

# **Inflation Monitor**

**June 2011**



**State Bank of Pakistan**  
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## Overview

Inflationary pressure eased slightly on year-on-year basis in the last month of FY11 compared to a month earlier. Headline inflation decelerated to 13.1 percent (YoY) in June 2011 from 13.2 percent in the previous month. It was slightly above 12.7 percent witnessed during June 2010. This decline was attributed to lower food inflation as non-food inflation remained unchanged. Food inflation, observing declining trend since April 2011, fell to 15.7 percent inflation in June 2011. It was still higher compared to 14.5 percent food inflation observed in June 2010. During June 2011, the non-food inflation was recorded at 11.0 percent which was similar to previous month non-food inflation but 0.2 percentage points lower than that in June 2010 (see **Table 1.1**).

**Table 1.1: Inflation Trends (percent)**

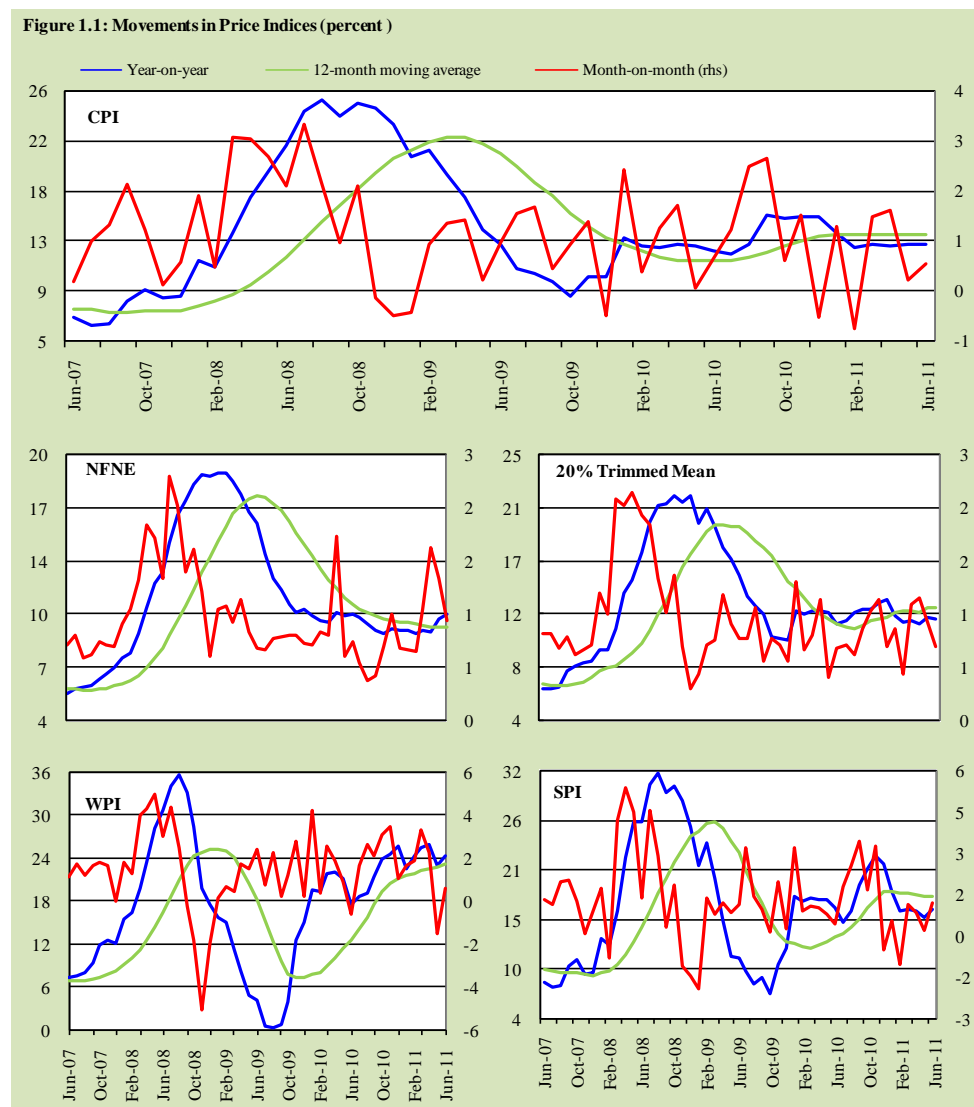
	CPI						Core Inflation				WPI		SPI**	
	General		Food		Non-food		NFNE*		Trimmed					
	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM
Jun-10	12.7	0.6	14.5	0.7	11.2	0.6	10.4	0.7	11.7	0.7	17.6	-0.6	16.5	0.4
Jul-10	12.3	1.2	12.8	1.5	12.0	1.0	10.3	0.5	12.0	0.7	18.7	1.7	14.9	1.8
Aug-10	13.2	2.5	15.6	5.1	11.2	0.3	9.8	0.4	12.5	0.6	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
Mar-11	13.2	1.5	18.0	2.0	9.1	1.0	9.5	1.0	11.9	1.1	25.4	3.3	16.3	1.2
Apr-11	13.0	1.6	17.2	1.4	9.5	1.8	9.4	1.6	11.6	1.2	25.9	2.3	16.1	0.9
May-11	13.2	0.2	15.9	-1.1	11.0	1.4	10.2	1.3	12.1	0.9	22.9	-1.6	15.4	0.2
Jun-11	13.1	0.6	15.7	0.5	11.0	0.6	10.4	0.9	12.0	0.7	24.4	0.6	16.3	1.2

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

Month-on-month (MoM) inflation was recorded at 0.6 percent in June 2011 compared to 0.2 percent in the previous month. The MoM inflation in June 2011 was contributed by rise in both the food as well as non-food prices. Food prices witnessed a (MoM) increase of 0.5 percent compared to 1.1 percent fall a month earlier. Non-food prices recorded a rise of 0.6 percent during the month under review; much lower than the climb by 1.4 percent in May 2011.

Core inflation measured by NFNE and 20% trimmed mean, showed mixed trend on YoY basis in June 2011. NFNE core inflation (YoY) increased by 0.2 percentage points to 10.4 percent in June 2011 compared to 0.8 percentage points rise in the last month. However, 20% trimmed mean core inflation (YoY) fell by 0.1 percentage points (to 12.0 percent) in the month under review as against 0.5 percentage points rise in the previous month. As far as the MoM core inflation is

concerned, both measures witnessed lower levels compared to May 2011 (see **Table 1.1 & Figure 1.1**).



Overall 12- month average inflation was recorded at 13.9 percent during June 2011 compared to 11.7 percent in June 2010 which shows average inflation in the country has increased by 2.2 percentage points. Though overall (12 month) average inflation is still in double digits, NFNE (12 month) average inflation has been down to single digit at 9.7 percent during June 2011 compared 11.0 percent in June 2010 and 17.6 percent during June 2009 (see **Figure 1.1**).

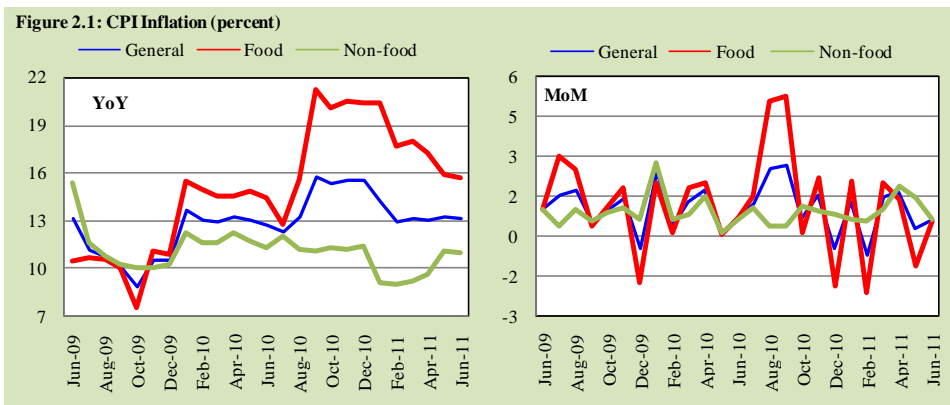
Contrary to a decline in CPI headline inflation, acceleration was observed in both the WPI and SPI inflation (YoY) during June 2011 compared to May 2011. On YoY basis, WPI inflation rose by 1.5 percentage points from 22.9 percent in the last month to 24.4 percent during June 2011. SPI inflation (YoY) reached 16.3 percent in the reviewed month from 15.4 percent during the previous month. It was 16.5 percent in the same month of preceding year.

On MoM basis, WPI inflation was 0.6 percent in June 2011 as against 1.6 percent deflation in May 2011 and 0.6 percent deflation in the corresponding month of preceding year. SPI (MoM) inflation was recorded at 1.2 percent in the month of June 2011 compared to 0.2 percent in the previous month.

Inflation diffusion for overall CPI basket is on declining trend since April 2011 and fell to 40.8 percent in June 2011, which was not only 6.6 percentage points lower than the previous month's level but also 3.8 percentage points lower than inflation diffusion in the same month last year. Inflation diffusion has showed either a decline or remained unchanged except for the food group in reviewed month. In case of food group, diffusion has increased. Inflation diffusion declined significantly for NFNE group (see **Table 2.1**).

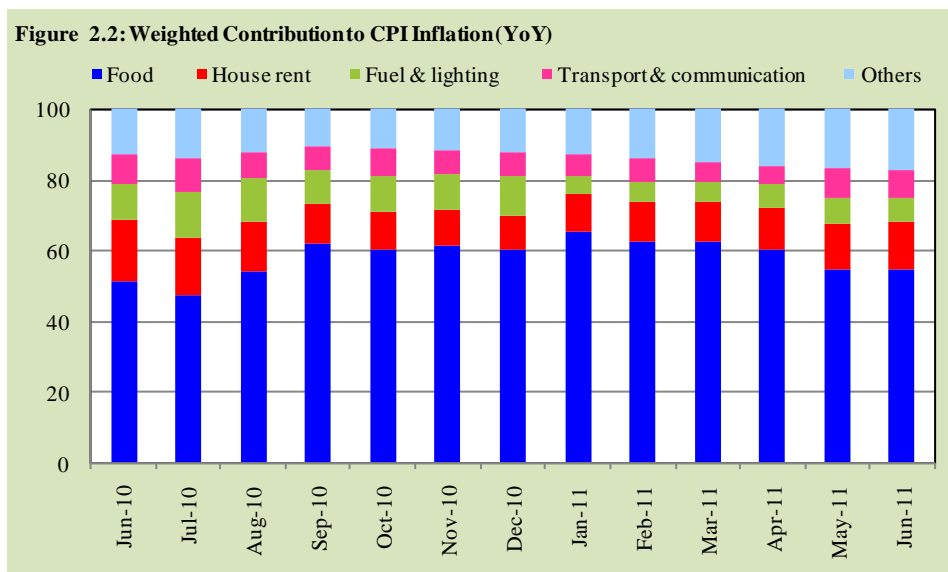
## 2. Consumer Price Index

CPI inflation (YoY) slightly decreased to 13.1 percent in June 2011 from 13.2 percent during May 2011. This marginal shrink of 0.1 percentage points was mainly due to decrease of 0.2 percentage points in food inflation (YoY) as non-food inflation (YoY) remained unchanged at 11.0 percent recorded during the last month. Month-on-month (MoM) inflation was 0.6 percent in June 2011 compared to 0.2 percent during May 2011 (see **Table 1.1** and **Figure 2.1**).



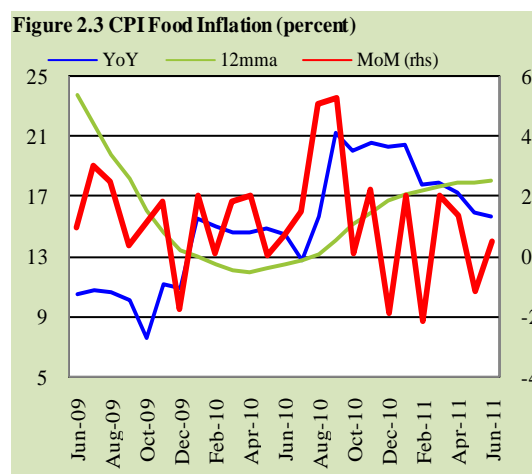
Due to deceleration in CPI food inflation (YoY) during June 2011, the weighted contribution of food inflation in overall headline inflation decreased from 54.7

percent in the last month to 54.4 percent; however, it was higher than 51.3 percent in the corresponding month of preceding year. Being a mirror image, weighted contribution of non-food group increased to 45.6 percent during June 2011 from 45.3 percent in May 2011. Within non-food group, out of nine sub-groups, three (*house rent, education and cleaning, laundry & personal appearance*) demonstrated increase in the weighted contribution during June 2011 whereas five sub-groups (*apparel, textile & footwear, fuel & lighting, household furniture & equipment, transportation & communication, and medicare*) reported fall in the weighted contribution during the same month, while the weighted contribution of *recreation & entertainment* sub-group remained unchanged in the reviewed month (see **Figure 2.2**) compared to the previous month.



