Inflation Monitor

January 2008



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Economic Analysis Department

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Contents

1.	Overview	1
2.	Consumer Price Inflation	5
	2.1 Food Inflation	6
	2.2 Non-food Inflation	8
	2.3 City-wise Inflation	9
	2.4 Income Group-wise Inflation	11
	2.5 Services and Non-services Inflation	11
3.	Wholesale Price Inflation	13
4.	Global Commodity Prices	18
5.	Sensitive Price Indicator	23
Annex	ure A:	26
Table A	A1: CPI Inflation (YoY) by Groups	
Table A	A2: Distribution of Price Changes of CPI Basket, January 2008	(YoY)
Table A	A3: Top Ten Contributors to YoY CPI Inflation in January 200	8
Table A	A4: Distribution of YoY Price Changes - Selected CPI Items,	
	January 2008	
Table A		/ 2008
Table A		
Table A		
Table A	······································	
Table A	A9: Consumer Price Index Numbers by Major Groups and Selec	cted
	Commodities for January 2008	
Figure .	A1: CPI Non-food Sub-indexes' Inflation	
-	A2: Fraguency Distribution of Price Changes of CPI Items Jan	10my 20

Figure A2: Frequency Distribution of Price Changes of CPI Items, January 2008 Figure A3: Frequency Distribution of Price Changes of WPI Items, January 2008

Annexure B: Technical Notes

39

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Overview

There was a broad-based increase in inflation during January 2008. The Consumer Price Index (CPI) inflation rose to 11.9 percent in January 2008, up sharply compared to 6.6 percent in the corresponding month last year. This double digit rise was principally a result of substantial increases in the prices of many essential food items such as wheat, rice, vegetable ghee, etc. The increase in prices of these commodities was generally led by the rising international commodity prices, but in some cases, in particular for wheat, was also aggravated due to domestic supply disruptions (probably including the impact of speculative hoarding and smuggling). As a result, CPI food inflation (YoY) witnessed a sharp rise to 18.2 percent during January 2008 – the highest level since April 1995. While non-food CPI inflation (YoY) also accelerated, to 7.3 percent in January 2008 compared to 5.2 percent in the same month last year, this rise was relatively weaker.

Inflation, measured by the other two indices, i.e., Wholesale Price Index (WPI) and Sensitive Price Indicator (SPI), also exhibited a significant rise in January 2008 compared to the same month last year (see **Table 1.1**).

							percent
		CPI		Core Inflation		WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed	W11	511.
Jan-07	6.6	8.7	5.2	5.7	6.5	5.4	9.5
Feb-07	7.4	10.0	5.6	6.0	6.8	5.1	8.8
Mar-07	7.7	10.7	5.5	5.9	6.7	6.1	8.9
Apr-07	6.9	9.4	5.2	5.6	6.6	6.0	7.7
May-07	7.4	11.3	4.7	5.2	6.2	6.8	8.3
Jun-07	7.0	9.7	5.1	5.7	6.5	7.3	8.0
Jul-07	6.4	8.5	4.9	6.0	6.6	7.6	7.5
Aug-07	6.5	8.6	4.9	6.0	6.7	8.0	7.6
Sep-07	8.4	13.0	5.0	6.1	8.0	9.3	9.8
Oct-07	9.3	14.7	5.4	6.5	8.3	11.8	10.7
Nov-07	8.7	12.5	5.9	6.9	8.6	12.6	9.0
Dec-07	8.8	12.2	6.3	7.2	8.7	12.2	9.2
Jan-08	11.9	18.2	7.3	7.8	9.6	15.5	13.1

Table 1.1: Inflation (YoY)

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

The sharp surge in CPI inflation (YoY) was also transmitted into the annualized trend of inflation, as measured by the 12-month moving average (12-mma) CPI. The 12-mma CPI inflation rose to 8.0 percent during January 2008 compared to 7.7 percent in the same month last year. Similarly, the strong CPI food inflation pushed up the 12-mma food inflation to 11.6 percent in January 2008, compared to 8.5 percent during the same period last year. This rise reflected the persistent upward pressure on food commodity prices throughout the past few months.

Conversely, the 12-mma non-food inflation showed a decline of 1.7 percentage points (5.5 percent in January 2008 compared to 7.2 percent in January 2007).

