# **Inflation Monitor**

November 2010



## **State Bank of Pakistan**

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### **Team**

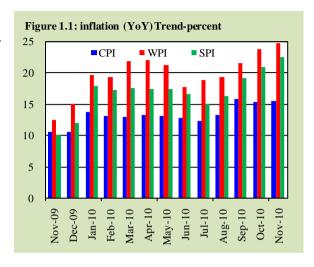
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#### 1. Overview

Inflationary pressures remained firm in the economy. Headline CPI inflation (YoY), with a modest increase, reached 15.5 percent in November 2010 (Figure 1.1). WPI and SPI inflation (YoY) saw greater increases during the month under review (see Table 1.1). Rising international commodity prices, domestic supply shortages of vegetables, upward adjustment in administered prices of fuel



and electricity, and government's budgetary borrowings from the central bank supporting aggregate demand were responsible for higher inflation.

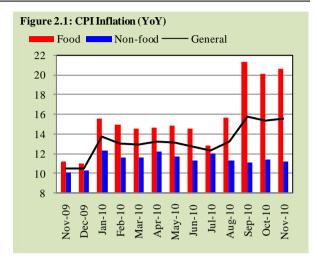
Table 1.1: In	flation T	rends												percent
			CPI	[			C	Core Inf	lation					
_	Gene	eral	Fo	ood	Non	-food	NFN	Æ*	Trin	ımed	W	PI	SP	[**
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
Nov-09	10.5	1.4	11.1	1.8	10.0	1.0	10.6	0.8	10.5	0.7	12.5	2.8	10.0	1.9
Dec-09	10.5	-0.5	10.9	-1.7	10.2	0.6	10.7	0.7	10.4	0.6	15.0	0.2	11.9	0.3
Jan-10	13.7	2.4	15.5	2.0	12.2	2.8	10.3	0.7	12.7	1.3	19.6	4.2	17.8	3.2
Feb-10	13.0	0.4	14.9	0.1	11.5	0.6	10.1	0.8	12.4	0.7	19.3	0.4	17.2	0.9
Mar-10	12.9	1.3	14.5	1.8	11.6	0.8	9.9	0.8	12.7	0.8	21.8	2.5	17.6	1.1
Apr-10	13.3	1.7	14.5	2.0	12.2	1.5	10.6	1.7	12.7	1.1	22.0	1.8	17.4	1.0
May-10	13.1	0.1	14.8	0.0	11.7	0.1	10.3	0.6	12.5	0.4	21.2	0.9	17.4	0.8
Jun-10	12.7	0.6	14.5	0.7	11.2	0.6	10.4	0.7	11.7	0.7	17.6	-0.6	16.5	0.4
Jul-10	12.3	1.2	12.8	1.5	12.0	1.0	10.3	0.5	12.0	0.7	18.7	1.7	14.9	1.8
Aug-10	13.2	2.5	15.6	5.1	11.2	0.3	9.8	0.4	12.5	0.7	19.2	2.6	16.2	2.6
Sep-10	15.7	2.7	21.2	5.3	11.0	0.3	9.4	0.4	12.8	0.9	21.5	2.1	19.1	3.5
Oct-10	15.3	0.6	20.1	0.1	11.3	1.1	9.3	0.7	12.8	1.0	23.8	3.1	20.9	1.7
Nov-10	15.5	1.5	20.5	2.2	11.1	0.9	9.5	1.0	13.4	1.2	24.7	3.5	22.5	3.3
* NFNE is No	n-food no	on-energ	y inflat	ion; **	SPI for	all inco	me group	s combin	ned.					

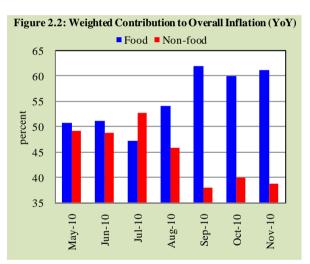
Core inflation YoY measured by NFNE also rose to 9.5 percent in the month under review; slightly higher than 9.3 percent YoY in October 2010. Core inflation measured by 20% trimmed mean increased to 13.4 percent in November 2010 compared to 12.8 percent previous month. The rise in core inflation NFNE shows that inflation was more broad-based in November 2010 relative to the preceding two months.

#### 2. Consumer Price Index

Headline CPI inflation (YoY) rose to 15.5 percent in November 2010, slightly higher than 15.3 percent in October 2010 and five percentage points higher than in November 2009 (see Figure 2.1). CPI inflation on month on month basis also surged to 1.5 percent during November 2010 compared to 0.6 percent in October 2010.

Since heavy rains and floods struck various parts of the country in August 2010, disrupting supply and creating shortages of some food commodities, food inflation remained higher contributor to overall inflation than non-food inflation in the recent months. This trend also continued during the month under and the contribution of food inflation was more than 60 percent (see **Figure 2.2**).





#### 2.1 Food Inflation

CPI food inflation (YoY) remained above 20 percent for the third consecutive month in November 2010. On month on month basis, food inflation increased from 0.1 percent in October 2010 to 2.2 percent in the month under review. Bifurcation of food group into perishable and non-perishable items reveal that inflation in non-perishable items remained almost at the previous month' level, whereas perishable food items witnessed a rise in inflation during the review month (see **Figure 2.3**). Higher prices of perishable food items can be attributed to higher external demand and impact of production losses caused by rains and floods. Strong international prices of agriculture commodities also contributed in the persistence of high food inflation.

In particular, prices of vegetable ghee, cooking oil and sugar increased (YoY) due to rise in the international prices of these commodities. Meat and fresh milk prices are increasing due to rising domestic demand and relatively slow growth in supply. A large part of CPI food inflation is attributed to increased cost of transportation amid surge in the prices of diesel in recent months.

Out of the reported 111 food items, prices of 76 items registered double-digit inflation during November 2010 compared to 56 items during November 2009. Only 17 items witnessed below five percent inflation in the review month against 39 items during the same month last year.

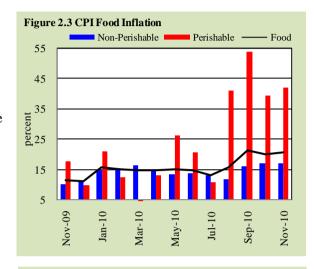


Table 2.1: Top Ten Contributors to CPI Food Inflation (YoY)											
		YoY	change	Weighted							
Items	Weights	Nov-09	Nov-10	Contribution							
1 Milk Fresh	16.51	13.97	18.08	14.26							
2 Onions	1.47	14.16	167.66	12.36							
3 Meat	6.69	17.64	28.37	11.48							
4 Sugar	4.83	50.13	56.22	10.75							
5 Vegetable Ghee	6.61	1.14	27.09	8.40							
6 Vegetables	4.77	20.23	26.18	7.80							
7 Readymade Foo	od 4.17	11.65	17.51	3.58							
8 Potatoes	1.37	12.27	39.09	3.48							
9 Fresh Fruits	4.01	19.35	19.86	3.43							
10 Wheat Flour	12.67	6.26	4.47	3.39							
Total	63.1			78.9							

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 20.5 percent in November 2010

#### 2.2 CPI Non-food Inflation

CPI non-food inflation decelerated to 11.1 percent during November 2010 against 11.3 percent in the previous month. However, this was higher than the 10.0 percent figure for November 2009.

It is interesting to note that, unlike the trend in food inflation, CPI non-food inflation has remained resilient in the past few months. This is reflected in the convergence of CPI non-food inflation (YoY) with its long-run trend 12-month moving average (see **Figure 2.4**).

Resilience in non-food inflation can be explained by the fact that rise in inflation within few non-food subgroups is partly offset by the falling trend in house rent index. While the medicare sub-group recorded its highest inflation since September 1994, its impact was more than offset by fall in house rent index, fuel & lighting, and transport & communications sub-groups. Increase in inflation in other sub-groups during the review month was negligible (see **Figure 2.5**).

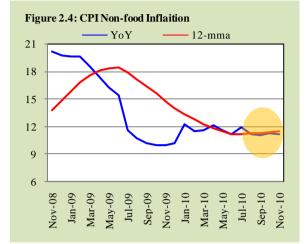


Figure 2.5: Inflation in Selected CPI Sub-groups (YoY)

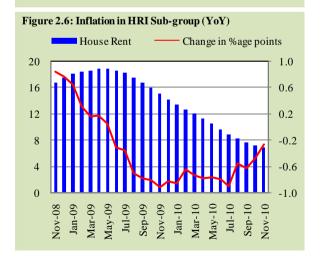
Apparel, Textile
Cleaning, Lauundry
Medicare

Rep-10

Oliver

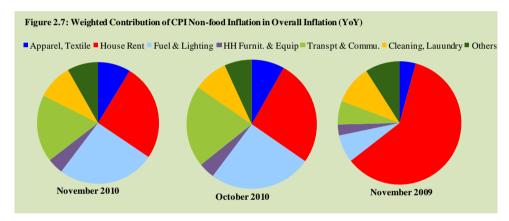
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House rent index sub-group witnessed a decline during November 2010; completing 18 months of its decline. However, the rate of fall in inflation is declining due to increasing cost of construction material. During the month under review, HRI inflation (YoY) fell by 0.3 percentage points to 6.9 percent compared to 7.1 percent in the preceding month. Given the rising prices of cement and labor wages in the country, it seems that HRI inflation (YoY) will resurge during the third quarter of FY11. (see **Figure 2.6**).