## 2.1 Food Inflation

CPI food inflation is on declining trend on YoY basis since April 2011 and fell to 15.7 percent in the month under review. It was 15.9 percent in May 2011 and 14.5 percent in June 2010 (see **Figure 2.3**). This decline in CPI food inflation on YoY basis during June 2011 was mainly contributed by fall in prices of pulse masoor and mash, onion, tomatoes, brinjal,



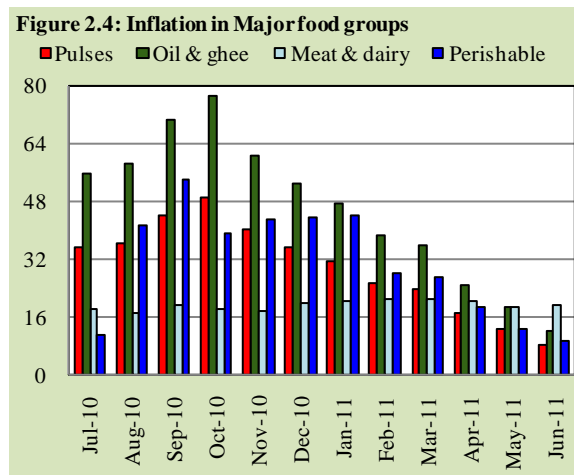


bottlegourd, lady finger, tinda, turai, and ginger compared to the same month of previous year.

Among top ten contributors to CPI inflation (YoY) during June 2011, six items were from the food group (fresh milk, vegetable ghee, meat, fresh fruits, readymade food, and spices). Combined weighted contribution of these items in the overall CPI food inflation was 37.4 percent in June 2011 and the share of these items in top ten contributors was 62.5 percent (see **Table A3** in **Annexure A**).

Detailed analysis of price movements in CPI food basket reveals that out of the reported 110 commodities, 75 commodities recorded double digit inflation on YoY basis in the reviewed month compared to 68 commodities of the same classification in the corresponding month of preceding year. Four out of 75 commodities registering more than 50 percent price change on YoY basis were cardamom large, chillies powder, apple and aloo bukhara, while other 71 items exhibited price changes (YoY) in the range of 10 to 50 percent during June 2011. On the other hand, 23 commodities witnessed price change between 0 to 10 percent and 12 items showed decline or no change in their prices in the reviewed month (see **Table A2** in **Annexure A**).

Further disaggregation of food items can be made on the basis of perishable, grains, pulses, oil & ghee, and meat & dairy sub-groups. Inflation in all these sub-groups (except for *meat & dairy*) declined in the month under review. Inflation (YoY) in perishable group declined by 3.1 percentage points; from 12.6 percent during May 2011 to 9.5 percent in June 2011. This decline was mainly contributed by potatoes, onions, and tomatoes. However, meat & dairy commodities' prices recorded 19.5 percent inflation in June 2011, which was not only higher than the inflation witnessed in May 2011 but also higher than the inflation during the same month last year (see **Figure 2.4**).

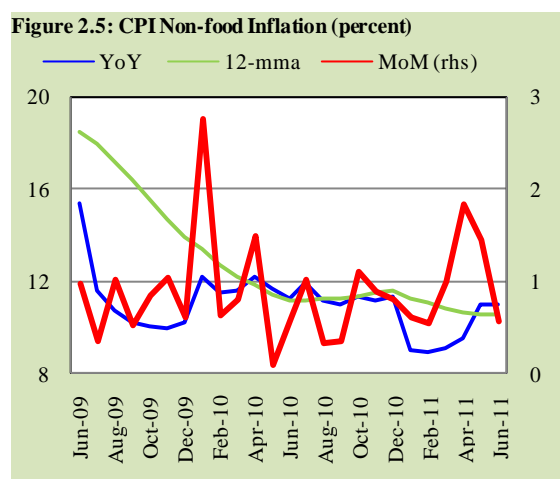


On MoM basis deflation was observed for all above mentioned sub-groups of food basket (except for *meat & dairy*) in June 2011. Perishable food sub-group

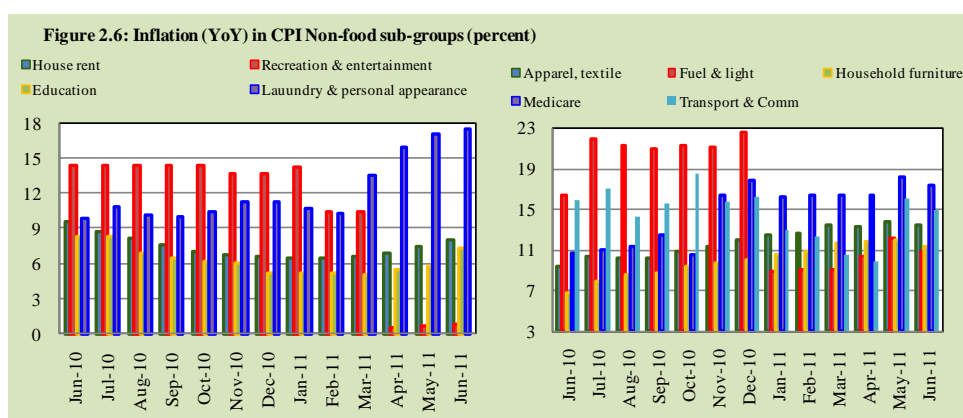
recorded 3.7 percent deflation in the month under review on top of 7.0 percent deflation in earlier month due to decline in the prices of onions, vegetables and most of fresh fruits. In contrast, the meat & dairy sub-group demonstrated inflation in the reviewed month. This sub-group witnessed 2.1 percent MoM inflation in June 2011; highest since April 2011.

## 2.2 Non-food Inflation

Year on year inflation in non-food group remained unchanged at 11.0 percent in June 2011 as was in the last month. However, non-food inflation on MoM basis continued declining (for the second consecutive month) in June 2011. MoM non-food inflation fell by 0.9 percentage points to 0.6 percent in the month under review on top of 0.4 percentage points decline in the previous month (see **Figure 2.5**).



Within non-food basket, four sub-groups (*house rent, recreation & entertainment, education, and cleaning, laundry & personal appearance*) out of nine sub-groups demonstrated increase in YoY inflation during June 2011 while five (*apparel, textile & footwear, fuel & lighting, household furniture & equipment, transportation & communication, and medicare*) reported fall in inflation during



June 2011 (see **Figure 2.6**). A fall in (MoM) inflation was witnessed for five out

of nine subgroups, two groups (*education, and cleaning, laundry & personal appearance*) showed rise in inflation, and fall in the prices of the remaining two subgroups (*fuel & lighting, and transportation & communication*) was recorded during June 2011 over May 2011.

Within the non-food (YoY) inflation, the highest acceleration of 1.7 percentage points was registered in *education* sub-group during June 2011. It rose to 7.4 percent during the reviewed month compared to 5.7 percent a month earlier. MoM inflation in *education* sub-group jumped by 0.4 percentage points and reached 1.6 percent compared to 1.2 percent in the previous month.

A significant deceleration was recorded in *fuel & lighting* and *transport & communication* sub-groups in June 2011 on the back of reduction in POL products' prices. The inflation in *fuel & lighting* sub-group fell from 12.1 percent in the last month to 10.8 percent in the month under review. It was 16.4 percent in the corresponding month of preceding year. For *transport & communication* sub-group (YoY) inflation fell by 1.1 percentage points to 14.8 percent in contrast to 6.1 percentage points rise in the previous month. On month-on-month basis, a deflation of 0.5 percent was registered in *fuel & lighting* sub-group in June 2011 as against 0.8 percent inflation in May 2011. Prices fell by 0.3 percent for *transport & communication* sub-group in the month under review compared to 3.3 percent surge during the last month.

Detailed analysis of 250 commodities included in CPI non-food basket showed that on YoY basis prices of only 4 commodities declined, 45 showed no change in their prices, 36 showed price changes between 0 to 5 percent, 45 depicted price changes between 5 to 10 percent, and 120 commodities witnessed price changes of more than 10 percent. The commodities which showed significant (YoY) price change included silver (113.8 percent), government medical college fee MBBS (71.9 percent), and glaxos-D (43.0 percent) in June 2011 (see **Table A2 & A4** in **Annexure A**).

### **2.3 Inflation Diffusion**

To see how widespread inflation is in the CPI basket (of 374 commodities), inflation diffusion index (IDI) can be used. It is based on MoM change in the prices of commodities. If it is zero, it means that the number of commodities for which prices increase (on MoM basis) equals the number of items for which prices decrease<sup>1</sup>. A positive (negative) inflation diffusion index means the number of commodities for which prices increased is higher (lower) than the number of commodities for which prices decrease during the month.

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<sup>1</sup> For details, see Appendix B

Table 2.1: Inflation Diffusion Index - based on MoM change

	General	Food Beverages & Tobacco	Apparel, Textile & Footwear	Fuel & Lighting	Household Furniture & Equipment	Transport & Communi- cation	Recreation & Entertainment	Education	Cleaning, Laundry & Personal Appearance	Medicare	NFNE*
Jun-10	44.6	43.1	69.0	26.7	75.0	37.2	-18.8	20.8	58.3	24.1	48.3
Jul-10	44.2	45.5	59.5	40.0	88.6	30.2	-6.3	12.5	55.6	10.3	44.4
Aug-10	47.9	69.7	61.9	26.7	90.9	30.2	18.8	12.5	13.9	3.4	39.2
Sep-10	48.3	61.8	69.0	20.0	88.6	20.9	0.0	20.8	38.9	20.7	45.3
Oct-10	55.2	52.7	81.0	73.3	93.2	44.2	25.0	16.7	61.1	17.2	54.7
Nov-10	47.6	42.3	76.2	20.0	95.5	30.2	18.8	29.2	58.3	10.3	52.2
Dec-10	45.5	38.9	81.0	53.3	93.2	27.9	12.5	0.0	52.8	13.8	48.7
Jan-11	49.9	61.5	78.6	20.0	84.1	30.2	31.3	25.0	27.8	13.8	47.0
Feb-11	48.9	43.5	78.6	20.0	86.4	53.5	31.3	16.7	44.4	17.2	53.9
Mar-11	54.7	62.0	78.6	40.0	88.6	32.6	18.8	25.0	66.7	10.3	52.1
Apr-11	52.7	31.8	76.2	33.3	93.2	55.8	31.3	58.3	72.2	20.7	62.3
May-11	47.4	21.1	64.3	33.3	97.7	39.5	43.8	62.5	75.0	17.2	60.2
Jun-11	40.8	43.6	59.5	0.0	40.9	16.3	25.0	62.5	66.7	17.2	43.6

\*: Non-food non-energy

Figure 2.7: Overall Inflation Diffusion Index (IDI) and YoY inflation (percent)

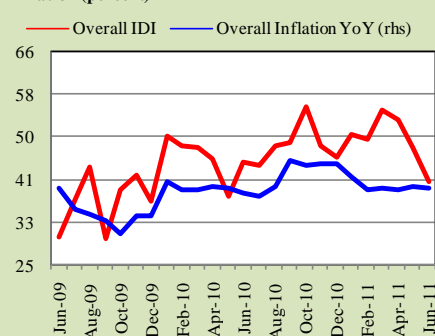
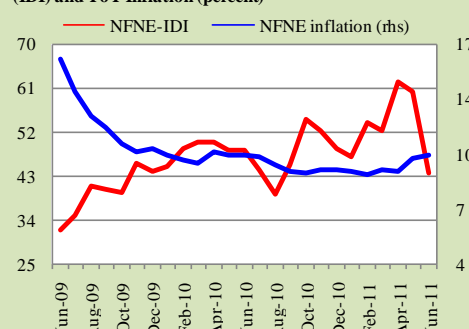


Figure 2.8: Non-food Non-energy Inflation Diffusion Index (IDI) and YoY Inflation (percent)



A decline of 6.6 points in inflation diffusion index was recorded during June 2011 compared to the previous month (see **Figure 2.7 & Table 2.1**). Inflation diffusion index for non-food non-energy group also decreased during June 2011 (see **Figure 2.8**). IDI for food group jumped up significantly during June 2011 from its level a month earlier on the back of (MoM) inflation in the food prices in the month under review. Except for the food group, the diffusion indices of inflation for all subgroups showed either a decline or remained unchanged during June 2011. The inflation diffusion for *fuel and lighting* group – which consists of fifteen items – fell to zero simply because the number of commodities for which prices rose (four) turned out to be same as for which prices fell (four); prices of the seven

items remained unchanged during the month under review (see **Figure A4 of Appendix A**).

