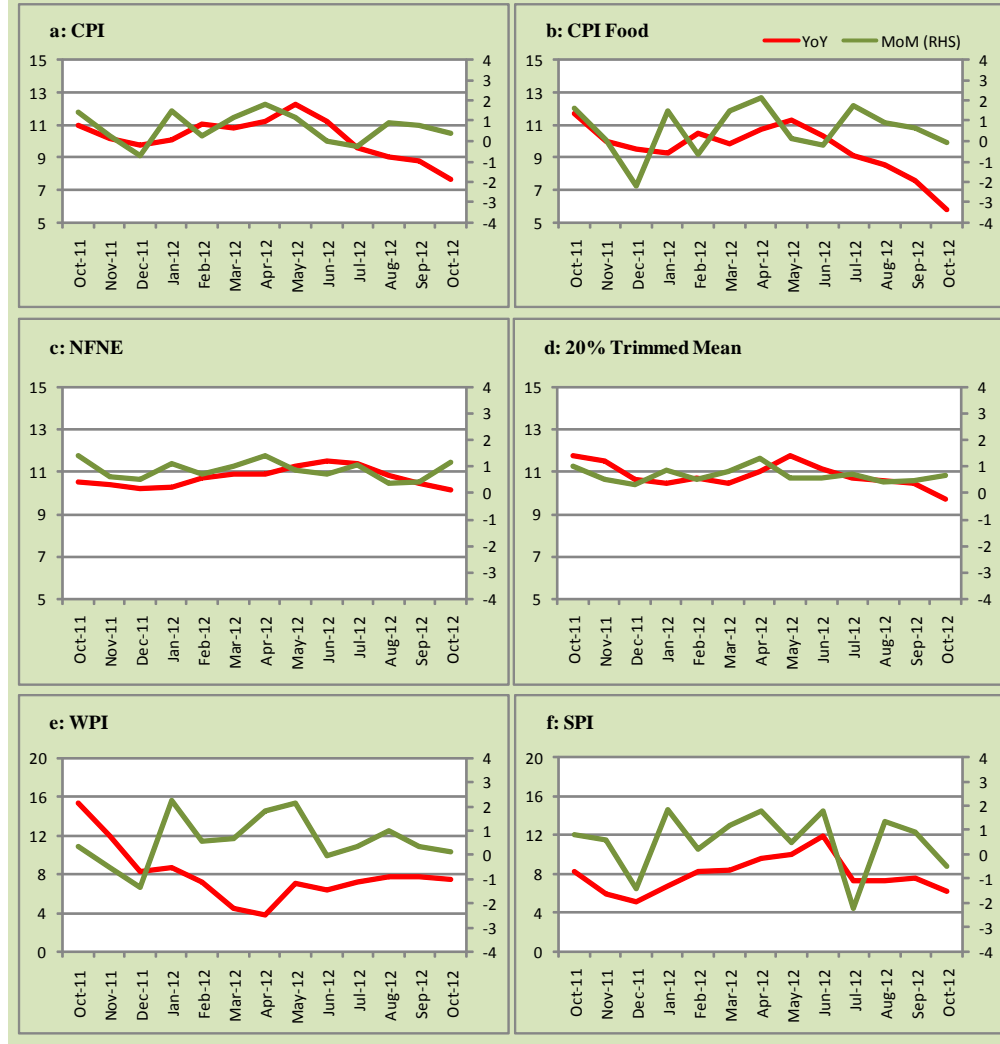


Fig 1.2: Movements in Price Indices (percent)

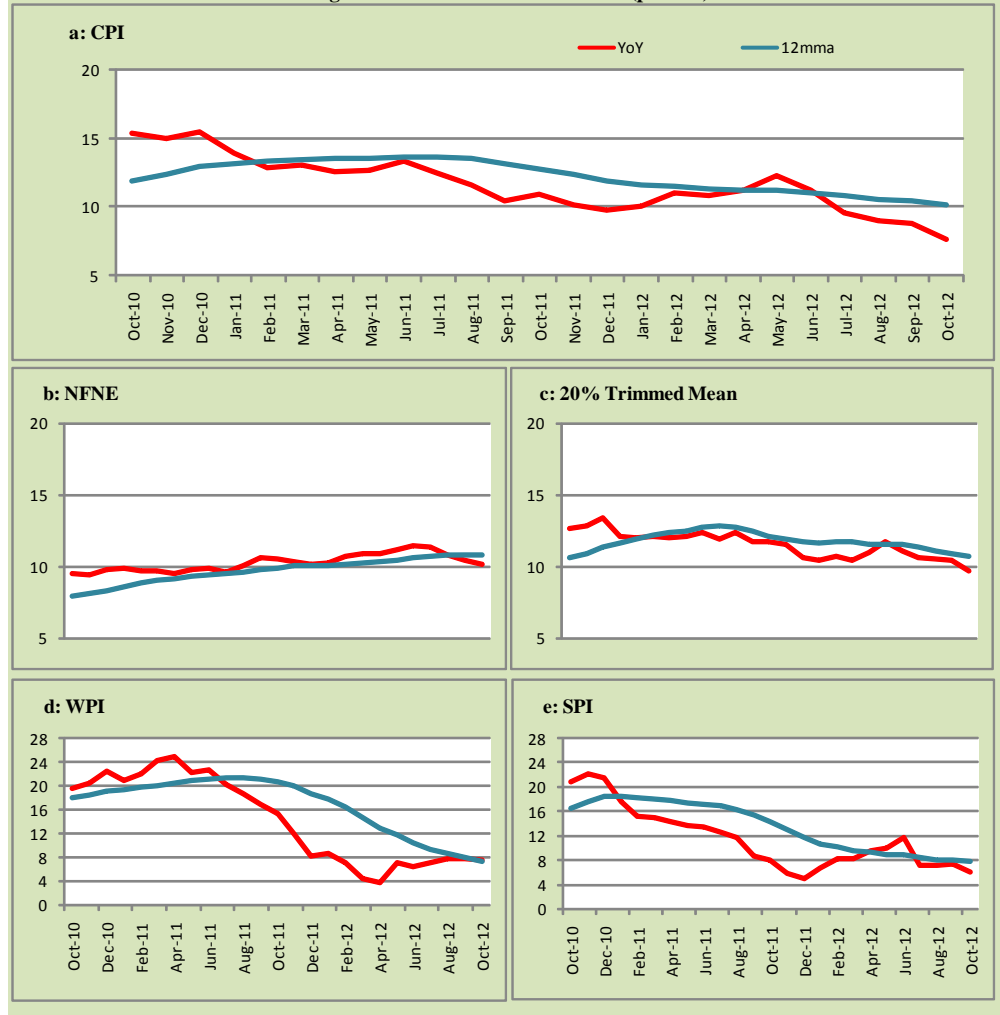


Fig 1.3: Movements in Price Indices -MoM (percent)

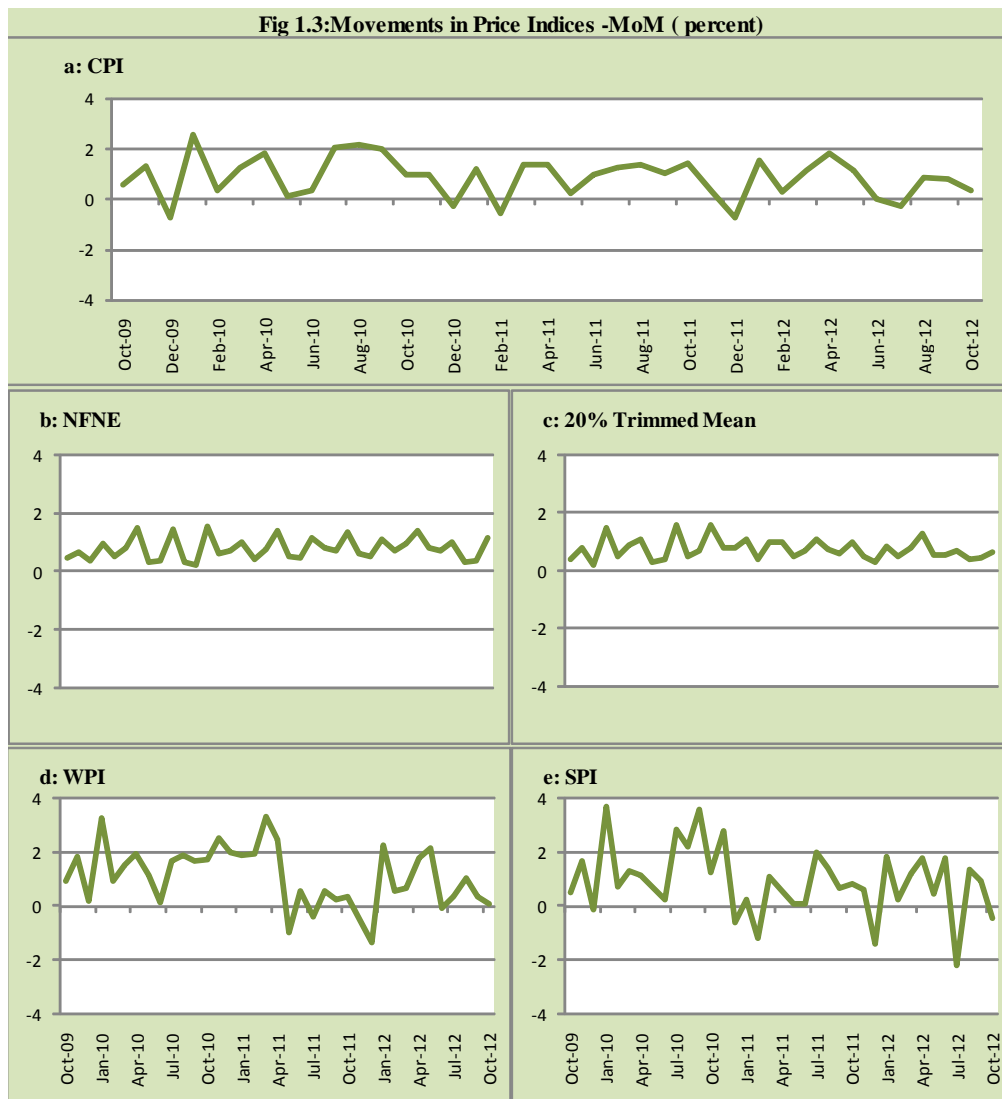
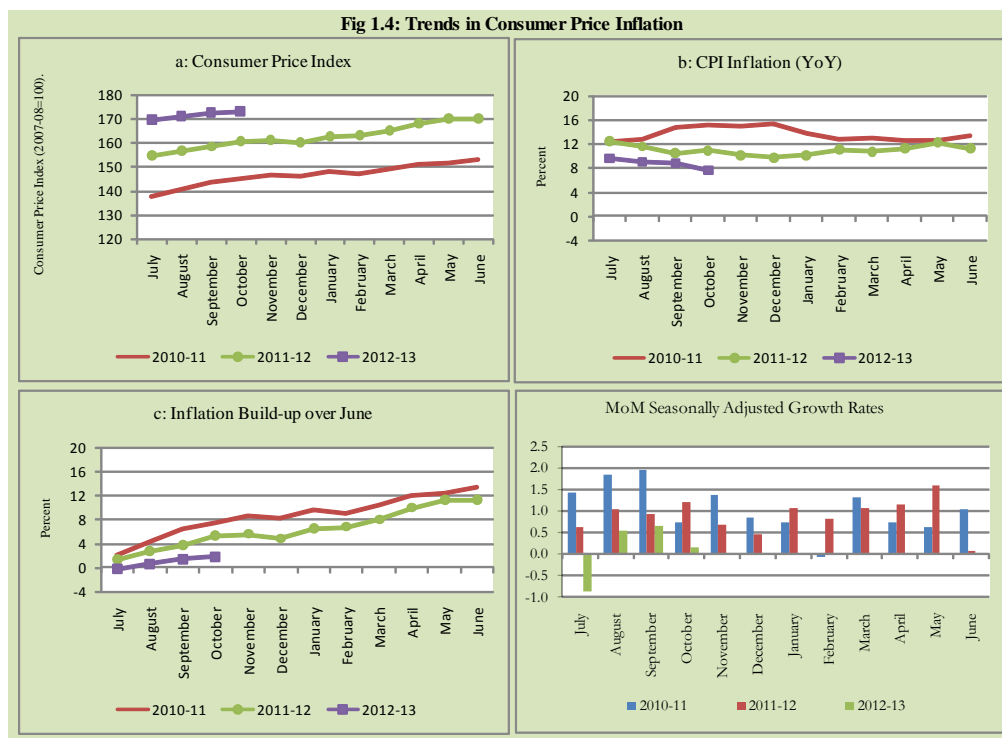


Fig 1.4: Trends in Consumer Price Inflation



2. City wise Inflation

CPI Inflation on year-on-year basis in federal and provincial capitals of Pakistan showed mix trend during October 2012. Among these five cities, the lowest inflation was observed in Peshawar which is 5.3 percent while the highest inflation was observed in Islamabad and Quetta at 8.0 percent (Table A6 of annexure-A).