Given a declining trend, the weighted contribution of HRI in CPI non-food inflation is also shrinking compared with other sub-groups. For instance, share of fuel & lighting group in non-food inflation was equivalent to that of HRI in November 2010 (see **Figure 2.7**).



Segregated item-wise analysis of non-food components of the CPI basket shows that during the last two months, number of items witnessing extreme price changes, i.e., lower than 5.0 percent and higher than 10.0 percent, has increased significantly. Substantial rise in the prices of medicines and cotton products have increased the number of items recording higher price changes in the month under review. The acceleration in the medicines sub-group is largely attributed to increased fee for doctor and price of cotton bandages.

#### 2.3 Income group wise Inflation

During November 2010, incidence of overall and food inflation was the highest on the lowest income group, while the highest income group witnessed highest non-food inflation (see **Table 2.2**). A disproportionately higher incidence on low income group is a source of concern.

Table 2.2: Income Group-wise Inflation (YoY)										
		Nov-0	)9		Oct-1	0	Nov-10			
	General Food Non-food			General	Food	Non-food	General	Food	Non-food	
Up to Rs. 3000	10.5	11.2	9.7	16.5	21.0	10.6	17.4	22.2	11.0	
Rs. 3001-5000	10.3	11.0	9.4	16.3	20.7	10.8	17.0	21.7	11.1	
Rs. 5000-12000	10.3	11.0	9.6	15.7	20.1	11.0	16.1	20.8	11.2	
Above Rs. 12000	10.8	11.3	10.4	14.8	19.7	11.8	14.5	19.6	11.3	
All income groups	10.5	11.1	10.0	15.3	20.1	11.3	15.5	20.5	11.1	

#### 2.4 City- wise Inflation

City- wise inflation data shows that out of 35 cities, 24 recorded inflation higher than overall inflation. This is the highest number of cities ever recording inflation above the national average.

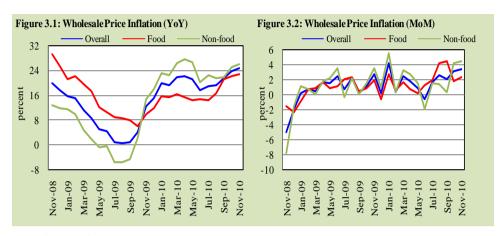
Data shows that the federal capital recorded the lowest overall and non-food inflation (YoY) while Turbat registered lowest food inflation during the month under review. On the other hand, the highest food inflation was recorded in Khuzdar (see **Table A6**).

Table 2.3: Province-wise Inflation (YoY)											
		General			Food		Non-food				
	Nov-09 Oct-10 Nov-10			Nov-09	Oct-10	Nov-10	Nov-09	Oct-10	Nov-10		
Islamabad	9.5	12.4	12.4	11.2	19.3	19.5	8.2	6.8	6.5		
Punjab	11.6	16.2	15.9	13.6	21.2	20.5	10.0	11.9	12.0		
Khyber											
Pakhtoonkhwa	7.8	16.6	17.4	5.9	20.3	22.1	9.4	13.4	13.5		
(KP)											
Sindh	11.0	15.9	16.7	11.1	20.0	21.5	10.9	12.5	12.8		
Balochistan	9.6	14.5	15.1	8.8	18.2	19.3	10.2	11.5	11.7		

#### 4. Wholesale Price Index

Inflation measured by wholesale price index (WPI) continued its upward trend and increased to 24.7 percent during November 2010 compared to 23.8 percent in the previous month (see **Figure 3.1**). Both food and non-food groups of WPI contributed in this significant increase, however, the contribution of non-food group was more pronounced. A significant increase in *raw materials* sub-group (see **Table 3.1**) amid rising international commodity prices mainly contributed in sharp jump in WPI non-food inflation.

WPI inflation also registered a strong rise on MoM basis. It rose to 3.5 percent in November 2010 from 3.1 percent in the preceding month (see **Figure 3.2**). This sharp jump is attributed to a record surge in WPI non food inflation (MoM) amid significant inflation in *raw materials*.



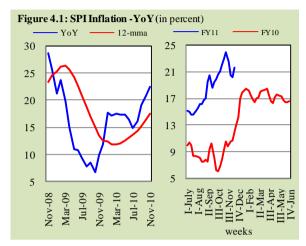
WPI food inflation rose to 22.7 percent YoY during November 2010 compared to 22.2 in October 2010. On MoM basis, WPI food inflation increased to 2.3 percent during the period under review compared to 1.8 percent in the previous month. Rise in the prices of food items was a result of domestic supply disruptions, rising international prices, and profiteering behavior of traders.

Table 3.1: W	PI Inflation	Trends					
	Overall	Food	Non-food	Raw materials	Fuel, lighting & lubricants	Manufactu res	Building materials
				MoM			
Nov-09	2.8	1.9	3.5	5.8	3.7	3.6	-1.5
Sep-10	2.1	4.5	0.2	2.5	-1.5	1.3	0.2
Oct-10	3.1	1.8	4.2	5.6	4.0	4.1	2.0
Nov-10	3.5	2.3	4.4	8.9	2.0	5.9	1.4
				YoY			
Nov-09	12.5	9.6	14.9	20.2	26.9	7.4	-16.7
Sep-10	21.5	21.1	21.8	58.3	13.3	21.5	10.5
Oct-10	23.8	22.2	25.1	65.8	14.7	25.7	15.5
Nov-10	24.7	22.7	26.2	70.7	12.8	28.4	18.9

WPI non-food inflation increased to 26.2 percent YoY during November 2010 compared to 25.1 percent in October 2010 and 14.9 percent in the corresponding month last year.

#### 4. Sensitive Price Indicator (SPI)

SPI inflation (YoY) also showed a continued uptrend in recent months. This is mainly due to rising prices of food commodities particularly perishable food items which constitute major part of SPI basket. SPI inflation (YoY) was recorded at 22.5 percent during November 2010 compared to 20.9 percent in October 2010 and 10.0 percent in November 2009 (see Figure 4.1).

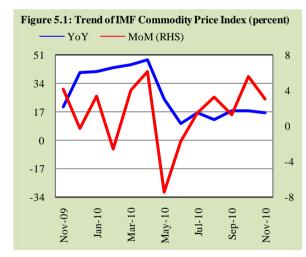


Similarly, weekly SPI (YoY) which remained very strong since the start of FY11 rose further in second week of December 2010 after witnessing a little ease in the preceding last two weeks. SPI was recorded at 21.7 percent in the second week of December 2010 compared to 20.2 percent in the previous week.

#### 5. Global Commodity Prices

International commodity prices eased somewhat (on YoY basis) during November 2010 compared to the previous month as well as the corresponding

month of the preceding year. IMF commodity index registered 16.5 percent increase (YoY) during November 2010 compared with a rise of 17.7 percent (YoY) in October 2010 and a significant increase of 20.2 percent in November 2009. This shows that increase in international commodity prices was slightly lower than the rise in general commodity prices during the corresponding period (see **Figure 5.1**).

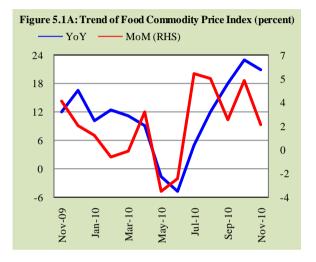


In line with YoY international commodity prices, the MoM global commodity prices also eased in November 2010 relative to the last month.

#### **Food Group**

International food commodity prices index recorded 21.0 percent YoY rise during November 2010 compared with 23.1 percent increase in October 2010. This relative ease is mainly attributed to deceleration in the prices of wheat and corn (see **Figure 5.1A**).

International corn prices eased during the period under review as it increased by 37.8 percent compared to 41.0 percent in



the month of October 2010. Corn prices eased on speculation that rising output in China, the world's second-largest consumer, will reduce demand for imports from the US. According to a report, China may have harvested a record 180 million metric tons this year, up from 166 million last year. Moreover, wet weather in Brazil and China (the two biggest exporters after the US), which improved prospects for early crop development, has also put downward pressure on corn prices.

