

Inflation Monitor

February 2011



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1. Overview

Easing a little more, inflationary pressure in the economy remained firm during February 2011, as evident from consumer price index and sensitive price indicator. CPI headline inflation dropped from 14.2 percent in January 2011 to 12.9 percent in February 2011 on YoY basis (**Figure 1.1**).

Similarly, SPI (YoY) inflation also slowed down in February 2011. For the first time in the current fiscal year both CPI

and SPI inflation decelerated for three straight months; partly because of no

Figure 1.1: Inflation Trend-YoY

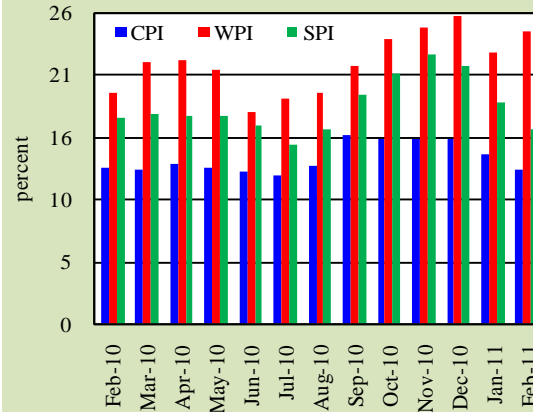


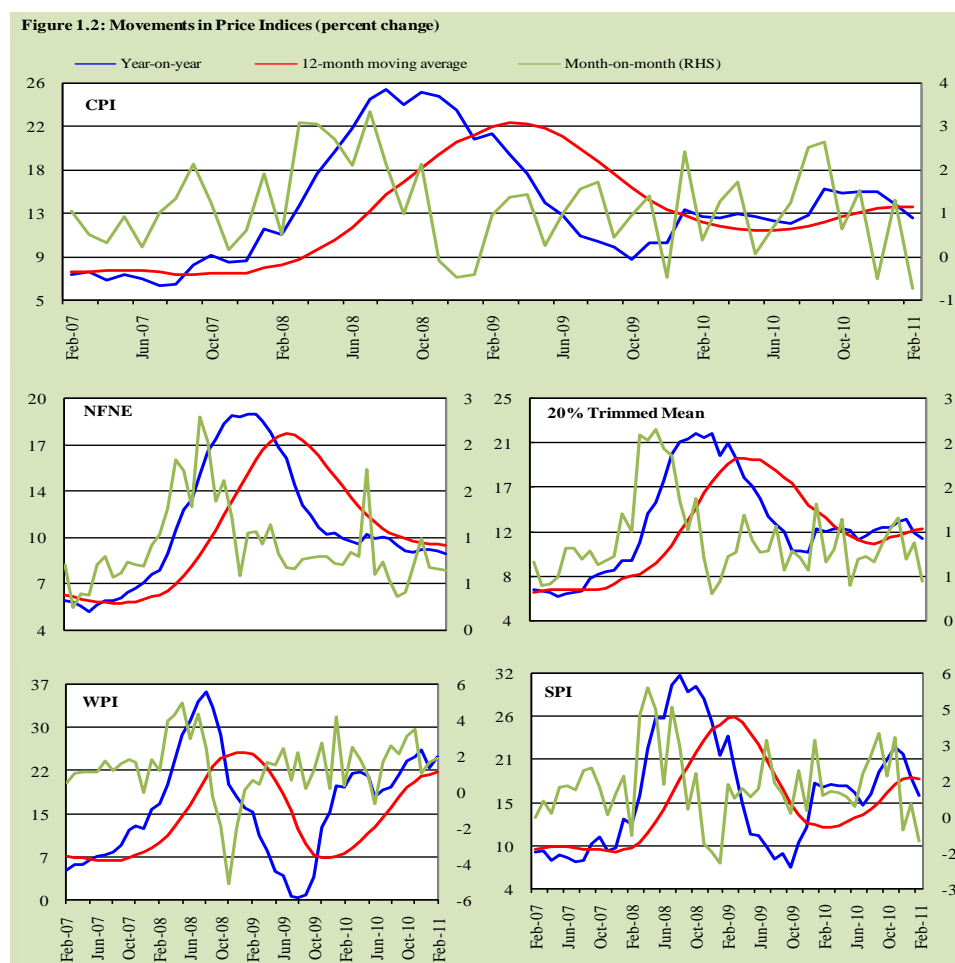
Table 1.1: Inflation Trends

											percent			
	CPI						Core Inflation							
	General		Food		Non-food		NFNE*		Trimmed		WPI		SPI**	
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
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
Dec-10	15.5	-0.5	20.4	-1.9	11.4	0.8	9.5	0.7	13.6	0.7	25.7	1.1	21.5	-0.5
Jan-11	14.2	1.3	20.4	2.1	9.0	0.6	9.4	0.7	12.2	0.9	22.6	1.6	18.4	0.6
Feb-11	12.9	-0.7	17.7	-2.1	8.9	0.5	9.2	0.6	11.7	0.4	24.4	1.9	16.2	-1.0

* NFNE is Non-food non-energy inflation; ** SPI for all income groups combined.

increase in domestic oil prices, and partly due to easing food group prices. This trend may be reversed in the months ahead considering the recent increase in domestic prices of petroleum products, upward adjustment in electricity tariffs, rising building material prices, and latest taxation measures to improve government revenues. On the contrary, WPI inflation increased during the month under review relative to the last month (see **Table 1.1** and **Figure 1.2**).

Like CPI headline inflation and SPI, both measures of core inflation depicted ease in inflationary pressures during the month under review. Core inflation, measured by 20% trimmed mean dropped to 11.7 percent on YoY basis in February 2011 from 12.2 percent in the preceding month. Non-food non-energy



(NFNE) inflation also decelerated to 9.2 percent (YoY) in February 2011 from 9.4 percent in the previous month.

During February 2011, inflation diffusion for overall CPI basket decreased to 48.9 percent in February 2011 from 49.9 percent in the last month. However, diffusion of core inflation (non-food non-energy) jumped during the month under review to 53.9 percent as against 47.0 percent in January 2011. Inflation diffusion in some of the group indices showed the similar peaks that Pakistan experienced in CY 2008 (a high inflation period).

2. Consumer Price Index

CPI inflation (YoY) dropped from 14.2 percent in January 2011 to 12.9 percent in February 2011. Inflation in both food and non-food groups decelerated but the decline in food group was more pronounced during the month (see **Figure 2.1**).

On MoM basis, CPI recorded deflation of 0.7 percent in February 2011 compared to 1.3 percent inflation in January 2011. This reversal came due to decline in food prices, recording deflation of 2.1 percent during February 2011 as against 2.1 percent inflation in the preceding month.

Decline in food inflation was evident from the fall in its weighted contribution to overall CPI inflation. However, this was still higher than the food group's weighted contribution to overall CPI in the corresponding month last year (see **Figure 2.2**).

Both food and non-food groups contributed almost equally to the overall CPI inflation in the first half of CY2010. But in the second half contribution of the food group was dominant that also continued in January and February 2011. This higher contribution from food group can be attributed to: (a) crop damages due to heavy rains and subsequent floods in the country; (b) domestic supply shortage of sugar; (c) rise in international prices of sugar, tea, and edible oil; and (d) strong external demand for our vegetables, meat, and fruits.

Figure 2.1: CPI Inflation (YoY)

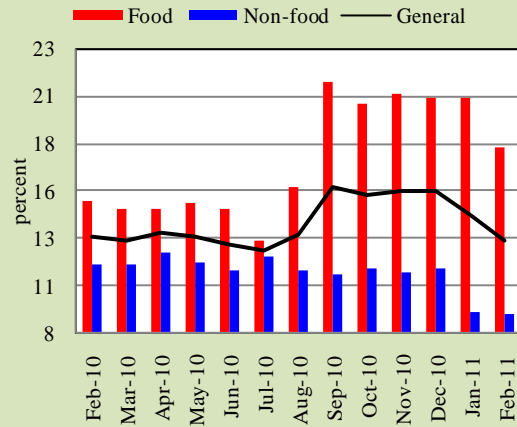


Figure 2.2: Contribution Towards Inflation (YoY)

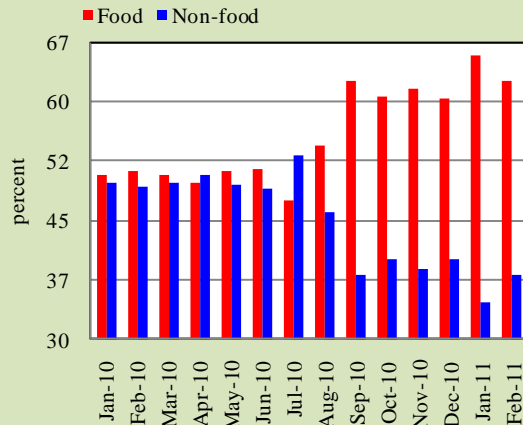
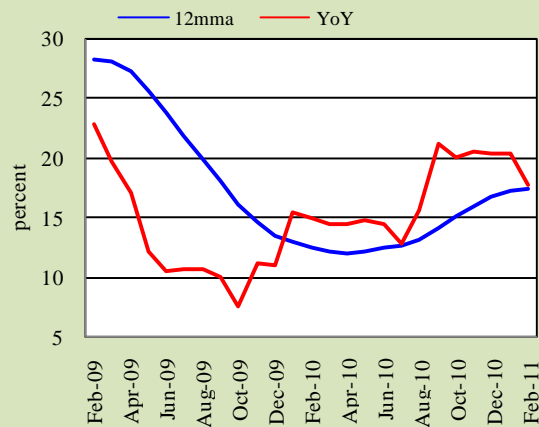


Figure 2.3 CPI Food Inflation



2.1 Food Inflation

CPI food inflation (YoY) dropped from 20.4 percent in January 2011 to 17.7 percent in February 2011. On MoM basis food prices registered 2.1 percent deflation in February 2011 as against 2.1 percent inflation in January 2011 (see **Figure 2.3**).

Segregated analysis of food group revealed a sharp decline in prices of the perishable food items, pulses, and oil & ghee in February 2011. Also, inflation in meat and dairy items dropped to single digit; first time in the last 12-months (see **Figure 2.4**).

The pace of increase in the prices of pulses slowed down somewhat during the last four months compared to the first four months of current fiscal year. Flood damages increased the import requirements of mash, pulse and the country became an importer from an exporter in the case of mung pulse. Fortunately, an improvement in the output of lentils in India resulted in decline in its international price. As a result, domestic lentil (masoor pulse) price also fell during recent months.

Among other food items, prices of bakery products, tea, beverages, and readymade food remained strong on the back of rising international prices of sugar, tea and edible oil.