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

	Oct-11		Sep-12		Oct-12	
	MoM	YoY	MoM	YoY	MoM	YoY
Overall CPI	1.4	11.0	0.8	8.8	0.4	7.7
Islamabad	0.9	9.5	0.9	9.0	0.0	8.0
Karachi	1.7	11.0	1.7	8.6	0.6	7.5
Lahore	0.4	8.3	0.4	8.0	-0.1	7.5
Peshawar	1.8	9.7	1.0	7.2	0.0	5.3
Quetta	1.7	10.4	-0.1	8.7	1.0	8.0

3. Income Group wise Inflation

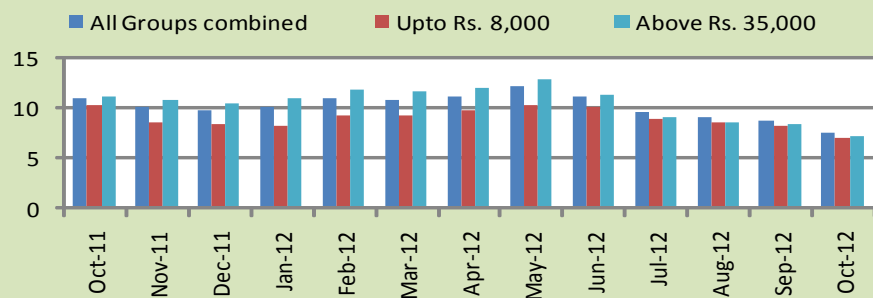
Income group- wise data showed that income group above Rs. 35,000 suffered higher inflation than the overall inflation in CPI basket during October 2012 for food group. The lowest income group (Up to Rs. 8, 000) has the lowest inflation in food group during the month of October 2012 (Table A7 of annexure-A).

Table 3.1 Income Group- wise Inflation (YoY)

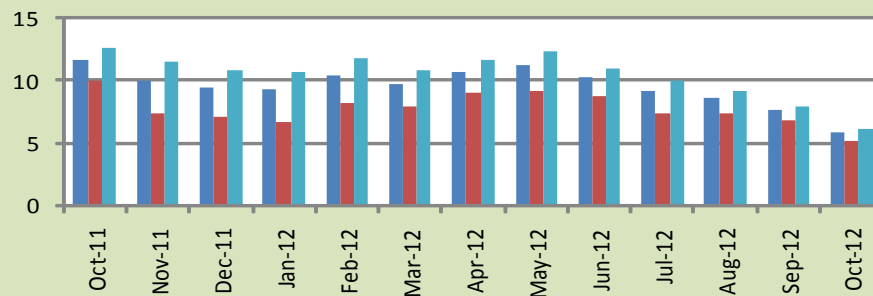
Income Groups	General			Food			Non-food		
	Oct-11	Sep-12	Oct-12	Oct-11	Sep-12	Oct-12	Oct-11	Sep-12	Oct-12
All Groups Combined	11.0	8.8	7.7	11.7	7.6	5.8	10.4	9.7	9.0
Up to Rs. 8,000	10.3	8.2	7.0	10.0	6.8	5.1	10.7	10.1	9.6
Rs. 8,001- 12,000	10.6	9.3	8.2	10.6	7.1	5.3	10.6	12.0	11.5
Rs. 12,001- 18,000	10.7	9.3	8.1	11.1	7.3	5.6	10.3	11.3	10.8
Rs. 18,001- 35,000	10.8	7.9	6.8	11.6	7.6	5.8	10.1	8.2	7.7
Above Rs. 35,000	11.2	8.4	7.3	12.7	8.0	6.1	10.5	8.7	7.9

Fig 3.1: Income Group- wise Inflation

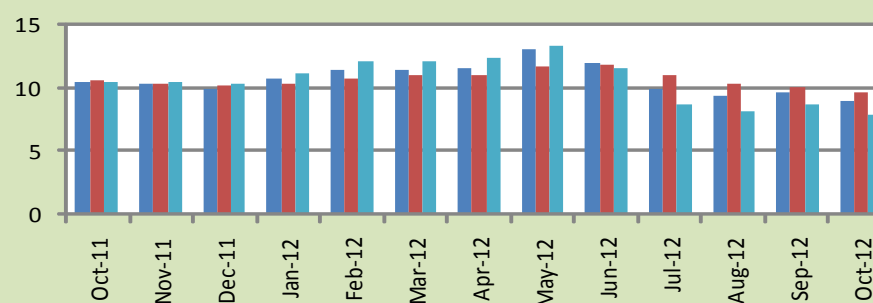
a: CPI Overall Inflation (YoY)



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 32.26 percent during October 2012 from 36.69 percent in September 2012. It was 45.19 percent in October 2011.

The weighted contribution of non-food group showed increase to touch 67.74 percent in October 2012 from 63.31 percent in September 2012.

Table 4.1 Weighted Contribution to CPI Inflation (YoY)

Period	Food	Clothing & Footwear	Housing, Water, Elect, Gas & Other Fuel	Transport	Education	Others
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
Jul-12	40.17	11.54	15.53	9.68	3.66	19.42
Aug-12	39.99	12.01	12.97	12.64	3.85	18.55
Sep-12	36.69	11.86	13.06	16.16	3.86	18.38
Oct-12	32.26	13.20	14.34	15.11	4.53	20.57

5. Inflation Diffusion Index

Table 5.1 Inflation Diffusion Index - based on MoM change													
	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
General	52.2	47.3	37.7	51.5	51.0	57.6	53.1	55.6	27.0	41.4	41.4	48.6	54.7
Food & Non-Alcoholic Beverages	60.9	15.3	9.4	34.2	41.6	40.2	37.6	43.4	-23.4	25.4	47.8	44.2	38.3
Alcoholic Beverages & Tobacco	33.3	50.0	16.7	16.7	-16.7	33.3	66.7	50.0	33.3	100.0	83.3	83.3	33.3
Clothing & Footwear	47.5	76.3	69.5	59.3	49.2	74.6	62.7	76.3	44.1	62.7	76.3	64.4	84.7
Housing, Water, Elect, Gas & other Fuels	61.1	41.7	27.8	69.4	36.1	36.1	58.3	38.9	33.3	33.3	30.6	38.9	50.0
Furnishing & Household Equip. Maintenance etc	89.9	89.9	88.4	87.0	82.6	85.5	92.8	87.0	78.3	68.1	20.3	81.2	79.7
Health	25.6	33.3	28.2	33.3	41.0	38.5	25.6	30.8	41.0	33.3	23.1	41.0	23.1
Transport	48.8	32.6	41.9	53.5	55.8	79.1	48.8	44.2	20.9	39.5	41.9	37.2	48.8
Communication	25.0	25.0	0.0	8.3	33.3	16.7	41.7	8.3	50.0	-25.0	8.3	16.7	50.0
Recreation & Culture	7.7	25.6	12.8	38.5	28.2	46.2	35.9	74.4	17.9	17.9	23.1	10.3	35.9
Education	31.3	62.5	-43.8	25.0	50.0	56.3	50.0	31.3	0.0	25.0	43.8	31.3	43.8
Restaurant & Hotels	66.7	100.0	83.3	83.3	100.0	83.3	100.0	100.0	66.7	100.0	33.3	83.3	100.0
Miscellaneous	51.4	77.1	68.6	65.7	77.1	74.3	51.4	54.3	48.6	60.0	60.0	54.3	80.0
NFNE	49.7	59.8	47.3	58.3	54.7	63.9	57.4	57.7	44.7	47.0	38.8	49.1	62.1

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	Oct-11		Sep-12		Oct-12	
			YoY	MoM	YoY	MoM	YoY	MoM
1	Wheat	10 Kg	0.10	0.70	10.63	4.98	10.08	0.20
2	Wheat Flour Bag	10 Kg	-0.53	0.35	10.68	6.43	10.47	0.16
3	Rice Basmati Sup. Qlty.	Kg	11.22	0.43	19.42	1.61	19.67	0.64
4	Pulse Masoor (Washed)	Kg	-9.17	0.42	-6.38	0.95	-7.32	-0.58
5	Pulse Moong (Washed)	Kg	-3.38	1.08	-14.87	-2.34	-17.05	-1.51
6	Pulse Mash (Washed)	Kg	-11.34	1.02	-9.98	0.21	-11.16	-0.31
7	Pulse Gram	Kg	1.82	0.14	47.86	0.74	46.47	-0.81
8	Vegetable Ghee (Loose)	Kg	24.19	0.29	1.81	-0.71	0.11	-1.39
9	Sugar Refined	Kg	-11.27	-5.29	-28.83	-1.11	-23.90	1.28
10	Milk Fresh (Unboiled)	Ltr	21.34	0.74	13.74	0.74	13.02	0.11
11	Tea- Tapal Danedar	200 Gm	16.16	0.00	-1.74	0.00	-1.74	0.00
12	Beef With Bone Av. Qlty.	Kg	18.69	1.08	9.61	1.21	9.03	0.54
13	Mutton Av. Qlty.	Kg	20.64	0.85	10.19	0.69	9.47	0.19
14	Chicken Farm Broiler (Live)	Kg	0.73	-3.64	-11.88	-15.46	-13.85	-5.80
15	Eggs Farm	Doz	0.94	0.61	10.35	12.08	28.68	17.32
16	Potatoes	Kg	-10.15	-2.61	-2.87	2.24	-1.13	-0.86
17	Onion	Kg	-5.74	25.84	18.86	13.77	3.45	9.53
18	Tomatoes	Kg	21.12	75.00	32.32	-14.33	-30.04	-7.48
19	Ginger	Kg	-28.67	2.65	-23.22	0.14	-4.26	28.00
20	Garlic	Kg	-41.49	-1.78	-15.82	4.85	-13.11	1.39

7. Global Commodity Prices

Table 7.1 Changes in Major Global Indices (percent)

Item/ Group	Oct-11		Sep-12		Oct-12	
	YoY	MoM	YoY	MoM	YoY	MoM
Overall	17.1	-3.1	-1.0	0.7	0.4	-1.7
Food	1.6	-5.6	3.8	-2.1	7.9	-1.8
Metals	8.4	-10.4	-19.7	4.3	-8.7	1.9
Energy	25.3	-0.6	3.1	0.8	1.2	-2.4
Agricultural	2.7	-5.9	-12.0	0.5	-6.0	0.5
Cotton	-12.6	-5.2	-27.9	-0.3	-25.9	-2.6

Source: IMF

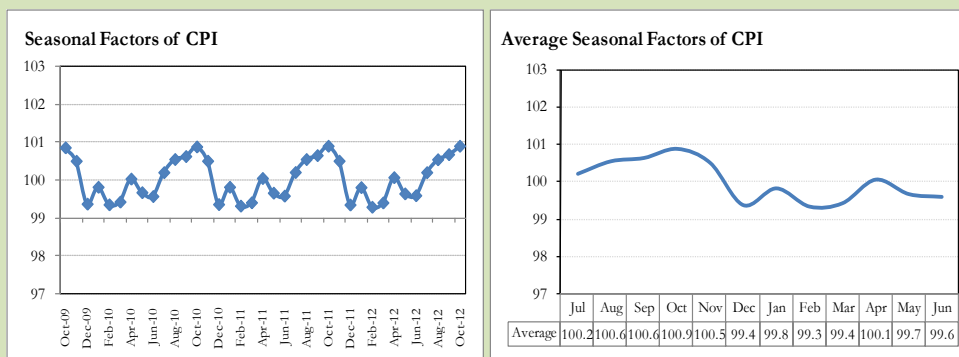
8. Seasonal Adjustment in CPI

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

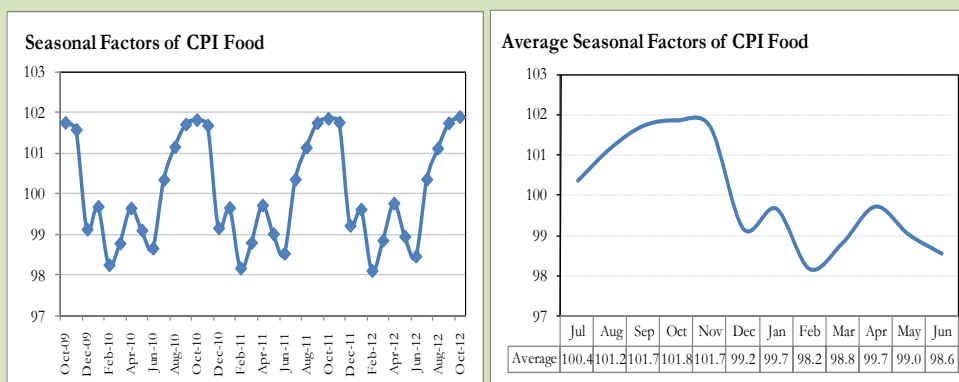
Figure 8.1 reveals that seasonality in CPI has been increasing over the period of last four years. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during the months from July to November & April and downward seasonality in the remaining months of the year. Upward and downward seasonality is above and below the trend line respectively. It is important to note that seasonal factors are estimates based on present and past experience and that future data may not necessarily show the same pattern of seasonal factors.