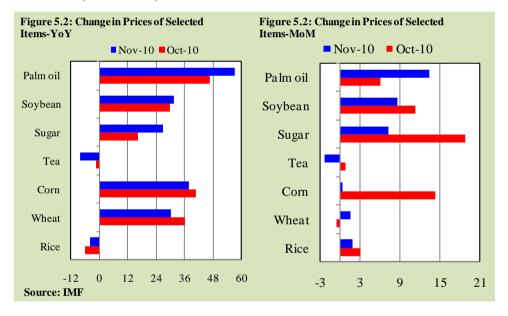
The prices of wheat surged by 30.0 percent (on YoY basis) in November 2010 in contrast to 7.0 percent decline in the corresponding month of 2009. Wheat prices increased on concerns that higher temperatures and dry conditions in the US may hurt the crop in the world's largest exporter. According to a report, parts of Kansas and Colorado are experiencing moderate drought. Moreover, rains might delay harvesting in Australia.

Sugar prices witnessed YoY increase of 26.9 percent in the month of November 2010 compared to 16.3 percent increase in the last month. Prices rose mainly due to supply concerns as adverse weather threatened crops in China, Russia, and Brazil. India is also expected to delay its sugar exports due to uncertainty of production estimates.

International edible oil prices remained strong during the month of November amid growing supply demand gaps. Palm oil prices increased by 57 percent

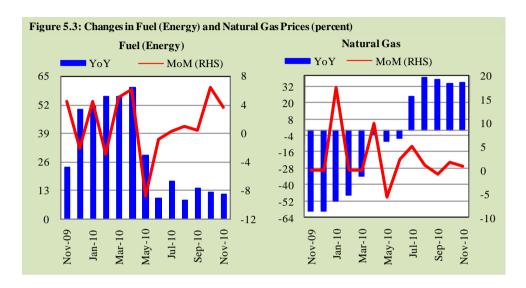
during the month under review compared to 46.6 percent increase last month. Palm oil prices rose on speculation that the US government will lower its soybean production estimate this month, and on concerns that recent heavy rains may damage harvests in Malaysia and Indonesia.

Prices of soybean oil registered an increase of 31.5 percent during the period under review amid dry weather in Brazil and Argentina as many areas in these countries have received only 50 to 70 percent of normal rains for November. Increased demand from China and prospects for further weakness in the dollar after the Federal Reserve announced plans to expand stimulus also put upward pressure on prices. Going forward, global prices of soybeans and palm oil are likely to rise further on increasing demand from China ahead of the Lunar New Year holiday in February 2011.



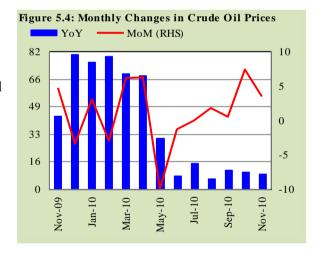
#### Non Food Group

Within the noon-food commodity group, fuel (energy) commodity index rose by 11.3 percent in November 2010, which is not only significantly lower than 23.5 percent increase in the corresponding month last year but also lower than the 12.3 percent growth seen in the previous month. The increase in fuel prices is contributed by natural gas, crude oil, and coal. Natural gas price in global market rose by 35.0 percent in November 2010, as against a 59.7 percent decline in the same month last year (see **Figure 5.3**). This rise was due to strong demand for heating oil due to cold weather in USA and Europe, indexation of imported gas to oil prices in European countries and sharp drawndown in gas inventories.



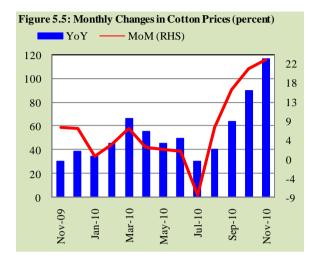
Crude oil prices went up in the world market in the month of November 2010, and reached approximately US\$ 86 per barrel – the highest since March 2010.

Crude oil prices index rose by 9.3 percent on YoY basis in November 2010 (see **Figure 5.4**) compared with 10.6 percent increase in the previous month. Strong global demand on the back of cold weather in Europe and US, rising demand from China, and expectation of unchanged production quotas for OPEC member economies were the main factors for the rising prices of crude oil during November 2010.



Similar to fuel (energy) prices index, agricultural raw material prices index (cotton, timber, wool, rubber and hides) also raised by 35.6 percent in November 2010, which is significantly higher than 4.4 percent rise in the same month last year. Within the agricultural, raw cotton prices soared by 116.6 percent YoY in November 2010 compared to 30.5 percent rise in the corresponding month of 2009 (see **Figure 5.5**). The rise in cotton prices during the month of November 2010 was the highest since September 1987. As far as the MoM change in cotton

prices is concerned, it climbed by a record 22.8 percent in November 2010. This increase is largely owed to strong demand and declining global stock-to-use ratio.



#### Annexure A

Table A1: CPI Inflation by Groups							
		M	oM chan	ge	Y	oY chang	ge
	Weights	Nov-09	Oct-10	Nov-10	Nov-09	Oct-10	Nov-10
I. Food Group	40.3	1.8	0.1	2.2	11.1	20.1	20.5
II. Non-Food Group	59.7	1.0	1.1	0.9	10.0	11.3	11.1
Apparel, textile, etc.	6.1	0.4	0.9	0.9	4.7	10.8	11.3
House rent	23.4	0.8	0.4	0.5	15.1	7.1	6.9
Fuel & lighting	7.3	0.9	1.7	0.8	5.1	21.1	21.1
Household furniture & equipment	3.3	0.8	1.0	1.1	5.7	9.4	9.7
Transport & communication	7.3	2.7	2.7	0.4	4.7	18.5	15.7
Recreation & entertainment	0.8	0.8	0.0	0.1	2.6	14.5	13.7
Education	3.5	0.5	0.3	0.3	13.4	6.3	6.0
Cleaning, laundry, etc.	5.9	1.6	2.0	2.3	11.1	10.5	11.3
Medicare	2.1	0.0	0.2	5.3	5.3	10.5	16.3
Headline	100.0	1.4	0.6	1.5	10.5	15.3	15.5

Table A2: Distribution of Price Changes of CPI Basket (YoY)												
						No. of	Items i	n each In	flation l	Range		
	%	Total N	lum be r	Decreas	se or no	Sub	Subdued M		Moderate		Double digit	
Groups	Change	of It	ems	change	(0% or	increas	e (>0%	increas	e (>5%	increas	se (over	
	s			less)		but <	but < 5%)		10%)	10%)		
		Nov-09	Nov-10	Nov-09	Nov-10	Nov-09	Nov-10	Nov-09	Nov-10	Nov-09	Nov-10	
I. Food Group	20.5	113	113	27	10	12	8	18	17	56	78	
II. Non-Food Group	11.1	250	250	64	53	68	33	68	58	50	106	
Apparel, textile, etc.	11.3	42	42	6	5	12	6	20	11	4	20	
House rent	6.9	1	1						1	1	0	
Fuel & lighting	21.1	15	15	4	1	3		4	0	4	14	
Household furniture & equipt	9.7	44	44		1	23	3	18	23	3	17	
Transport & communication	15.7	43	43	25	15	5	3	10	7	3	18	
Recreation & entertainment	13.7	16	16	5	4	7	7	1	1	3	4	
Education	6.0	24	24	4	8	3	7	5	4	12	5	
Cleaning, laundry, etc.	11.3	36	36	7	6	9	2	9	11	11	17	
Medicines	16.3	29	29	13	13	6	5	1		9	11	
Overall	15.5	363	363	91	63	80	41	86	75	106	184	
Note: Prices of 12 seasonal items were not reported during the month.												

Table	e A3: Top Ten Contribution to Yo	oY CPI Inflatio	on in Nov 20	10	
			YoY c	hange	Weighted
	Items	Weights	Nov-09	Nov-10	Contribution
A. Ra	nked by Weighted Contribution				
1	House Rent Index	23.43	15.05	6.87	10.55
2	Vegetables	1.92	20.23	26.18	8.4
3	Sugar	1.95	50.13	56.22	8.02
4	Milk Fresh	6.66	13.97	18.08	7.54
5	Meat	2.70	17.64	28.37	6.93
6	Electricity	4.37	2.74	27.18	6.06
7	Vegetable Ghee	2.67	1.14	27.09	3.61
8	Natural Gas	2.05	4.91	18.16	3.24
9	Onions	0.59	14.16	167.66	2.91
10	Transport Fare/Charges	2.12	-2.92	15.90	2.65
	Total	48.46			59.94
B. Ra	nked by Percentage Change				
1	Onions	0.59	14.16	167.66	2.91
2	Pulse Moong	0.22	38.98	103.30	2.09
3	Sugar	1.95	50.13	56.22	8.02
4	Pulse Gram	0.43	-16.82	43.91	1.00
5	Pulse Mash	0.20	58.41	41.86	0.87
6	Besan	0.13	-15.43	41.13	0.29
7	Potatoes	0.55	12.27	39.09	1.42
8	Communication	1.93	2.17	37.11	2.19
9	Tomatoes	0.45	14.93	33.39	1.32
10	Honey	0.04	16.97	31.80	0.07
	Total	6.49			20.19
	inked by Weights				
1	House Rent Index	23.43	15.05	6.87	10.55
2 3	Milk Fresh Wheat Flour	6.66 5.11	13.97 6.26	18.08	7.54 1.53
3 4	Electricity	4.37	6.26 2.74	4.47 27.18	6.06
5	Bakery & Confectionary	2.98	4.32	7.02	0.77
6	Meat	2.70	17.64	28.37	6.93
7	Vegetable Ghee	2.67	1.14	27.09	3.61
8	Tution Fees	2.36	8.10	7.80	0.97
9	Transport Fare/Charges	2.12	-2.92	15.90	2.65
10	Natural Gas	2.05	4.91	18.16	3.24
	Total	54.45			43.84

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 15.5 percent in November 2010.