2.2 Non-food Inflation

CPI non-food inflation dropped from 9.0 percent in January 2011 to 8.9 percent in February 2011; it was 11.5 percent in the corresponding month last year. In H1-FY11, CPI non-food inflation oscillated in a narrow range, converging to the 12-month moving average

Figure 2.4: Inflation in Major Food Groups

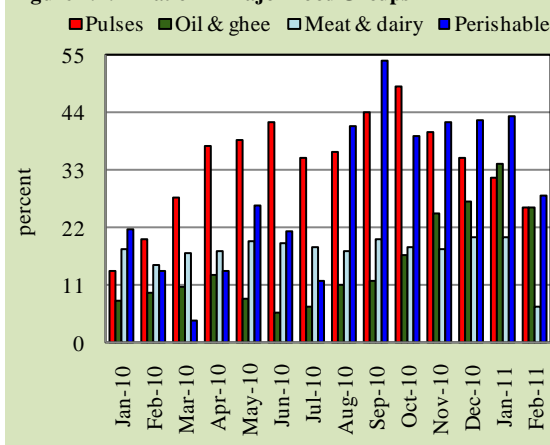
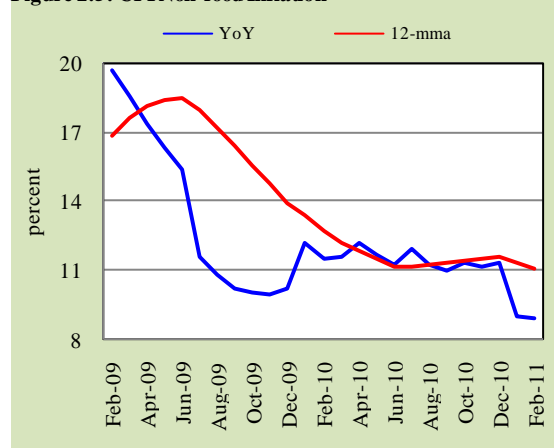
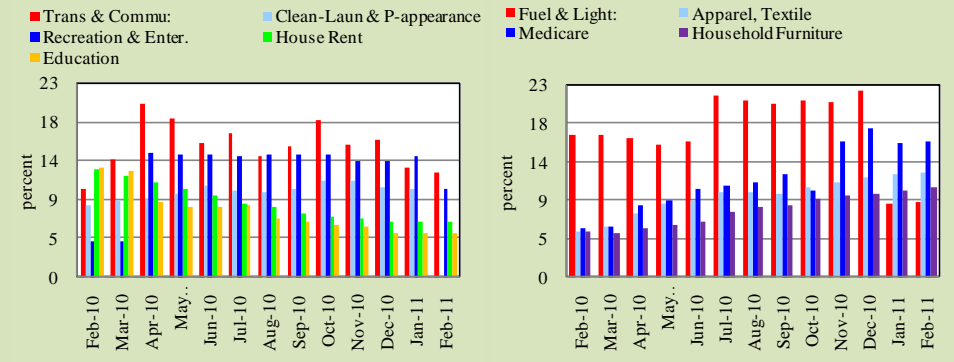


Figure 2.5: CPI Non-food Inflation



(12mma), that showed its stubbornness (see **Figure 2.5**). However, from January 2011 onwards, CPI non-food inflation (YoY) slid downwards from 12mma. It seems a temporary phenomenon considering the expected upward adjustment(s) in the prices of domestic petroleum products and in electricity tariffs as a consequence of recent surge in global crude oil prices.

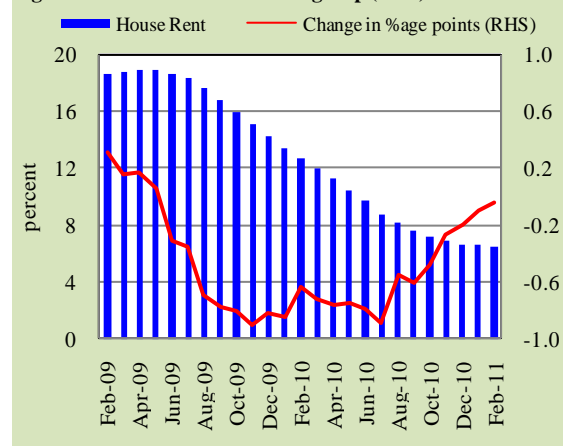
Figure 2.6: Inflation in Selected CPI NoN-food Sub-groups



Four out of nine sub-groups of the CPI non-food group with 31.5 percent share observed rise in inflation whereas the other five sub-groups with 68.5 percent share showed a decline in inflation during February 2011. Inflation in recreation & entertainment sub-group fell by 3.7 percentage points in February 2011 compared to the corresponding month in 2010 (see **Figure 2.6**).

Inflation in House Rent Index eased slightly from 6.6 percent in the last month to 6.5 percent in February 2011. However, it is likely that the declining trend in HRI will reverse in months ahead due to rising building material prices in the international as well as domestic market. An acceleration in HRI inflation would strongly impact the CPI non-food inflation as it has 39.3 percent weight in the non-food basket (see **Figure 2.7**).

Figure 2.7: Inflation in HRI Sub-group (YoY)



2.3 Inflation Diffusion

With the recent history of higher than the target inflation in the country, it is important to look at how widespread inflation is in the 374 commodities in the

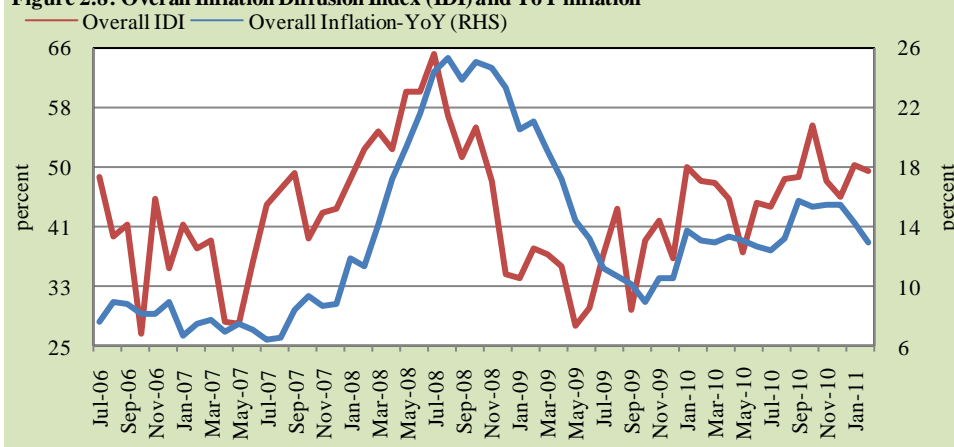
CPI basket. For this purpose we constructed an index, called inflation diffusion index (IDI), based on MoM change in the prices at micro level. It is the difference between the share of items with increasing prices and the share of items with falling prices in CPI basket¹.

Table 2.2: Inflation Diffusion Index - based on MoM change (percent)

	General	Food Beverages & Tobacco	Apparel, Textile & Footwear	Fuel & Lighting	Household Furniture & Equipment	Transport & Communi- cation	Recreation & Entertainment	Education	Cleaning, Laundry & Personal Appearance	Medicare	NFNE*
Feb-10	47.77	53.70	64.29	13.33	79.55	37.21	18.75	29.17	52.78	10.34	48.71
Mar-10	47.34	45.79	73.81	13.33	86.36	44.19	31.25	29.17	38.89	10.34	50.00
Apr-10	45.35	40.00	52.38	6.67	90.91	41.86	31.25	33.33	61.11	6.90	50.00
May-10	37.96	23.30	64.29	-6.67	84.09	13.95	43.75	33.33	61.11	10.34	48.28
Jun-10	44.57	43.12	69.05	26.67	75.00	37.21	-18.75	20.83	58.33	24.14	48.28
Jul-10	44.17	45.45	59.52	40.00	88.64	30.23	-6.25	12.50	55.56	10.34	44.40
Aug-10	47.91	69.72	61.90	26.67	90.91	30.23	18.75	12.50	13.89	3.45	39.22
Sep-10	48.33	61.82	69.05	20.00	88.64	20.93	0.00	20.83	38.89	20.69	45.26
Oct-10	55.25	52.68	80.95	73.33	93.18	44.19	25.00	16.67	61.11	17.24	54.74
Nov-10	47.65	42.34	76.19	20.00	95.45	30.23	18.75	29.17	58.33	10.34	52.16
Dec-10	45.53	38.89	80.95	53.33	93.18	27.91	12.50	0.00	52.78	13.79	48.71
Jan-11	49.86	61.47	78.57	20.00	84.09	30.23	31.25	25.00	27.78	13.79	46.98
Feb-11	48.88	43.52	78.57	20.00	86.36	53.49	31.25	16.67	44.44	17.24	53.88

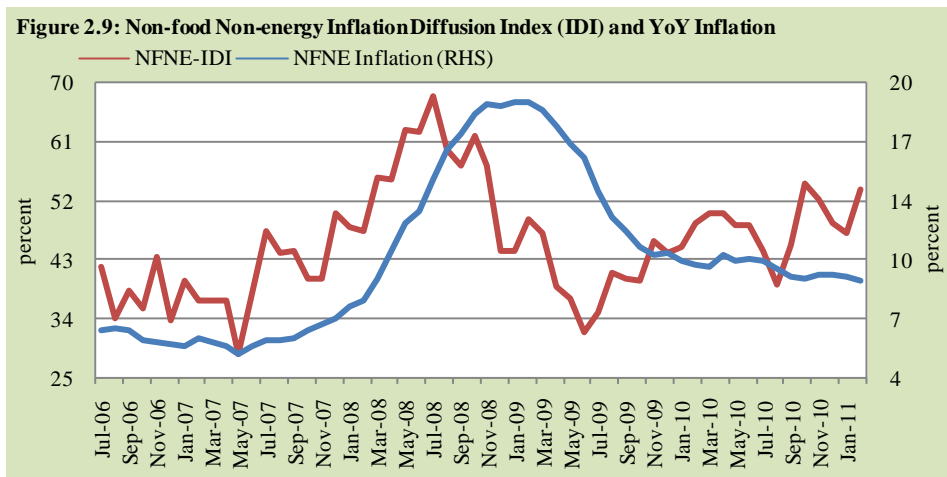
*: Non-food-non-energy

Figure 2.8: Overall Inflation Diffusion Index (IDI) and YoY inflation



The diffusion of inflation in February 2011 for overall CPI basket decreased to 48.9 percent in February 2011 from 49.9 percent in the last month. But this decline in inflation diffusion index was lower compared to the deceleration in headline inflation (see **Table 2.2** and **Figure 2.8**). As reported in the **Table 2.2**, after a short respite, the inflation diffusion index for non-food non-energy group trended upward during February 2011 despite reversal in the behaviour of core

¹ For details, see Appendix B



inflation during the last couple of months (see **Figure 2.9**). It shows the reversal in the non-food non-energy inflation may be short lived and a concern about the core inflation lives. The diffusion indices of inflation for food & beverages apparel, textile & footwear, fuel & lighting, household furniture & equipment groups (accounting for 57.02% of the basket) in February 2011 were at diffusion levels experienced in 2008 for these groups (see **Figure A4 of Appendix A**)².

2.4 Income Group-wise Inflation

Income group-wise price movements' data shows that inflation hurts the poor relatively more than the rich. In February 2011 the three lower income groups faced higher inflation than overall inflation (see **Table 2.3**). The highest income

Table 2.3: Income Group-wise Inflation (YoY)

	Feb-10			Jan-11			Feb-11		
	General	Food	Non-food	General	Food	Non-food	General	Food	Non-food
Up to Rs. 3000	14.3	16.8	11.2	16.1	20.9	10.0	14.2	17.5	10.0
Rs. 3001-5000	14.0	16.3	11.4	15.7	20.6	9.7	13.9	17.4	9.6
Rs. 5000-12000	13.3	15.4	11.3	14.8	20.4	9.1	13.3	17.6	8.9
Above Rs. 12000	12.5	13.8	11.8	13.3	20.3	8.9	12.4	18.0	10.9
All income groups	13.0	14.9	11.5	14.2	20.4	9.0	12.9	17.7	8.9

group experienced higher than average food and non-food inflation during February 2011. Interestingly, the group at number three in the income bracket seemed least affected during the month.

² We are thankful to Jahanzeb Malik and Javed Iqbal of Research Department (SBP) for sharing their original exercise on inflation diffusion index for Pakistan

2.5 City-wise Inflation

In February 2011, the number of cities having above average inflation was same as in the last month. Out of 35 cities, 22 had above 12.9 percent (average inflation) in the month under review compared to 19 cities recording higher than the average inflation (13.0

percent) in the corresponding month last year (see **Table 2.4**).

Kunri (in Sindh province) observed the highest whereas Lahore observed the lowest food inflation during February 2011. And Bahawalnagar saw the highest and Islamabad the lowest non-food inflation during the month under review.

	Feb-10		Jan-11		Feb-11	
	MoM	YoY	MoM	YoY	MoM	YoY
Over all CPI	0.4	13.0	1.3	14.2	-0.7	12.9
Islamabad	0.4	11.0	1.3	10.6	-0.7	10.5
Lahore	0.2	13.1	0.8	11.4	0.1	9.7
Karachi	0.7	12.2	1.2	12.6	-0.8	10.6
Quetta	0.6	11.0	0.7	15.7	-1.1	12.8
Peshawar	0.7	12.3	0.8	13.9	-1.9	13.7

3. Wholesale Price Index

Unlike ease in CPI and SPI inflation, WPI inflation (YoY) increased to 24.4 percent during February 2011 compared to 22.6 percent in the previous month.