Fig. 8.1 Seasonal Factors of CPI



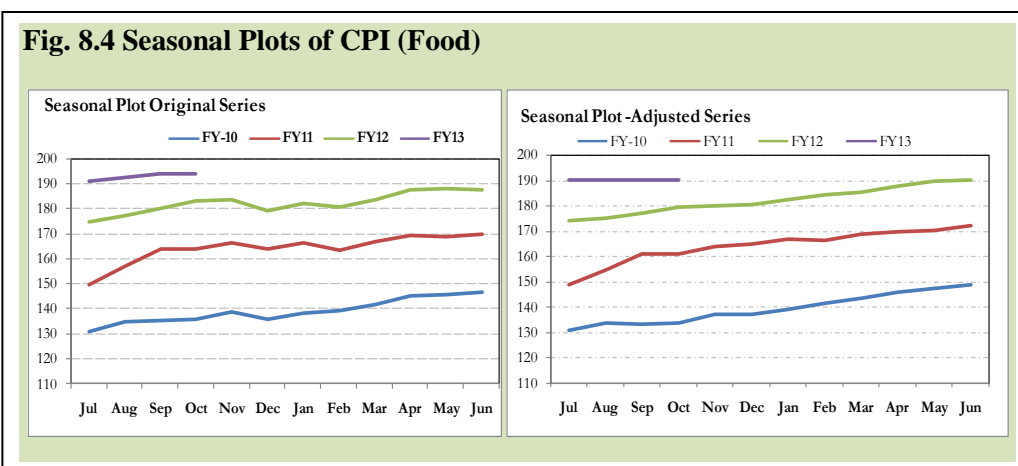
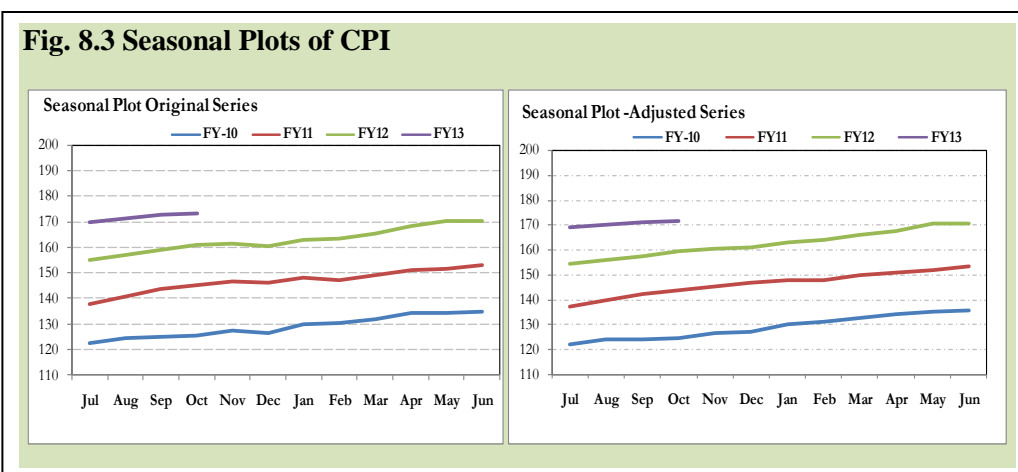
Note: Data Available in Annex Table 16.

Fig. 8.2 Seasonal Factors of CPI Food



Note: Data Available in Annex Table 17.

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



Seasonally adjusted CPI for October 2012 stood at 171.55 against 173.10 in original series showing a decrease of 1.55 on account of adjustment of upward seasonality in October 2012.

Seasonally adjusted CPI food group for October 2012 stood at 190.03 against 193.66 in original series showing a decrease of 3.63 on account of adjustment of upward seasonality in October 2012.

Month-on-month change of seasonally adjusted CPI series stood at 0.16% reflecting increase during October 2012 over September 2012 and an increase of 0.38% in original series.

Month-on-month change of seasonally adjusted CPI food group series stood at -0.22% reflecting decrease during October 2012 and a decrease of 0.07% 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 October 2012 (corresponding to the seasonally adjusted month-on-month rate) is 1.96 percent.

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

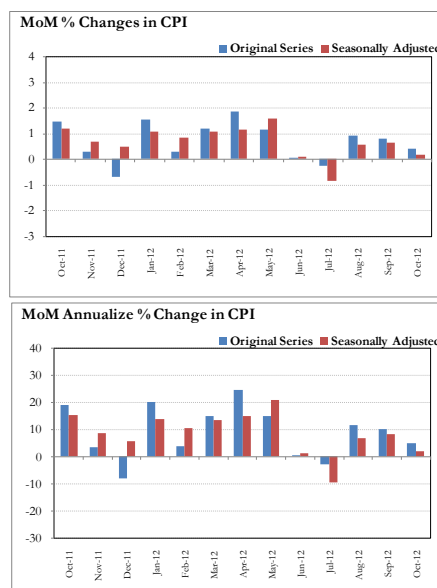
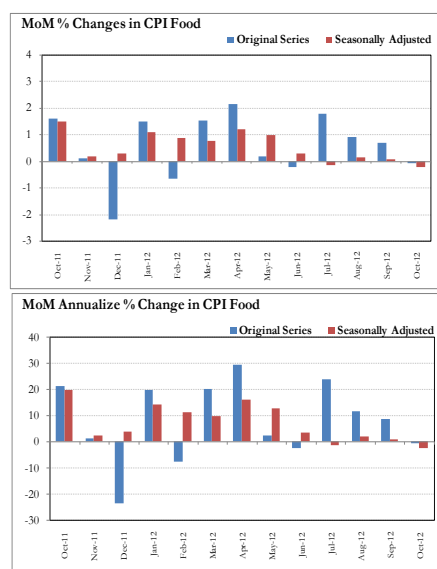


Fig. 8.6 Month-on-Month Percent Changes in CPI Food



Annexure A

Table A1: CPI Inflation by Groups (percent)							
	Weight	MoM change			YoY change		
		Oct-11	Sep-12	Oct-12	Oct-11	Sep-12	Oct-12
I. Food Group	37.5	1.6	0.7	-0.1	11.7	7.6	5.8
Food & Non-Alcoholic Beverages	34.8	1.7	0.7	-0.1	11.7	7.1	5.2
Alcoholic Beverages & Tobacco	1.4	0.0	0.2	0.0	6.8	17.8	17.9
Restaurant & Hotels	1.2	0.3	0.7	1.2	15.5	9.8	10.8
II. Non-Food Group	62.5	1.3	0.9	0.7	10.4	9.7	9.0
Clothing & Footwear	7.6	1.5	0.8	1.1	15.2	14.9	14.4
Housing, Water, Elect, Gas & other Fuels	29.4	1.5	0.0	1.3	7.5	4.4	4.2
Furnishing & Household Equip. Maint	4.2	3.1	0.8	0.8	16.7	17.3	14.7
Health	2.2	1.2	1.0	0.8	12.5	15.2	14.7
Transport	7.2	1.5	4.1	-1.6	14.0	19.2	15.6
Communication	3.2	0.0	0.0	0.1	1.1	0.2	0.3
Recreation & Culture	2.0	0.6	0.0	0.4	4.6	18.4	18.3
Education	3.9	0.1	0.2	0.4	11.9	9.7	10.1
Miscellaneous	2.8	-0.7	1.7	1.7	19.6	10.1	12.7
Headline	100.0	1.4	0.8	0.4	11.0	8.8	7.7

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)	
		Oct-11	Oct-12	Oct-11	Oct-12	Oct-11	Oct-12	Oct-11	Oct-12	Oct-11	Oct-12
I. Food Group	5.8	130	130	13	36	15	22	16	29	86	43
Food & Non-Alcoholic Beverages	5.2	118	118	13	36	14	21	12	25	79	36
Alcoholic Beverages & Tobacco	17.9	6	6	0	0	1	1	3	1	2	4
Restaurant & Hotels	10.8	6	6	0	0	0	0	1	3	5	3
II. Non-Food Group	9.0	348	348	42	42	53	38	63	68	190	200
Clothing & Footwear	14.4	59	59	8	4	3	1	8	7	40	47
Housing, Water, Elect, Gas & other Fuels	4.2	36	36	0	7	4	3	13	10	19	16
Furnishing & Household Equip. Maintenance etc	14.7	69	69	2	3	3	5	14	17	50	44
Health	14.7	39	39	16	13	6	4	3	4	14	18
Transport	15.6	43	43	1	1	6	4	7	7	29	31
Communication	0.3	12	12	4	5	3	2	5	2	0	3
Recreation & Culture	18.3	39	39	7	7	20	8	5	8	7	16
Education	10.1	16	16	3	2	1	5	2	4	10	5
Miscellaneous	12.7	35	35	1	0	7	6	6	9	21	20
Overall	7.7	478	478	55	78	68	60	79	97	276	243

Note: Prices of 9 seasonal items were not reported during the month.

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

Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Oct-11	Oct-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	7.17	6.27	14.60
2	Milk Fresh	6.68	21.29	13.09	13.51
3	Electricity	4.40	3.19	16.39	9.88
4	Motor Fuel	3.03	19.86	18.76	7.51
5	Wheat Flour	4.16	-0.04	9.62	5.29
6	Transport Services	2.70	9.99	13.25	5.15
7	Education	3.94	11.94	10.07	4.53
8	Meat	2.43	19.33	9.17	3.63
9	Cigarette	1.39	6.58	18.04	3.29
10	Text Books	0.57	3.32	40.00	3.05
Total		51.12			70.43
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	1.82	46.46	1.45
2	Besan	0.15	5.11	42.05	0.85
3	Text Books	0.57	3.32	40.00	3.05
4	Egg	0.46	0.95	28.67	1.78
5	Motor Vehicle Tax	0.11	20.91	25.73	0.28
6	Doctor (MBBS) Clinic Fee	0.59	20.37	22.71	1.71
7	Household Servant	1.04	23.65	22.53	2.91
8	Honey	0.04	9.74	22.27	0.16
9	Utensils	0.32	11.93	21.10	0.80
10	Beans	0.03	14.46	20.65	0.08
Total		3.55			13.06
C. Ranked by Weights					
1	House Rent	21.81	7.17	6.27	14.60
2	Milk Fresh	6.68	21.29	13.09	13.51
3	Electricity	4.40	3.19	16.39	9.88
4	Wheat Flour	4.16	-0.04	9.62	5.29
5	Education	3.94	11.94	10.07	4.53
6	Communication & Apparatus	3.15	1.07	0.09	0.03
7	Motor Fuel	3.03	19.86	18.76	7.51
8	Transport Services	2.70	9.99	13.25	5.15
9	Meat	2.43	19.33	9.17	3.63
10	Vegetable Ghee	2.07	25.87	4.03	1.06
Total		54.39			65.19
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, which is 7.7 percent in October, 2012.					