Table A4	: Distribution of Price (	Changes (YoY)- Select	ed CPI Items, November 2010	
14010111	Decrease or no	Subdued increase	Moderate increase (5 to	
Groups	change	(upto 5%)	10%)	Increase of over 10%
Food Group	Tinda, Chicken, Cinamon Loose Av. Qlty, Eggs, Groundnuts (With Shell), Maida, Peas, Cuminseed White National, Corriander Seed Powd.Nationa	Wheat, Wheat Flour Fine/Superior, Milo 200 Gm., Fruit Juice Tetra Pack, Coffee-Nescafe 75 Gm.	Wheat Flour Bag, Tea(L/R) Brookbond Supreme 250Gm, Biscuits-Packed, Tea Lipton Yellow Label 200G, Chillies Powd.National 200Gm, Betel Nuts, Bread Tandoori St. Size, Cigarettes Gold Leaf 20'S, Coconut Dry Av.Qlty.	Cabbage, Pastry Av.Qlty., Guava, Betel Leaves, Patties (Vegatables), Potatoes, Pistachio Av.Qlty., Dates Av.Qlty.,Fish-Rahu Medium Size
Apparel & Textile	Gents Shoes Paul Bata, Gents Sandal Bata, Child Shoe Power Lite Bata	Pullover Gents Oxford/Bon., Tailoring Coat-Pant Suit, Pullover Ladies Oxford/Bon.	Awami-Suit W&W(Gents)Av.Qlt, School Uni. Kameez,Shal.Boys, School Uni. Pant,Shirt Boys	Tailoring Suit Female, Tailoring Shirt, Dopatta Georgette Av.Qlty.
House Rent Index			House Rent Index	
Fuel & Lighting	Match Box Small			Gas Chrg 3.3719 - 6.7438 Mmbtu, Bulb Philips 100- Watts, Gas Cylinder Stand. Size Elect.Charges 301 - 1000 Uni
Household Furniture & Equipment	Washing Machine Singer	Carpet Plain Av. Qlty, Tea-Set S. Steel 3 Pcs. M.Siz, S.Steel Deghchi Medium Size	Almirah (Steel) 6'X3' 20 Gua, Electric Juicer For Apple, Airconditioner 1.5 Ton Pel	Farshi Dari 12'X9' Av.Qlty, Sofaset Wooden With Foam Sea, Table Shesham Wood (4X2X5")
Transport & Communication	Train Fare A/C Slp > 500Km., Plateform Ticket Postal Registration Charges, U.M.S. Reg Charges Min.	Internet Charges, Motorcycle Yamaha 100Cc.	Air Fare Economy Class., T.C.S. Ch. Min.With In Zone, A/C Bus Fare Outside City, Taxi 4 Seater Fare	Bus Fare Min (Within City), Bus Fare Max (Within City), Telephone Charges Local Call, Tel Charges Out Side City
Recreation & Entertainment	Daily "Dawn", Monthly "Naunehal Digest", Weekly "Akhbar-E-Jahan"	T.V. 20" Colored With R/Cont, Tape Recorder Cassette Blan, Dry Cell 1.5 Volt(Local)	Cinema Non-A/C High Class	Daily "Jang", Daily "Nawa- E-Waqt", Cinema A/C. Highest Class
Education	Com. C.D. (Tdk/Imation), English Book Class V1, Urdu Book Class V (T.B.Bord)	Maths Book Class Ix Or X, Ball Pen (Local), Maths Book Calss V (T.B.B)	School Fee Primary Eng.Med., Paper Foolscape (27"X17"), Fountin Pen Youth China	Pencilgoldfish/Deer, Exercise.Book Lined 80/100 P, Govt. Engg. Coll. Fee I Year
Cleaning & Laundry	Surf (Medium) 160 Grm, Washing Powder 1000 Grm Robin Blue (35 Grams), Toilet Soap Lux 95 Grams	Facecream Ponds (Medium), Brylcreem 210 Ml.	Toilet Soap Lifebouy 140 Grm, Perfume Med.Size Medora/Broa, Wrist Watch Gents Citizen, Hair-Colour Begin (6 Gms)	Hair-Oil , Amla/Chambeli, Haircut Charges For Men, Washing Soap Nyl(135- 160Gms) Beauty Porl Hair Styl Charge
Medicare	Septran Tablets, Brufen Tabs 200- Mg. Panadol Tab, Extra/Plain	Lederplex Syrup, O.R.S. (Nimcol)		Burnol Cream 30 Grm, Polyfax Eye Ointment, Dettol (Medium)

Table A5: City-wise Inflation by Income Groups, November 2010												
	_		Upto Rs	:3000					Rs 300	1-5000		
	Gen	eral	Fo	od	Non-	Food	Gen	eral	Fo	od	Non-	Food
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Lahore	0.1	15.0	-0.3	20.0	0.8	7.8	0.1	14.9	-0.4	19.8	0.8	8.4
2 Faisalabad	2.0	16.6	2.9	24.4	0.3	5.2	2.1	17.1	3.0	24.3	0.8	7.8
3 Rawalpindi	0.2	14.5	-0.1	19.9	0.7	7.1	0.3	14.6	0.1	19.7	0.7	8.1
4 Multan	0.3	17.8	-0.1	22.0	0.8	12.1	0.0	17.2	-0.5	21.1	0.6	12.0
5 Gujranwala	1.7	17.9	2.3	24.1	0.7	9.1	1.5	16.2	2.1	21.4	0.7	9.7
6 Islamabad	1.0	14.0	1.5	22.0	0.3	3.8	1.0	14.4	1.4	21.8	0.4	5.3
7 Sargodha	1.9	17.1	2.3	22.7	1.4	9.7	2.3	17.3	3.0	22.4	1.3	11.0
8 Sialkot	0.5	13.5	0.4	14.9	0.7	11.4	0.8	13.7	1.0	16.0	0.5	10.5
9 Bahawalpur	1.5	19.4	1.1	23.6	2.2	13.4	1.5	18.8	1.2	22.6	2.0	13.7
10 Karachi	4.0	17.5	6.7	24.1	0.1	8.8	3.1	17.4	5.3	24.6	0.2	8.7
11 Hyderabad	3.3	17.5	4.8	21.9	1.2	11.6	3.2	17.8	4.9	22.7	0.9	11.7
12 Sukkur	1.7	18.4	2.5	24.4	0.5	10.4	1.9	17.0	2.9	21.5	0.6	11.6
13 Larkana	3.3	16.7	5.1	21.7	0.7	9.8	2.8	16.4	4.1	20.6	1.1	10.9
14 Peshawar	2.5	18.1	3.3	23.2	1.4	11.5	2.8	18.6	3.8	23.5	1.5	12.6
15 Bannu	3.0	20.4	4.0	25.4	1.7	14.2	2.8	19.2	3.6	23.6	1.7	14.0
16 Quetta	3.3	16.3	5.1	21.5	0.6	8.7	2.9	16.9	4.4	22.3	0.6	9.8
17 Khuzdar	6.6	15.8	9.2	18.6	3.1	11.9	6.1	16.1	8.0	19.9	3.6	11.4
			Rs 5001					a	above R		0	
	Gen		Fo		Non-Food		General		Food		Non-	
	MoM	YoY	MoM	YoY	MoM		MoM	YoY	MoM	YoY	MoM	
1 Lahore	0.0	14.3	-0.6	19.2	0.7	8.8	-0.1	12.9	-1.0	18.4	0.5	9.3
2 Faisalabad	1.7	16.4	2.4	23.3	0.9	8.9	1.2	14.3	1.8	21.1	0.8	9.8
3 Rawalpindi	0.4	13.9	0.0	18.7	0.8	9.0	0.3	13.8	-0.6	18.1	0.9	11.1
4 Multan	0.0	15.7	-0.5	19.6	0.5	11.3	0.0	14.6	-1.1	17.8	0.7	12.4
5 Gujranwala	1.3	15.4	1.9	20.7	0.6	9.8	0.8	14.4	1.2	19.8	0.6	10.9
6 Islamabad	0.9	13.7	1.6	21.3	0.2	5.9	0.5	12.1	0.5	19.1	0.6	8.0
7 Sargodha	2.3	17.6	3.0	21.9	1.5	13.2	1.7	17.6	2.3	23.0	1.3	14.1
8 Sialkot	0.6	13.0	0.8	14.9	0.5	10.9	0.4	12.4	0.1	13.2	0.5	11.9
9 Bahawalpur	1.2	17.8	1.0	22.2	1.4	12.8	0.7	16.7	-0.1	21.3	1.4	13.6
10 Karachi	2.5	16.0	4.4	22.9	0.5	9.1	1.4	12.8	3.0	20.7	0.3	8.0
11 Hyderabad	2.9	17.2	4.6	21.8	1.1	12.3	2.1	16.5	3.7	20.4	1.1	14.1
12 Sukkur	1.7	16.3	2.7	20.3	0.8	12.3	1.5	16.6	2.4	20.3	1.0	14.5
13 Larkana	2.9	16.1	4.3	20.5	1.3	11.4	2.9	15.7	4.2	19.9	2.0	13.1
13 Larkana										212		400
14 Peshawar	2.4	17.1	3.5	22.3	1.2	11.8	1.6	15.7	2.6	21.2	0.9	12.3
		17.1 18.6	3.5 3.6	22.3 22.9	1.2 2.0	11.8 14.1	1.6 2.1	15.7	2.6	21.2	0.9 1.9	12.3
14 Peshawar	2.4											