Figure 3.1: Wholesale Price Inflation (YoY)

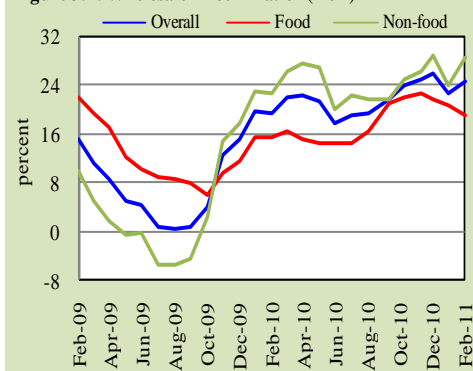
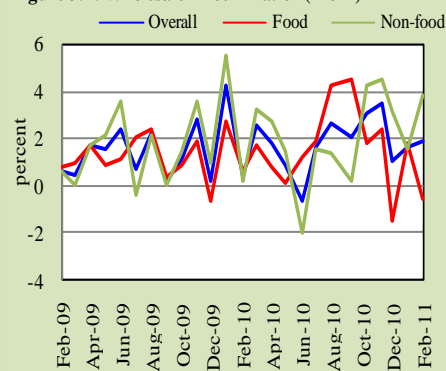


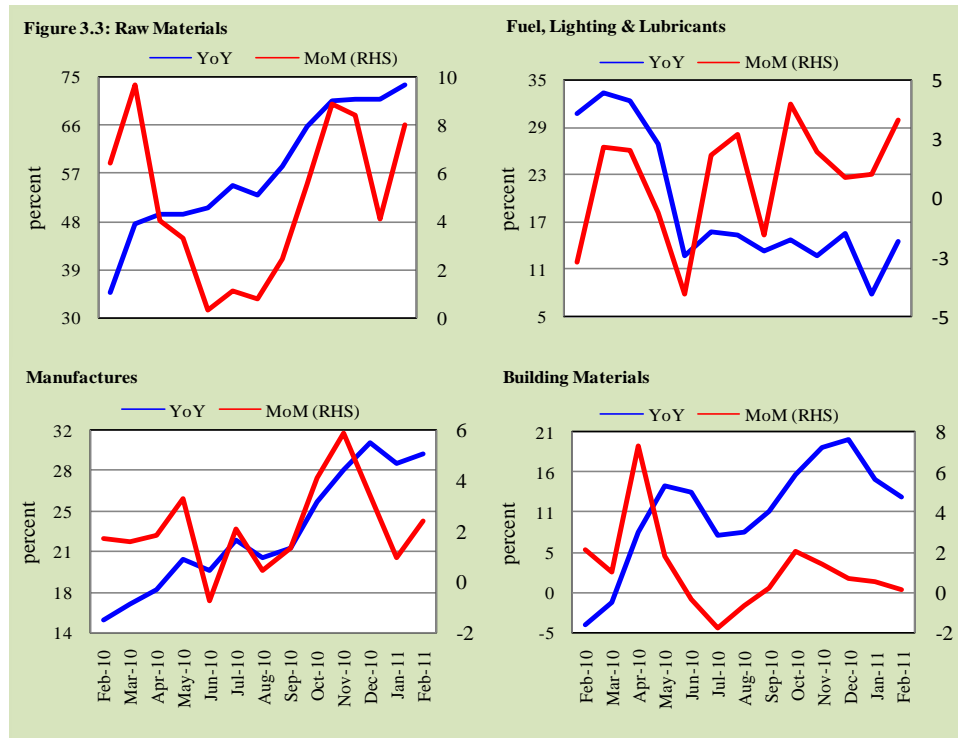
Figure 3.2: Wholesale Price Inflation (MoM)



Despite ease in WPI food group inflation, overall WPI inflation surged due to acceleration in WPI non food inflation (see **Figure 3.1**).

On MoM basis, WPI inflation increased to 1.9 percent in February 2011 from 1.6 percent in the previous month. The increase was entirely attributed to a surge in WPI non food MoM inflation as WPI food prices declined during the month under review compared to the previous month (see **Figure 3.2**) on account of improved supply of perishable food items in domestic market.

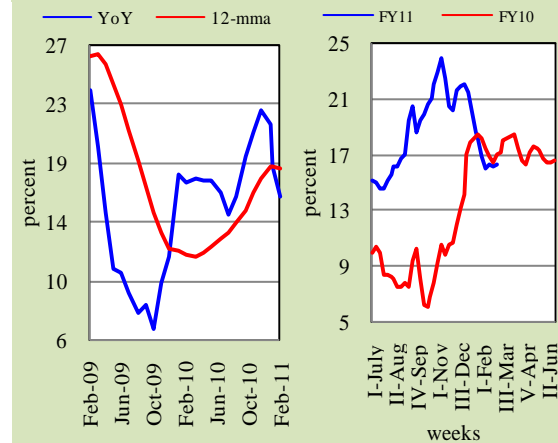
WPI food inflation eased to 19.2 percent YoY during February 2011 from 20.6 in January 2011. WPI non-food inflation increased to 28.6 percent YoY during February 2011 from 24.2 percent in January 2011. The same was 22.6 percent in the corresponding month last year. Segregated analysis of WPI non-food group's sub-groups indicated that the highest inflation was recorded in raw materials sub-group (see **Figure 3.3**).



4. Sensitive Price Indicator

Inflation measured by Sensitive Price Indicator (SPI) easing for the third consecutive month, dropped to 16.2 percent in February 2011 from 18.4 percent in the last month. The ease is largely attributed to improved supply of food related items such as potatoes, tomatoes, onions, and vegetables (see **Figures**

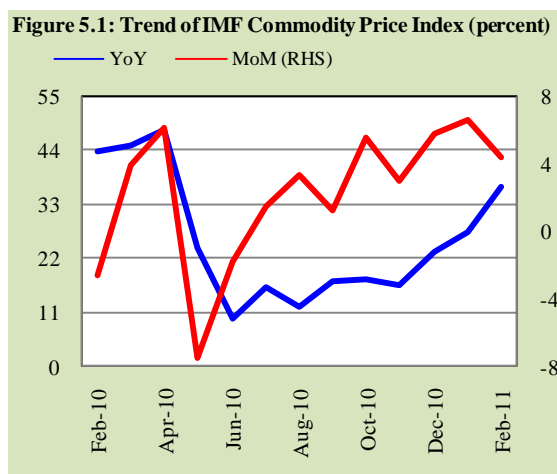
Figure 4.1: SPI Inflation - YoY



4.1). However, on week-on-week basis, SPI declined only in the first week of the month, resurging in the later weeks of the month.

5. Global Commodity Prices

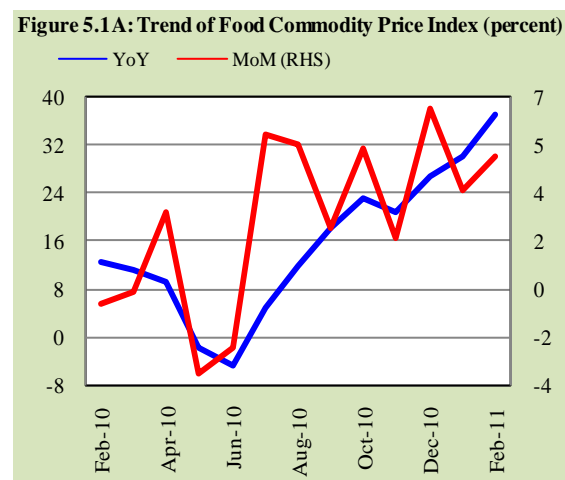
A continuous rising trend is observed in world commodity prices since November 2010 reaching the highest levels of the last ten months in February 2011. International commodity prices measured by IMF primary commodity prices index rose by 36.8 percent on YoY basis in February 2011, which was 9.2 percentage points higher than the increase observed in the first month of CY 2011. This surge in global commodity prices was spread over food as well as all sub-groups of non-food group (see **Figure 5.1**).



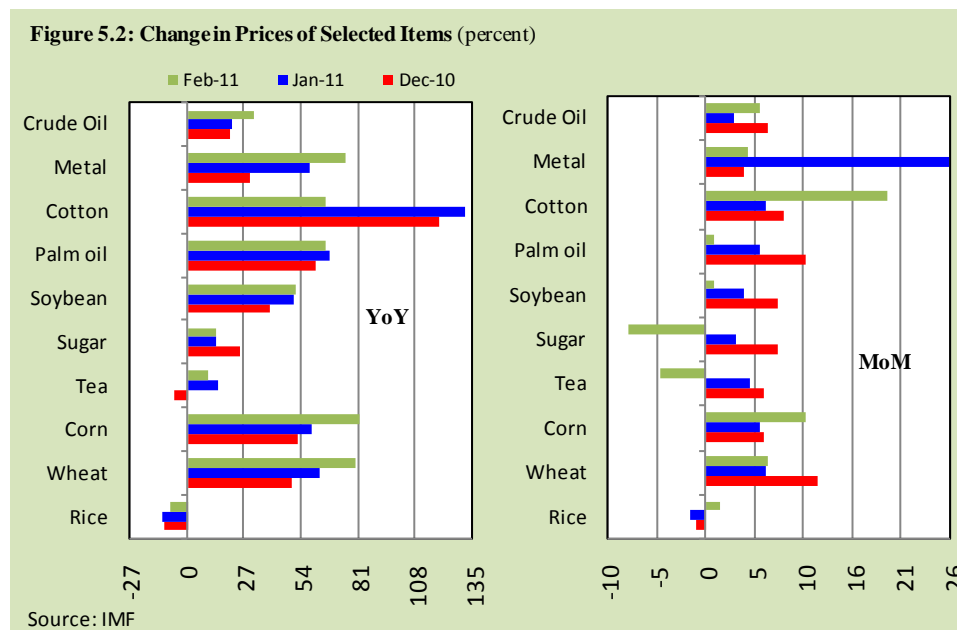
A continuous surge in food commodity prices was shared by wheat, corn, sugar, and vegetable oil on the back of strong global demand, unfavorable weather in USA and China, low level of stock of some commodities, and other supply concerns. In non-food group, there was a strong gain in nearly all commodity indices in February 2011. Commodity industrial inputs price index (comprising agricultural raw material, fuel, and metal prices indices) surged in the month under review due to ongoing conflict and supply losses in Libya, and unrest in other oil producing countries. Strong demand, supply shortfalls from Canada and Indonesia, and depreciation of US dollar were the driving factors behind recent metal price climb.

Food Group

Food inflation (measured by IMF commodity food prices index) rose to 37.2 percent in February 2011 compared to



30.0 percent rise in the preceding month (see **Figure 5.1A**). This was mainly due to surge in the prices of wheat, corn, and edible oil (see **Figure 5.2**).



International wheat prices surged by 79.1 percent in the month under review compared to 62.3 percent in January 2011 on substantial buying by the importers to pile up inventories in anticipation of higher food prices as drought threatened crops in China (the world's biggest grower) and thus the global supplies. Moreover, political unrest in some countries pressurized governments there to raise wheat stocks to ensure food availability for their people. The dry spell in China also affected crops as the weather became warmer because the winter wheat needed relatively more water while turning green.

Sugar prices rose on YoY basis by 13.3 percent in February 2011 compared to 13.0 percent in January 2011. These prices declined by 8.3 percent on MoM basis on the back of rising sugar output in Brazil (the world's largest producer) less than feared damage by the cyclone 'Yasi' in Australia, and some low demand prospects from China (as a result of monetary policy measures taken to curb inflation since mid-October 2010).

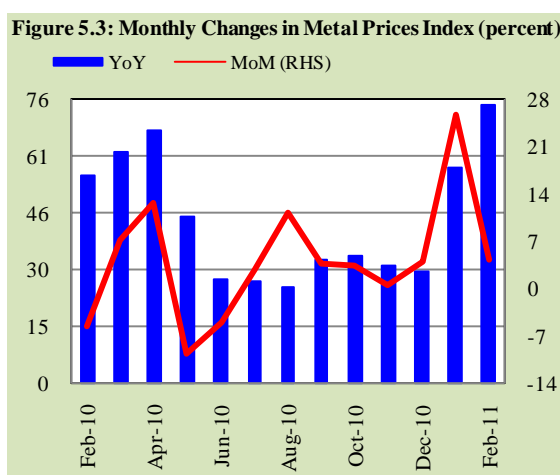
International edible oil prices inflation eased slightly during February 2011 compared to the last month. On YoY basis palm oil prices increased by 65.5 percent during the month under review compared to 66.9 percent increase in the preceding month. On MoM basis, palm oil prices inflation eased to 0.8 percent

compared to 5.7 percent in the previous month. It eased on higher expected palm oil production this year in Malaysia compared to the last year based upon improved weather conditions as a result of heavy rains there.