Table A3.1: Top Ten Contributors to CPI Food Inflation (YoY) in October 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Oct-11	Oct-12	
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.68	21.29	13.09	13.51
2	Wheat Flour	4.16	-0.04	9.62	5.29
3	Meat	2.43	19.33	9.17	3.63
4	Cigarette	1.39	6.58	18.04	3.29
5	Cooking Oil	1.75	22.42	13.79	2.86
6	Rice	1.58	20.59	12.95	2.53
7	Ready Made Food	1.23	15.49	10.83	1.95
8	Egg	0.46	0.95	28.67	1.78
9	Pulse Gram	0.24	1.82	46.46	1.45
10	Bakery & Confectionary	1.16	12.66	7.99	1.20
Total		21.08			37.49
B. Ranked by Percentage Change					
1	Pulse Gram	0.24	1.82	46.46	1.45
2	Besan	0.15	5.11	42.05	0.85
3	Egg	0.46	0.95	28.67	1.78
4	Honey	0.04	9.74	22.27	0.16
5	Beans	0.03	14.46	20.65	0.08
6	Cigarette	1.39	6.58	18.04	3.29
7	Milk Powder	0.11	15.58	16.44	0.24
8	Condiments	0.27	18.46	16.19	0.64
9	Gram Whole	0.16	24.79	14.63	0.38
10	Cooking Oil	1.75	22.42	13.79	2.86
Total		4.60			11.72
C. Ranked by Weights					
1	Milk Fresh	6.68	21.29	13.09	13.51
2	Wheat Flour	4.16	-0.04	9.62	5.29
3	Meat	2.43	19.33	9.17	3.63
4	Vegetable Ghee	2.07	25.87	4.03	1.06
5	Fresh Fruits	1.86	24.70	-0.57	-0.16
6	Fresh Vegetable	1.75	-0.10	-8.24	-2.78
7	Cooking Oil	1.75	22.42	13.79	2.86
8	Rice	1.58	20.59	12.95	2.53
9	Cigarette	1.39	6.58	18.04	3.29
10	Chicken	1.36	0.73	-13.85	-2.56
Total		25.05			26.66
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 5.8 percent in October, 2012.					

Table A3.2: Top Ten Contributors to CPI Non-food Inflation (YoY) in October 2012					
Items/ Contributors		Weights	YoY Change		Weighted Contribution
			Oct-11	Oct-12	
A. Ranked by Weighted Contribution					
1	House Rent	21.81	7.17	6.27	14.60
2	Electricity	4.40	3.19	16.39	9.88
3	Motor Fuel	3.03	19.86	18.76	7.51
4	Transport Services	2.70	9.99	13.25	5.15
5	Education	3.94	11.94	10.07	4.53
6	Text Books	0.57	3.32	40.00	3.05
7	Household Servant	1.04	23.65	22.53	2.91
8	Footwear	1.55	1.59	16.08	2.49
9	Personal Equipments	0.84	24.90	15.46	2.38
10	Personal Care	1.49	17.23	11.61	2.25
Total		41.39			54.75
B. Ranked by Percentage Change					
1	Text Books	0.57	3.32	40.00	3.05
2	Motor Vehicle Tax	0.11	20.91	25.73	0.28
3	Doctor (MBBS) Clinic Fee	0.59	20.37	22.71	1.71
4	Household Servant	1.04	23.65	22.53	2.91
5	Utensils	0.32	11.93	21.10	0.80
6	Woolen Readymade Garments	0.40	7.86	19.74	0.90
7	Dopatta	0.44	22.76	19.53	1.09
8	Kerosene Oil	0.01	21.28	19.17	0.02
9	Fire Wood Whole	0.23	29.10	18.77	0.67
10	Motor Fuel	3.03	19.86	18.76	7.51
Total		6.73			18.92
C. Ranked by Weights					
1	House Rent	21.81	7.17	6.27	14.60
2	Electricity	4.40	3.19	16.39	9.88
3	Education	3.94	11.94	10.07	4.53
4	Communication & Apparatus	3.15	1.07	0.09	0.03
5	Motor Fuel	3.03	19.86	18.76	7.51
6	Transport Services	2.70	9.99	13.25	5.15
7	Cotton Cloth	1.73	18.81	7.13	1.48
8	Gas	1.58	13.55	-42.09	-12.50
9	Footwear	1.55	1.59	16.08	2.49
10	Personal Care	1.49	17.23	11.61	2.25
Total		45.39			35.42
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 9.0 percent in October, 2012.					

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

Groups	Decrease or no change	Subdued increase (Up to 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food & Non-Alcoholic Beverages	Malta/Mosambi, Tomatoes, Bottlegourd, Sugar, Refined, Chillies Green, Gur Av.Qlty, Cardamom Small Av.Qlty	Saunf, Butter Local Packed, Salt Powdered (National/Shan), Curry Powd., National 200 Gm, Custard Powder Rafhan 300	Vermicelli, Almonds Whole Av.Qlty., Cooking Oil (Dalda), Samosa (Vegetable), Rusk (Papay), Mutton Av.Qlty.	Pulse Gram, Chillies Powd.National 200 Gm, Cloves Loose Av.Qlty, Besan Av. Qlty., Pepper Black National, Gram Whole Black Av Qlty., Eggs Farm, Bananas, Sweetmelon (Garma), Ice, Honey Langanese 500 Gm.
Alcoholic Beverages & Tobacco		Betel Leaves	Cigarettes Gold Leaf 20,S	Cigarettes K-20,S, Cigarettes Capstan 20,S, Cigarettes Morven Gold 20,S, Betel Nuts
Clothing & Footwear	Brassier Av.Qlty, Gents Shoe, Art 1109 Servis, Sports Shoes, Child Shoe Power Lite Bata	Long Cloth 57" Gul Ahmed/Al Karam	Secondhand Winter Jacket, Pant Cloth Wash & Wear Av.Qlty, Lawn Printed Gul Ahmed/Al Karam, Shoe Repair Half Sole, Tailoring Coat-Pant Suit	Brassier Sup.Qlty, Gents Spoung Chappal Bata, Ladies Spoung Chappal Bata, Ladies Sandal Bata, Foot Wear Local (Children), Secondhand Sweater For Men, Pullover Ladies Oxford/Bon, Washing Charges Paint & Shirt, Dopatta Georgette Av.Qlty
Housing, Water, Elect, Gas & other Fuels	Gas Chrg All Over 500 Mmbtu, Gas Chrg Over 300 - 500 Mmbtu, Gas Chrg Overall/ Combined	Water Charges Per House, Iron Bar (M.S. Bar) 1/2", Cement Blocks (6"X8"X12")	Cement (Local), Timber Shesham Log, Elect. Charges Upto 50 Units, House Rent For Q-I, House Rent For Q-II, House Rent For Q-III	Elect. Charges 01 - 100 Units, Kerosene Oil, Firewood Whole, Elect. Charges 101 - 300 Units, Electrician Wage Rate, Elect. Charges Overall/ Combined, Elect. Charges 301 - 1000 Units, Unskilled Labour Wage Rat
Furnishing & Household Equip. Maintenance etc	Washing Machine (Singer), Match Box (Small), Surf Excel 400 Gms Poly Bag	Tube Light Philips 40 Watt, Air conditioner 1.5 Ton PEL, Electric Juicer, Split Air Conditioner 1.5 Ton, Bulb Philips 100-Watt	Sewing Machine Needle (Singer), Refg. Dawlance 10 Cft., Bucket(Balti) Plastic Med, S. Steel Plate Avg. Qlty, Aluminium Cooking Pan	Dinner Set Plastic 72 Pcs, Robin Blue (35 Gms), Elect. Iron Philips, Dari Cotton (6'X2 1/2'), Lota Plastic (Med Size) Avg. Qlty, Table Shesham Wood, Household Servant Female (Part Time), Water Set Jug+6 Glasses, Chair Shesham Wood
Health	Lederplex Syrup, Amoxil Capsule 250 Mg., Entox Tab., Septran Tablets, Polyfax Eye Ointment, Calcium Syrup Sandoz	Ventolin Tab. 2Mg., Betnesol Eye Drops, Daonil Tab. 5 Mg., Renitec Tab. 5 Mg.	Thermometer China, Dettol (Medium), Sugar Test (Random/Fasting), Betnovate-N Ointment 5 Gm	Hydriyllin Syrup 120 ML, O.R.S. (Nimcol), Disprin Tab., Panadol Tab. Extra/Plain, Glycrine Small Bottle, Doctor (Mbbs) Clinic Fee, Cac. 1000 Tab, Gripe-Water Woodward's, Blood Test (Cp) Charges, Cotton Bandage 2" - 4"
Transport	Bus Fare Outside City (Non A/C)	Bus Fare Outside City (A/C), Motor Cycle Hero 70 Cc, Motorcycle Yamaha 100 Cc, Motorcycle Honda Cd-70	Car Toyota 1300 Cc, Minibus Fare Min. Within City, Auto Rickshaw Fare, Suzuki Fare Maximum Wityin City, Air Fare Economy Class.	Platform Ticket, Taxi 4 Seater Fare, Cng, Train Fare Eco. 1-100 Km., Train Fare 1st Slp.101-50, Train Fare 1st Slp. > 500, Train Fare A/C Slp > 500K, Train Fare A/C Slp. 1-100, Cycle Overhauling Charges, Train Fare 1st Slp. 1-10
Communication	Mobile Set Nokia/Sony/Ericsson Av.Qlty, Postal Envelope Domestic	Fax Charges (Local), Mobile Cell Charges	T.C.S. Ch. Min. Within Zone, Telephone Set Av. Qlty	Postal Registration Charges, Postal Envelope For Saudi Arabia, Internet Charges
Recreation & Culture	Video Game Sega 16 Byte, English Book BA/B.Sc, TV License Fee Domestic, Daily "Nawa-E-Waqt", Daily "Jang", Weekly "Mag"	Personnel Computer (Branded), V.C.P. Panasonic/LG/National, Urdu Book BA/B.Sc, Pakistan Studies Book BA/B.Sc, Computer CD (Tdk/Imation)	Pencil Goldfish/Deer, Video Cassette Blank. Tdk/Sony, Eng. Book Ist. Yr Complete Set, Cable Charges, Photostat Paper 70 Gm, DVD/VCD Player Panasonic/LG	English Book Class V1, English Book Class IX or X, Maths Book Class IX or X, Urdu Book Class V (T.B.Board), Cinema A/C High Class, Urdu Book Ist Year/ Inter, Maths Book Calss V (T.B.Board), Cinema Non-A/C High Class, Monthly "Naunehal Digest"
Education	MBA Tuition Fee, Pvt Eng.College Fee (1st Year),	I.T. Tuition Fees, Govt. Med. College Fee MBBS 1st Year, Govt. University Fee MSc/ MA	Pvt School Fee Eng. Med (Class-I), Coaching Fee For Class IX/ X	Govt. Engg. Coll. Fee 1st Year, Pvt School Fee Eng. Med (Class-X), Pvt School Fee Eng. Med (Class-V), Pvt School Fee Eng. Med (Class-VI)
Restaurant & Hotels			Cooked Dal (Av. Hotel), Bread Tandoori St. Size, Tea Prepared (Ordinary)	Chicken Biryani Full/Double, Cooked Mutton (Av. Hotel), Cooked Beef (Av. Hotel)
Miscellaneous		Hair Color Bigen, Toilet Soap Lux 95 Gms, Shampoo Sunsilk/Pantene 100 ML, Silver Tezabi 24 Ct	Beauty Cream (Fair & Lovely), Toothpowder Dentonic 90 Gms, Wrist Watch Gents Citizen	Wall Clock Quartz Av.Qlty, Toothpaste Med Size Colgate 70Gms, Face Cream Ponds (Medium), Beauty Parlor Hair Style Charges, Artificial Jewellery Set