Table A6: Cit	Table A6: City-wise Inflation in CPI (YoY) Nov 2010										
	High i	nflation	cities		Low	inflation	cities				
	General	Food	Non-food		General	Food	Non-food				
Bannu	18.5	22.6	15.1	Faisalabad	15.3	22.4	9.1				
D.G. Khan	18.2	23.4	13.9	Gujranwala	15.3	20.7	10.8				
Jhang	18.1	22.2	14.8	Attock	15.0	21.5	9.9				
Khuzdar	18.1	24.6	12.7	Karachi	14.5	22.1	8.3				
Abbotabad	18.0	23.0	13.6	Jehlum	14.2	19.8	9.6				
Bahawalnagar	17.8	20.9	15.3	Loralai&Cantt	14.2	16.9	12.0				
Nawabshah	17.8	21.6	14.7	Rawalpindi	13.9	18.5	10.0				
Bahawalpur	17.8	22.2	13.8	Lahore	13.7	18.9	9.0				
D.I.Khan	17.7	23.2	13.0	Sialkot	12.7	14.0	11.5				
Sargodha	17.6	22.2	13.7	Turbat	12.5	14.5	11.1				
Shahdadpur	17.6	21.5	14.4	Islamabad	12.4	19.5	6.5				
Kunri	17.5	22.7	13.2								
Mianwali	17.2	22.9	12.5								
Hyderabad	17.0	21.6	13.3								
Mirpur Khas	16.8	21.3	13.2								
Samundari	16.7	20.1	13.9								
Peshawar	16.6	22.0	12.1								
Mardan	16.5	19.9	13.7								
Sukkur	16.5	20.6	13.3								
Larkana	16.1	20.4	12.4								
Okara	16.0	20.6	12.3								
Quetta	15.8	21.2	11.1								
Vehari	15.7	19.5	12.5								
Multan	15.6	19.4	12.1								

Note: High inflation refers to above average inflation, and low inflation refers to below average inflation

Table A7: Income	Group-w	ise Inflat	ion			percent
		MoM			YoY	
	Nov-09	Oct-10	Nov-10	Nov-09	Oct-10	Nov-10
<u>Up to Rs. 3000</u>						
General	1.5	0.6	2.3	10.5	16.5	17.4
Food	2.0	0.4	3.0	11.2	21.0	22.2
Non-food	0.9	1.0	1.3	9.7	10.6	11.0
Rs. 3001-5000						
General	1.5	0.5	2.1	10.3	16.3	17.0
Food	1.9	0.2	2.8	11.0	20.7	21.7
Non-food	0.8	1.0	1.1	9.4	10.8	11.1
Rs. 5000-12000						
General	1.4	0.5	1.7	10.3	15.7	16.1
Food	1.8	0.1	2.4	11.0	20.1	20.8
Non-food	0.8	0.9	1.0	9.6	11.0	11.2
Above Rs. 12000						
General	1.4	0.8	1.1	10.8	14.8	14.5
Food	1.7	0.0	1.6	11.3	19.7	19.6
Non-food	1.3	1.3	0.8	10.4	11.8	11.3
All income groups						
General	1.4	0.6	1.5	10.5	15.3	15.5
Food	1.8	0.1	2.2	11.1	20.1	20.5
Non-food	1.0	1.1	0.9	10.0	11.3	11.1

Table A	8: SPI Item-wise Price M	ovements			
			Prices	Percenta	ge change
S.No	Items	Unit	Nov-10	YoY	Monthly
1	Wheat	Kg.	26.5	3.2	1.4
2	Wheat flour average qlt.	Kg.	30.7	6.1	0.8
3	Rice basmti.broken	Kg.	49.2	14.2	2.8
4	Rice irri-6	Kg.	37.5	12.7	0.3
5	Masur pulse washed	Kg.	121.6	0.1	0.1
6	Moong pulse washed	Kg.	140.7	105.4	-2.3
7	Mash pulse washed	Kg.	166.9	39.1	-2.4
8	Gram pulse washed	Kg.	71.9	45.1	0.5
9	Beef	Kg.	214.4	25.6	1.4
10	Mutton	Kg.	406.7	35.3	2.2
11	Egg hen (farm)	Doz.	78.9	-3.5	-4.5
12	Bread plain	Each	27.9	7.8	0.4
13	Sugar	Kg.	89.0	72.8	7.7
14	Gur Mills fragh	Kg.	90.1	27.3	0.5
15	Milk fresh	Ltr	49.0	18.4	3.2
16 17	Milk powdered nido Curd	400g	200.0	11.1 17.8	0.0 2.1
		Kg.	57.4		5.0
18 19	Veg.ghee tin Veg.ghee loose	2.5kg	409.3 145.7	15.9 36.9	5.0 7.4
20	Mustard oil	Kg. Kg.	145.7	36.9 17.4	7.4 3.7
21	Cooking oil	Ng. 2.5ltr	409.3	17.4	5.4
22	Potatoes	Kg.	37.9	21.6	11.0
23	Onions	Kg.	66.3	155.8	50.1
24	Tomatoes	Kg.	46.0	13.3	-17.7
25	Bananas	Doz.	39.3	12.9	0.9
26	Salt powdered	Kg.	7.0	5.4	0.4
27	Red chillies(powd)	Kg.	221.4	44.9	13.0
28	Garlic	Kg.	231.1	70.5	3.5
29	Tea packet	250g	130.3	6.4	0.0
30	Tea (prepared)	Cup	12.4	25.9	4.1
31	Cooked beef plate	Each	52.0	18.3	2.6
32	Cooked dal plate	Each	33.0	21.5	3.1
33	Cigarettes k-2	10's	13.6	23.5	0.0
34	Coarse latha	Mtr.	53.4	17.3	3.1
35	Lawn (avg.+s.qlty)	Mtr.	105.8	14.3	-0.6
36	Voil printed	Mtr.	54.3	15.2	0.4
37	Shirting	Mtr.	85.8	6.5	-0.2
38	Sandel gents bata	Pair	499.0	0.0	0.0
39	Sandel ladies bata	Pair	399.0	5.3	0.0
40	Chappal spng. Bata	Pair	139.0	7.8	0.0
41	Kerosene	Litr	82.2	19.9	6.2
42	Firewood	40kg	335.7	15.6	1.8
43	Elec. Bulb 60-wats	Each	24.0	20.0	0.0
44	Match box	Each	1.0	0.0	0.0
45	Washing soap	Cake	14.3	13.0	1.9
46	Bath soap lifebuoy	Cake	24.0	9.1	0.0
47	Chicken (farm)	Kg.	117.8	-5.5	-11.2
48	Gas chrg. All clb. Comb	mmbtu	337.2	17.8	0.0
49	L.P.G.(cylender 11kg.)	Each	1219.1	28.0	11.9
50	Elec.chrg.all slabs comb	per unit	8.9	26.7	1.0
51	Petrol	Ltr	73.7	18.0	9.1
52	Diesel	Ltr	79.1	20.9	6.1
53	Telephone local	Call	3.6	48.3	0.0
Maximu	*			155.8	50.1
Median				17.4	0.9
Minimu				-5.5	-17.7