Prices of soybean oil increased by 50.9 percent during the period under review compared to 50.0 percent growth in the previous month. However, soybean oil prices change eased to 0.9 percent on MoM basis compared to 4.0 percent in the previous month. It eased on expectations that Brazil's output and exports may climb to record levels and on the speculation that US farmers may increase soybean plantation area. Brazil, the second-largest producer of soybeans, may have record output this year as rainfall in some areas boosted crop prospects.

Non-food group

Non-food commodities' prices escalated in international market during February 2011. Strong demand, supply shortfalls of metals from Canada and Indonesia, oil supply losses on the back of unrest in Libya, and depreciation of US dollar were major factors responsible for surge in the global commodity prices in February 2011.

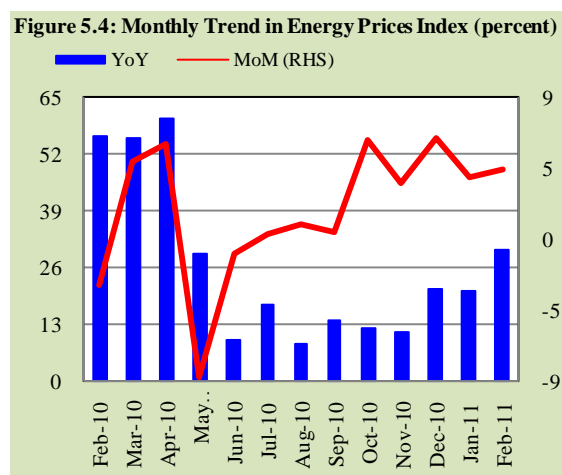


Within the non-food group, metals sub-group prices witnessed the highest growth on YoY basis in February 2011; seen after May 2006. Metal prices growth further increased by 18.6 percentage points to 74.4 percent during February 2011 as compared to 55.8 percent in the corresponding month of preceding year (see **Figure 5.3**). Copper prices reached US\$ 9880.9 per ton with 14.5 percent increase during February 2011 which was highest after September 2009. Similarly, tin prices reached new peak of US\$ 31619.7 per ton with 93.4 percent rise in February 2011 as against 12.5 percent decline in the previous month. The jump in tin prices was mainly due to continued decline in supply from Indonesia. Like copper and tin prices, the price of iron ore rose by 85.3 percent in February 2011 compared to 77.9 percent increase in January 2011. Tight supply and severe weather conditions in Australia and Brazil during the first two months of current year were the contributing factors to this raise. Nickel prices climbed by 49.4 percent on YoY basis in the month under review compared to 39.2 percent surge in the previous month

largely on the back of strong demand of iron and stainless steel and supply shortfalls from Canada and Indonesia.

As far the precious metal prices are concerned, per troy ounce gold prices increased in February 2011 by US\$ 16.3 to US\$ 1372.7 against the decline of US\$ 34.2 in the previous month. Similarly, silver prices rose by 94.4 percent on YoY basis in the month under review which was not only higher than 60.8 percent growth observed in last month but also higher than 18.1 percent increase witnessed during the corresponding month in preceding year. The rise in precious metals' prices was due to strong (investment) demand on the back of many geopolitical and macro concerns particularly the likely negative impact of higher oil prices on global inflation and growth.

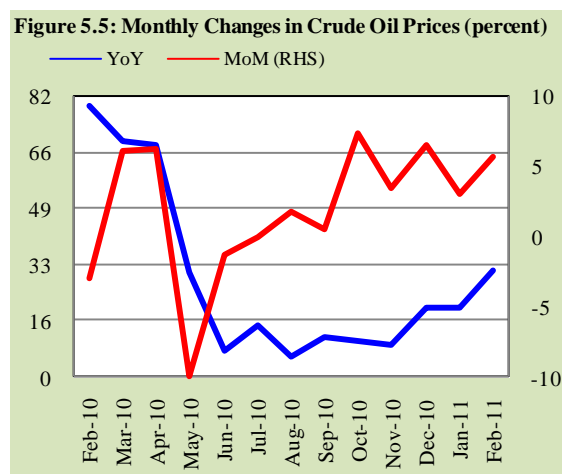
Similar to metals sub-group, energy (fuel) commodity prices index (which includes the petroleum, gas and coal prices indices) surged in February 2011 compared to some ease in prices pressure in the last month. Energy commodity index grew by 29.9 percent on YoY basis in the month under review compared to 20.6 percent growth in January 2011 (see **Figure 5.4**). This increase was attributed to strong crude oil prices despite ease in coal and natural gas prices.



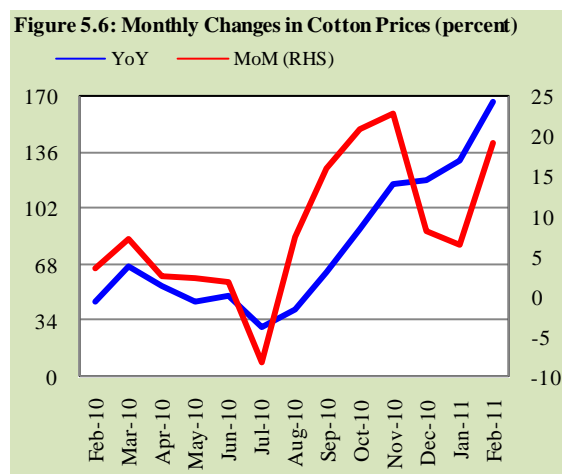
Within the energy sub-group, simple average of three spot prices of crude oil increased by 31.4 percent in February 2011 on YoY basis; highest growth during the last ten months (see **Figure 5.5**). As far as month on month (MoM) crude oil prices are concerned, it rose to 5.6 percent in February 2011 as compared to 3.0 percent increase in the preceding month. The recent rise in crude oil prices was mainly due to increasing unrest and oil supply losses in Libya³ whose production declined by more than sixty percent. In addition, concerns of potential disturbances in other oil producing countries also contributed to higher prices in international markets.

³ Out of the total production of 1.6 million barrel per day, more than one million barrel per day of Libyan crude production has been shut-in, which is around one percent of world oil supply.

In contrast to crude oil prices, the prices of other two components (coal and natural gas) of energy sub-group declined during February 2011. The prices of natural gas were dropped by 23.0 percent in February 2011 as against 18.5 percent rise in the corresponding month of preceding year. Weaker demand on the back of moderate weather in USA, milder weather in Europe, and ample inventories were the major causes of decline in gas prices during the month under review. Coal prices slightly eased in February 2011 on post flood recovery of operations in Australia and reduction in sales to China, which remained shy from the international market due to higher prices.



International cotton prices continued on its historical rising trend which was started with the current fiscal year and reached US\$ 2.13 per pound in February 2011. Cotton outlook A Index YoY growth further jumped by 35.1 percentage points in the month under review compared to 12.1 percentage points rise in the preceding month (See **Figure 5.6**). Cotton price soared to all time high in February 2011 due to tight supply, low stocks and strong demand. The strong demand was reflected from the 8.0 percent rise in the US consumption, more than expected increase in US exports, higher import by China and expectation of further strengthening cotton demand from China, the biggest consumer and importer of fiber. Meanwhile, supply expectations have been dimmed by flood in Queensland (one of Australia's two big cotton producing states) in the beginning of this calendar year, and a lack of clarity over shipments from India (the second largest cotton exporter in the world)



which resulted in delay in shipment of 5.5 million bales otherwise cleared for trade. The fall in the US cotton stock to its lowest level of the last 50 years also put upward pressures on the cotton prices.

Annexure A

Table A1: CPI Inflation by Groups

	Weights	MoM change			YoY change		
		Feb-10	Jan-11	Feb-11	Feb-10	Jan-11	Feb-11
I. Food Group	40.3	0.1	2.1	-2.1	14.9	20.4	17.7
II. Non-Food Group	59.7	0.6	0.6	0.5	11.5	9.0	8.9
Apparel, textile, etc.	6.1	0.7	0.9	0.9	5.6	12.4	12.6
House rent	23.4	0.8	0.7	0.7	12.7	6.6	6.5
Fuel & lighting	7.3	-0.1	0.8	0.2	17.2	8.8	9.1
Household furniture & equipment	3.3	0.7	1.0	0.9	5.5	10.4	10.7
Transport & communication	7.3	1.1	0.1	0.5	10.4	13.0	12.3
Recreation & entertainment	0.8	3.5	0.0	0.1	4.3	14.2	10.5
Education	3.5	0.2	0.3	0.1	12.9	5.3	5.2
Cleaning, laundry, etc.	5.9	0.5	0.3	0.2	9.8	10.7	10.4
Medicare	2.1	0.4	1.2	0.5	5.9	16.2	16.3
Headline	100.0	0.4	1.3	-0.7	13.0	14.2	12.9

Table A2: Distribution of Price Changes of CPI Basket (YoY)

Groups	% Change	Total Number of Items		No. of Items in each Inflation Range							
				Decrease or no change (0% or less)		Subdued increase (>0% but <5%)		Moderate increase (>5% but <10%)		Double digit increase (over 10%)	
		Feb-10	Feb-11	Feb-10	Feb-11	Feb-10	Feb-11	Feb-10	Feb-11	Feb-10	Feb-11
I. Food Group	17.7	106	106	21	7	12	13	15	11	58	75
II. Non-Food Group	8.9	250	250	55	51	61	33	71	60	63	106
Apparel, textile, etc.	12.6	42	42	6	5	9	1	21	13	6	23
House rent	6.5	1	1						1	1	
Fuel & lighting	9.1	15	15	1	5	0		0		14	10
Household furniture & equipt	10.7	44	44	1	1	20	3	19	18	4	22
Transport & communication	12.3	43	43	19	6	6	4	10	8	8	25
Recreation & entertainment	10.5	16	16	3	6	9	7	0	1	4	2
Education	5.2	24	24	3	9	3	8	6	6	12	1
Cleaning, laundry, etc.	10.4	36	36	6	6	8	4	13	13	9	13
Medicines	16.3	29	29	16	13	6	6	2		5	10
Overall	12.9	356	356	76	58	73	46	86	71	121	181

Note: Prices of 12 seasonal items were not reported during the month.

Table A3: Top Ten Contribution to YoY CPI Inflation in Feb 2011

Items	Weights	YoY change		Weighted Contribution	
		Feb-10	Feb-11		
A. Ranked by Weighted Contribution					
1	Milk Fresh	6.66	14.42	19.87	11.43
2	House Rent Index	23.43	12.73	6.52	11.4
3	Vegetable Ghee	2.67	12.12	40.31	9.34
4	Meat	2.70	19.51	28.86	8.65
5	Vegetables	1.92	36.24	29.41	4.74
6	Electricity	4.37	19.05	11.95	3.53
7	Readymade Food	1.68	13.44	19.51	2.93
8	Spices	0.60	10.82	52.00	2.60
9	Fresh Fruits	1.62	11.02	20.29	2.56
10	Communication	1.93	2.17	37.14	2.38
Total		47.58			59.55
B. Ranked by Percentage Change					
1	Tomatoes	0.45	-32.67	116.82	2.04
2	Pulse Moong	0.22	75.38	66.28	1.49
3	Spices	0.60	10.82	52.00	2.60
4	Vegetable Ghee	2.67	12.12	40.31	9.34
5	Communication	1.93	2.17	37.14	2.38
6	Cooking Oil	0.69	0.60	35.98	1.95
7	Besan	0.13	-6.60	31.43	0.30
8	Pulse Gram	0.43	-6.07	30.36	0.90
9	Vegetables	1.92	36.24	29.41	4.74
10	Meat	2.70	19.51	28.86	8.65
Total		11.74			34.38
C. Ranked by Weights					
1	House Rent Index	23.43	12.73	6.52	11.39
2	Milk Fresh	6.66	14.42	19.87	11.43
3	Wheat Flour	5.11	18.02	2.20	1.23
4	Electricity	4.37	19.05	11.95	3.53
5	Bakery & Confectionary	2.98	4.41	6.51	1.04
6	Meat	2.70	19.51	28.86	8.65
7	Vegetable Ghee	2.67	12.12	40.31	9.34
8	Tution Fees	2.36	8.82	6.75	1.03
9	Transport Fare/Charges	2.12	6.99	11.26	2.31
10	Natural Gas	2.05	16.91	3.45	0.84
Total		54.45			50.79

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 12.9 percent in February 2011.