Table A5: City- wise CPI Inflation by Income Groups, October 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	0.2	8.2	-0.2	7.4	0.7	9.3	0.2	8.3	-0.2	7.4	0.6	9.3
2 Islamabad	0.6	9.0	0.1	6.4	1.2	12.6	0.4	7.9	0.1	6.3	0.9	9.9
3 Lahore	-0.2	7.0	-1.1	5.5	1.2	9.2	-0.1	7.1	-1.1	5.5	1.1	9.0
4 Gujranwala	0.5	6.5	0.8	7.0	0.2	5.8	0.3	6.4	0.4	6.9	0.2	5.8
5 Sialkot	0.3	7.7	0.0	8.3	0.7	6.8	0.1	7.6	-0.2	8.4	0.6	6.7
6 Faisalabad	-0.7	5.4	-1.6	5.2	0.5	5.8	-0.6	5.3	-1.6	5.0	0.6	5.6
7 Multan	0.3	7.4	-0.3	5.6	1.1	9.8	0.4	7.7	-0.2	6.1	1.0	9.4
8 Sargodha	-0.3	5.6	-1.5	2.7	1.0	9.2	0.0	6.1	-1.2	3.3	1.1	8.9
9 Bahawalpur	0.0	9.9	-0.5	6.4	0.7	14.3	0.1	10.3	-0.4	7.0	0.6	13.8
10 Karachi	0.6	5.8	0.8	4.0	0.4	8.4	0.6	6.0	0.7	4.4	0.4	8.0
11 Hyderabad	0.2	5.5	0.2	3.9	0.3	7.8	0.2	5.8	0.2	4.2	0.2	7.7
12 Sukkur	0.3	8.2	0.3	7.3	0.2	9.3	0.3	8.5	0.3	7.8	0.2	9.2
13 Larkana	1.1	8.4	0.0	4.1	2.6	14.3	1.3	9.4	0.0	5.2	2.6	14.1
14 Peshawar	0.3	5.4	0.2	2.9	0.3	8.5	0.3	5.7	0.2	3.5	0.3	8.0
15 Bannu	-0.2	7.7	-1.1	4.5	0.8	11.7	0.0	8.4	-1.1	4.9	1.1	12.3
16 Quetta	0.8	8.1	-0.2	4.8	2.1	12.6	0.9	8.7	0.0	5.3	2.0	12.7
17 Khuzdar	0.3	5.4	-0.1	2.0	0.7	9.7	0.4	5.4	0.0	2.0	0.8	9.0
	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	0.2	7.5	-0.2	7.4	0.6	7.5	0.2	7.7	-0.2	7.0	0.5	8.2
2 Islamabad	0.3	6.7	-0.2	5.8	0.7	7.7	0.3	6.9	-0.2	5.7	0.8	8.0
3 Lahore	-0.1	6.5	-1.1	6.2	1.0	6.8	-0.1	7.2	-1.1	6.5	0.8	7.9
4 Gujranwala	0.1	5.9	0.1	7.6	0.2	4.1	-0.1	6.4	-0.3	7.8	0.0	5.2
5 Sialkot	0.1	7.0	-0.2	8.7	0.5	5.3	0.1	7.4	-0.2	9.2	0.3	5.8
6 Faisalabad	-0.6	4.4	-1.6	5.3	0.4	3.5	-0.5	5.1	-1.5	5.4	0.4	4.9
7 Multan	0.4	6.6	-0.2	6.0	1.0	7.2	0.4	7.2	-0.1	6.1	0.8	8.2
8 Sargodha	0.1	5.7	-1.1	3.8	1.2	7.5	0.3	6.5	-0.8	4.2	1.3	8.3
9 Bahawalpur	0.3	9.8	-0.2	7.2	0.7	12.3	0.3	11.2	-0.1	7.6	0.6	14.1
10 Karachi	0.5	5.4	0.7	4.6	0.4	6.3	0.5	6.2	0.6	4.8	0.4	7.5
11 Hyderabad	0.2	4.9	0.2	4.3	0.3	5.5	0.2	5.4	0.1	4.4	0.2	6.4
12 Sukkur	0.3	8.0	0.4	8.3	0.2	7.6	0.1	9.1	0.1	9.2	0.2	9.0
13 Larkana	1.3	9.1	0.1	5.9	2.5	12.3	1.2	10.1	0.1	7.3	2.2	12.5
14 Peshawar	0.2	4.6	0.1	3.4	0.3	5.8	0.1	5.1	0.1	3.3	0.2	6.6
15 Bannu	0.0	7.5	-0.9	5.1	0.9	10.0	0.1	7.7	-1.0	5.2	1.0	10.0
16 Quetta	0.9	7.9	-0.1	5.5	2.0	10.5	1.0	8.2	-0.1	5.4	2.0	10.9
17 Khuzdar	0.6	5.8	0.4	2.8	0.9	8.8	0.7	6.5	0.5	2.9	0.9	9.7
	Above Rs 35000						Combined					
	General		Food		Non-Food		General		Food		Non-Food	
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Rawalpindi	0.0	8.2	-0.3	6.8	0.2	8.9	0.1	8.1	-0.2	7.0	0.3	8.9
2 Islamabad	-0.1	7.9	-0.4	5.4	0.1	9.3	0.0	8.0	-0.4	5.4	0.2	10.0
3 Lahore	-0.1	8.0	-1.2	7.1	0.5	8.6	-0.1	7.5	-1.1	6.6	0.7	8.2
4 Gujranwala	-0.3	6.8	-0.7	8.2	-0.1	6.1	0.0	6.3	-0.1	7.7	0.1	5.3
5 Sialkot	0.0	6.9	-0.4	9.3	0.2	5.7	0.1	7.1	-0.3	9.0	0.3	5.7
6 Faisalabad	-0.4	6.1	-1.3	6.0	0.0	6.2	-0.5	5.2	-1.5	5.5	0.2	5.0
7 Multan	0.4	7.5	0.1	6.7	0.6	7.8	0.4	7.2	-0.1	6.3	0.7	7.8
8 Sargodha	1.2	7.8	-0.2	5.9	1.8	8.7	0.4	6.4	-0.9	4.2	1.2	7.8
9 Bahawalpur	0.5	11.9	0.1	8.8	0.7	13.3	0.3	10.7	-0.2	7.5	0.6	12.9
10 Karachi	0.6	8.5	0.4	4.9	0.7	10.4	0.6	7.5	0.5	4.7	0.6	9.6
11 Hyderabad	0.1	5.7	-0.1	4.3	0.3	6.5	0.2	5.3	0.1	4.3	0.3	6.1
12 Sukkur	0.0	9.6	0.0	10.1	0.0	9.3	0.2	8.6	0.2	8.7	0.1	8.5
13 Larkana	1.3	10.0	0.2	7.5	1.9	11.3	1.2	9.2	0.1	6.1	2.1	11.5
14 Peshawar	-0.2	5.8	0.0	3.2	-0.3	7.2	0.0	5.3	0.1	3.3	-0.1	6.7
15 Bannu	1.1	9.3	-0.2	7.6	1.7	10.2	0.2	8.1	-0.9	5.4	0.9	10.0
16 Quetta	1.1	8.3	-0.2	5.5	1.7	9.7	1.0	8.0	-0.1	5.4	1.8	10.0
17 Khuzdar	0.7	8.5	0.4	3.0	0.8	11.3	0.5	6.0	0.2	2.4	0.7	8.5

Table A6: City- wise CPI Inflation (YoY) October, 2012							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Loralai&Cantt	11.2	7.5	13.8	Gawadar	7.6	6.9	8.1
Bahawalnagar	11.1	8.5	12.9	Karachi	7.5	4.7	9.6
Bahawalpur	10.7	7.5	12.9	Lahore	7.5	6.6	8.2
Mithi	10.6	4.6	15.1	Multan	7.2	6.3	7.8
Nawabshah	10.4	9.2	11.2	Sialkot	7.1	9.0	5.7
D.I.Khan	10.2	8.2	11.7	Mardan	6.8	4.3	8.5
Sahiwal	9.8	7.1	11.7	Muzaffargarh	6.6	5.0	7.7
D.G. Khan	9.7	6.2	12.2	Sargodha	6.4	4.2	7.8
Larkana	9.2	6.1	11.5	Gujranwala	6.3	7.7	5.3
Mianwali	9.0	4.7	12.1	Jehlum	6.3	4.7	7.4
Sukkur	8.6	8.7	8.5	Rahim Yar Khan	6.3	2.3	9.4
Vehari	8.3	6.6	9.5	Khuzdar	6.0	2.4	8.5
Mir Pur Khas	8.2	3.2	12.0	Attock	5.4	1.8	8.0
Turbat	8.2	7.3	8.8	Hyderabad	5.3	4.3	6.1
Jhang	8.2	4.6	10.6	Peshawar	5.3	3.3	6.7
Bannu	8.1	5.4	10.0	Abbotabad	5.3	3.7	6.4
Rawalpindi	8.1	7.0	8.9	Faisalabad	5.2	5.5	5.0
Quetta	8.0	5.4	10.0	Dadu	5.2	2.9	6.8
Islamabad	8.0	5.4	10.0	Wazirabad	4.7	4.4	4.9
Mingora	7.9	5.8	9.4	Dera Mrd.Jamali	2.3	-1.3	5.1
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		
	Oct-11	Sep-12	Oct-12	Oct-11	Sep-12	Oct-12
<u>Up to Rs. 8000</u>						
General	1.5	1.1	0.4	10.3	8.2	7.0
Food	1.6	1.6	0.0	10.0	6.8	5.1
Non-food	1.4	0.4	1.0	10.7	10.1	9.6
<u>Rs. 8001- 12000</u>						
General	1.5	0.8	0.4	10.6	9.3	8.2
Food	1.6	1.2	-0.1	10.6	7.1	5.3
Non-food	1.3	0.4	0.9	10.6	12.0	11.5
<u>Rs. 12001- 18000</u>						
General	1.5	0.7	0.4	10.7	9.3	8.1
Food	1.6	1.0	-0.1	11.1	7.3	5.6
Non-food	1.3	0.5	0.9	10.3	11.3	10.8
<u>Rs. 18001- 35000</u>						
General	1.4	0.7	0.4	10.8	7.9	6.8
Food	1.6	0.7	-0.1	11.6	7.6	5.8
Non-food	1.3	0.7	0.8	10.1	8.2	7.7
<u>Above Rs. 35000</u>						
General	1.4	0.8	0.4	11.2	8.4	7.3
Food	1.6	0.3	-0.1	12.7	8.0	6.1
Non-food	1.3	1.1	0.6	10.5	8.7	7.9
<u>All income groups</u>						
General	1.4	0.8	0.4	11.0	8.8	7.7
Food	1.6	0.7	-0.1	11.7	7.6	5.8
Non-food	1.3	0.9	0.7	10.4	9.7	9.0

Table A8: SPI Item-wise Price Movements

Sr.No.	Items	Unit	Prices Oct-12	Percentage change	
				YoY	MoM
1	Wheat	10Kg.	288.5	10.0	0.2
2	Wheat Flour Bag	10Kg.	334.8	12.1	0.1
3	Rice Basmati Broken	Kg.	68.1	15.3	1.2
4	Rice Irri-6	Kg.	49.0	8.6	-0.1
5	Bread Plain Med. Size (340-400 Gm.)	Each	33.2	7.0	1.6
6	Beef	Kg.	267.3	7.3	0.3
7	Mutton	Kg.	510.7	8.7	0.1
8	Chicken Live (Farm)	Kg.	120.4	-8.9	-7.3
9	Milk Fresh	Litr	64.7	14.4	0.0
10	Curd	Kg.	75.1	13.1	0.0
11	Milk Powdered Nido	500G	290.0	21.4	0.0
12	Egg Hen (Farm)	Doz.	105.4	27.5	16.1
13	Mustard Oil	Kg.	186.1	5.7	-0.9
14	Cooking Oil (Tin)	2.5Ltr	539.4	9.0	-1.9
15	Veg. Ghee (Tin)	2.5Kg.	529.4	7.0	-1.9
16	Veg. Ghee Loose	Kg.	162.4	0.4	-1.6
17	Bananas	Doz.	59.6	28.2	-19.5
18	Masoor Pulse Washed	Kg.	97.2	-8.0	-1.9
19	Moong Pulse Washed	Kg.	115.0	-14.2	-2.4
20	Mash Pulse Washed	Kg.	134.1	-9.7	-0.6
21	Gram Pulse Washed	Kg.	106.0	46.3	-1.5
22	Potatoes	Kg.	30.5	3.6	-3.4
23	Onions	Kg.	41.3	-3.4	-1.7
24	Tomatoes	Kg.	50.5	-33.9	2.2
25	Sugar	Kg.	53.4	-23.7	1.2
26	Gur	Kg.	73.6	-19.7	-0.3
27	Salt Powdered Loose (Lahori)	Kg.	8.6	8.2	0.3
28	Red Chilies Powder Loose	Kg.	281.4	-10.3	-2.7
29	Garlic	Kg.	118.2	9.4	2.1
30	Tea (Yellow Label)	200Gm.	131.7	0.1	0.9
31	Cooked Beef Plate	Each	66.7	13.8	1.2
32	Cooked Dal Plate	Each	39.2	7.6	0.0
33	Tea Prepared (Sada)	Cup	15.1	10.6	0.6
34	Cigarettes K-2 (20'S)	20'S	32.0	11.6	0.0
35	Long Cloth (Coarse Latha)	Mtr.	143.4	46.5	1.2
36	Shirting	Mtr.	118.3	11.9	0.8
37	Lawn	Mtr.	160.1	64.5	-1.0
38	Georgette (Voil Printed)	Mtr.	98.1	17.3	0.9
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	0.0
43	Gas Charges upto 3.3719	Mmbtu	116.0	-7.3	0.0
44	Kerosene	Litr	119.3	20.3	-0.3
45	Firewood	40Kg	474.1	13.5	0.4
46	Energy Savor 14 Watts	Each	147.9	7.8	0.2
47	Washing Soap (200-250 Gm.)	Cake	20.7	16.4	0.0
48	Match Box	Each	1.1	2.8	0.0
49	Petrol	Litr	104.4	16.0	-1.6
50	Diesel	Litr	113.8	19.6	-0.8
51	L.P.G.(11 Kg Cylinder.)	Each	1515.5	14.8	1.3
52	Tele. Local Call	Call	3.6	0.0	0.0
53	Bath Soap Lifebuoy (Standard)	Cake	32.0	6.7	0.0
Maximum				64.5	16.1
Median				8.6	0.0
Minimum				-33.9	-19.5