The monthly CPI inflation rose by 1.9 percent in January 2008. This is the highest single-month increase since October 2007. Also, this increase is higher than the fiveyear average of monthly increases for January. Both food and non-food CPI inflation (MoM) contributed to overall CPI inflation during January 2008. The monthly CPI food sub-group inflation registered a steep rise to 3.0 percent in January 2008 compared to the decline of 2.2 percent in January 2007. Monthly CPI non-food sub-group inflation also increased by 1.0 percent in January 2008 compared to a 0.1 percent rise during the same month of the previous year (see Table 1.2).

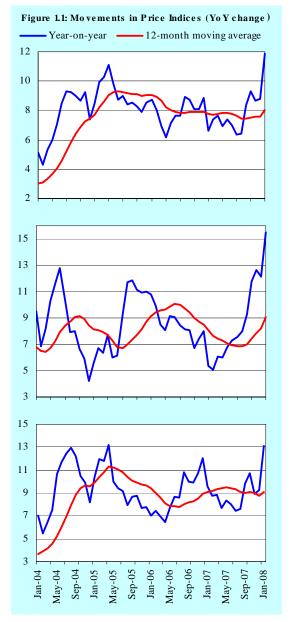
Table 1.2: Different Dir	nensions of In	flation (pe	rcent)	_
	Jan-06	Jan-07	Jan-08	5-year average
Ve	ar-on-year (Ja		Jan-00	average
Overall CPI	8.8	6.6	11.9	8.2
Food group	8.2	8.7	18.2	10.7
Non-food group	9.2	5.2	7.3	6.5
Core Inflation				
NFNE*	7.7	5.7	7.8	6.4
Trimmed	7.2	6.5	9.6	7.1
Period a	verage (July-Ja	n over July	-Jan)	
Overall CPI	8.5	8.1	8.6	7.2
Food group	7.6	10.3	12.5	8.6
Non-food group	9.1	6.6	5.7	6.3
Core Inflation				
NFNE*	7.9	6.1	6.7	6.1
Trimmed	7.7	6.6	8.0	6.7
12	e-month movin	ig average		
Overall CPI	9.1	7.7	8.0	7.1
Food group	9.7	8.5	11.6	8.7
Non-food group	8.7	7.2	5.5	6.0
Core Inflation				
NFNE*	7.9	6.5	6.3	5.9
Trimmed	8.1	6.6	7.9	6.6
Ν	Monthly (Jan o	ver Dec)		
Overall CPI	1.2	-0.9	1.9	0.3
Food group	1.4	-2.2	3.0	0.0
Non-food group	1.1	0.1	1.0	0.6
Core Inflation				
NFNE*	0.5	0.4	0.9	0.6
Trimmed	0.3	0.5	1.2	0.5

* NFNE is Non-food non-energy inflation

Core inflation has continued the uptrend seen since June 2007. This is evident from both measures of core inflation i.e. the NFNE (non-food non-energy) as well as the 20 percent trimmed-mean. NFNE based core inflation (YoY) increased to 7.8 percent in January 2008 from 5.7 percent in January 2007. Similarly core inflation based on a 20 percent trimmed-mean, accelerated to 9.6 percent YoY in January 2008 compared to 6.5 percent YoY during the same month of the previous year (see **Table 1.2**). This uptrend in core inflation reflects the persistent rise in the prices of food and non-food items included in the core inflation basket.

Corroborating the inflation trends captured by the CPI, the WPI also recorded strong inflationary pressures in January 2008. WPI inflation rose to 15.5 percent in January 2008, substantially higher than the 5.4 percent level in the same month last year. Both, the food and the non-food, components of WPI inflation contributed in this sharp upsurge, but the contribution by the former was stronger. The WPI food inflation was recorded at 19.5 percent in January 2008 - the highest level since April 1995 compared to 8.4 percent in January 2007. The non food group of WPI witnessed a YoY inflation of 12.7 percent in January 2008 – the highest level in the last 24 months compared to 3.2 percent during the same month last year.

Within the food group of WPI, the strongest contribution to the sharp increase in inflation was due to the increases in the prices of some essential food items, such as rice, wheat, vegetable ghee and cooking oil. A substantial contribution to the rise in WPI non-food inflation owed to increases in the prices of coke and furnace oil.