Table A4: Distribution of Price Changes (YoY)- Selected CPI Items, February 2011				
Groups	Decrease or no change	Subdued increase (up to 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Cauliflower, Pulse Masoor, Sugar Refined, Maida, Ice Cream Walls, Toffee (Hilal), Chocolate Candy (Small Size)	Cigarettes Gold Leaf & Morven Gold, Turmeric powder national 250 grams, Coffee-Nescafe 75 grams, Fruit Juice Tetra Pack, Wheat Flour Bag, Pepper Black national, Cuminseed white National, Coriander Seed powder national, Curry powder national 200 grams, Wheat Flour Fine, Peas	Radish, Tea Loose Kenya Av.Qlty 250 grams, Chicken , Cigarettes Capstan, Tea (L/R) Brookbond Supreme 250 grams, Biscuits-Packed, Vinegar Synthetic, Eggs, Tea Lipton Yellow Label 200grams, Bread Plain Medium Size, Vermicelli	Cardamom Large Loose, Tomatoes, Chillies Green, Chillies, Powder national 200grams, Pulse Moong, Cucumber, Vegetable Ghee (Loose), Garlic, Kinnu, Cooking Oil, Vegetable Ghee Tin, Mutton
Apparel & Textile	Gents Shoes Paul Bata, Gents Sandal Bata, Child Shoe Power Lite Bata	Pullover Gents Oxford/Bon.	Awami-Suit W&W (Gents)Avg.Qlt, School Uni. Kameez, Shal.Boys, School Uni. Kameez, Shal.Girl	Lawn, Underwear Av.Qlty Medium Size, Brassier Av.Qlty.
House Rent Index			House Rent Index	
Fuel & Lighting	Match Box Small,Gas charges upto 3.3719 mmbtu, Gas Chrg 3.3719 - 6.7438 mmbtu			Gas Cylinder stand. Size, Bulb Philips 100-watts, Firewood whole, Kerosene Oil
Household Furniture & Equipment	Washing Machine Singer	Carpet Plain Avg. Qlty, Wall Clock Quartz Avg.Qlty, Tea-Set S.Steel 3 Pcs. M.Siz	Single Bed Without Foam Med., Cot Iron (With Niwar) S.Steel Plate	Pressure Cooker 4 ltr, Refg, Dawlence 10 cft. Water Cooler 9/10 ltr. Plastic
Transport & Communication	Platform Ticket, Internet Charges, CNG Filling Charges, Bus Fare Outside City	Motorcycle Honda Cd-70, Petrol Super, Internet Charges, CNG Filling Charges	Motor Cycle Service Charges, Car Suzuki 800 cc (W/O. A/C), Motorcycle Yamaha 100cc, Car Service Charges	Telephone Charges Local Call, Tel Charges Out Side City, Tyre Car With Tube General, Bus Fare Min
Recreation & Entertainment	Daily "Dawn", Daily "Jang", Daily "Nawa-e-Waqt"	Vid. Cassette Blk. Tdk/Sony, Dry Cell 1.5 Volt(Local),Tape Recorder Cassette Blan	Cinema Non-A/C High Class	Cinema A/C. Highest Class, TV. license Fee domestic
Education	Com. C.D. TDK/Imation, Urdu Book Class IX/X, Govt. College Fee Ist. Year	Pen Ink Dollor 57 ml Bottle, Eng. Book Ist.yr Complete Se, Govt. Engg. Coll. fee I year	Pencil goldfish, Exercise.Book Lined 80/100 P, Paper Foolscap	Govt. Medical College fee MBBS
Cleaning & Laundry	Surf (Medium) 160 grm, Washing Powder 1000 grm, Robin Blue (35 grams), Toilet Soap Lux 95 grams	Brylcreem 210 ML., Perfume Med.Size Medora/Broa	Wrist Watch Gents Citizen, Wrist Watch Ladies Citizen, Blade Treet Ordinary, Shaving Cream Touch	Silver Tezabi 24 ct, Gold Tezabi 24 ct, Washing Ch. Shirt, Artificial Jewellery Set
Medicare	Septran Tablets, Phenergan Syrup 120 ml., Betnesol Eye Drops	Lederplex Syrup, Ventolin Tab. 2mg., Amoxil Capsule 250 mg		Dettol (Medium), Polyfax Eye Ointment, Thermometer China

Table A5: City-wise Inflation by Income Groups, February 2011

		Upto Rs:3000						Rs 3001-5000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	-1.3	10.8	-2.9	13.1	1.2	7.6	-1.3	10.6	-3.0	12.9	1.1	7.7
2	Faisalabad	-0.7	11.9	-1.9	16.2	1.2	5.6	-0.7	12.3	-1.8	16.4	0.9	7.1
3	Rawalpindi	-1.0	12.1	-2.2	18.3	0.9	3.8	-1.1	11.0	-2.6	16.0	0.9	4.9
4	Multan	-0.9	15.6	-2.0	18.9	0.7	11.2	-1.2	14.7	-2.5	18.1	0.6	10.4
5	Gujranwala	-1.6	11.9	-3.3	15.6	0.9	6.9	-1.3	11.3	-2.6	14.9	0.6	6.9
6	Islamabad	-0.8	12.0	-2.3	21.0	1.4	1.2	-0.7	12.6	-2.1	20.7	1.4	3.1
7	Sargodha	-0.9	14.0	-1.9	17.8	0.4	9.2	-1.1	14.0	-2.2	17.0	0.4	10.1
8	Sialkot	-0.4	11.7	-1.0	14.2	0.5	8.2	-0.7	11.6	-1.7	14.9	0.6	7.4
9	Bahawalpur	-1.5	15.8	-3.1	17.9	0.7	12.9	-1.3	15.5	-2.7	17.8	0.7	12.6
10	Karachi	-1.5	12.9	-2.8	17.6	0.4	6.9	-1.6	12.1	-3.1	16.5	0.5	6.8
11	Hyderabad	-1.1	14.7	-2.4	18.3	0.8	10.1	-1.1	15.2	-2.5	19.3	0.8	10.2
12	Sukkur	-0.6	15.7	-1.6	22.0	0.7	7.9	-0.7	14.8	-1.6	20.0	0.5	8.9
13	Larkana	-0.6	15.6	-1.6	21.1	1.0	8.2	-0.8	15.6	-1.9	20.7	0.6	9.4
14	Peshawar	0.0	14.1	-1.5	16.1	2.0	11.6	-0.5	14.5	-2.1	16.9	1.6	11.6
15	Bannu	-1.2	14.3	-2.4	15.5	0.4	12.8	-1.7	14.8	-3.4	16.3	0.5	13.1
16	Quetta	-3.6	15.3	-6.1	20.7	0.6	7.8	-2.8	13.8	-5.2	19.3	0.8	6.8
17	Khuzdar	-2.8	16.5	-4.8	20.4	0.0	11.6	-2.1	15.9	-3.9	19.8	0.2	11.4
		Rs 5001-12000						above Rs 12000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	-1.1	10.0	-2.7	12.7	0.9	7.0	-0.6	9.3	-2.2	13.0	0.5	6.9
2	Faisalabad	-0.6	11.9	-1.7	16.7	0.6	6.9	-0.5	10.9	-1.7	16.6	0.4	7.2
3	Rawalpindi	-0.7	10.8	-2.1	15.9	0.8	5.8	-0.2	11.4	-1.5	16.9	0.7	8.3
4	Multan	-1.1	13.5	-2.5	17.6	0.5	9.1	-0.7	12.7	-2.4	17.7	0.4	9.5
5	Gujranwala	-0.8	11.3	-2.0	15.7	0.5	6.9	0.0	11.2	-0.6	16.9	0.4	7.8
6	Islamabad	-0.4	11.0	-2.0	19.6	1.4	2.7	0.1	10.4	-1.5	19.5	1.2	5.2
7	Sargodha	-0.9	14.5	-2.0	17.1	0.2	11.8	-0.5	14.8	-1.7	18.2	0.4	12.7
8	Sialkot	-0.5	11.2	-1.4	14.7	0.4	7.5	-0.3	11.0	-1.1	14.1	0.2	8.9
9	Bahawalpur	-1.0	14.9	-2.4	18.7	0.6	10.8	-0.6	14.8	-1.9	20.2	0.4	11.2
10	Karachi	-1.4	11.3	-3.0	15.9	0.2	6.9	-0.8	9.8	-2.4	16.1	0.3	6.0
11	Hyderabad	-0.9	14.7	-2.3	18.8	0.6	10.6	-0.6	14.6	-1.9	18.6	0.2	12.1
12	Sukkur	-0.5	14.4	-1.4	19.6	0.4	9.5	-0.4	14.2	-1.4	19.0	0.2	11.6
13	Larkana	-0.6	15.0	-1.4	20.5	0.4	9.5	0.1	15.1	-0.4	20.4	0.4	11.9
14	Peshawar	-0.1	14.1	-1.7	18.0	1.6	10.3	0.0	13.2	-1.4	18.5	1.0	10.0
15	Bannu	-1.8	15.1	-3.9	16.6	0.5	13.6	-1.8	14.4	-4.1	15.8	-0.4	13.5
16	Quetta	-2.1	12.7	-4.3	18.5	0.6	6.7	-1.6	12.7	-3.5	18.5	-0.2	9.2
17	Khuzdar	-1.6	13.2	-3.7	17.2	0.8	9.2	-0.8	10.7	-2.3	15.0	0.2	8.1

Table A6: City-wise Inflation in CPI (YoY) February 2011							
	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Kunri	17.8	23.8	13.0	Quetta	12.8	18.5	8.0
Bahawalnagar	17.1	18.2	16.2	Okara	12.7	14.9	10.8
Jhang	16.9	19.4	14.9	Shahdadpur	12.7	14.8	10.9
Mianwali	15.9	19.1	13.3	Jhelum	12.1	16.9	8.2
Mirpur Khas	15.8	21.3	11.6	Faisalabad	11.4	16.6	6.9
Khuzdar	15.6	20.3	11.8	Gujranwala	11.3	15.8	7.6
D.G. Khan	15.6	21.4	11.0	Rawalpindi	11.1	16.3	7.0
D.I.Khan	15.5	20.7	11.2	Sialkot	11.1	14.4	8.2
Larkana	15.2	20.5	10.8	Attock	10.9	15.9	7.0
Bahawalpur	15.1	18.8	11.8	Karachi	10.6	16.0	6.4
Bannu	14.8	16.2	13.6	Islamabad	10.5	19.5	3.6
Hyderabad	14.7	18.8	11.4	Lahore	9.7	12.8	6.9
Sargodha	14.5	17.4	12.1				
Sukkur	14.4	19.6	10.5				
Nawabshah	14.3	17.4	11.9				
Vehari	14.3	17.6	11.5				
Peshawar	13.7	18.0	10.3				
Samundari	13.5	15.5	11.9				
Multan	13.4	17.8	9.7				
Loralai&Cantt	13.4	16.9	10.8				
Mardan	13.2	16.1	10.9				
Abbotabad	13.1	17.1	9.8				
Turbat	12.9	15.7	10.7				

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

Table A7 : Income Group-wise Inflation							percent
	MoM			YoY			
	Feb-10	Jan-11	Feb-11	Feb-10	Jan-11	Feb-11	
<u>Up to Rs. 3000</u>							
General	0.5	1.4	-1.2	14.3	16.1	14.2	
Food	0.3	1.7	-2.4	16.8	20.9	17.5	
Non-food	0.7	1.0	0.7	11.2	10.0	10.0	
<u>Rs. 3001-5000</u>							
General	0.4	1.4	-1.1	14.0	15.7	13.9	
Food	0.2	1.8	-2.5	16.3	20.6	17.4	
Non-food	0.7	0.8	0.6	11.4	9.7	9.6	
<u>Rs. 5000-12000</u>							
General	0.4	1.4	-0.9	13.3	14.8	13.3	
Food	0.1	2.0	-2.2	15.4	20.4	17.6	
Non-food	0.7	0.7	0.6	11.3	9.1	8.9	
<u>Above Rs. 12000</u>							
General	0.3	1.2	-0.5	12.5	13.3	12.4	
Food	0.0	2.2	-1.9	13.8	20.3	18.0	
Non-food	0.5	0.5	2.3	11.8	8.9	10.9	
<u>All income groups</u>							
General	0.4	1.3	-0.7	13.0	14.2	12.9	
Food	0.1	2.1	-2.1	14.9	20.4	17.7	
Non-food	0.6	0.6	0.5	11.5	9.0	8.9	