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

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

Table A10: Consumer Price Index Numbers by Major Groups and Composite Commodities				
Items and specification	Weights	Index		
		Oct-11	Sep-12	Oct-12
General	100.00	160.79	172.44	173.10
Food & Non-Alcoholic Beverages.	34.83	184.02	193.80	193.56
1 Wheat	0.35	154.09	169.28	169.62
2 Wheat Flour	4.16	162.53	177.85	178.16
3 Wheat Product	0.10	161.96	170.63	171.84
4 Besan	0.15	166.33	236.24	236.28
5 Rice	1.58	152.25	170.51	171.96
6 Cereals	0.16	184.14	199.54	201.55
7 Bakery & Confectionary	1.16	160.32	171.51	173.13
8 Nimco	0.46	177.21	195.37	196.94
9 Meat	2.43	200.24	217.68	218.61
10 Chicken	1.36	167.45	153.14	144.25
11 Fish	0.30	171.04	184.50	190.61
12 Milk Fresh	6.68	190.19	214.85	215.09
13 Milk Product	0.63	187.88	208.08	208.96
14 Milk Powder	0.11	157.02	182.22	182.84
15 Egg	0.46	167.36	183.56	215.35
16 Mustard Oil	0.10	150.50	160.47	161.41
17 Cooking Oil	1.75	145.35	164.65	165.39
18 Vegetable Ghee	2.07	156.57	163.96	162.88
19 Dry Fruits	0.25	193.26	200.93	201.35
20 Fresh Fruits	1.86	189.95	207.64	188.87
21 Pulse Masoor	0.27	156.45	143.69	143.13
22 Pulse Moong	0.23	265.11	223.28	219.90
23 Pulse Mash (Washed)	0.21	217.69	193.99	193.39
24 Pulse Gram	0.24	162.58	240.06	238.12
25 Gram Whole	0.16	198.47	228.39	227.51
26 Beans	0.03	175.46	207.52	211.70
27 Potatoes	0.45	206.71	206.16	204.38
28 Onion	0.51	237.79	224.60	245.99
29 Tomatoes	0.42	222.66	168.36	155.77
30 Fresh Vegetable	1.75	236.89	213.15	217.38
31 Sugar	1.04	257.00	193.11	195.57
32 Gur	0.02	286.63	223.95	224.78
33 Honey	0.04	201.20	238.98	246.01
34 Sweet Meet	0.25	185.08	202.90	204.05
35 Beverages	1.20	158.79	170.37	168.93
36 Jam, Tomato Ketchup & Pickle	0.25	169.49	174.05	174.76
37 Condiments	0.27	182.60	212.33	212.16
38 Spices	0.54	244.45	265.88	262.26
39 Tea	0.84	200.28	202.17	203.23
Alcoholic Beverages, Tobacco	1.41	161.57	190.34	190.43
40 Cigarette	1.39	161.50	190.53	190.63
41 Betel Leaves & Nuts	0.02	165.88	178.59	178.37
Clothing & Footwear	7.57	148.92	168.51	170.38
42 Cotton Cloth	1.73	147.69	155.96	158.22
43 Woolen Cloth	0.88	166.84	188.17	190.45
44 Ready Made Garment	0.97	146.47	169.35	172.07
45 Woolen Readymade Garments	0.40	141.11	165.18	168.96
46 Hosiery	0.51	158.72	179.11	181.55
47 Dopatta	0.44	155.63	183.24	186.02
48 Cleaning & Laundering	0.21	160.44	186.62	190.15

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

Items and specification	Weights	Index		
		Oct-11	Sep-12	Oct-12
49 Tailoring	0.88	173.30	201.54	202.23
50 Footwear	1.55	123.11	142.75	142.91
Housing, Water, Elect, Gas & Other Fuel	29.41	143.95	147.99	149.95
51 House Rent	21.81	131.37	137.02	139.61
52 Construction Input Item	0.56	181.83	200.34	201.21
53 Construction Wage Rate	0.33	150.91	169.83	170.75
54 Water Supply	0.50	127.24	133.23	133.23
55 Electricity	4.40	168.71	196.37	196.37
56 Gas	1.58	232.00	134.34	134.34
57 Kerosene Oil	0.01	230.00	269.28	274.10
58 Fire Wood Whole	0.23	192.12	227.21	228.19
Furnished H.Hold Equip. & Maint. Etc	4.21	154.18	175.40	176.84
59 Furniture	0.33	146.78	165.35	167.17
60 Household Textile	0.65	150.62	171.59	173.24
61 Household Equipment	0.59	147.52	156.33	156.81
62 Utensils	0.32	144.44	173.70	174.91
63 Plastic Products	0.25	161.30	174.14	174.35
64 Washing Soap & Detergent	0.79	172.01	190.56	191.20
65 Sewing Needle & Dry Cell	0.15	135.15	149.00	150.70
66 Household Servant	1.04	152.17	183.91	186.45
67 Marriage Hall Charges	0.08	165.97	189.76	193.10
Health	2.19	135.22	153.94	155.13
68 Drug Medicine	1.27	123.86	137.29	137.39
69 Medical Equipment	0.01	170.41	194.08	195.89
70 Doctor (MBBS) Clinic Fee	0.59	157.19	189.17	192.89
71 Medical Test	0.32	138.73	153.85	154.65
Transport	7.20	165.39	194.25	191.21
72 Motor Vehicle	0.66	139.90	151.17	152.25
73 Motor Vehicle Accessories	0.24	181.20	204.52	205.45
74 Motor Fuel	3.03	162.74	201.27	193.27
75 Mechanical Service	0.46	153.42	180.11	181.25
76 Motor Vehicle Tax	0.11	120.91	152.02	152.02
77 Transport Services	2.70	177.01	200.12	200.46
Communication	3.22	123.37	123.56	123.68
78 Postal Services	0.07	163.13	171.43	172.90
79 Communication & Apparatus	3.15	122.54	122.55	122.65
Recreation & Culture	2.02	140.30	165.24	165.94
80 Recreation & Culture	0.86	115.10	121.68	121.85
81 Text Books	0.57	164.45	230.23	230.23
82 News Papers	0.19	149.97	154.22	155.91
83 Stationery	0.40	155.75	171.96	174.36
Education	3.94	140.35	153.87	154.48
84 Education	3.94	140.35	153.87	154.48
Restaurants And Hotels	1.23	180.73	197.85	200.30
85 Ready Made Food	1.23	180.73	197.85	200.30
Miscellaneous Goods And Services	2.76	176.45	195.65	198.94
86 Personal Care	1.49	159.65	176.39	178.18
87 Cosmetics	0.39	137.36	148.59	148.93
88 Blades	0.03	156.13	169.80	171.50
89 Personal Equipments	0.84	224.82	252.20	259.57

Table A11: Wholesale Price Index Numbers by Major Groups and Composite Commodities			
Items and Specifications	Index		
	Oct-11	Sep-12	Oct-12
General	179.34	192.66	192.88
Agriculture Forestry & Fishery	189.95	194.63	194.13
1 Wheat	159.45	177.08	177.61
2 Maize	155.85	174.03	167.05
3 Rice	150.79	162.33	163.86
4 Sorghum/Jowar	171.73	197.09	184.26
5 Millet/Bajra	150.84	192.59	194.58
6 Vegetables	289.33	253.47	269.17
7 Fresh Fruits	164.50	228.22	183.93
8 Dry Fruits	185.82	173.12	173.49
9 Cotton Seeds	200.09	162.42	170.28
10 Other Oil Seeds	166.79	179.64	183.21
11 Edible Roots/ Potatoes	222.49	201.22	196.16
12 Stimulant And Spice Crops	206.39	166.95	204.46
13 Pulses	209.86	216.53	213.03
14 Sugar Crops	271.70	267.92	267.92
15 Fibre Crops	208.10	180.60	176.84
16 Unmanufactured Tobacco	167.75	168.46	168.99
17 Poultry	174.87	152.21	143.42
18 Milk From Bovine Animals	187.04	208.85	213.76
19 Eggs	173.63	192.74	217.03
20 Raw Animal Material/Wool	135.67	135.45	136.65
21 Hides And Fur Skins, Raw	124.28	137.35	137.17
22 Fuel Wood In Logs	182.08	204.59	205.02
23 Fishes Live Fresh Or Chilled	139.80	176.07	176.68
Ores/Minerals, Gas & Elect.	170.17	207.86	207.79
24 Coal Not Agglomerated	125.49	196.08	196.08
25 Natural Gas Liquefied	180.08	192.41	192.25
26 Salt & Pure Sodium Chloride	150.55	162.41	164.54
27 Electrical Energy	166.13	226.10	226.10
Food, Beverages, Tobacco, Textiles	177.12	184.53	185.83
28 Meat Of Animals	209.72	226.71	227.09
29 Vegetables & Fruit Juices	175.05	183.67	185.05
30 Dried Fruits & Nuts	193.71	217.12	212.04
31 Fruit Juices	155.59	156.65	157.15
32 Vegetable Oil Refined	152.38	157.46	155.32
33 Vegetable Ghee	140.73	143.63	141.43
34 Oil Cakes	159.54	164.48	172.81
35 Processed Liquid Milk	176.43	208.43	208.43
36 Milk And Cream In Solid Form	170.87	171.00	170.79
37 Ice Cream	154.79	170.00	167.68
38 Dairy Products N.E.C	176.03	204.36	202.69
39 Wheat Flour	149.75	162.40	164.13
40 Other Cereal Flour	145.05	207.98	208.22
41 Sugar Refined	264.98	198.63	204.34
42 Chocolate	100.26	99.19	99.19
43 Sugar Confectionary	100.89	100.40	100.40
44 Coffee And Tea	188.84	190.66	192.33
45 Spices	210.44	307.94	304.68
46 Other Food Products	295.00	328.55	323.46
47 Mineral Water	161.35	166.05	168.29
48 Beverages	132.14	135.30	137.86
49 Tobacco Products	175.88	208.80	208.80
50 Cotton Yarn	202.80	200.46	200.08
51 Nylon Yarn	213.15	176.45	176.45
52 Blended Yarn	205.30	188.46	190.06
53 Woven Fabrics	161.84	174.25	196.74
54 Cotton Fabrics	163.06	172.55	173.68
55 Other Fabrics	150.74	164.13	165.62
56 Silk And Rayon Fabrics	137.41	143.52	151.23