## 2.4 City-wise Inflation

City-wise inflation (YoY) data reveals that two (Quetta and Peshawar) out of five major cities had higher than the overall headline inflation during June 2011. The highest inflation (YoY) was observed in Peshawar; 0.7 percentage points higher than the overall inflation (see **Table 2.2**).

**Table 2.2: City-wise Inflation of Selected Cities (percent)**

	Jun-10		May-11		Jun-11	
	MoM	YoY	MoM	YoY	MoM	YoY
<b>Over all CPI</b>	0.6	12.7	0.2	13.2	0.6	13.1
Islamabad	0.6	9.7	0.2	11.6	0.6	12.3
Lahore	-0.2	11.4	0.6	9.4	0.4	10.8
Karachi	-0.4	13.9	0.7	10.7	0.9	10.5
Quetta	1.6	11.3	-0.1	13.1	1.4	13.5
Peshawar	0.8	13.0	0.9	14.6	1.1	13.8

Inflation data for 35 cities (see **Table A6 in Annexure A**) for the month under review shows that, on YoY basis, 19 cities had higher inflation than the overall inflation, whereas 16 cities observed lower than the overall inflation during June 2011. The highest inflation was recorded in Loralai & Cantt, while Sialkot maintained its last month position as the lowest inflation city. As far as the (YoY) food basket is concerned, Loralai & Cantt and Sialkot also represented the same position with highest and lowest inflation respectively. While the highest non-food inflation (YoY) was seen in Khuzdar and the lowest non-food inflation was observed in Lahore.

## 2.5 Income Group-wise Inflation

Income group-wise (YoY) inflation data shows that lowest income group (upto Rs. 3000) shared higher inflation than the overall inflation in case of CPI basket

**Table 2.3: Income Group-wise Inflation (YoY)**

	General			Food			Non-food		
	Jun-10	May-11	Jun-11	Jun-10	May-11	Jun-11	Jun-10	May-11	Jun-11
Up to Rs. 3000	12.7	14.6	14.3	14.1	15.6	15.3	10.8	13.1	12.9
Rs. 3001-5000	12.7	14.1	13.8	14.1	15.4	15.1	11.1	12.4	12.3
Rs. 5000-12000	12.8	13.3	13.1	14.4	15.6	15.4	11.2	10.9	10.7
Above Rs. 12000	12.6	13.1	13.1	14.8	16.5	16.3	11.3	11.0	11.1
All income groups	12.7	13.2	13.1	14.5	15.9	15.7	11.2	11.0	11.0

and non-food group. As far as the food basket is concerned, it shows a quite opposite picture with highest income group facing the higher than the overall inflation during June 2011 (see **Table 2.3**).

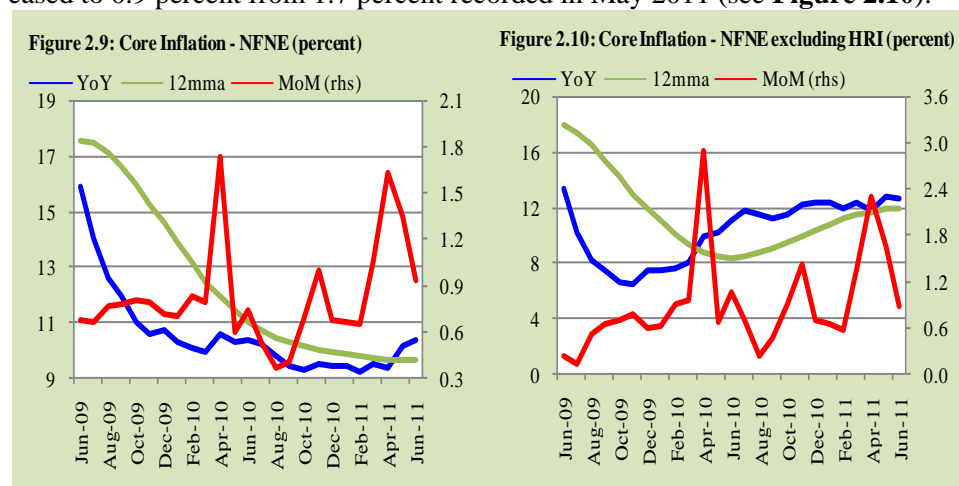
City and income group-wise (YoY) inflation data, collected from 17 cities for June 2011, shows that the highest inflation was recorded in Khuzdar for first three income groups and Larkana experienced the highest inflation for highest income group. Sialkot experienced the lowest inflation for all income groups. In case of

food items, Sukkur shared the highest food inflation for lowest income group while Larkana observed the highest inflation for other three income groups. Sialkot experienced lowest food inflation in all income groups. Khuzdar witnessed highest inflation for non-food items for first three income groups and Sargodha recorded the highest non-food inflation for the top income group. Islamabad had lowest non-food inflation for first three income groups while Lahore experienced lowest non-food inflation for the highest income group (see **Table A5 in Annexure A**).

## 2.6 Core Inflation

Core inflation (YoY) measured by NFNE basket further increased to 10.4 percent during June 2011 from 10.2 percent in the previous month. However, it (10.4 percent) was identical with June 2010. On MoM basis NFNE core inflation also decreased and was recorded at 0.9 percent in June 2011 compared to 1.3 percent during May 2011 (see **Figure 2.9**).

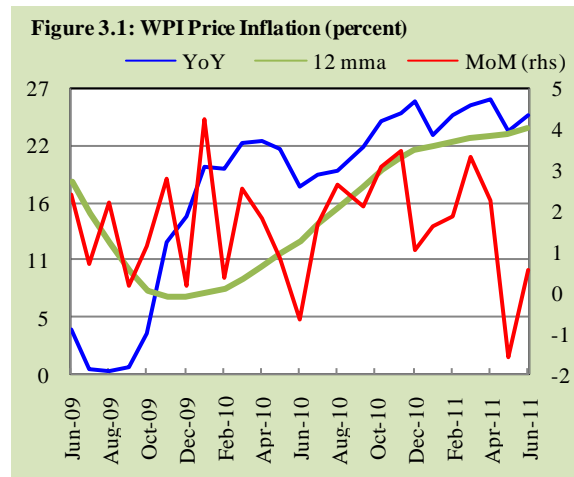
NFNE excluding HRI core inflation (YoY) decreased slightly to 12.6 percent in June 2011 from 12.8 percent in May 2011. The same was 11.1 percent in June 2010. During the month under review NFNE excluding HRI core inflation (MoM) eased to 0.9 percent from 1.7 percent recorded in May 2011 (see **Figure 2.10**).



Core inflation (YoY) measured by 20% trimmed mean decelerated to 12.0 percent in June 2011 from 12.1 percent during May 2011. It was 11.7 percent in the corresponding month last year. On MoM basis 20% trimmed mean core inflation showed a decline and reached 0.7 percent in June 2011 compared to 0.9 percent during May 2011. Similar behaviour was observed in both the MoM and YoY inflation in 'excluding HRI from 20% trimmed mean basket'.

### 3. Wholesale Price Index

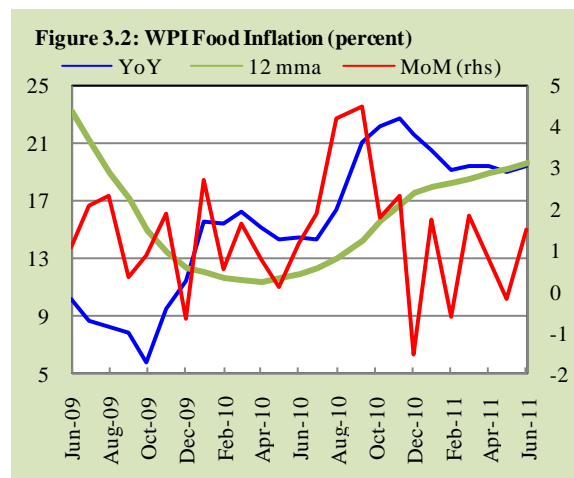
Decline in wholesale price index during the previous month proved short lived as it increased by 0.6 percent (on MoM basis) in June 2011 (see **Figure 3.1**). MoM WPI inflation was contributed by increase in the wholesale prices of food items by 1.5 percent during June 2011. Non-food WPI declined (by 0.1 percent) for the second consecutive month despite significant (MoM) inflation in the building material prices of 8.2 percent during June 2011 which is highest after 2003-04.



WPI inflation (YoY) increased to 24.4 percent during June 2011 from 22.9 percent a month earlier. This was significantly higher than June 2010 WPI inflation of 17.6 percent (see **Figure 3.1**). Both food and non-food groups contributed to the increase in (YoY) WPI inflation during the month under review.

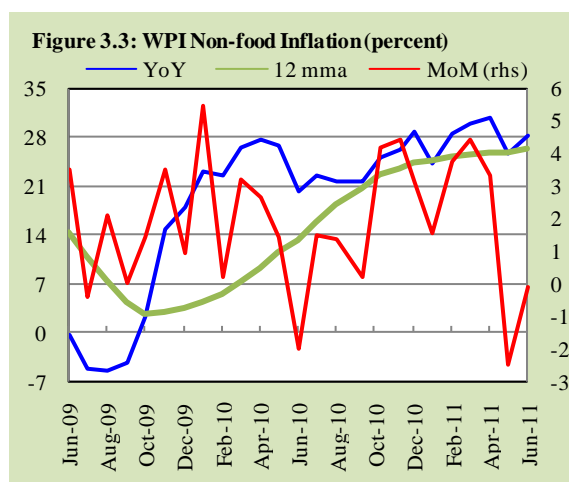
In this month, 12-month average WPI (YoY) inflation was recorded at 23.3 percent compared to 12.9 percent observed in June 2010. WPI (YoY) average inflation during June 2011 was highest compared to recent history for the months of June. Average WPI inflation peaked in June 2011 on the back of very high inflation in the *raw materials* and *manufactures* subgroups due to 90 percent (average) inflation in cotton prices during this period.

WPI food inflation (YoY) increased to 19.4 percent in June 2011 compared to 19.0 percent in the previous month and 14.5 percent in the corresponding month last year. On MoM basis wholesale food prices showed an inflation of 1.5 percent during the month

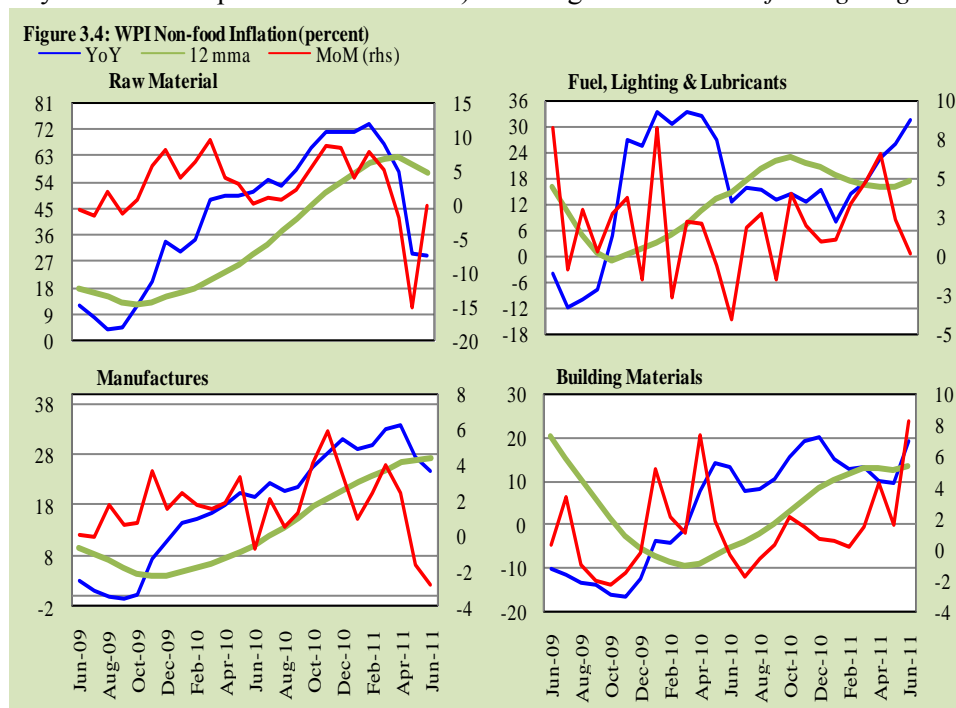


under review compared to 0.2 percent deflation in the previous month (see **Figure 3.2**).

WPI non-food inflation (YoY) recorded a rise of 2.5 percentage points and increased to 28.3 percent in June 2011 from 25.8 percent observed during May 2011. It was 20.1 percent during June 2010. However, on MoM basis, WPI non-food prices fell by 0.1 percent during the reviewed month over and above a fall of 2.5 percent in the last month (see **Figure 3.3**) following a decline in the international commodity prices (see **Table 5.1**).