Table A9	: Distribution of	Price Change (YoY) - W	VPI Items: November 20	010
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Chicken, Eggs, Maida, Masoor	Sugar Confectionary, Wheat, Wheat Flour, Salt, Powdered Milk	Tea, Condiments, Milk, Food Beverages, Mineral Water	Vegetables Prepared/ Preserved, Cooking Oil, Gram Whole, Fish, Rice, Fresh Milk, Dry Fruits, Oil Cakes, Beans, Cotton Seed Oil, Gur, Mustard & Rapeseed Oil, Fresh Fruits, Fruit Prepared/ Preserved, Meat, Mash, Vegetable Ghee, Spices, Potatoes, Tomatoes, Besan, Vegetables, Bajra, Gram Split, Sugar Refined, Jowar, Maize, Moong, Onions
Raw material	Pig Iron	Skins, Hides	Wool	Tobacco, Cotton Seeds, Mustard/ Rapeseeds, Sugar Cane, Cotton
Fuel & lighting		Coal	Mobil Oil, Furnace Oil	Motor Sprit, Diesel Oil, Fire Wood, Coke, Kerosine Oil, Natural Gas, Electricity Ind. Supply Tariff-B, Elec. Agriculture Tariff-D
Manufactures	Sole Leather, Chrome Leather	Audio-Visual Instruments, Utensils, Glass Products, Paper, Ready Made Garments, Matches, Foot Wear, Other Electrical Goods, Woolen Textiles	Silk & Reyon Textiles, Hosiery, Soaps, Pesticides & Insecticised, Mattresses, Tyres, Plastic Products, Machinery, Drugs & Medicines	Tubes, Dying Materials, Cotton Textiles, Fertilizers, Jute Manufactures, Chemicals, Transports, Cosmetics, Nylon Yarn, Blended Yarn, Cigarettes, Cotton Yarn
Building material	Tiles	Sanitary Wares, Cement Blocks, Pipe Fittings	Timber, Glass Sheets, Cement, Wires And Cables	Bricks, Paints & Varnishes, Iron Bars & Sheets

Table A	A10: Consumer Price Index Numbers by I	Major Groups and Sele	cted Comm		
Item a	nd Specification			Index	
		Weights	Nov-09	Oct-10	Nov-10
Gener		100.00	212.02	241.17	244.84
	Beverages.	40.34	242.40	285.89	292.20
1	Wheat	0.48	300.54	301.14	308.05
2	Wheat Flour	5.11	298.21	308.04	311.54
3	Maida	0.11	281.96	279.23	280.45
4	Besan	0.13	181.06	252.20	255.53
5	Rice	1.34	269.24	295.10	299.58
6	Pulse Masoor	0.22	330.76	330.40	332.61
7	Pulse Moong	0.22	232.02	487.44	471.70
8	Pulse Mash	0.20	264.60	382.94	375.36
9	Pulse Gram	0.43	171.96	246.16	247.47
10	Gram Whole	0.15	200.00	228.84	232.80
11	Mustard Oil	0.05	237.28	270.61	278.95
12	Cooking Oil	0.69	221.73	243.72	256.28
13	Vegetable Ghee	2.67	233.53	277.31	296.79
14	Sugar	1.95	197.34	294.73	308.29
15	Gur	0.07	276.60	350.20	350.34
16	Tea	1.26	193.96	207.80	207.68
17	Milk Fresh	6.66	237.88	272.57	280.88
18	Milk Powder	0.11	209.86	232.22	235.29
19	Milk Products	0.56	222.19	249.72	256.82
20	Honey	0.04	200.28	258.10	263.97
21	Cereals	0.09	243.96	265.60	266.06
22	Jam, Tomato, Pickles & Vinegar	0.25	178.96	207.97	209.02
23	Beverages	0.73	177.19	204.05	204.65
24	Condiments	0.34	243.43	252.65	253.66
25	Spices	0.60	194.87	240.88	241.98
26	Dry Fruit	0.28	323.62	360.54	374.31
27	Bakery & Confectionary	2.98	146.63	155.01	156.93
28	Cigarettes	0.95	208.02	239.91	239.91
29	Betel Leaves & Nuts	0.19	175.09	206.59	209.56
30	Readymade Food	1.68	243.87	276.88	286.56
31	Sweetmeat & Nimco	0.38	245.29	285.91	300.05
32	Fish	0.27	199.08	230.15	242.80
33	Meat	2.70	301.12	377.26	386.55
34	Chicken Farm	0.92	243.61	265.67	226.34
35	Eggs	0.41	308.81	309.49	288.88
36	Potatoes	0.58	323.98	371.47	450.62
37	Onions	0.62	249.17	398.43	666.93
38	Tomatoes	0.48	208.50	331.32	278.11
39	Vegetables	1.84	311.05	434.82	392.49
40	Fresh Fruits	1.62	214.85	277.88	257.51
	el, Textile & Footwear.	6.10	159.95	176.54	178.08
41	Cotton Cloth	1.62	159.43	187.53	188.62
42	Silk, Linen, Woolen/Cloth	0.58	160.35	180.26	182.24
43	Tailoring Charges	0.86	176.15	196.20	198.96
44	Hosiery	0.15	172.91	190.25	193.59
45	Readymade Garments	1.20	147.68	158.66	160.70
46	Woolen Readymade Garments	0.15	184.11	203.70	209.83
47	Footwear	1.53	157.22	162.49	162.65
House		23.43	203.90	216.73	217.91
48	House Rent Index (Combined)	23.43	203.90	216.73	217.91 (continued)

Table .	A10: Consumer Price Index Numbers by Ma	jor Groups and Sele	cted Comm	odities	
Item a	and Specification			Index	
	and Specification	Weights	Nov-09	Oct-10	Nov-10
	and Lighting.	7.29	213.97	256.98	259.06
49	Kerosene	0.14	447.00	497.88	497.88
50	Firewood	0.48	331.14	357.93	370.74
51	Match Box	0.13	200.00	200.00	200.00
52	Bulb & Tube	0.13	129.29	149.58	150.19
53	Electricity	4.37	163.57	208.03	208.03
54	Natural Gas	2.05	285.01	332.39	336.76
H.Hol	d. Furniture & Equipment Etc.	3.29	168.10	182.40	184.47
55	Utensils	0.37	155.45	165.31	165.93
56	Plastic Products	0.11	202.09	227.11	229.67
57	Suit case	0.05	162.77	177.02	178.94
58	House Hold Equipments	0.10	155.19	171.14	172.61
59	Furniture (Ready Made)	0.31	180.12	198.36	200.46
60	Furnishing	0.64	160.17	174.44	178.67
61	Elect. Iron Fans & Washing Machine	0.19	160.77	172.37	173.21
62	Sewing Machine, Clock And Needles	0.13	145.28	158.43	159.92
63	Refrigerator & Air conditioner	0.18	131.89	142.26	143.22
64	Marriage Hall	0.04	197.98	219.33	226.97
65	House Hold Servant	1.19	179.22	193.68	195.26
Transp	port & Communication.	7.32	197.68	227.96	228.79
66	Petrol	1.73	217.37	240.37	240.37
67	Diesel	0.21	447.68	498.07	498.07
68	CNG . Filling Charges	0.16	206.43	235.78	236.39
69	Service Charges	0.38	174.13	188.81	190.40
70	Vehicles	0.26	129.97	140.52	141.29
71	Tyre & Tube	0.28	163.02	185.52	190.22
72	Transport Fare/Charges	2.12	257.74	296.91	298.73
73	Train Fare	0.15	253.24	253.24	253.24
74	Air Fare	0.10	342.93	365.51	365.51
75	Communication	1.93	93.28	127.90	127.90
Recrea	ation & Entertainment.	0.83	122.61	139.28	139.45
76	Recreation	0.34	134.04	142.98	142.98
77	Entertainment	0.49	114.61	136.69	136.98
Educat	tion.	3.45	183.65	194.24	194.75
78	Tuition Fees	2.36	177.33	190.49	191.16
79	Stationery	0.35	178.83	193.17	193.54
80	Text Books	0.69	215.30	215.90	215.90
81	Computer & Allied Products	0.05	84.57	85.71	86.29
Clean	ing Laundry & Per. Appearance.	5.88	179.64	195.47	200.02
82	Washing Soap & Detergent	1.55	165.39	174.92	178.07
83	Toilet Soap	0.74	186.50	194.80	194.80
84	Tooth Paste	0.40	115.19	119.57	120.56
85	Shaving Articles	0.35	152.21	161.95	163.91
86	Cosmetics	1.43	162.33	173.05	176.44
87	Watches	0.06	138.95	152.90	152.72
88	Jewellery	0.39	408.18	493.88	520.07
89	Laundry Charges	0.22	183.82	208.52	211.78
90	Hair Cut & Beauty Parlour Charges	0.73	164.18	180.11	186.86
Medic	are.	2.07	153.91	170.04	178.98
91	Drugs & Medicares	1.08	124.67	137.18	137.35
92	Doctor's Fee	1.00	185.03	205.44	223.86