Table A8: SPI Item-wise Price Movements

S.No	Items	Unit	Prices Feb-11	Percentage change	
				YoY	Monthly
1	Wheat	Kg.	27.2	0.6	0.3
2	Wheat flour average qlt.	Kg.	30.9	2.4	0.2
3	Rice basmti.broken	Kg.	52.6	20.7	1.8
4	Rice irri-6	Kg.	40.2	17.1	2.6
5	Masur pulse washed	Kg.	119.2	-3.5	-0.6
6	Moong pulse washed	Kg.	140.1	65.4	0.8
7	Mash pulse washed	Kg.	159.0	18.8	-0.2
8	Gram pulse washed	Kg.	73.3	29.7	-0.4
9	Beef	Kg.	218.8	24.3	0.5
10	Mutton	Kg.	420.7	32.6	1.2
11	Egg hen (farm)	Doz.	66.8	3.0	-22.4
12	Bread plain	Each	28.1	4.4	0.1
13	Sugar	Kg.	66.4	-2.3	-8.3
14	Gur	Kg.	83.0	12.5	-3.7
15	Milk fresh	Ltr	50.4	20.7	0.7
16	Milk powdered nido	400g	200.0	11.1	0.0
17	Curd	Kg.	58.2	18.5	0.5
18	Veg.ghee tin	2.5kg	477.4	35.2	5.7
19	Veg.ghee loose	Kg.	165.9	44.5	1.1
20	Mustard oil	Kg.	168.1	23.0	2.8
21	Cooking oil	2.5ltr	477.4	35.2	5.7
22	Potatoes	Kg.	18.0	7.6	-7.0
23	Onions	Kg.	27.7	15.4	-30.5
24	Tomatoes	Kg.	40.8	122.5	-42.0
25	Bananas	Doz.	48.2	23.9	6.1
26	Salt powdered	Kg.	7.5	12.4	2.0
27	Red chillies(powder)	Kg.	264.4	60.0	3.1
28	Garlic	Kg.	200.5	37.2	-1.9
29	Tea packet	250g	142.8	11.0	3.4
30	Tea (prepared)	Cup	13.4	25.6	0.4
31	Cooked beef plate	Each	53.3	17.6	0.2
32	Cooked dal plate	Each	34.5	20.3	0.3
33	Cigarettes k-2	10's	13.7	13.8	0.0
34	Coarse latha	Mtr.	56.2	19.1	1.4
35	Lawn (avg.+s.qlty)	Mtr.	105.8	13.7	0.0
36	Voil printed	Mtr.	54.7	14.9	0.4
37	Shirting	Mtr.	87.8	6.6	1.4
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	83.1	10.2	-0.7
42	Firewood	40kg	371.6	21.9	2.0
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	15.9	21.5	4.1
46	Bath soap lifebuoy	Cake	25.7	17.0	7.3
47	Chicken (farm)	Kg.	135.6	9.0	11.4
48	Gas chrg. All clb. Comb	mmbtu	337.2	0.0	0.0
49	L.P.G.(cylinder 11kg.)	Each	1252.4	18.0	-10.3
50	Elec.chrg.all slabs comb	per unit	9.1	12.0	0.0
51	Petrol	Ltr	73.7	2.4	-2.3
52	Diesel	Ltr	79.1	9.1	-1.3
53	Telephone local	Call	3.6	48.3	0.0
Maximum				122.5	11.4
Median				17.0	0.2
Minimum				-3.5	-42.0

Table A9: Distribution of Price Change (YoY) - WPI Items: February 2011				
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase
Food	Masoor, Sugar Refined, Maida, Wheat	Sugar Confectionary, Wheat Flour, Condiments	Fish, Tea, Powdered Milk, Gram Whole	Tomatoes, Moong, Maize, Jowar, Vegetable Ghee, Bajra, Spices, Gram Split, Besan, Mustard & Rapeseed Oil, Cotton Seed Oil, Meat, Dry Fruits, Fruit Prepared/Preserved, Onions, Cooking Oil, Vegetables, Fresh Fruits, Rice, Mash, Oil Cakes, Fresh Milk, Potatoes, Salt, Milk Food, Mineral Water, Beans, Vegetables, Prepared Preserved, Gur
Raw material	Pig Iron		Wool	Cotton, Cotton Seeds, Sugar Cane, Mustard /Rapeseeds, Tobacco
Fuel & lighting	Natural Gas	Motor Sprit	Mobil Oil, Electricity Ind. Supply Tariff-B	Diesel Oil, Coal, Kerosene Oil, Elec. Agriculture Tariff-D, Fire Wood, Coke, Furnace Oil
Manufactures	Sole Leather, Chrome Leather	Audio-Visual Instruments, Foot Wear, Ready Made Garments, Utensils	Matches, Woolen Textiles, Glass Products, Paper, Dying Materials, Soaps, Other Electrical Goods, Silk & Rayon Textiles, Pesticides & Insecticised	Cotton Yarn, Nylon Yarn, Blended Yarn, Cigarettes, Cosmetics, Transports, Chemicals, Fertilizers, Jute Manufactures, Tubes, Cotton Textiles, Hosiery, Machinery
Building material	Tiles	Sanitary Wares, Cement Blocks, Pipe Fittings	Glass Sheets, Timber, Cement, Wires And Cables	Bricks, Paints & Varnishes, Iron Bars & Sheets

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item and Specification	Weights	Index		
		Feb-10	Jan-11	Feb-11
General	100.00	210.99	244.84	243.60
Food & Beverages.	40.34	243.17	292.52	286.26
1 Wheat	0.48	315.30	315.20	316.65
2 Wheat Flour	5.11	307.37	313.55	314.13
3 Maida	0.11	285.46	283.38	284.70
4 Besan	0.13	199.32	260.68	261.97
5 Rice	1.34	276.37	314.56	321.24
6 Pulse Masoor	0.22	344.67	332.34	331.89
7 Pulse Moong	0.22	281.79	468.16	468.57
8 Pulse Mash	0.20	296.38	360.73	360.09
9 Pulse Gram	0.43	193.66	251.40	252.46
10 Gram Whole	0.15	213.82	235.41	237.76
11 Mustard Oil	0.05	251.97	296.93	300.22
12 Cooking Oil	0.69	221.73	285.80	301.50
13 Vegetable Ghee	2.67	243.23	332.39	341.27
14 Sugar	1.95	248.00	268.98	242.87
15 Gur	0.07	285.99	334.29	326.94
16 Tea	1.26	204.99	218.22	223.31
17 Milk Fresh	6.66	241.80	287.36	289.84
18 Milk Powder	0.11	210.86	237.74	238.91
19 Milk Products	0.56	223.20	261.12	263.60
20 Honey	0.04	212.57	264.80	268.72
21 Cereals	0.09	250.46	273.58	274.72
22 Jam, Tomato, Pickles & Vinegar	0.25	184.43	213.03	215.90
23 Beverages	0.73	175.93	207.73	208.26
24 Condiments	0.34	247.29	256.93	257.87
25 Spices	0.60	232.96	353.51	354.11
26 Dry Fruit	0.28	338.88	393.33	397.07
27 Bakery & Confectionary	2.98	150.00	162.47	159.76
28 Cigarettes	0.95	220.08	239.91	239.91
29 Betel Leaves & Nuts	0.19	179.96	213.07	220.31
30 Readymade Food	1.68	249.65	297.36	298.35
31 Sweetmeat & Nimco	0.38	256.97	312.97	317.32
32 Fish	0.27	209.32	257.01	257.68
33 Meat	2.70	310.90	397.86	400.64
34 Chicken Farm	0.92	234.92	230.43	257.03
35 Eggs	0.41	236.66	344.40	256.69
36 Potatoes	0.58	175.03	225.75	199.11
37 Onions	0.62	224.98	399.70	271.68
38 Tomatoes	0.48	107.48	453.11	233.04
39 Vegetables	1.84	234.27	330.34	303.17
40 Fresh Fruits	1.62	218.97	272.07	263.40
Apparel, Textile & Footwear.	6.10	162.53	181.46	183.07
41 Cotton Cloth	1.62	162.45	192.08	194.12
42 Silk, Linen, Woolen/Cloth	0.58	166.20	188.69	191.31
43 Tailoring Charges	0.86	178.40	202.59	205.29
44 Hosiery	0.15	177.68	200.65	203.21
45 Readymade Garments	1.20	149.70	165.30	166.89
46 Woolen Readymade Garments	0.15	200.00	217.98	220.34
47 Footwear	1.53	157.23	162.86	162.88
House Rent.	23.43	208.78	220.82	222.39
48 House Rent Index (Combined)	23.43	208.78	220.82	222.39

(continued)

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item and Specification	Weights	Index		
		Feb-10	Jan-11	Feb-11
Fuel And Lighting.	7.29	243.96	265.58	266.04
49 Kerosene	0.14	441.51	497.88	497.88
50 Firewood	0.48	341.08	394.14	399.73
51 Match Box	0.13	200.00	200.00	200.00
52 Bulb & Tube	0.13	130.43	150.80	150.95
53 Electricity	4.37	189.54	212.19	212.19
54 Natural Gas	2.05	334.40	345.59	345.93
H.Hold. Furniture & Equipment Etc.	3.29	171.14	187.75	189.50
55 Utensils	0.37	157.83	171.41	172.68
56 Plastic Products	0.11	207.49	236.49	237.91
57 Suitcase	0.05	165.11	182.77	187.66
58 House Hold Equipments	0.10	158.24	176.81	179.12
59 Furniture (Ready Made)	0.31	185.99	203.77	206.75
60 Furnishing	0.64	162.68	182.49	184.44
61 Elect. Iron Fans & Washing Machine	0.19	162.84	174.70	175.54
62 Sewing Machine, Clock And Needles	0.13	150.39	163.70	164.72
63 Refrigerator & Air conditioner	0.18	132.57	144.25	144.93
64 Marriage Hall	0.04	202.70	235.28	239.33
65 House Hold Servant	1.19	182.04	197.53	199.16
Transport & Communication.	7.32	205.36	229.49	230.63
66 Petrol	1.73	232.19	240.37	240.37
67 Diesel	0.21	445.07	498.07	498.07
68 CNG . Filling Charges	0.16	226.80	236.39	236.39
69 Service Charges	0.38	175.46	191.03	191.06
70 Vehicles	0.26	133.71	145.18	146.61
71 Tyre & Tube	0.28	164.22	195.90	199.36
72 Transport Fare/Charges	2.12	270.00	299.76	300.40
73 Train Fare	0.15	253.24	253.24	287.05
74 Air Fare	0.10	342.93	365.51	369.79
75 Communication	1.93	93.29	127.93	127.94
Recreation & Entertainment.	0.83	126.43	139.61	139.71
76 Recreation	0.34	142.98	142.98	142.98
77 Entertainment	0.49	114.86	137.24	137.43
Education.	3.45	185.97	195.46	195.73
78 Tuition Fees	2.36	180.15	191.98	192.31
79 Stationery	0.35	180.74	195.09	195.49
80 Text Books	0.69	216.25	215.90	215.90
81 Computer & Allied Products	0.05	85.14	86.29	86.67
Cleaning Laundry & Per. Appearance.	5.88	183.71	202.36	202.78
82 Washing Soap & Detergent	1.55	168.30	179.92	181.06
83 Toilet Soap	0.74	186.50	194.80	194.80
84 Tooth Paste	0.40	116.80	120.84	121.06
85 Shaving Articles	0.35	153.39	164.94	165.43
86 Cosmetics	1.43	167.87	176.97	177.42
87 Watches	0.06	139.13	152.72	152.72
88 Jewellery	0.39	420.58	534.93	527.41
89 Laundry Charges	0.22	193.38	220.98	223.56
90 Hair Cut & Beauty Parlour Charges	0.73	168.86	189.24	192.23
Medicare.	2.07	158.79	183.71	184.68
91 Drugs & Medicares	1.08	125.68	138.00	138.35
92 Doctor's Fee	1.00	194.49	232.97	234.63