Historic jump in *building material* sub-group YoY inflation (from 9.6 percent in May 2011 to 19.1 percent in June 2011) and a significant rise in *'fuel lighting and*

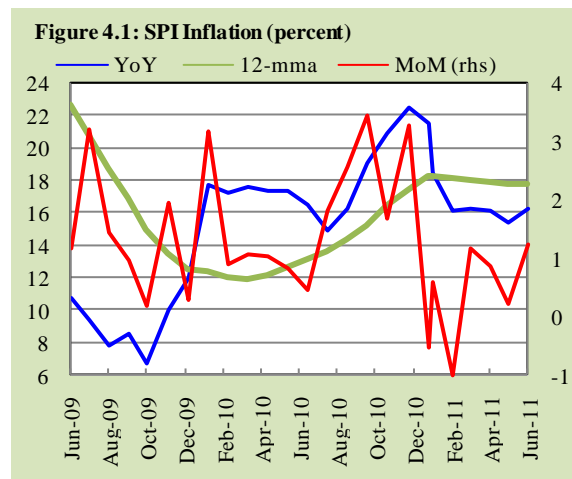




*lubricants'* sub-group (YoY) inflation contributed to higher overall non-food WPI inflation in the month under review compared to its previous month level. Lower (YoY) inflation was observed in the other two sub-groups - *raw materials* and *manufactures* - compared to previous month. On MoM basis three sub-groups showed inflation while one recorded deflation during June 2011 (see **Figure 3.4**). Detailed item-wise analysis of WPI basket shows that out of 106 items, 74 items recorded double digit inflation (YoY) - out of which 27 were food items.

#### 4. Sensitive Price Indicator

SPI inflation (YoY) in June 2011 increased to 16.3 percent from 15.4 percent in May 2011. It was slightly lower than 16.5 percent SPI inflation recorded in the corresponding month last year. On MoM basis, SPI witnessed an inflation of 1.2 percent during the month under review compared to 0.2 percent in May 2011 (see **Figure 4.1**).



Out of 53 commodities included in SPI basket, 37 (31 in June 2010) showed more than 10 percent (YoY) price increase during June 2011. On MoM basis 10 items' prices showed decline, prices for 9 items remained same, for 12 items prices increased between 0 to 1 percent, and for 22 items prices rose by 1 percent or more during June 2011.

Income group-wise data suggests that incidence of SPI inflation (YoY) was highest on the lowest income group during June 2011, and third income group (having income of Rs. 5001-12000) had the lowest incidence in the same month. As far as the MoM inflation incidence is concerned, it has the highest effect on the third income group in the month under review (see **Table 4.1**).

**Table 4.1; Income Group-wise SPI Inflation (percent)**

	Jun-10		May-11		Jun-11	
	YoY	MoM	YoY	MoM	YoY	MoM
Up to Rs. 3000	14.9	1.0	16.7	-0.3	16.9	1.2
Rs. 3001-5000	14.9	0.9	15.9	-0.3	16.3	1.2
Rs. 5001-12000	15.5	0.8	15.0	-0.2	15.5	1.3
Above Rs. 12001	17.7	0.1	14.8	0.6	15.9	1.0
<b>All income groups</b>	<b>16.5</b>	<b>0.4</b>	<b>15.4</b>	<b>0.2</b>	<b>16.3</b>	<b>1.2</b>

## 5 Global Commodity Prices

Another month of deflation was seen in global commodity prices as overall IMF commodity price index further declined by 1.5 percent (on MoM basis) in June 2011 over 5.0 percent fall in the previous month. All major price indices retreated with the exception of agricultural commodities sub-group which rose by 2.8 percent in June 2011. The decrease in global commodity prices during June 2011 was mainly due to concerns over Greece debt, US debt ceiling issue, slower global economic growth (on the back of falling global manufacturing production index for fourth consecutive month in June 2011 which touched its lowest level after July 2009), and improved supply prospects of agricultural goods, (see **Table 5.1**). On YoY basis, overall global commodity prices inflation was at 40.3 percent in June 2011 compared to 39.9 percent during May 2011 and 9.9 percent in June last year.

### Food Group

Despite significant rise in sugar prices, IMF food prices index recorded another slump of 3.0 percent in June 2011 in addition to 1.9 percent slip observed during the previous month (see **Figure 5.1**). The deflation in food group was

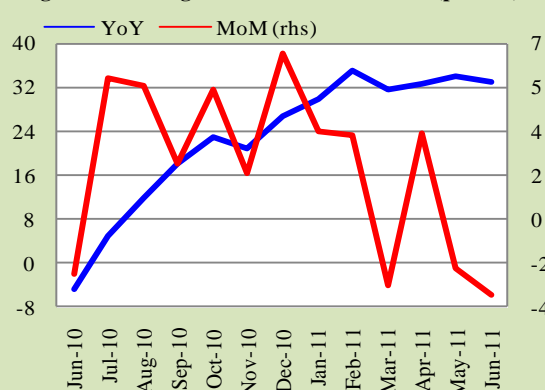
**Table 5.1: Monthly Changes in Major Indices (percent)**

	YoY			
	Jun-10	Apr-11	May-11	Jun-11
Overall	9.9	36.1	39.9	40.3
Food	-4.8	32.6	34.2	33.1
Metals	27.6	41.9	50.5	55.9
Energy	9.6	36.1	40.8	40.0
Agricultural	28.5	37.0	29.3	40.1
Cotton	49.3	145.9	83.8	79.9

	MoM			
	Jun-10	Apr-11	May-11	Jun-11
Overall	-1.8	4.6	-5.0	-1.5
Food	-2.2	3.4	-1.9	-3.0
Metals	-5.0	2.4	-4.3	-1.6
Energy	-0.9	6.1	-5.7	-1.5
Agricultural	-5.1	-1.0	-7.6	2.8
Cotton	1.8	-5.7	-23.6	-0.4

**Figure 5.1: Change in IMF Food Price Index (percent)**



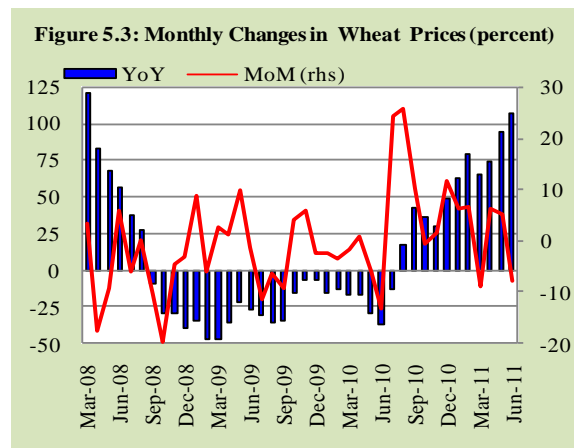
**Figure 5.2 Monthly Sugar Prices Trend (USD/pound)**



mainly driven by the fall in the prices of corn, meat, coffee, and edible oils in June 2011. Sugar prices (US\$/pound) reversed their downward trend started early 2011 and reached 24.9 compared to 21.9 in the last month (see **Figure 5.2**). The significant rise in sugar prices was due to uncertain levels of supply on the back of poor output from Brazil (the world's largest exporter), and growing demand from USA, China and India.

Wheat prices plummeted by 7.9 percent (or by US\$ 28.0, to US\$/MT 326.5) during June 2011 compared to an increase of 5.4 percent a month earlier. This ease was mainly due to the decision of Russia and Ukraine to lift the ban from wheat export effective July 1, 2011, good prospects of wheat harvest in Australia, improved weather conditions in Germany & France, and rains in western Europe.

However, on YoY basis wheat prices recorded 107.0 percent increase during June 2011 - highest YoY wheat price inflation after March 2008 (see **Figure 5.3**). Overall (YoY) food price inflation decelerated marginally and reached 33.1 percent during June 2011 compared to 34.2 percent in May 2011.



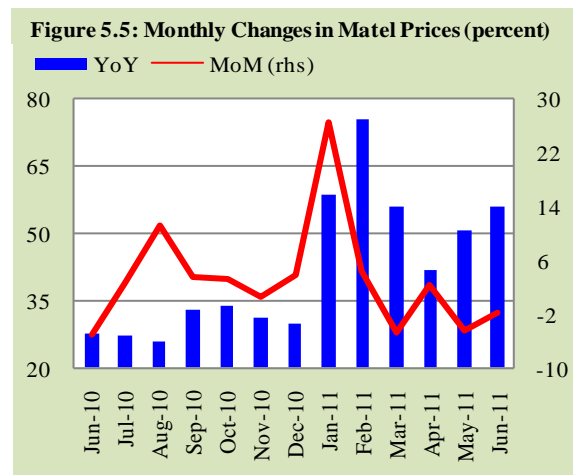
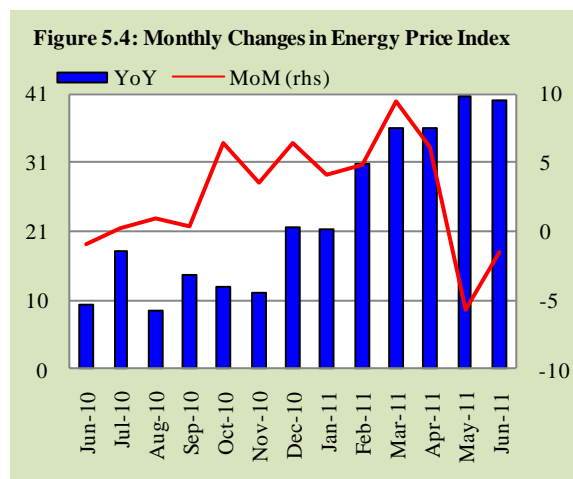
### Non-food group

Within the non-food group, energy prices index declined in June 2011 and registered 1.5 percent deflation on MoM basis in the month under review following 5.7 percent fall in the previous month. The current month's non-food deflation was mainly shared by decline in the metal and energy prices (see **Table 5.1**). Cotton prices also declined but marginally. Crude oil prices were dropped further by 2.2 percent (from US\$/barrel 108.2 to 105.9) on MoM basis in the reviewed month as members of International Energy Agency released crude oil from their strategic reserves. Among other factors, weak economic data from Europe & the United States, unexpected fall in German industrial production, concerns over US debt ceilings, expectation of increase in the oil production in OPEC countries were the main factors behind the fall in the crude oil prices in the month under review.

During June 2011, a slight ease was also observed in the energy prices YoY inflation which declined to 40.0 percent from 40.8 percent a month earlier (see

**Figure 5.4).** The fall in YoY inflation in energy was contributed by all components of this sub-group - crude oil, coal and natural gas. Crude oil prices increased by 41.6 percent on YoY basis in reviewed month compared to 42.8 percent rise during May 2011 and 8.1 percent in the corresponding month of preceding year.

Among non-food sub-groups, (YoY) inflation in metals prices remained high and rose to 55.9 percent in June 2011 compared to 50.5 percent in the previous month (see **Figure 5.5**). On MoM basis, metals prices fell by 1.6 percent in the reviewed month as well as against a slump of 5.7 percent in May 2011 mainly due to slowing global manufacturing activity.