Table A11: Wholesale Price Index Numbers b	y major Group	os and Selected	Commodities	
Item and Specifications	Nov-09	Sep-10	Oct-10	Nov-10
GENERAL	220.98	258.22	266.19	275.46
FOOD	236.69	279.03	283.96	290.52
1 WHEAT	307.03	295.41	300.46	308.38
2 WHEAT FLOUR	294.05	287.07	294.87	299.59
3 MAIDA	292.94	273.28	275.44	277.81
4 BESAN	162.02	227.80	232.02	233.82
5 RICE	303.58	342.52	347.10	351.56
6 MAIZE	197.23	355.32	345.65	341.87
7 JOWAR	215.10	381.56	385.88	360.30
8 BAJRA	176.07	280.97	279.95	268.71
9 BEANS	250.56	304.84	304.94 233.53	306.47
10 GRAM WHOLE 11 GRAM SPLIT	211.07 147.63	226.41	233.53	241.69 226.73
12 MASOOR	331.24	222.67 313.36	317.13	318.16
13 MASH	239.41	334.56	328.13	319.06
14 MOONG	228.90	442.30	455.83	443.29
15 POTATOES	324.08	418.03	374.91	457.43
16 ONIONS	260.47	546.32	448.80	628.11
17 TOMATOES	202.66	372.91	347.41	291.82
18 VEGETABLES	330.21	480.83	543.71	485.73
19 FRESH FRUITS	161.31	225.37	208.26	202.72
20 DRY FRUITS	242.55	264.68	274.09	286.67
21 FRESH MILK	204.52	225.41	233.59	239.89
22 POWDERED MILK	221.74	228.19	228.52	229.09
23 MILK FOOD	170.90	183.39	183.61	182.52
24 VEGETABLE GHEE	249.30	305.68	316.21	334.36
25 MUST ARD & RAPESEED OIL	262.32	304.10	313.33	326.75
26 COTTON SEED OIL	260.34	296.50	305.41	319.21
27 COOKING OIL	217.56	236.55	237.87	247.35
28 OIL CAKES	306.99	350.33	345.44	364.53
29 GUR	251.61	327.86	332.82	313.22
30 SUGAR REFINED	198.60	299.53	300.19	317.71
31 CHICKEN	255.59	303.34	268.78	229.31
32 EGGS	318.75	273.69	313.62	302.17
33 FISH	137.57	151.17	155.00	157.71
34 MEAT	284.19	353.85	362.56	367.22
35 SPICES	202.74	276.68	276.80	277.84
36 CONDIMENTS 37 SALT	285.94 168.67	300.98	301.29	301.29 171.87
38 TEA	161.24	171.87 169.43	171.87 168.34	169.50
39 BEVERAGES	140.97	146.09	147.28	151.18
40 MINERAL WATER	126.74	135.11	138.18	137.99
41 FRUIT PREPARED/PRESERVED	174.68	221.04	223.48	224.04
42 VEGET ABLES PREPARED/PRESERVED	175.64	193.22	194.41	197.79
43 SUGAR CONFECTIONARY	100.46	100.57	100.57	100.57
RAW MATERIAL	208.71	309.74	327.07	356.30
44 COTTON	172.32	292.38	320.57	369.80
45 COTTON SEEDS	274.41	305.32	315.54	330.24
46 MUSTARD/RAPESEEDS	268.25	314.41	334.77	349.30
47 TOBACCO	215.81	247.24	247.25	248.01
48 SUGAR CANE	294.37	499.09	499.09	499.09
49 WOOL	142.86	151.09	153.73	153.72
50 HIDES	134.23	138.25	138.66	139.06
51 SKINS	104.82	105.27	106.18	106.04
52 PIGIRON	321.93	321.93	321.93	321.93
				(continued)

(continued)

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

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Item and Specifications	Nov-09	Sep-10	Oct-10	Nov-10
FUEL & LIGHT	294.39	313.03	325.57	332.06
53 COAL	141.00	142.50	142.50	144.00
54 COKE	624.58	693.98	693.98	693.98
55 DIESEL OIL	439.35	457.22	486.97	486.97
56 MOTOR SPRIT	214.97	218.19	237.66	237.66
57 MOBIL OIL	199.00	210.76	210.65	214.24
58 FURNACE OIL	365.78	355.22	370.17	397.28
59 KEROSINE OIL	425.10	446.67	481.70	481.70
60 NATURAL GAS	217.12	256.00	256.00	256.00
61 ELECTRICITY IND. SUPPLY TARIFF-B	179.27	214.08	217.55	217.55
62 ELEC. AGRICULTURE TARIFF-D	177.78	231.01	237.51	237.51
63 FIRE WOOD MANUFACTURE	273.61	288.45	290.86	303.63
	150.65	175.40	182.66	193.44
64 SOLE LEATHER 65 CHROME LEATHER	137.13 212.23	134.06	134.06	134.06
66 COTTON YARN		212.23	212.23	212.23
67 BLENDED YARN	128.24 145.63	174.23 187.69	198.09 191.95	227.32 197.69
68 NYLON YARN	114.88	133.93	140.89	150.92
69 COTTON TEXTILES	146.83	159.50	160.30	163.45
70 HOSIERY	155.79	163.64	164.21	165.03
71 SILK & REYON TEXTILES	148.10	152.72	155.31	156.03
72 WOOLEN TEXTILES	139.69	143.79	144.42	146.21
73 JUTE MANUFACTURES	123.97	139.08	141.53	143.28
74 MATTRESSES	138.89	145.94	148.33	150.22
75 READY MADE GARMENTS	118.87	121.18	121.18	121.18
76 UTENSILS	148.79	149.98	149.98	149.98
77 PLASTIC PRODUCTS	138.32	148.67	148.83	150.30
78 GLASS PRODUCTS	179.65	182.18	182.18	182.18
79 CHEMICALS	178.18	204.08	206.69	211.90
80 DYING MATERIALS	87.20	94.80	96.14	96.14
81 SOAPS	182.93	190.11	190.31	194.85
82 COSMETICS	119.84	128.74	129.81	152.22
83 DRUGS & MEDICINES	113.17	122.68	123.55	123.48
84 FERTILIZERS	284.38	306.78	308.54	324.79
85 PESTICIDES & INSECTICISED	147.16	155.88	156.11	156.80
86 MACHINERY	175.32	191.25	191.25	191.25
87 TRANSPORTS	128.99	144.27	149.09	157.98
88 TYRES	208.57	226.09	226.31	226.37
89 TUBES	187.13	205.86	205.86	205.86
90 AUDIO-VISUAL INSTRUMENTS	92.28	92.60	92.60	92.60
91 OTHER ELECTRICAL GOODS	131.07	136.83	136.83	136.86
92 CIGARETTES	179.05	265.10	262.79	262.67
93 PAPER	105.98	106.36	107.79	107.79
94 MATCHES	124.26	126.93	126.93	126.93
95 FOOT WEAR	192.15	199.97	199.97	199.97
BUILDING MATERIAL	187.33	215.35	219.69	222.70
96 CEMENT	124.02	126.48	127.27	134.70
97 BRICKS	239.05	273.20	276.71	281.96
98 CEMENT BLOCKS	166.63	170.83	170.83	170.83
99 TILES	99.67	99.67	99.67	99.67
100 IRON BARS & SHEETS	232.66	281.31	288.78	289.10
101 PIPE FITTINGS	180.95	185.07	185.42	186.36
102 TIMBER	208.88	221.30	222.34	223.10
103 GLASS SHEETS	172.95	184.74	187.35	187.35
104 PAINTS & VARNISHES	146.05	167.15	170.10	178.02
105 SANITARY WARES	159.33	162.40	162.40	162.40
106 WIRES AND CABLES	262.08	286.09	286.09	286.09