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

Items and Specifications	Index		
	Oct-11	Sep-12	Oct-12
57 Towels	182.14	193.36	200.68
58 Blankets	144.97	172.59	172.59
59 Bed Sheets	158.15	194.91	197.94
60 Quilts	142.42	147.05	147.05
61 Woolen Carpets	106.55	106.55	106.55
62 Synthetic Carpets	154.24	113.15	113.15
63 Hosiery Products	149.42	163.76	173.15
64 Ready Made Garments	122.59	128.64	135.15
65 Leather With Out Hairs	109.34	109.83	109.83
66 Other Leather N.E.C	120.10	122.57	122.57
67 Footwear's	101.48	128.50	128.50
Other Transportable Goods	186.58	207.14	206.53
68 Timber	136.04	148.07	148.07
69 Printing Paper	118.38	153.92	147.96
70 Hard Board	141.67	166.67	239.58
71 Coke	155.28	163.45	163.45
72 Motor Sprit	150.24	177.23	174.17
73 Diesel Oil	228.14	272.24	268.79
74 Kerosene Oil	230.92	275.06	273.51
75 Furnace Oil	183.76	186.02	179.20
76 Mobil Oil	169.72	179.59	182.64
77 Chemicals	144.28	148.29	149.01
78 Dying Materials	106.14	104.26	104.26
79 Fertilizers	252.74	258.16	259.86
80 Pesticides	164.86	197.39	197.49
81 Insecticides	126.62	117.64	117.46
82 Paints & Varnishes	178.96	233.80	237.29
83 Medicines	113.92	139.44	139.44
84 Soaps & Detergent	146.21	158.01	168.39
85 Auto Tyres	167.32	180.62	180.73
86 Plastic Products	179.46	191.31	191.31
87 Glass Sheets	167.73	190.93	190.93
88 Other Glass Articles	195.83	189.11	189.33
89 Ceramics And Sanitary	132.70	157.32	157.32
90 Bricks Blocks And Tiles	162.96	172.01	172.14
91 Cement	155.02	180.43	183.17
92 Bed Foams	123.17	140.00	140.00
93 Matches	115.66	122.82	126.70
Metal Product Machinery & Equip	150.03	157.74	158.67
94 Pig Iron	128.97	128.97	128.97
95 Steel Bars & Sheets	131.03	137.60	135.96
96 Pipe Fittings	139.65	141.47	141.47
97 Steel Products	146.99	160.60	161.94
98 Engines And Motors	109.07	109.07	109.07
99 Vacuum Pumps	115.39	115.39	115.39
100 Air Conditioners	163.43	172.67	172.67
101 Cultivators	184.66	184.66	184.66
102 Chuff Cutter	131.08	138.54	138.54
103 Tractors	180.89	161.96	161.96
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	162.49	163.64	163.68
107 Electrical Wires	157.53	159.57	159.57
108 Lighting Equipments	140.57	144.85	145.21
109 Radio And Television	129.24	126.46	126.46
110 Motor Vehicles	154.47	167.04	167.70
111 Motor Cycles	121.72	125.19	125.19
112 Bicycles	162.17	175.08	177.87

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	175.47	164.99
	Mar	148.91	167.10	138.01	174.41	162.92	181.70	166.81
	Apr	150.99	169.25	140.05	178.69	165.46	187.09	167.83
	May	151.33	168.76	140.88	176.97	167.15	183.20	167.98
	Jun	152.78	169.88	142.53	177.98	172.14	181.68	168.09
	Jul	154.72	174.80	142.68	177.26	175.45	178.41	171.45
	Aug	156.89	177.32	144.65	178.24	178.67	177.97	173.86
	Sep	158.50	180.16	145.52	178.68	181.88	176.65	175.02
	Oct	160.79	183.07	147.44	179.34	182.82	177.13	176.45
	Nov	161.25	183.26	148.06	178.39	181.48	176.43	177.53
	Dec	160.12	179.21	148.67	176.01	178.29	174.57	175.04
2012	Jan	162.58	181.90	151.00	179.99	178.95	180.65	178.25
	Feb	163.07	180.69	152.51	180.99	177.56	183.17	178.63
	Mar	164.98	183.46	153.90	182.20	180.41	183.34	180.79
	Apr	168.00	187.43	156.35	185.48	184.45	186.13	184.03
	May	169.93	187.75	159.25	189.46	186.57	191.29	184.88
	Jun	169.99	187.35	159.58	189.37	189.36	189.37	188.14
	Jul	169.57	190.72	156.89	190.05	193.92	187.59	183.98
	Aug	171.09	192.47	158.27	191.99	195.30	189.89	186.47
	Sep	172.44	193.80	159.64	192.66	195.81	190.66	188.21
	Oct	173.10	193.66	160.77	192.88	196.21	190.77	187.32

*: all groups combined

Table A13: International Commodity Prices/ Indices

	Jul-12	Aug-12	Sep-12	Oct-12
Energy				
Crude Oil (US\$ per barrel) *	96.8	105.3	106.3	103.4
IMF Energy Index (2005 = 100)	181.1	195.1	196.3	191.5
WB Energy Index (2005 = 100) @	173.6	187.3	188.5	184.0
Food				
Rice (\$/MT)	578.4	582.9	590.5	584.7
Wheat (\$/MT)	345.7	349.4	353.4	358.2
Sugar (US cent/ pound)	22.8	20.6	20.2	20.4
Palm Oil (\$/MT)	952.5	930.6	879.5	768.1
Soybean Oil (\$/MT)	1,175.3	1,188.5	1,213.3	1,119.9
Non-Food Non-Energy				
Cotton Outlook 'A' Index #	84.0	84.4	84.2	82.0
IMF Metal Price Index (2005 = 100)	183.2	172.5	179.9	183.4
Copper (\$/MT)	7,584.3	7,510.4	8,087.7	8,062.0
Aluminum (\$/MT)	1,876.3	1,843.3	2,064.1	1,974.3
Iron Ore (\$ cents/dry MT)	127.9	107.8	99.5	114.0
Tin (\$/MT)	18,546.1	18,675.6	20,771.3	21,233.7
Nickle (\$/MT)	16,128.4	15,704.0	17,288.0	17,168.7
Zinc (\$/MT)	1,847.8	1,816.3	2,009.9	1,904.0
Lead (\$/MT)	1,881.5	1,897.8	2,177.7	2,142.0
Uranium (\$/MT)	50.4	49.3	47.7	44.6
DAP (\$/MT)	563.1	559.0	573.0	573.0
Urea (\$/MT)	384.5	374.9	384.5	396.0

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	FY10	FY11	FY12	FY13
Jul	122.46	137.62	154.72	169.57
Aug	124.68	140.63	156.88	171.09
Sep	124.89	143.49	158.50	172.44
Oct	125.64	144.90	160.79	173.10
Nov	127.30	146.34	161.25	
Dec	126.37	145.90	160.12	
Jan	129.64	147.67	162.58	
Feb	130.13	146.85	163.07	
Mar	131.75	148.91	164.98	
Apr	134.16	150.99	168.00	
May	134.34	151.33	169.93	
Jun	134.83	152.78	169.99	
Seasonally Adjusted Series				
Jul	122.19	137.34	154.40	169.22
Aug	124.00	139.85	156.02	170.16
Sep	124.15	142.59	157.46	171.27
Oct	124.56	143.63	159.35	171.55
Nov	126.66	145.60	160.43	
Dec	127.17	146.84	161.17	
Jan	129.88	147.94	162.89	
Feb	130.98	147.86	164.24	
Mar	132.51	149.80	165.97	
Apr	134.11	150.91	167.88	
May	134.78	151.84	170.54	
Jun	135.41	153.42	170.68	

Table 15. CPI Food Data Series Original and Seasonally Adjusted

Original Series				
Period	FY10	FY11	FY12	FY13
Jul	130.97	149.33	174.80	190.72
Aug	134.95	156.70	177.32	192.47
Sep	135.20	163.96	180.16	193.80
Oct	135.98	163.91	183.07	193.66
Nov	138.87	166.59	183.26	
Dec	135.81	163.69	179.21	
Jan	138.54	166.52	181.90	
Feb	139.06	163.56	180.69	
Mar	141.71	167.10	183.46	
Apr	145.24	169.25	187.43	
May	145.69	168.77	187.75	
Jun	146.63	169.88	187.35	
Seasonally Adjusted Series				
Jul	130.55	148.79	174.16	190.02
Aug	133.33	154.89	175.29	190.31
Sep	133.03	161.17	177.04	190.45
Oct	133.62	160.95	179.71	190.03
Nov	136.69	163.80	180.06	
Dec	137.00	165.07	180.61	
Jan	138.96	167.08	182.58	
Feb	141.53	166.61	184.17	
Mar	143.45	169.12	185.58	
Apr	145.74	169.71	187.85	
May	147.00	170.44	189.74	
Jun	148.61	172.40	190.27	

Table 16: CPI Monthly & Average Seasonal Factors					
Period	FY10	FY11	FY12	FY13	Average
Jul	100.22	100.21	100.21	100.21	100.2
Aug	100.55	100.56	100.55	100.55	100.6
Sep	100.60	100.63	100.66	100.68	100.6
Oct	100.86	100.89	100.91	100.91	100.9
Nov	100.51	100.51	100.51		100.5
Dec	99.37	99.36	99.35		99.4
Jan	99.82	99.82	99.81		99.8
Feb	99.35	99.32	99.29		99.3
Mar	99.43	99.41	99.40		99.4
Apr	100.04	100.05	100.07		100.1
May	99.67	99.66	99.64		99.7
Jun	99.57	99.58	99.59		99.6

Table 17: CPI Food Monthly & Average Seasonal Factors					
Period	FY10	FY11	FY12	FY13	Average
Jul	100.32	100.36	100.37	100.37	100.4
Aug	101.22	101.17	101.16	101.13	101.2
Sep	101.63	101.73	101.76	101.76	101.7
Oct	101.77	101.84	101.87	101.91	101.8
Nov	101.60	101.70	101.78		101.7
Dec	99.13	99.17	99.23		99.2
Jan	99.70	99.67	99.63		99.7
Feb	98.25	98.17	98.11		98.2
Mar	98.79	98.81	98.86		98.8
Apr	99.66	99.73	99.78		99.7
May	99.11	99.02	98.95		99.0
Jun	98.67	98.54	98.47		98.6

Table 18: CPI Month-on-Month Change Original & Seasonally Adjusted				
Original Series				
Period	FY10	FY11	FY12	FY13
Jul		2.07	1.27	-0.25
Aug	1.81	2.19	1.40	0.90
Sep	0.17	2.03	1.03	0.79
Oct	0.60	0.98	1.44	0.38
Nov	1.32	0.99	0.29	
Dec	-0.73	-0.30	-0.70	
Jan	2.59	1.21	1.54	
Feb	0.38	-0.56	0.30	
Mar	1.24	1.40	1.17	
Apr	1.83	1.40	1.83	
May	0.13	0.23	1.15	
Jun	0.36	0.96	0.04	
Seasonally Adjusted Series				
Jul		1.42	0.64	-0.86
Aug	1.48	1.83	1.05	0.55
Sep	0.13	1.95	0.93	0.65
Oct	0.33	0.73	1.20	0.16
Nov	1.68	1.37	0.68	
Dec	0.41	0.85	0.46	
Jan	2.13	0.75	1.07	
Feb	0.85	-0.05	0.83	
Mar	1.17	1.31	1.06	
Apr	1.21	0.74	1.15	
May	0.50	0.62	1.59	
Jun	0.47	1.04	0.08	

Table 19: CPI Food Month-on-Month Change Original & Seasonally Adjusted Series				
Original Series				
Period	FY10	FY11	FY12	FY13
Jul		1.84	2.90	1.80
Aug	3.04	4.93	1.44	0.92
Sep	0.19	4.64	1.60	0.69
Oct	0.58	-0.04	1.62	-0.07
Nov	2.12	1.64	0.10	
Dec	-2.20	-1.74	-2.21	
Jan	2.01	1.73	1.50	
Feb	0.38	-1.77	-0.66	
Mar	1.91	2.16	1.53	
Apr	2.49	1.28	2.16	
May	0.31	-0.28	0.17	
Jun	0.65	0.66	-0.21	
Seasonally Adjusted Series				
Jul		0.12	1.02	-0.13
Aug	2.13	4.10	0.65	0.16
Sep	-0.22	4.06	1.00	0.07
Oct	0.44	-0.14	1.51	-0.22
Nov	2.30	1.77	0.20	
Dec	0.23	0.77	0.31	
Jan	1.43	1.22	1.09	
Feb	1.85	-0.28	0.87	
Mar	1.36	1.51	0.76	
Apr	1.60	0.35	1.23	
May	0.86	0.43	1.00	
Jun	1.10	1.15	0.28	