## Annexure A

Table A1: CPI Inflation by Groups (percent)

	Weights	MoM change			YoY change		
		Jun-10	May-11	Jun-11	Jun-10	May-11	Jun-11
<b>I. Food Group</b>	<b>40.3</b>	<b>0.7</b>	<b>-1.1</b>	<b>0.5</b>	<b>14.5</b>	<b>15.9</b>	<b>15.7</b>
<b>II. Non-Food Group</b>	<b>59.7</b>	<b>0.6</b>	<b>1.4</b>	<b>0.6</b>	<b>11.2</b>	<b>11.0</b>	<b>11.0</b>
Apparel, textile, etc.	6.1	0.7	1.8	0.5	9.3	13.7	13.5
House rent	23.4	0.4	1.0	1.0	9.7	7.5	8.1
Fuel & lighting	7.3	0.6	0.8	-0.5	16.4	12.1	10.8
Household furniture & equipment	3.3	0.7	1.0	0.1	6.7	11.9	11.2
Transport & communication	7.3	0.6	3.3	-0.3	15.8	15.9	14.8
Recreation & entertainment	0.8	0.0	0.1	0.1	14.4	0.8	0.8
Education	3.5	0.1	1.2	1.6	8.4	5.7	7.4
Cleaning, laundry, etc.	5.9	1.3	1.6	1.7	10.0	17.2	17.6
Medicare	2.1	1.3	2.3	0.6	10.6	18.1	17.3
<b>Headline</b>	<b>100.0</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	<b>12.7</b>	<b>13.2</b>	<b>13.1</b>

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

Groups	% Changes	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 (10% or more)	
		Jun-10	Jun-11	Jun-10	Jun-11	Jun-10	Jun-11	Jun-10	Jun-11	Jun-10	Jun-11
<b>I. Food Group</b>	<b>15.7</b>	<b>110</b>	<b>110</b>	<b>14</b>	<b>12</b>	<b>17</b>	<b>8</b>	<b>11</b>	<b>15</b>	<b>68</b>	<b>75</b>
<b>II. Non-Food Group</b>	<b>11.0</b>	<b>250</b>	<b>250</b>	<b>55</b>	<b>49</b>	<b>39</b>	<b>36</b>	<b>71</b>	<b>45</b>	<b>85</b>	<b>120</b>
Apparel, textile, etc.	13.5	42	42	8	5	2	1	18	5	14	31
House rent	8.1	1	1	0	0	0	0	1	1	0	0
Fuel & lighting	10.8	15	15	1	5	0	0	0	1	14	9
Household furniture & equipt	11.2	44	44	1	1	13	3	22	14	8	26
Transport & communication	14.8	43	43	15	7	4	7	9	6	15	23
Recreation & entertainment	0.8	16	16	4	7	5	8	2	0	5	1
Education	7.4	24	24	5	4	4	10	7	8	8	2
Cleaning, laundry, etc.	17.6	36	36	7	4	6	3	9	10	14	19
Medicines	17.3	29	29	14	16	5	4	3	0	7	9
<b>Overall</b>	<b>13.1</b>	<b>360</b>	<b>360</b>	<b>69</b>	<b>61</b>	<b>56</b>	<b>44</b>	<b>82</b>	<b>60</b>	<b>153</b>	<b>195</b>

Note: Prices of 14 seasonal items were not reported during the month.

**Table A3: Top Ten Contributors to YoY CPI Inflation in June 2011**

Items / Contributors		Weights	YoY change		Weighted Contribution
			Jun-10	Jun-11	
A. Ranked by Weighted Contribution					
1	House Rent Index	23.43	9.69	8.11	13.71
2	Milk Fresh	6.66	15.36	20.72	12.44
3	Vegetable Ghee	2.67	6.07	39.14	8.83
4	Meat	2.70	26.33	21.82	6.96
5	Fresh Fruits	1.62	17.46	36.80	4.96
6	Petrol	1.73	9.29	27.73	3.62
7	Electricity	4.37	18.63	12.55	3.52
8	Readymade Food	1.68	12.58	18.76	2.78
9	Spices	0.60	20.57	53.54	2.64
10	Transport Fare/Charges	2.12	16.59	10.63	2.25
Total		47.58			61.71
B. Ranked by Percentage Change					
1	Spices	0.60	20.57	53.54	2.64
2	Vegetable Ghee	2.67	6.07	39.14	8.83
3	Fresh Fruits	1.62	17.46	36.80	4.96
4	Jewellery	0.39	33.78	33.75	2.02
5	Cooking Oil	0.69	3.33	32.71	1.78
6	Diesel	0.21	14.49	31.39	1.00
7	Toilet Soap	0.74	0.00	30.35	1.42
8	Petrol	1.73	9.29	27.73	3.62
9	Kerosene	0.14	7.37	25.29	0.54
10	Honey	0.04	16.60	24.93	0.07
Total		8.81			26.89
C. Ranked by Weights					
1	House Rent Index	23.43	9.69	8.11	13.71
2	Milk Fresh	6.66	15.36	20.72	12.44
3	Wheat Flour	5.11	1.40	3.86	1.88
4	Electricity	4.37	18.63	12.55	3.52
5	Bakery & Confectionary	2.98	4.59	7.67	1.18
6	Meat	2.70	26.33	21.82	6.96
7	Vegetable Ghee	2.67	6.07	39.14	8.83
8	Tution Fees	2.36	7.88	8.61	1.31
9	Transport Fare/Charges	2.12	16.59	10.63	2.25
10	Natural Gas	2.05	16.08	4.20	0.95
Total		54.45			53.01
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 13.1 percent in June 2011.					

Table A4: Distribution of Price Changes (YoY)- Selected CPI Items, June 2011

Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	Increase of over 10%
Food Group	Onion, Tomatoes, Ginger, Pulse Masoor, Bottlegourd, Pulse Mash, Brinjal, Lady Finger, Turai,	Garlic, Coffee- Nescafe 75 Gm., Wheat, Wheat Flour Fine/Superior., Maida, Chillies Green, Chicken , Wheat Flour Bag,	Cigarettes Capstan 10'S, Cigarettes Morven Gold 20'S, Muskmelon (Kharbooza), Coriander Seed Powd.Nationa, Vermicelli, Jam Ahmed/Mitchelles, Curry Powd. National 200 Gm, Sugar Refined, Bread Plain Medium Size, Salt-Powdered (Lahori) Loose,	Fruit Juice Tetra Pack, Eggs, Rice Basmati 385/386, Milk Powder Loose/Packed, Mango Kalmi, Dates Av.Qlty., Tea(L/R) Brookbond Supreme 250Gm., Cooked Dal (Av. Hotel), Rooh Afza, Gram Whole Yellow Av.Qlty, Cold Drink (Standard Siz), Vegetable Ghee (Loose)
Apparel & Textile	Gents Shoes Paul Bata, Gents Sandal Bata, Child Shoe Power Lite Bata	Pullover Gents Oxford/Bon.,	Ladies Sandal Bata, Tailoring Coat-Pant Suit, Ladies Spoung Chappal Bata	Full Pant Boy 24"/26" Lgth., Tailoring Awami-Suit (Male), Dopatta Georgette Av.Qlty.
House Rent Index	House Rent Index			
Fuel & Lighting	Gas Chrg 3.3719 - 6.7438 Mmbtu, Match Box Small, Gas Chrg10.1157 - 13.4876Mmbtu,		Tube Light Philips 40 Watts,	Elect.Charges 301 - 1000 Uni, Firewood Whole, Kerosene Oil, Gas Cylinder Stand. Size
Household Furniture & Equipment	Washing Machine Singer,	Carpet Plain Av. Qlty, Wall Clock Quartz Av.Qlty, Aircooler Super Asia	Water-Set S.Steel Sup.Qlty, Tea-Set S.Steel 3 Pcs. M.Siz, Pedestal Fan 22" Super Qlty	Ceiling Fan 48" Super Qlty, Airconditioner 1.5 Ton PEL, Chair Shesham Wood With Arms
Transport & Communication	Platform Ticket, Postal Envelope Domestic, Postal Registration Charges, Aerogram For Saudi Arabia	Car Tax For 800Cc To 1300Cc, Suzuki Fare Min.With In City, Suzuki Fare Maximum W.In Cit, Internet Charges	Bus Fare Max (Within Cit, Minibus Fare Min.With In Cit, Bus Fare Min (Within City), CNG Filling Charges	Motorcycle Yamaha 100Cc., Tyre Motor Cycle Without Tub, Auto Rickshaw Fares, Train Fare A/C Slp > 500Km.
Recreation & Entertainment	Daily "Dawn", Daily "Jang", Monthly "Naunehal Digest"	Video Game Sega 16 Byte Radio With C.Player National, Cinema A/C. Highest Class		Dry Cell 1.5 Volt(Local)
Education	English Book Class V1, Govt. College Fee 1st. Year, Govt. College Fee 4Th. Year	Comp. With Printer & Speaker Urdu Book 1st.Year/Inter, English Book Class 1x Or X	Maths Book Class 1x Or X, School Fee Primary Eng.Med.Paper Foolscape (27"X17")	Govt. University Fee Msc., Govt. Med. College Fee MBBS,
Cleaning & Laundry	Surf (Medium) 160 Grm, Toothpaste Macklines 70 Grm, Toothpowder Dentonic 90 Grm, Lipstick S.Miss/Medora	Washing Powder 1000 Grm, Disposable Razor Gillet-Ii, Facecream Ponds (Medium),	Shampoo Plain Medora 200 ML., Wrist Watch Ladies Citizen, Toothbrush Shield A/Plaque, Cleanser Powder Vim 1000 Gm	Hair-Oil Amla/Chambeli, Haircut Charges For Men, Artificial Jewellery Set, Silver Tezabi 24 Ct
Medicare	Betnovate-N Ointment 5 Gms, Sancos Syrup (50 ML.), Renitec Tab. 5 Mg.	Ventolin Tab. 2Mg., Daonil Tab. 5 Mg., Lederplex Syrup		Doctor (MBBS) Clinic Fee, Entox Tab., Galxos-D (450 Grms)

**Table A5: City-wise Inflation by Income Groups, June 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
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Lahore	1.4	12.2	1.7	13.8	1.1	10.1	1.2	11.8	1.2	13.5	1.2	9.7
2 Faisalabad	0.0	10.0	-0.6	9.7	0.9	10.4	0.2	10.5	-0.6	9.4	1.1	12.0
3 Rawalpindi	0.3	12.8	-0.3	15.9	1.1	8.5	0.5	12.3	0.0	14.9	1.2	9.0
4 Multan	1.4	13.8	1.5	13.5	1.1	14.1	1.4	12.9	1.6	13.0	1.2	12.8
5 Gujranwala	0.3	11.8	0.1	13.4	0.5	9.6	0.3	11.5	0.0	13.0	0.6	9.6
6 Islamabad	0.9	12.7	1.1	17.5	0.5	6.5	0.6	12.6	0.4	16.7	0.7	7.6
7 Sargodha	-0.5	13.1	-1.8	12.7	1.2	13.6	-0.6	13.3	-1.8	12.8	0.8	13.9
8 Sialkot	0.4	9.0	0.0	8.8	0.9	9.2	0.6	9.2	0.5	9.3	0.7	8.9
9 Bahawalpur	0.7	15.5	0.6	14.5	0.8	16.9	0.7	15.3	0.6	14.8	0.8	16.0
10 Karachi	1.3	11.5	1.8	14.0	0.6	8.2	1.4	10.6	1.9	12.3	0.8	8.5
11 Hyderabad	2.3	13.1	3.1	13.0	1.3	13.3	2.1	13.0	3.1	13.7	0.9	12.2
12 Sukkur	0.3	15.7	-0.1	20.3	0.9	9.4	0.4	14.9	0.0	18.9	1.0	10.2
13 Larkana	0.3	16.4	-0.2	19.7	1.1	12.0	0.0	16.4	-0.7	19.3	1.0	12.7
14 Peshawar	0.2	16.0	0.1	15.9	0.4	16.2	-0.1	15.2	-0.6	14.4	0.5	16.1
15 Bannu	0.4	14.0	0.8	14.7	-0.1	13.0	0.7	13.3	1.4	13.6	-0.2	12.8
16 Quetta	2.2	14.7	3.4	16.6	0.4	11.9	1.8	13.7	2.7	16.4	0.5	10.2
17 Khuzdar	3.1	19.7	3.6	18.6	2.4	21.2	2.6	18.9	3.1	17.7	1.9	20.3
	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
	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1 Lahore	1.0	10.8	1.0	13.5	1.0	7.9	0.7	10.6	0.8	14.3	0.6	8.3
2 Faisalabad	-0.1	10.1	-0.7	10.2	0.6	9.9	-0.1	10.4	-0.8	11.8	0.3	9.5
3 Rawalpindi	0.4	11.9	-0.1	15.2	0.9	8.7	0.2	13.4	-0.3	16.1	0.5	11.8
4 Multan	1.1	11.8	1.5	13.0	0.7	10.5	0.7	11.6	1.2	13.6	0.3	10.3
5 Gujranwala	0.1	11.0	-0.1	13.5	0.4	8.5	-0.1	10.9	-0.6	14.4	0.2	8.8
6 Islamabad	0.6	11.5	0.8	16.2	0.4	6.8	0.4	12.4	0.1	16.9	0.6	9.8
7 Sargodha	-1.1	13.5	-1.9	13.3	-0.2	13.6	-1.4	15.3	-2.5	15.3	-0.6	15.3
8 Sialkot	0.3	8.4	0.2	8.8	0.4	8.0	0.1	8.6	-0.4	8.2	0.4	8.8
9 Bahawalpur	0.6	14.6	0.8	16.3	0.5	12.8	0.7	15.2	1.5	19.0	0.2	12.7
10 Karachi	1.3	10.1	1.8	12.2	0.8	8.0	1.4	10.7	1.5	14.0	1.3	8.8
11 Hyderabad	1.9	12.7	2.9	14.0	0.8	11.2	1.6	12.7	2.4	14.6	1.1	11.6
12 Sukkur	0.4	14.4	0.0	18.8	0.7	10.1	0.4	14.2	0.0	18.2	0.6	12.0
13 Larkana	-0.1	15.7	-0.9	19.5	0.7	11.9	-0.3	16.4	-1.2	20.4	0.3	13.9
14 Peshawar	-0.1	13.8	-0.6	14.2	0.4	13.3	-0.5	13.4	-1.5	14.5	0.1	12.8
15 Bannu	-0.1	12.8	0.7	13.4	-0.9	12.2	-0.4	13.4	0.1	14.7	-0.7	12.6
16 Quetta	1.4	13.3	2.2	16.7	0.4	9.7	0.8	13.7	1.4	17.5	0.4	11.3
17 Khuzdar	2.1	15.9	2.9	15.1	1.2	16.7	1.9	14.1	2.7	13.7	1.4	14.3