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

Item and Specifications	Feb-10	Dec-10	Jan-11	Feb-11
GENERAL	231.64	278.38	282.96	288.24
FOOD	242.67	286.07	291.06	289.24
1 WHEAT	319.65	312.17	315.15	317.02
2 WHEAT FLOUR	301.86	301.67	302.98	302.64
3 MAIDA	291.04	281.25	284.32	283.75
4 BESAN	173.78	238.11	238.88	237.62
5 RICE	319.18	359.52	380.15	385.58
6 MAIZE	231.67	336.23	347.51	367.90
7 JOWAR	240.32	358.86	357.42	374.71
8 BAJRA	194.47	272.12	279.95	283.01
9 BEANS	271.85	308.77	312.89	311.17
10 GRAM WHOLE	232.17	249.51	250.88	255.30
11 GRAM SPLIT	167.25	232.48	234.71	234.71
12 MASOOR	338.33	313.26	315.01	308.46
13 MASH	261.27	316.21	312.92	314.64
14 MOONG	278.82	450.21	458.64	467.51
15 POTATOES	177.27	276.90	224.48	206.08
16 ONIONS	230.27	552.50	435.27	290.67
17 TOMATOES	93.26	387.42	531.23	271.23
18 VEGETABLES	238.65	336.34	317.10	297.61
19 FRESH FRUITS	164.37	201.66	201.93	203.39
20 DRY FRUITS	255.78	302.49	313.91	328.15
21 FRESH MILK	208.03	242.14	244.25	245.41
22 POWDERED MILK	222.47	229.11	232.63	241.84
23 MILK FOOD	171.18	186.46	188.09	196.81
24 VEGETABLE GHEE	268.02	353.20	378.76	398.19
25 MUSTARD & RAPESEED OIL	280.70	338.06	351.56	367.42
26 COTTON SEED OIL	284.31	327.60	348.02	371.09
27 COOKING OIL	221.17	257.50	266.91	277.21
28 OIL CAKES	317.15	364.72	366.13	377.34
29 GUR	259.85	306.82	313.98	291.87
30 SUGAR REFINED	250.56	274.55	273.10	242.50
31 CHICKEN	239.63	227.80	241.25	266.65
32 EGGS	243.31	328.81	359.72	269.14
33 FISH	142.98	162.97	164.25	150.37
34 MEAT	291.41	368.58	372.60	377.52
35 SPICES	244.16	286.51	332.14	343.65
36 CONDIMENTS	292.26	301.57	303.35	306.47
37 SALT	165.72	174.83	182.71	192.07
38 TEA	169.07	170.14	172.03	183.54
39 BEVERAGES	141.85	151.85	154.59	158.02
40 MINERAL WATER	127.38	139.50	140.19	146.43
41 FRUIT PREPARED/PRESERVED	178.61	225.08	227.04	227.04
42 VEGETABLES PREPARED/PRESERVED	179.63	198.21	200.30	204.34
43 SUGAR CONFECTIONARY	100.46	100.57	100.57	100.57
RAW MATERIAL	250.35	386.42	402.36	434.70
44 COTTON	210.85	404.05	422.26	487.18
45 COTTON SEEDS	275.04	347.69	356.41	355.91
46 MUSTARD/RAPESEEDS	293.98	364.94	376.57	378.46
47 TOBACCO	221.77	250.41	255.01	262.07
48 SUGAR CANE	438.72	555.70	584.97	566.09
49 WOOL	141.45	153.72	153.73	153.73
50 HIDES	128.58	141.45	143.03	151.24
51 SKINS	98.99	107.11	107.76	110.13
52 PIG IRON	321.93	321.93	321.93	321.93

(continued)

(continued)				
Table A11: Wholesale Price Index Numbers by major Groups and Selected Commodities				
Item and Specifications	Feb-10	Dec-10	Jan-11	Feb-11
FUEL & LIGHT	304.47	335.15	338.54	349.84
53 COAL	141.00	160.00	160.00	160.00
54 COKE	555.18	693.98	693.98	693.98
55 DIESEL OIL	434.92	486.97	486.97	486.97
56 MOTOR SPRIT	229.87	237.66	237.66	237.66
57 MOBIL OIL	200.36	216.39	216.39	216.39
58 FURNACE OIL	363.06	405.38	420.08	469.12
59 KEROSINE OIL	417.41	481.70	481.70	481.70
60 NATURAL GAS	256.00	256.00	256.00	256.00
61 ELECTRICITY IND. SUPPLY TARIFF-B	201.01	220.68	220.68	220.68
62 ELEC. AGRICULTURE TARIFF-D	205.07	238.86	238.86	238.86
63 FIRE WOOD	279.48	319.51	330.55	332.95
MANUFACTURE	159.31	200.05	201.97	206.86
64 SOLE LEATHER	134.06	134.06	134.06	134.06
65 CHROME LEATHER	212.23	212.23	212.23	212.23
66 COTTON YARN	150.55	241.23	244.54	255.82
67 BLENDED YARN	173.90	214.58	223.23	235.34
68 NYLON YARN	121.04	171.00	174.85	174.09
69 COTTON TEXTILES	147.42	166.39	166.51	168.34
70 HOSIERY	156.75	169.20	171.79	176.56
71 SILK & REYON TEXTILES	149.15	158.79	159.41	163.50
72 WOOLEN TEXTILES	139.79	146.34	146.88	147.42
73 JUTE MANUFACTURES	128.60	144.32	146.42	148.17
74 MATTRESSES	140.61	154.56	156.11	157.11
75 READY MADE GARMENTS	118.87	123.49	123.49	123.89
76 UTENSILS	148.79	152.05	153.01	156.01
77 PLASTIC PRODUCTS	140.48	151.55	153.20	156.45
78 GLASS PRODUCTS	179.81	182.18	182.18	192.67
79 CHEMICALS	189.84	227.92	231.61	236.37
80 DYING MATERIALS	88.99	96.14	96.14	96.14
81 SOAPS	183.88	198.22	199.15	199.26
82 COSMETICS	121.91	161.81	161.81	161.81
83 DRUGS & MEDICINES	115.82	123.48	123.48	127.60
84 FERTILIZERS	297.34	339.55	347.45	358.17
85 PESTICIDES & INSECTICISED	148.35	157.48	160.57	162.74
86 MACHINERY	177.90	192.92	196.32	199.80
87 TRANSPORTS	129.05	162.72	162.74	162.78
88 TYRES	208.57	228.02	228.02	229.57
89 TUBES	187.73	214.77	214.77	214.77
90 AUDIO-VISUAL INSTRUMENTS	92.28	92.61	94.02	94.02
91 OTHER ELECTRICAL GOODS	131.27	138.26	139.60	142.51
92 CIGARETTES	197.49	262.35	262.35	262.35
93 PAPER	105.98	107.79	107.79	114.45
94 MATCHES	124.26	129.78	130.85	130.85
95 FOOT WEAR	192.15	199.97	199.97	199.97
BUILDING MATERIAL	200.37	224.13	225.32	225.57
96 CEMENT	124.02	134.47	134.47	135.31
97 BRICKS	246.93	304.72	310.85	316.98
98 CEMENT BLOCKS	170.83	170.83	170.83	172.23
99 TILES	99.67	99.67	99.67	99.67
100 IRON BARS & SHEETS	257.22	291.57	293.69	293.43
101 PIPE FITTINGS	185.05	186.87	190.29	193.87
102 TIMBER	208.88	226.07	226.36	227.30
103 GLASS SHEETS	177.94	187.35	188.34	188.34
104 PAINTS & VARNISHES	146.05	180.97	180.97	180.97
105 SANITARY WARES	162.20	162.77	162.77	163.29
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
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	203.94	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	207.91	252.93	267.12	242.60	261.70
Sep	239.69	285.63	208.62	258.22	279.03	243.08	270.74
Oct	241.17	285.89	210.93	266.19	283.96	253.26	275.31
Nov	244.84	292.20	212.81	275.46	290.52	264.50	284.33
Dec	243.60	286.64	214.50	278.38	286.07	272.78	282.83
2011 Jan	246.76	292.52	215.82	282.96	291.06	277.07	284.47
Feb	244.93	286.26	216.98	288.24	289.24	287.51	281.56

*: all groups combined

Table A13: International Commodity Prices/Indices

	Dec-10	Jan-11	Feb-11
Energy			
Crude Oil (US\$ per barrel)*	90.1	92.7	97.7
IMF Energy Index (2005 =100)	166.4	173.0	180.7
WB Energy Index (1990=100) @	307.3	320.4	333.1
Food	0.0	0.0	0.0
Rice (\$/MT)	536.8	527.5	535.2
Wheat (\$/MT)	307.0	326.5	348.2
Sugar (US cent / pound)	31.1	32.1	29.4
Palm Oil (\$/MT)	1,171.2	1,238.6	1,248.6
Soybean Oil (\$/MT)	1,208.4	1,257.1	1,268.4
Non-Food Non-Energy			
Cotton Outlook 'A' Index #	168.2	178.9	213.2
IMF Metal Price Index (2005=100)	193.7	243.8	254.5
Copper (\$/MT)	9,152.9	9,533.2	9,880.9
Aluminum (\$/MT)	2,356.7	2,439.7	2,515.3
Iron Ore (\$ cents/dry MT)	182.0	179.6	187.2
Tin (\$/MT)	26,103.9	27,439.4	31,619.7
Nickel (\$/MT)	24,099.6	25,621.2	28,412.2
Zinc (\$/MT)	2,287.3	2,375.8	2,473.5
Lead (\$/MT)	2,413.2	2,584.0	2,595.6
Uranium (\$/pound)	60.7	63.9	65.0
DAP (\$/MT)	468.9	533.2	558.1
Urea (\$/MT)	354.0	367.5	375.0

\$/MT = US\$ per metric tonne.

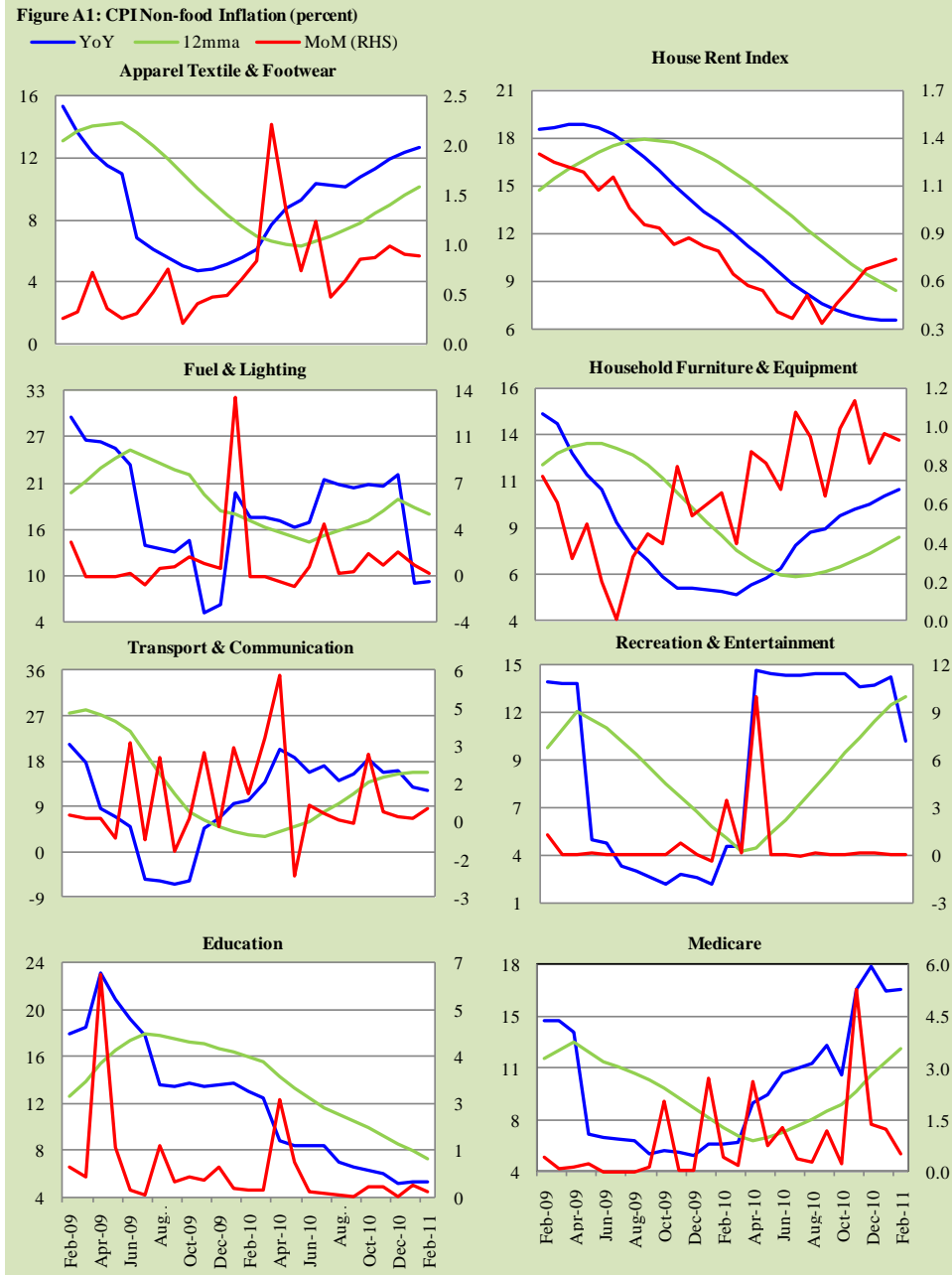
* Crude Oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh

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

Source: IMF and World Bank.