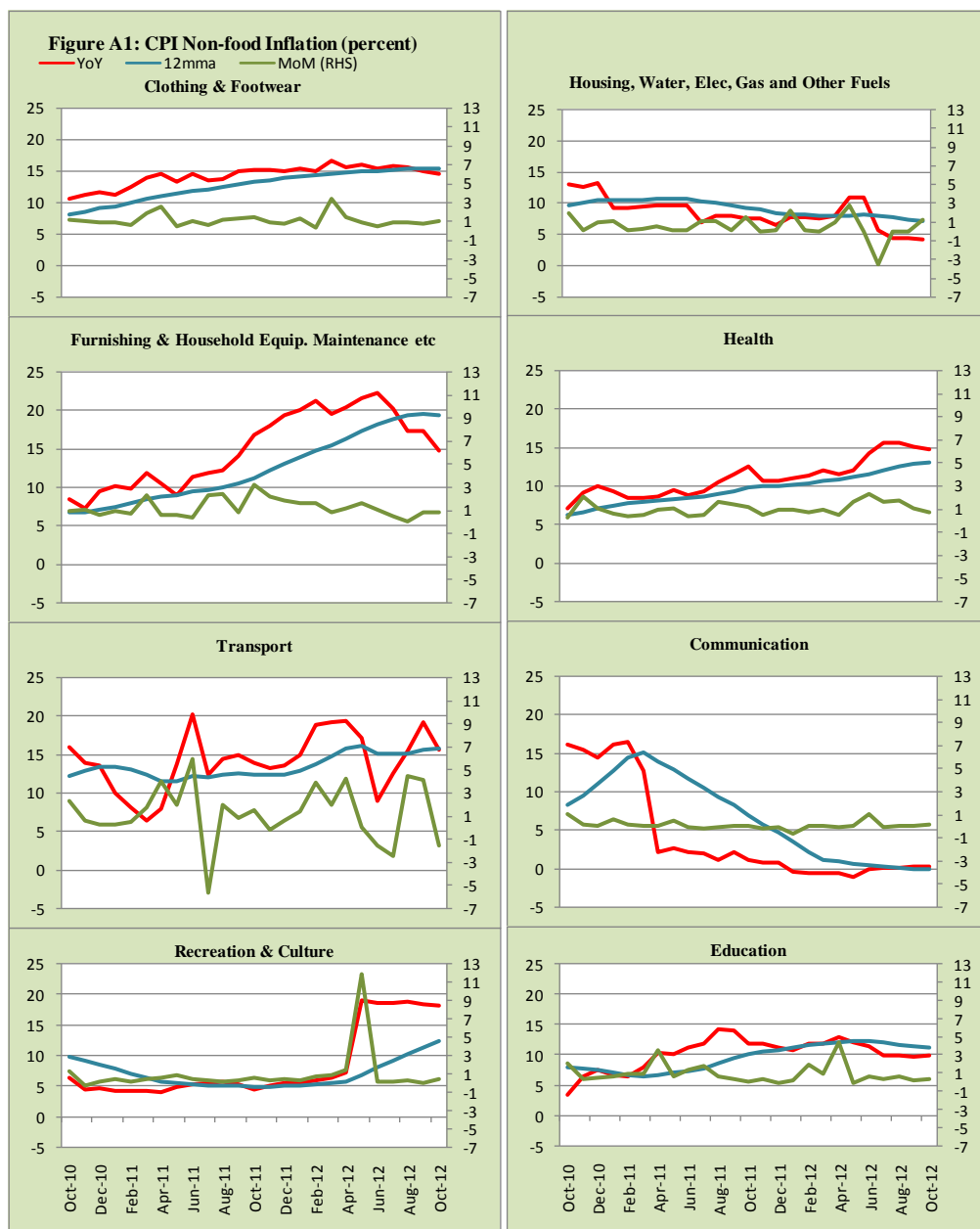


Figure A2: Frequency Distribution of Price Changes of CPI Items, October 2012

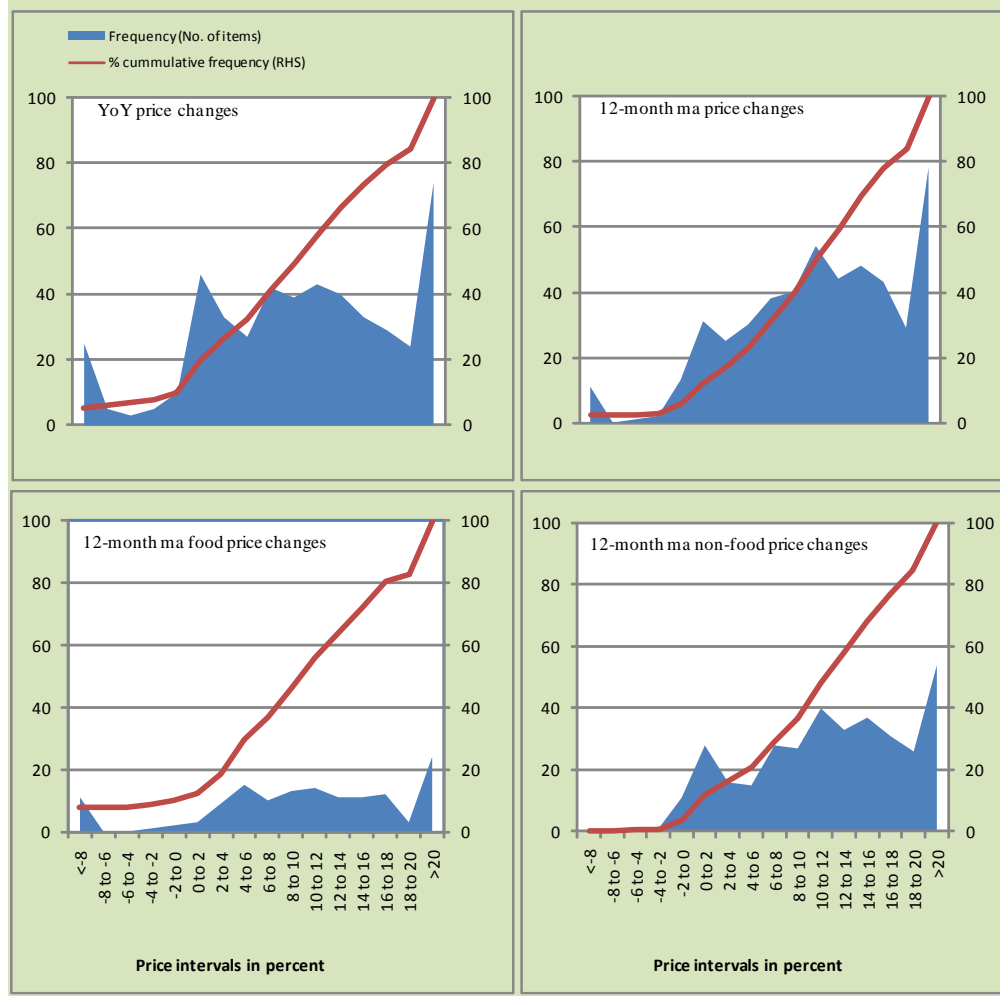
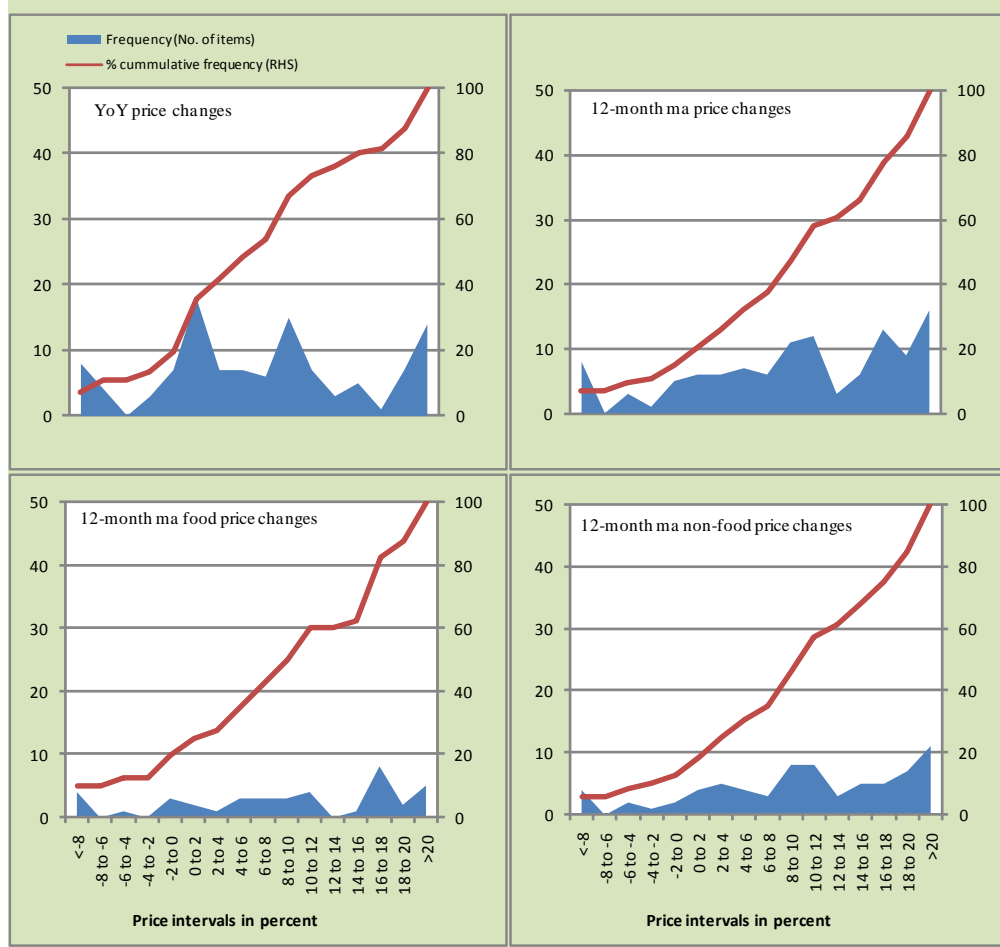
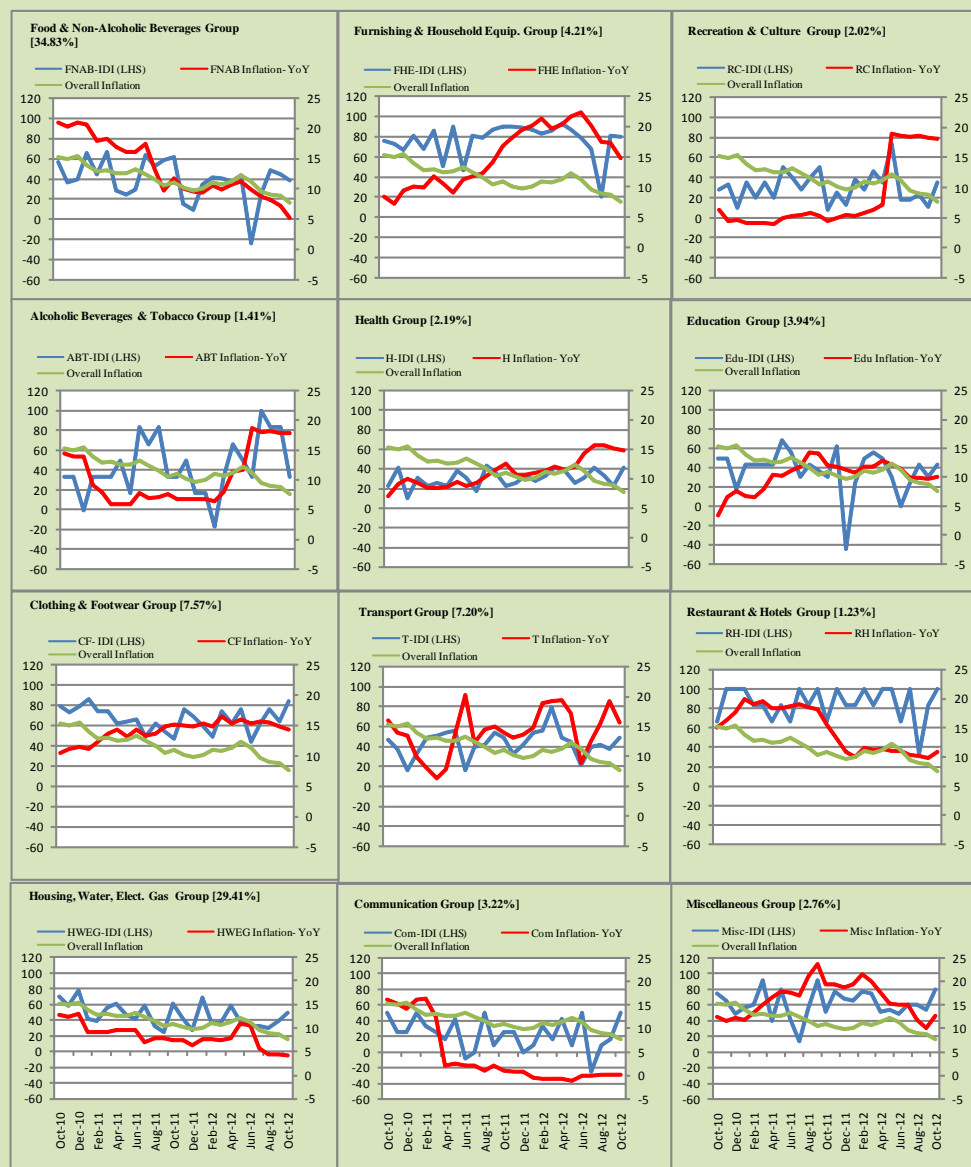


Figure A3: Frequency Distribution of Price Changes of WPI Commodities, October 2012



Inflation Monitor, October 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.