**Table A6: City-wise Inflation in CPI (YoY) June 2011**

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Loralai & Cantt	20.5	27.0	15.6	Hyderabad	12.7	14.1	11.6
Khuzdar	19.9	21.0	19.0	Rawalpindi	12.7	15.5	10.4
D.I.Khan	17.6	21.4	14.5	Jehlum	12.6	14.2	11.2
Bahawalnagar	16.2	13.9	17.9	Shahdadpur	12.5	13.8	11.4
Larkana	15.9	19.6	12.9	Islamabad	12.3	16.7	8.8
Kunri	15.7	17.4	14.3	Vehari	12.2	12.3	12.1
Okara	15.3	18.4	12.9	Abbottabad	12.0	13.7	10.7
Turbat	15.1	18.0	12.8	Multan	12.0	13.2	10.9
Bahawalpur	15.0	16.5	13.7	D.G. Khan	11.7	13.0	10.6
Mirpur Khas	14.9	18.1	12.4	Attock	11.2	13.1	9.8
Mardan	14.8	15.1	14.5	Mianwali	11.2	8.9	13.1
Jhang	14.5	13.4	15.5	Gujranwala	11.1	13.6	9.0
Samundari	14.5	16.3	13.1	Lahore	10.8	13.8	8.1
Sukkur	14.4	18.7	11.1	Karachi	10.5	12.9	8.4
Sargodha	13.9	13.7	14.1	Faisalabad	10.3	10.9	9.7
Peshawar	13.8	14.4	13.2	Sialkot	8.5	8.5	8.6
Quetta	13.5	17.0	10.5				
Nawabshah	13.2	13.9	12.6				
Bannu	13.1	13.9	12.5				

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

**Table A7 : Income Group-wise Inflation (percent)**

	MoM			YoY		
	Jun-10	May-11	Jun-11	Jun-10	May-11	Jun-11
<b>Up to Rs. 3000</b>						
General	0.9	-0.2	0.7	12.7	14.6	14.3
Food	0.9	-1.4	0.6	14.1	15.6	15.3
Non-food	0.9	1.6	0.7	10.8	13.1	12.9
<b>Rs. 3001-5000</b>						
General	0.9	-0.2	0.7	12.7	14.1	13.8
Food	0.9	-1.4	0.6	14.1	15.4	15.1
Non-food	0.8	1.5	0.7	11.1	12.4	12.3
<b>Rs. 5000-12000</b>						
General	0.8	0.0	0.6	12.8	13.3	13.1
Food	0.8	-1.2	0.6	14.4	15.6	15.4
Non-food	0.8	1.4	0.5	11.2	10.9	10.7
<b>Above Rs. 12000</b>						
General	0.5	0.5	0.5	12.6	13.1	13.1
Food	0.5	-0.9	0.4	14.8	16.5	16.3
Non-food	0.4	1.5	0.5	11.3	11.0	11.1
<b>All income groups</b>						
General	0.6	0.2	0.6	12.7	13.2	13.1
Food	0.7	-1.1	0.5	14.5	15.9	15.7
Non-food	0.6	1.4	0.6	11.2	11.0	11.0

Table A8: SPI Item-wise Price Movements					
S.No	Items	Unit	Prices	Percentage change	
			Jun-11	YoY	Monthly
1	Wheat	Kg.	24.5	2.6	0.7
2	Wheat flour average qlt.	Kg.	28.6	5.0	-0.8
3	Rice basmti.broken	Kg.	55.0	23.1	1.6
4	Rice irri-6	Kg.	42.5	23.2	0.6
5	Masur pulse washed	Kg.	109.3	-9.0	-2.8
6	Moong pulse washed	Kg.	140.3	21.4	0.6
7	Mash pulse washed	Kg.	155.6	-6.3	-0.7
8	Gram pulse washed	Kg.	69.6	20.4	0.6
9	Beef	Kg.	229.5	18.6	1.3
10	Mutton	Kg.	444.4	21.2	1.0
11	Egg hen (farm)	Doz.	66.8	12.0	11.4
12	Bread plain	Each	30.2	10.5	1.2
13	Sugar	Kg.	69.0	9.8	5.3
14	Gur	Kg.	83.3	14.7	2.4
15	Milk fresh	Ltr	56.0	21.9	1.5
16	Milk powdered nido	400g	230.0	15.0	3.4
17	Curd	Kg.	64.7	19.5	1.7
18	Veg.ghee tin	2.5kg	495.0	32.7	0.0
19	Veg.ghee loose	Kg.	166.6	43.4	1.2
20	Mustard oil	Kg.	168.5	24.0	0.5
21	Cooking oil	2.5ltr	495.0	32.7	0.0
22	Potatoes	Kg.	29.3	14.2	10.3
23	Onions	Kg.	14.6	-36.4	-8.8
24	Tomatoes	Kg.	27.7	8.3	64.3
25	Bananas	Doz.	60.7	25.8	4.0
26	Salt powdered	Kg.	7.7	13.0	1.3
27	Red chillies(powder)	Kg.	254.8	44.7	-1.2
28	Garlic	Kg.	159.2	-2.6	-1.0
29	Tea packet	250g	151.3	16.2	0.0
30	Tea (prepared)	Cup	13.7	25.3	0.7
31	Cooked beef plate	Each	56.8	16.6	0.4
32	Cooked dal plate	Each	35.8	17.5	0.1
33	Cigarettes k-2	10's	14.5	7.3	6.1
34	Coarse latha	Mtr.	69.0	35.6	0.6
35	Lawn (avg.+s.qlty)	Mtr.	125.4	18.5	1.4
36	Voil printed	Mtr.	64.5	20.6	1.4
37	Shirting	Mtr.	97.8	17.0	1.0
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	96.6	25.5	-4.1
42	Firewood	40kg	391.8	25.2	0.5
43	Elec. Bulb 60-wats	Each	24.4	7.3	0.0
44	Match box	Each	1.0	3.0	2.0
45	Washing soap	Cake	17.0	27.1	1.1
46	Bath soap lifebuoy	Cake	29.3	33.1	4.2
47	Chicken (farm)	Kg.	137.9	10.1	10.3
48	Gas chrg. All clb. Comb	mmbtu	337.2	0.0	0.0
49	L.P.G .(cylender 11kg.)	Each	1175.1	25.7	-6.8
50	Elec.chrg.all slabs comb	per unit	9.1	12.9	0.1
51	Petrol	Ltr	87.6	25.4	-1.9
52	Diesel	Ltr	94.9	24.0	-3.2
53	Telephone local	Call	3.6	0.0	0.0
<b>Maximum</b>				<b>44.7</b>	<b>64.3</b>
<b>Median</b>				<b>17.0</b>	<b>0.6</b>
<b>Minimum</b>				<b>-36.4</b>	<b>-8.8</b>

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

Table A10: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item and Specification	Weights	Index		
		Jun-10	May-11	Jun-11
<b>General</b>	<b>100.00</b>	<b>225.03</b>	<b>253.17</b>	<b>254.57</b>
<b>Food &amp; Beverages.</b>	<b>40.34</b>	<b>254.42</b>	<b>292.73</b>	<b>294.29</b>
1 Wheat	0.48	278.22	283.35	283.54
2 Wheat Flour	5.11	280.97	296.66	291.82
3 Maida	0.11	270.25	275.73	277.15
4 Besan	0.13	210.38	253.48	250.61
5 Rice	1.34	279.74	326.43	328.68
6 Pulse Masoor	0.22	333.92	311.34	301.31
7 Pulse Moong	0.22	385.87	466.32	468.48
8 Pulse Mash	0.20	364.75	349.78	344.47
9 Pulse Gram	0.43	198.71	235.77	236.21
10 Gram Whole	0.15	202.68	245.27	246.61
11 Mustard Oil	0.05	249.34	301.97	305.26
12 Cooking Oil	0.69	234.30	310.94	310.94
13 Vegetable Ghee	2.67	249.88	344.90	347.68
14 Sugar	1.95	231.05	238.22	251.53
15 Gur	0.07	278.10	316.46	320.41
16 Tea	1.26	205.47	233.97	233.57
17 Milk Fresh	6.66	266.26	315.26	321.42
18 Milk Powder	0.11	227.15	258.19	260.45
19 Milk Products	0.56	242.07	285.89	291.37
20 Honey	0.04	221.79	275.98	277.09
21 Cereals	0.09	256.83	283.94	283.83
22 Jam, Tomato, Pickles & Vinegar	0.25	202.87	225.85	230.87
23 Beverages	0.73	200.44	226.31	231.59
24 Condiments	0.34	248.47	278.39	279.51
25 Spices	0.60	242.88	370.47	372.92
26 dry Fruit	0.28	352.10	404.57	406.74
27 Bakery & Confectionary	2.98	151.84	162.32	163.49
28 Cigarettes	0.95	232.79	239.91	248.06
29 Betel Leaves & Nuts	0.19	203.35	231.44	231.66
30 Readymade Food	1.68	260.41	306.68	309.26
31 Sweetmeat & Nimco	0.38	266.85	325.30	327.64
32 Fish	0.27	215.91	250.09	244.32
33 Meat	2.70	349.13	419.02	425.30
34 Chicken Farm	0.92	236.95	239.52	247.39
35 Eggs	0.41	228.77	230.93	258.87
36 Potatoes	0.58	276.35	274.25	312.76
37 Onions	0.62	219.64	159.52	147.97
38 Tomatoes	0.48	167.91	109.78	143.02
39 Vegetables	1.84	281.38	299.17	287.96
40 Fresh Fruits	1.62	246.31	378.77	336.96
<b>Apparel, Textile &amp; Footwear.</b>	<b>6.10</b>	<b>170.99</b>	<b>193.07</b>	<b>193.99</b>
41 Cotton Cloth	1.62	181.82	214.36	215.65
42 Silk, Linen, Woolen/Cloth	0.58	174.02	202.32	202.83
43 Tailoring Charges	0.86	187.67	212.38	213.48
44 Hosiery	0.15	183.05	218.39	219.44
45 Readymade Garments	1.20	155.20	176.86	178.29
46 Woolen Readymade Garments	0.15	200.74	225.32	226.60
47 Footwear	1.53	157.30	163.30	163.42
<b>House Rent.</b>	<b>23.43</b>	<b>213.21</b>	<b>228.29</b>	<b>230.50</b>
48 House Rent Index (Combined)	23.43	213.21	228.29	230.50

(continued)