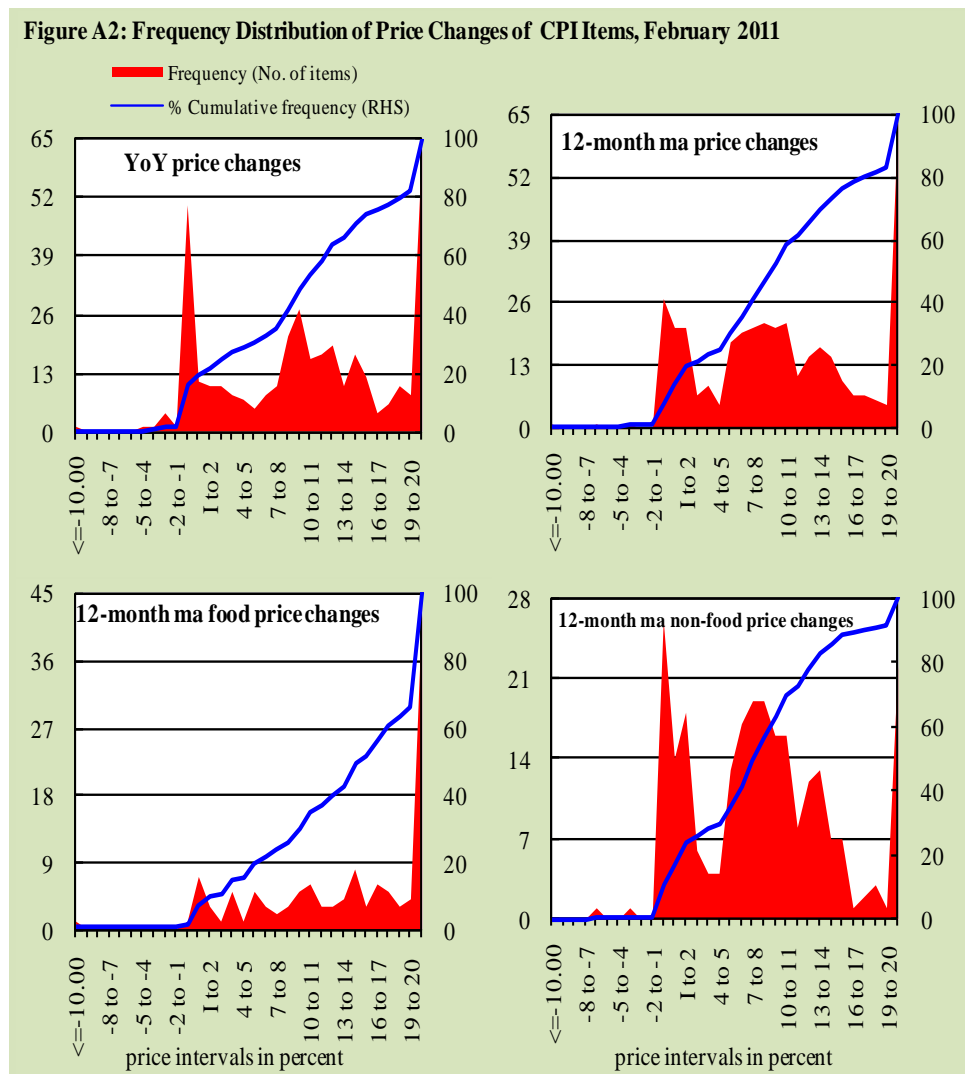
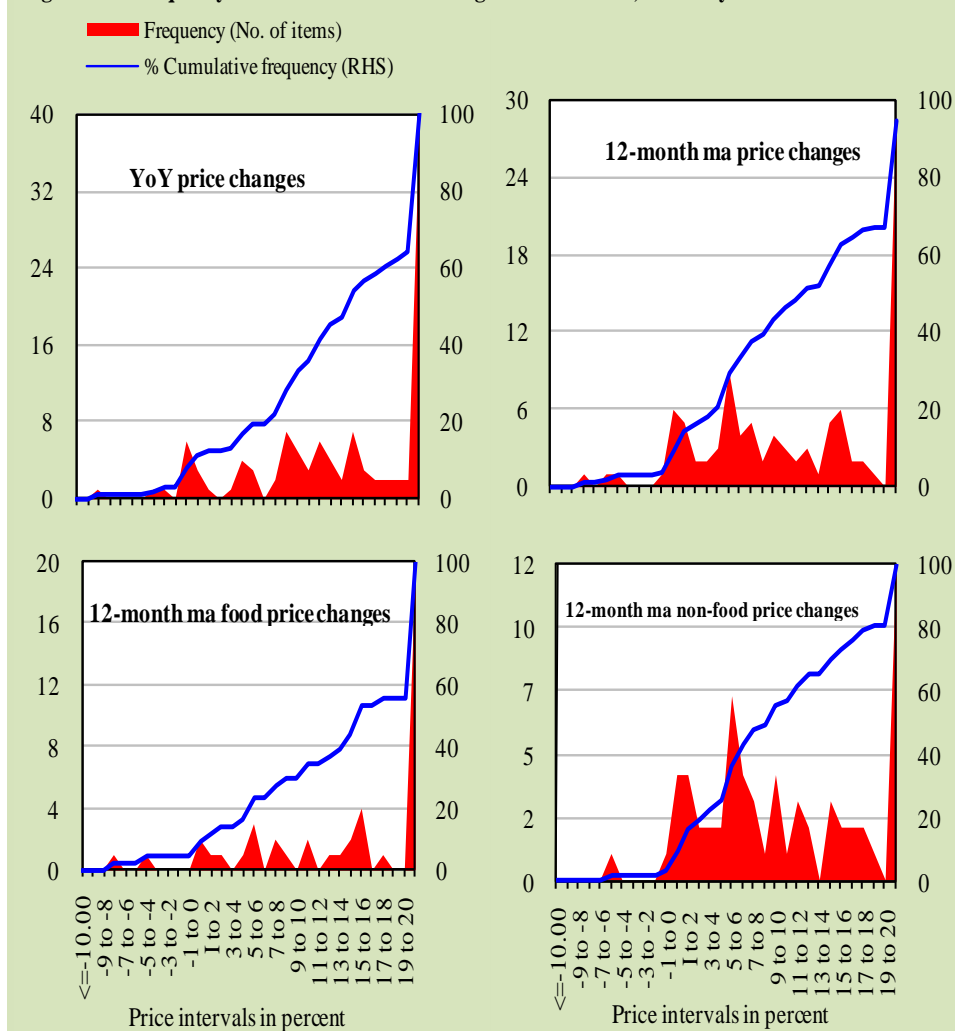
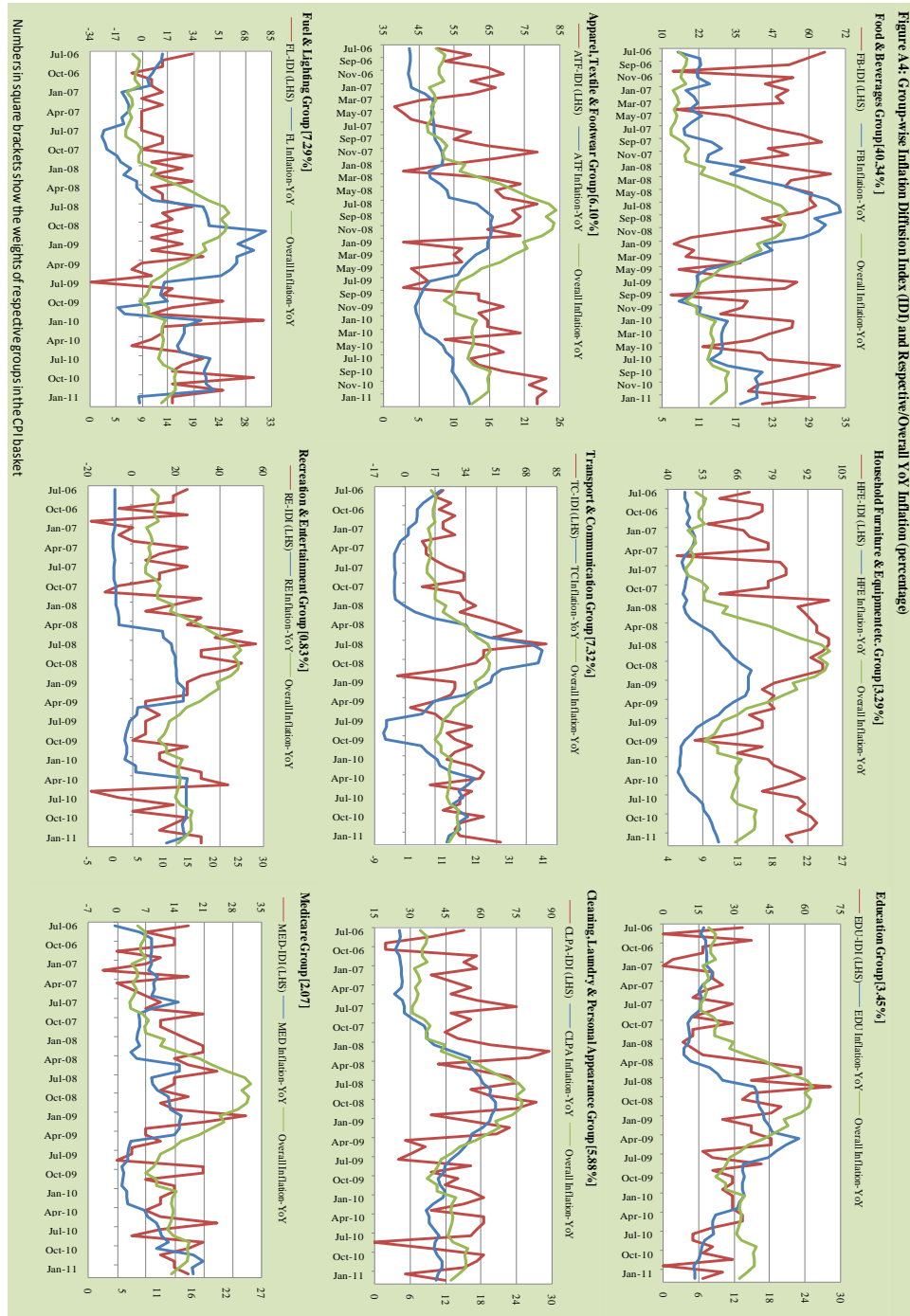


Figure A3: Frequency Distribution of Price Changes of WPI Items, February 2011





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:

$$\pi_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

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

Methodology for Estimating Inflation Diffusion Index for Pakistan

We constructed an index to measure the spread of inflation in the 374 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 constant⁴.

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 analysis⁵ suggests that IDI is a leading indicator for Pakistan’s YoY inflation.

⁴ 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

⁵ Formal test shows one way ‘Granger’ causality from IDI to YoY inflation