Table A12: Price Indices - Base 2000-01=100

Period		CPI			WPI		SPI *
	Overall	Food	Non-food	Overall	Food	Non-food	
2004-05	121.98	125.69	119.47	124.14	125.03	123.50	126.52
2005-06	131.64	134.39	129.78	136.68	133.78	138.78	136.43
2006-07	141.87	148.21	137.59	146.18	145.67	146.53	149.29
2007-08	158.90	174.36	148.44	170.15	173.27	167.88	170.55
2008-09	191.90	215.69	175.82	201.10	213.54	192.04	209.29
2009-10	214.41	242.59	195.36	226.49	239.01	217.39	236.87
2008 Jan.	157.73	172.96	147.43	166.75	172.50	162.57	168.24
Feb.	158.50	172.36	149.26	168.81	172.30	166.20	166.94
Mar.	163.38	180.52	151.79	175.55	172.40	174.08	173.96
Apr.	168.34	188.37	151.79	183.09	184.07	182.38	183.29
May.	172.87	196.28	157.04	192.19	194.26	190.68	191.49
Jun.	172.87	201.12		192.19	194.26	196.85	191.49
			159.85				
Jul.	182.39	206.85	165.85	206.53	206.37	206.65	202.94
Aug.	186.29	212.21	168.76	211.60	211.91	211.37	208.85
Sep.	188.10	214.13	170.50	211.02	213.63	209.12	209.52
Oct.	192.08	221.44	172.23	207.08	219.58	197.98	213.37
Nov.	191.85	218.12	174.09	196.50	215.97	182.33	211.03
Dec.	190.90	214.71	174.80	192.62	210.77	179.41	207.99
2009 Jan.	190.09	210.33	176.40	192.91	208.80	181.35	204.02
Feb.	191.90	211.58	178.59	194.19	210.31	182.46	206.78
Mar.	194.53	216.13	179.92	195.00	212.16	182.51	208.40
Apr.	197.28	220.46	181.61	198.28	215.69	185.61	210.85
May.	197.74	220.04	182.66	201.29	217.50	189.49	212.62
Jun.	199.69	222.23	184.45	206.13	219.81	196.17	215.09
Jul	202.77	228.93	185.08	207.57	224.31	195.39	222.00
Aug	206.21	234.69	186.95	212.16	229.52	199.53	225.18
Sep	207.14	235.59	187.90	212.53	230.34	199.57	227.34
Oct	209.11	238.12	189.49	215.01	232.35	202.39	227.73
Nov	212.02	242.40	191.48	220.98	236.69	209.55	232.14
Dec	210.99	238.16	192.62	221.43	235.06	211.51	232.81
2010 Jan.	216.09	242.91	197.95	230.80	241.37	223.11	240.25
Feb	216.93	243.17	199.19	231.64	242.67	223.61	242.37
Mar	219.65	247.55	200.78	237.51	246.68	230.84	244.98
Apr	223.44	252.53	203.77	241.88	248.53	237.04	247.50
May	223.58	252.62	203.77	243.98	248.81	240.47	249.51
Jun	225.03	254.42	205.15	242.44	251.73	235.68	250.61
Jul	227.79	258.19	207.23	246.48	256.40	239.26	255.13
Aug	233.50	271.35	207.23	252.93	267.12	242.60	261.70
	239.69	285.63	207.91	258.22	279.03	242.00	270.74
Sep Oct	239.69			258.22	283.96	243.08	
		285.89	210.93				275.31
Nov	244.84	292.20	212.81	275.46	290.52	264.50	284.33

<sup>\*:</sup> all groups combined

	Sep-10	Oct-10	Nov-10
Energy			
Crude Oil (US\$ per barrel)*	76.2	81.7	81.7
IMF Energy Index (2005 = 100)	142.0	151.0	151.0
WB Energy Index (1990=100) @	262.2	277.6	287.8
Food	0.0	0.0	0.0
Rice (\$/MT)	517.7	533.1	533.1
Wheat (\$/MT)	271.9	270.3	270.3
Sugar (US cent / pound)	22.7	26.9	26.9
Palm Oil (\$/MT)	880.5	933.5	933.5
Soybean Oil (\$/MT)	929.8	1,034.9	1,034.9
Non-Food Non-Energy			
Cotton Outlook 'A' Index #	104.7	126.6	126.6
IMF Metal Price Index (2005=100)	179.2	185.3	185.3
Copper (\$/MT)	7,729.6	8,289.8	8,289.8
Aluminum (\$/MT)	2,171.3	2,342.2	2,342.2
Iron Ore (\$ cents/dry MT)	205.0	182.0	182.0
Tin (\$/MT)	22,694.4	26,237.1	26,237.1
Nickel (\$/MT)	22,690.1	23,793.7	23,793.7
Zinc (\$/MT)	2,151.0	2,373.6	2,373.6
Lead (\$/MT)	2,192.9	2,383.6	2,383.6
Uranium (\$/pound)	46.7	48.8	48.8
DAP (\$/MT)	518.5	575.0	588.0
Urea (\$/MT)	318.8	329.4	366.4

<sup>\$/</sup>MT = US\$ per metric tonne.

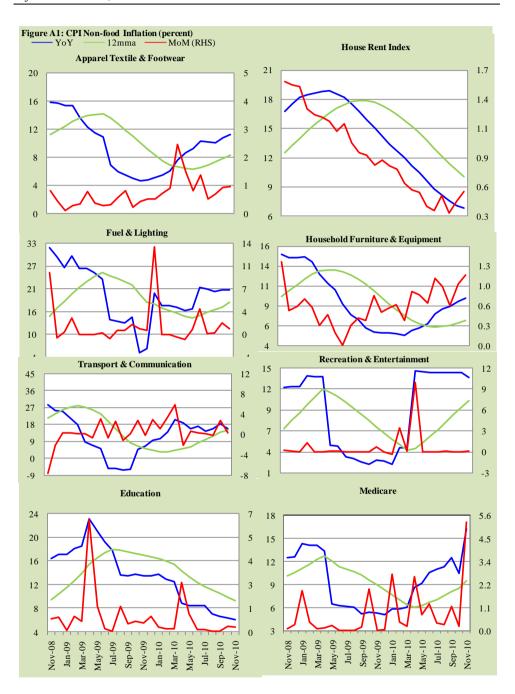
Source: IMF and World Bank.

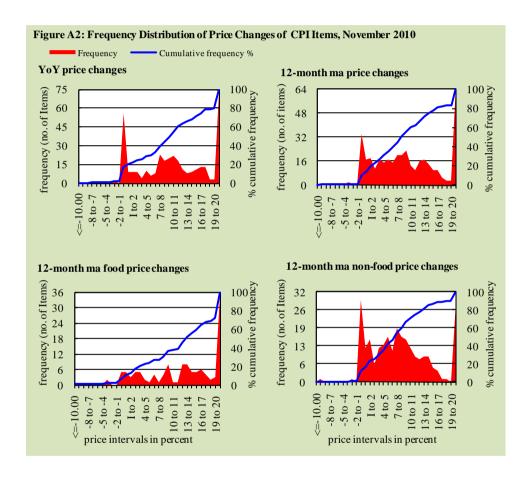
<sup>\*</sup> Crude Oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the

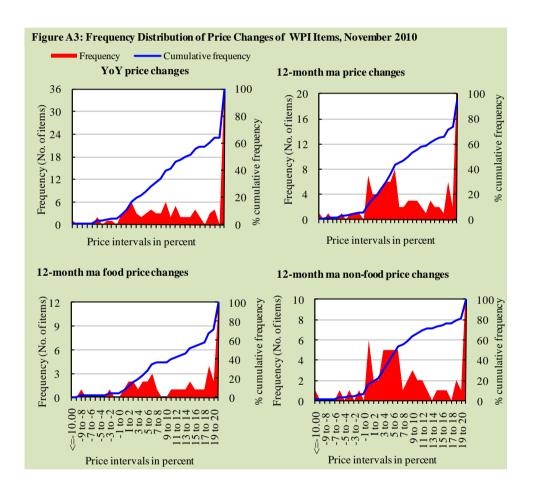
<sup>#</sup> Middling 1-3/32 inch staple, Liverpool Index "A", average of the cheapest Cts/lb five of fourteen styles, CIF Liverpool (Cotton Outlook, Liverpool). From January 1968 to May 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16. 2/

DAP: Diammonium Phosphate

<sup>@</sup> World bank commodity index for low and middle income countries







#### 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 2000-01.
- 3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities.
- 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:

$$\pi_{t} = (\frac{I_{t}}{I_{t-12}} - 1) \times 100$$

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:

$$\overline{\pi}_{t} = \left(\frac{\sum_{i=0}^{t-v} I_{t-i}}{\sum_{i=0}^{t-12-v} I_{t-12-i}} - 1\right) \times 100$$

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:

$$\pi_{t} = (\frac{I_{t}}{I_{t-1}} - 1) \times 100$$

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:

$$\widetilde{\pi}_{t} = \left(\frac{\sum_{i=0}^{11} I_{t-i}}{\sum_{i=0}^{11} I_{t-12-i}} - 1\right) \times 100$$

- 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:
    - 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  $C_{ii}$ : Contribution of i<sup>th</sup> item to the overall inflation

 $\alpha_{it-12} = \frac{I_{it-12}}{I_{t-12}}$ ; i.e. ratio of item's index to overall index in

the reference month

 $W_i$ : Weights of i<sup>th</sup> item

 $\pi_{it}$ : Inflation of i<sup>th</sup> item

 $\pi_{\scriptscriptstyle t}$  : Overall inflation