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

Item and Specification	Weights	Index		
		Jun-10	May-11	Jun-11
<b>Fuel And Lighting.</b>	<b>7.29</b>	<b>242.34</b>	<b>269.88</b>	<b>268.53</b>
49 Kerosene	0.14	463.98	612.08	581.33
50 Firewood	0.48	347.55	426.58	433.49
51 Match Box	0.13	200.00	200.00	200.00
52 Bulb & Tube	0.13	137.76	152.94	153.09
53 Electricity	4.37	189.54	212.90	213.32
54 Natural Gas	2.05	325.15	344.09	338.81
<b>H.Hold. Furniture &amp; Equipment Etc.</b>	<b>3.29</b>	<b>175.90</b>	<b>195.48</b>	<b>195.63</b>
55 Utensils	0.37	160.54	178.10	179.13
56 Plastic Products	0.11	215.83	250.62	250.62
57 Suitcase	0.05	171.49	193.83	193.83
58 House Hold Equipments	0.10	164.95	185.52	185.52
59 Furniture (Ready Made)	0.31	190.47	211.10	211.17
60 Furnishing	0.64	167.13	189.42	189.47
61 Elect. Iron Fans & Washing Machine	0.19	169.72	182.80	182.80
62 Sewing Machine, Clock And Needles	0.13	152.44	170.94	170.94
63 Refrigerator & Air conditioner	0.18	138.04	153.93	154.33
64 Marriage Hall	0.04	211.69	253.48	253.48
65 House Hold Servant	1.19	186.82	204.65	204.65
<b>Transport &amp; Communication.</b>	<b>7.32</b>	<b>221.20</b>	<b>254.81</b>	<b>253.95</b>
66 Petrol	1.73	223.82	291.27	285.89
67 Diesel	0.21	455.56	618.45	598.55
68 CNG . Filling Charges	0.16	226.80	243.54	243.54
69 Service Charges	0.38	184.17	200.91	203.86
70 Vehicles	0.26	137.13	150.65	151.12
71 Tyre & Tube	0.28	174.14	210.88	211.52
72 Transport Fare/Charges	2.12	294.70	326.02	326.02
73 Train Fare	0.15	253.24	287.05	287.05
74 Air Fare	0.10	365.51	369.79	427.16
75 Communication	1.93	127.84	128.28	128.28
<b>Recreation &amp; Entertainment.</b>	<b>0.83</b>	<b>139.16</b>	<b>140.22</b>	<b>140.32</b>
76 Recreation	0.34	142.98	142.98	142.98
77 Entertainment	0.49	136.48	138.29	138.46
<b>Education.</b>	<b>3.45</b>	<b>193.42</b>	<b>204.28</b>	<b>207.64</b>
78 Tuition Fees	2.36	189.67	202.19	206.01
79 Stationery	0.35	190.60	204.97	206.63
80 Text Books	0.69	215.90	220.00	222.92
81 Computer & Allied Products	0.05	85.52	87.05	87.05
<b>Cleaning Laundry &amp; Per. Appearance.</b>	<b>5.88</b>	<b>188.47</b>	<b>218.00</b>	<b>221.63</b>
82 Washing Soap & Detergent	1.55	170.67	189.03	194.99
83 Toilet Soap	0.74	186.50	237.36	243.11
84 Tooth Paste	0.40	119.57	122.55	122.70
85 Shaving Articles	0.35	157.90	171.41	171.81
86 Cosmetics	<b>1.43</b>	<b>170.89</b>	<b>182.60</b>	<b>183.81</b>
87 Watches	0.06	146.01	157.07	157.43
88 Jewellery	0.39	449.87	591.97	601.70
89 Laundry Charges	0.22	197.87	232.67	234.21
90 Hair Cut & Beauty Parlour Charges	0.73	174.91	202.71	205.00
<b>Medicare.</b>	<b>2.07</b>	<b>166.58</b>	<b>194.27</b>	<b>195.38</b>
91 Drugs & Medicares	1.08	135.19	153.68	153.97
92 Doctor's Fee	1.00	200.40	238.01	240.01

<b>Table A11: Wholesale Price Index Numbers by major Groups and Selected Commodities</b>				
<b>Item and Specifications</b>	<b>Jun-10</b>	<b>Apr-11</b>	<b>May-11</b>	<b>Jun-11</b>
<b>General</b>	<b>242.44</b>	<b>304.58</b>	<b>299.85</b>	<b>301.53</b>
<b>Food</b>	<b>251.73</b>	<b>296.72</b>	<b>296.11</b>	<b>300.50</b>
1 Wheat	279.06	313.76	283.76	286.23
2 Wheat flour	273.54	300.85	285.43	283.19
3 Maida	266.62	285.22	277.83	276.88
4 Besan	188.61	234.61	225.80	224.95
5 Rice	310.72	393.72	395.80	399.94
6 Maize	331.03	391.76	383.09	377.23
7 Jowar	345.17	385.88	329.32	321.03
8 Bajra	237.17	292.89	295.61	307.53
9 Beans	294.86	319.89	316.63	318.55
10 Gram whole	211.41	262.72	263.29	262.41
11 Gram split	180.74	228.57	221.45	222.14
12 Masoor	307.36	292.85	281.91	271.39
13 Mash	306.99	315.37	304.05	302.25
14 Moong	387.06	491.04	487.42	487.77
15 Potatoes	262.14	248.45	290.01	320.29
16 Onions	230.27	191.58	147.43	139.88
17 Tomatoes	132.20	215.88	112.95	132.69
18 Vegetables	307.11	320.68	299.12	296.02
19 Fresh fruits	191.26	255.16	244.27	232.76
20 Dry fruits	259.91	331.55	326.80	329.45
21 Fresh milk	220.50	252.98	261.43	267.11
22 Powdered milk	225.47	245.09	245.41	248.94
23 Milk food	181.08	207.84	216.92	220.28
24 Vegetable ghee	278.75	395.72	392.87	395.78
25 Mustard & rapeseed oil	279.15	377.17	376.60	380.87
26 Cotton seed oil	285.06	386.62	386.30	398.84
27 Cooking oil	225.71	293.64	301.10	301.40
28 Oil cakes	325.35	393.95	391.87	392.99
29 Gur	268.31	279.86	283.03	289.97
30 Sugar refined	236.21	246.81	241.43	254.27
31 Chicken	258.10	273.30	253.20	261.62
32 Eggs	231.94	254.86	239.84	263.71
33 Fish	145.86	150.76	149.34	150.17
34 Meat	330.29	389.39	393.69	402.36
35 Spices	272.40	380.36	385.18	385.08
36 Condiments	304.45	313.17	314.60	315.61
37 Salt	171.77	196.00	196.00	205.27
38 Tea	172.25	195.13	195.61	195.70
39 Beverages	145.99	163.75	166.31	168.22
40 Mineral water	130.06	152.67	159.52	167.99
41 Fruit prepared/preserved	214.30	239.08	244.16	248.80
42 Vegetables prepared/preserved	189.31	215.31	217.71	221.53
43 Sugar confectionary	100.57	100.67	100.98	101.16
<b>Raw material</b>	<b>296.34</b>	<b>450.47</b>	<b>382.68</b>	<b>383.08</b>
44 Cotton	278.56	503.45	377.50	370.87
45 Cotton seeds	276.41	362.89	358.16	370.37
46 Mustard/rapeseeds	289.33	367.55	364.65	374.82
47 Tobacco	236.02	260.69	261.49	263.41
48 Sugar cane	499.09	601.95	601.95	608.55
49 Wool	146.46	164.33	170.95	175.82
50 Hides	139.49	156.19	157.02	160.56
51 Skins	104.48	122.98	126.49	134.62
52 Pig iron	321.93	321.93	321.93	321.93

(continued)

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

<b>Item and Specifications</b>	<b>Jun-10</b>	<b>Apr-11</b>	<b>May-11</b>	<b>Jun-11</b>
<b>Fuel &amp; light</b>	<b>304.00</b>	<b>390.47</b>	<b>399.37</b>	<b>400.28</b>
53 Coal	142.50	<b>160.00</b>	<b>160.00</b>	<b>160.00</b>
54 Coke	666.22	791.13	791.13	791.13
55 Diesel oil	448.03	577.53	626.56	617.19
56 Motor sprit	221.32	272.22	288.03	282.49
57 Mobil oil	208.33	233.37	246.36	251.34
58 Furnace oil	341.81	536.84	521.19	536.33
59 Kerosene oil	443.81	571.16	609.25	574.90
60 Natural gas	256.00	256.00	256.00	256.00
61 Electricity ind. Supply tariff-b	201.01	222.49	222.49	222.49
62 Elec. Agriculture tariff-d	205.07	238.86	238.86	238.86
63 Fire wood	282.24	357.11	364.01	365.39
<b>Manufacture</b>	<b>168.82</b>	<b>220.30</b>	<b>216.65</b>	<b>210.61</b>
64 Sole leather	134.06	140.01	140.01	140.01
65 Chrome leather	212.23	228.63	232.07	232.07
66 Cotton yarn	164.37	267.49	239.47	210.64
67 Blended yarn	186.61	251.42	248.86	233.19
68 Nylon yarn	128.09	185.96	187.85	180.56
69 Cotton textiles	154.95	183.61	184.34	186.11
70 Hosiery	160.37	196.13	196.65	197.21
71 Silk & reyon textiles	152.12	174.29	176.71	178.26
72 Woolen textiles	143.32	149.53	149.53	149.53
73 Jute manufactures	135.59	174.73	196.39	205.48
74 Mattresses	142.61	165.50	166.67	165.94
75 Readymade garments	118.87	125.26	125.07	124.58
76 Utensils	149.53	160.39	160.47	160.47
77 Plastic products	144.91	168.07	168.89	177.01
78 Glass products	179.81	198.87	200.12	200.12
79 Chemicals	201.43	250.25	253.58	255.60
80 Dying materials	93.46	96.14	96.14	96.14
81 Soaps	185.38	223.03	228.46	231.15
82 Cosmetics	123.62	178.84	181.27	181.27
83 Drugs & medicines	120.90	135.67	140.73	145.21
84 Fertilizers	312.14	427.49	437.90	439.60
85 Pesticides & insecticides	150.11	184.80	191.90	197.91
86 Machinery	183.67	207.45	211.96	215.30
87 Transports	131.55	169.28	185.85	193.04
88 Tyres	219.60	243.64	259.21	261.72
89 Tubes	198.01	229.40	232.19	232.19
90 Audio-visual instruments	92.59	100.49	100.49	98.83
91 Other electrical goods	134.41	152.72	159.53	159.33
92 Cigarettes	246.75	262.35	262.35	263.34
93 Paper	106.36	114.45	117.04	117.04
94 Matches	124.26	130.85	144.89	149.16
95 Foot wear	192.15	204.94	204.94	204.94
<b>Building material</b>	<b>220.29</b>	<b>238.63</b>	<b>242.36</b>	<b>262.30</b>
96 Cement	127.57	135.55	136.49	139.08
97 Bricks	250.44	325.74	334.06	335.81
98 Cement blocks	170.83	175.73	179.23	186.23
99 Tiles	99.67	101.37	102.37	102.82
100 Iron bars & sheets	292.64	314.21	318.60	322.62
101 Pipe fittings	183.46	196.51	198.99	201.32
102 Timber	217.94	231.22	245.20	243.56
103 Glass sheets	178.68	191.40	191.40	197.52
104 Paints & varnishes	149.43	218.35	238.33	247.40
105 Sanitary wares	162.22	163.37	163.29	163.15
106 Wires and cables	272.09	304.05	306.76	312.18

**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
2010-11		244.26	286.15	215.94	279.39	285.93	274.63	278.96
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
	Mar	248.55	292.03	219.15	297.86	294.48	300.32	284.83
	Apr	252.58	296.04	223.19	304.58	296.72	310.30	287.28
	May	253.17	292.73	226.42	299.85	296.11	302.57	287.89
	June	254.57	294.29	227.71	301.53	300.50	302.28	291.41

\*: all groups combined



Table A13: International Commodity Prices/Indices					
	Feb-11	Mar-11	Apr-11	May-11	Jun-11
<b>Energy</b>					
Crude Oil (US\$ per barrel)*	97.7	108.7	116.3	108.2	105.9
IMF Energy Index (2005=100)	181.5	198.6	210.7	198.7	195.8
WB Energy Index (1990=100) @	333.7	365.4	389.1	364.1	357.7
<b>Food (\$/MT)</b>					
Rice	532.8	509.0	500.6	500.6	515.4
Wheat	348.2	316.8	336.3	354.5	326.5
Sugar	29.3	25.9	23.9	21.9	24.9
Palm Oil	1,248.6	1,142.2	1,123.8	1,143.4	1,075.9
Soybean Oil	1,268.4	1,245.1	1,279.0	1,255.7	1,250.1
<b>Non-Food Non-Energy</b>					
Cotton Outlook 'A' Index #	213.2	229.7	216.6	165.5	164.9
IMF Metal Price Index (2005=100)	256.2	244.2	250.1	239.5	235.7
Copper (\$/MT)	9,880.9	9,503.4	9,482.8	8,931.7	9,066.9
Aluminum (\$/MT)	2,515.3	2,555.5	2,667.4	2,587.2	2,557.8
Iron Ore (\$ cents/dry MT)	187.2	169.4	179.3	177.1	170.9
Tin (\$/MT)	31,619.7	30,590.9	32,347.7	28,571.4	25,519.7
Nickel (\$/MT)	28,412.2	26,710.4	26,332.2	24,164.6	22,420.9
Zinc (\$/MT)	2,473.5	2,341.5	2,371.5	2,159.6	2,234.5
Lead (\$/MT)	2,595.6	2,624.0	2,719.4	2,419.6	2,525.0
Uranium (\$/pound)	65.0	63.5	57.8	56.1	55.4
DAP (\$/MT)	603.8	605.5	617.1	609.8	612.0
Urea (\$/MT)	358.1	327.8	340.4	397.4	485.9
\$/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.					

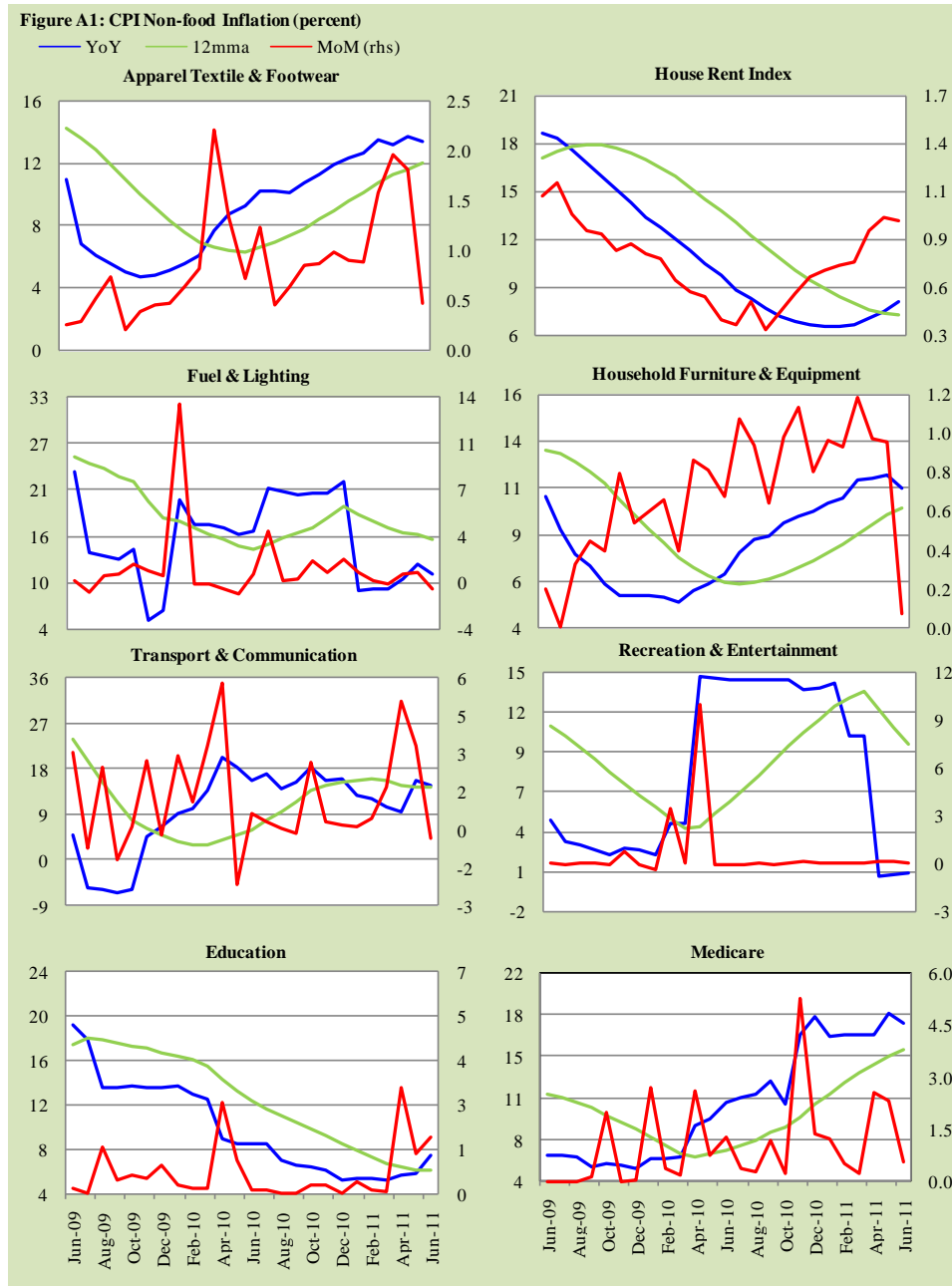
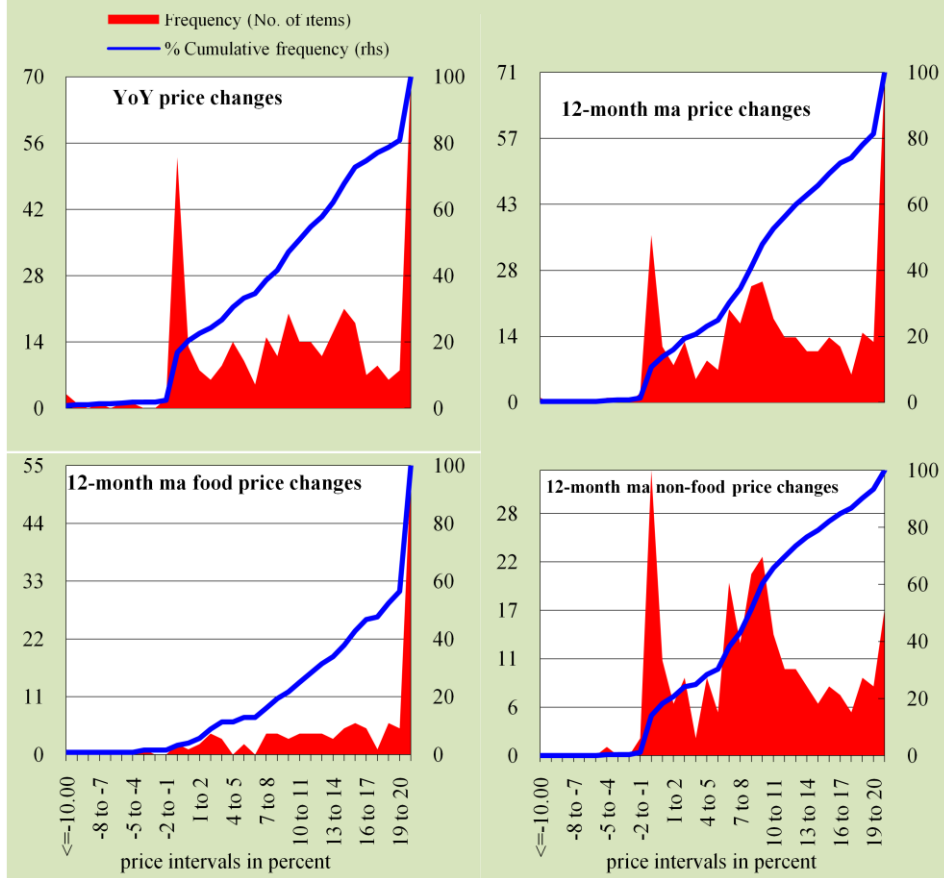


Figure A2: Frequency Distribution of Price Changes of CPI Items, June 2011



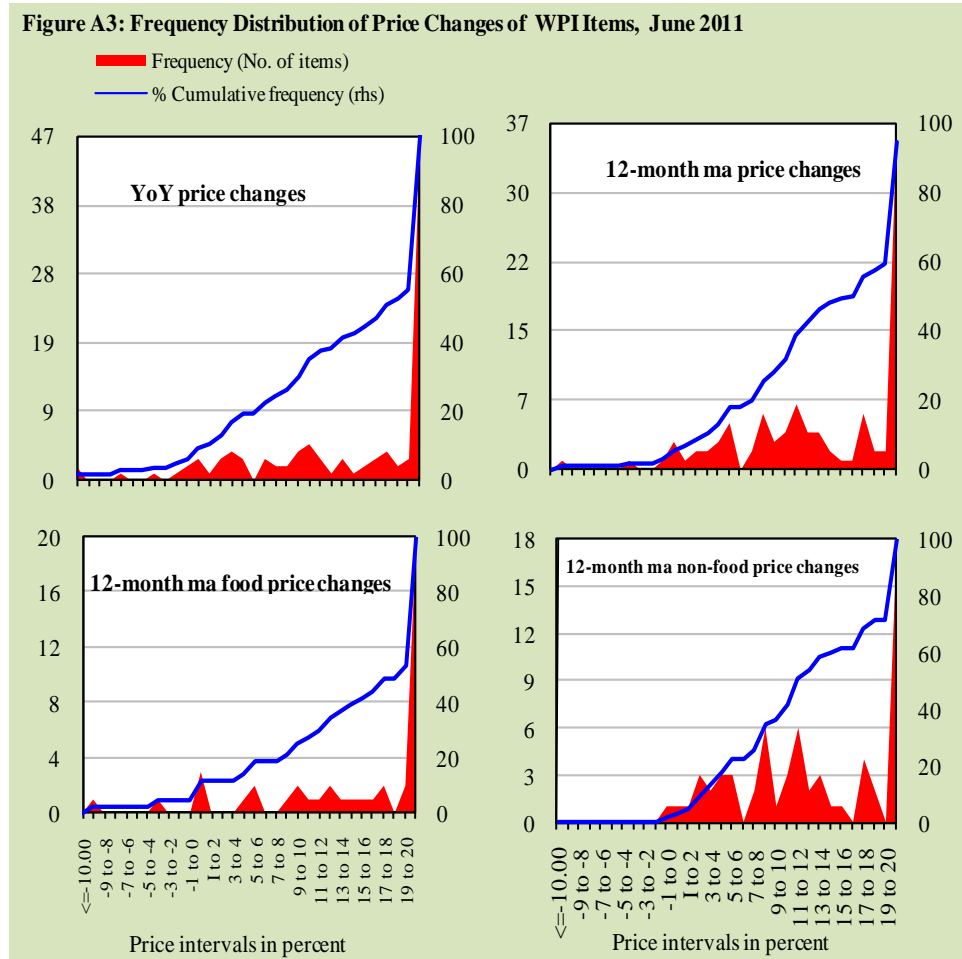
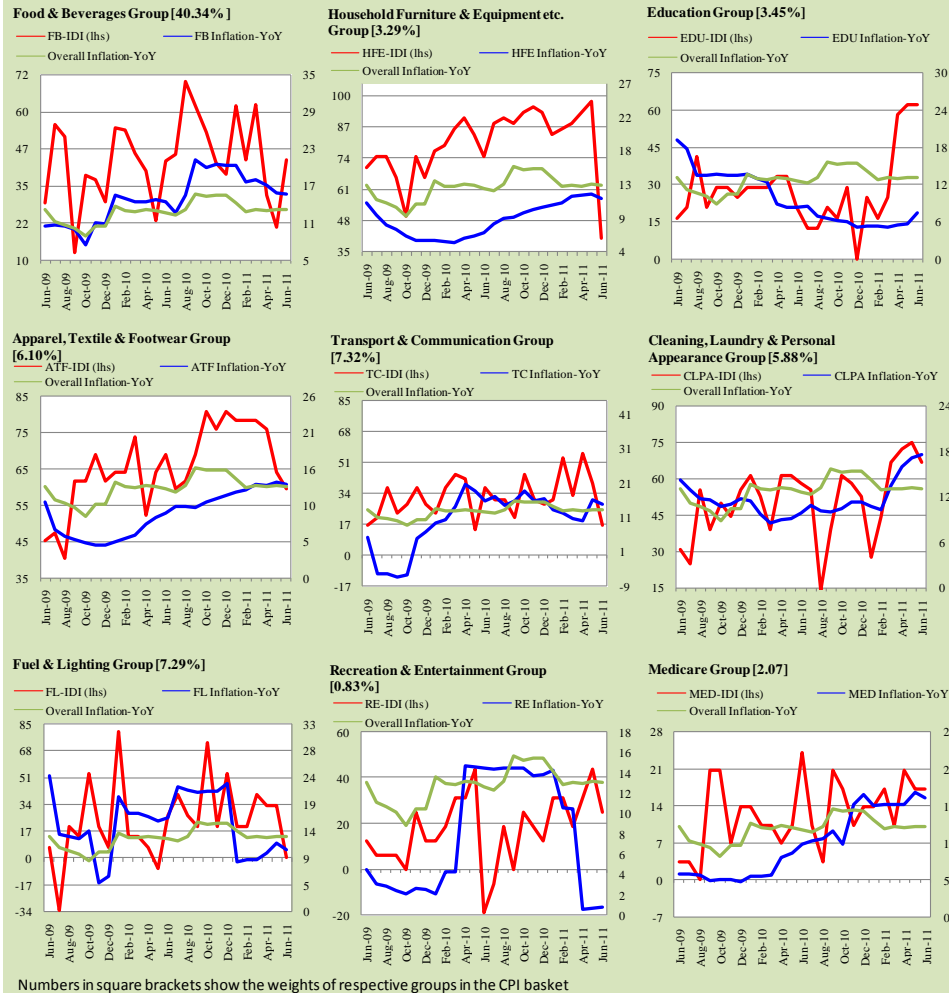


Figure A4: Group-wise Inflation Diffusion Index (IDI) and Respective Overall YoY Inflation (percent)



## **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:
- 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.
  - 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.
    - 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).
    - 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  $i^{\text{th}}$  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  $i^{\text{th}}$  item

$\pi_{it}$  : Inflation of  $i^{\text{th}}$  item

$\pi_t$  : 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 constant<sup>2</sup>.

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 analysis<sup>3</sup> suggests that IDI is a leading indicator for Pakistan's YoY inflation.

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<sup>2</sup> 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.

<sup>3</sup> Formal test shows one way 'Granger' causality from IDI to YoY inflation.