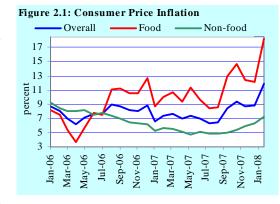


The Sensitive Price Indicator (SPI) too, exhibited YoY acceleration in January 2008 and was recorded at 13.1 percent compared to 9.5 percent in the corresponding month of the previous year (**see Figure 1.1**).

2. Consumer Price Index

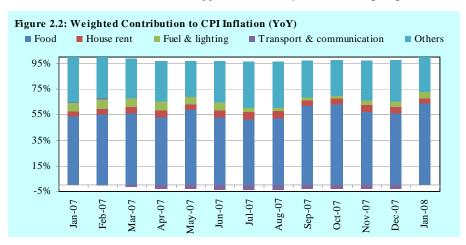
Overall CPI inflation (YoY) reached a 10-year high in January 2008. This was mainly due to CPI food inflation which also touched its highest level since April 1995.

CPI inflation (YoY) was recorded at 11.9 percent during January 2008 as compared to 6.6 percent in the corresponding month of last year. Accelerated food inflation



(YoY) was recorded at 18.2 percent in January 2008 compared to 8.7 percent during January 2007. Non-food inflation (YoY) was recorded at 7.3 percent for the month under review compared to 6.3 percent in January 2007 (see **Figure 2.1**).

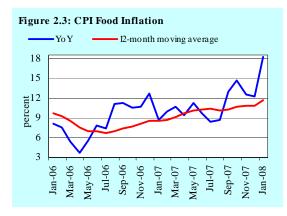
Food group inflation remained exceptionally high and witnessed a double digit rise for the fifth consecutive month (from September 2007 to January 2008). As a result, the contribution of food inflation in overall inflation increased to 64.4 percent in January 2008, higher than the 58.9 percent contribution during December 2007. Whereas, the contribution of non-food group in overall inflation decreased to 35.6 percent in January 2008 from 41.1 percent in December 2007. This was mainly on account of a decline in the weighted contributions of all subgroups of non-food group. A significant decline was recorded in the weighted contribution of the *house rent and apparel, textile footwear* sub-groups' to the



overall CPI inflation. Despite an acceleration in the *house rent index* inflation, its contribution of house rent index decreased to 18.7 percent in January 2008 from 21.9 percent in the same month last year. This owed mainly due to the substantially higher increase in food inflation (see **Figure 2.2**).

2.1 Food Inflation

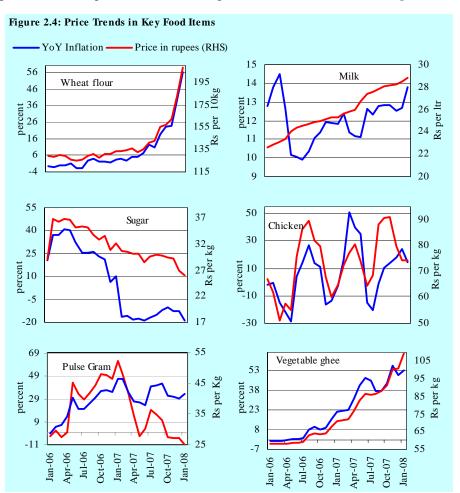
Food inflation (YoY) increased significantly, from 12.2 percent in December 2007 to 18.2 percent (YoY) in January 2008. Food inflation remained high and has exhibited a double digit rise for the fifth consecutive month (from September 2007 to January 2008). This double digit inflation is mainly due to a sharp increase in the prices of some key food staples like wheat, rice, vegetable ghee,



mustard oil etc. The impact of the substantial increases in these prices overshadowed the impact of the fact that prices of some vegetables, pulses and some other food items like potatoes, onions, pulse gram and sugar, either declined or remained unchanged during the month of January 2008.

A disaggregated analysis of the CPI food basket components shows that out of total 124 commodities under the food group, prices of 60 commodities including chilli powder, wheat, tomatoes, rice, mustard oil, vegetable ghee, green chillies and milk powder etc. exhibited double digit YoY increase in the range of 10 to 67.9 percent during January 2008. The combined weight of food commodities in the food group recording double digit inflation was 60.4 percent. The most prominent upward movement was observed in the prices of chilli powder, wheat flour, tomatoes, rice and mustard oil that showed price increases ranging between 60 to 68 percent YoY in January 2008. On the other hand, prices of 20 commodities including key staples such as onions, potatoes, sugar, basen, pulse gram, pulse moong etc. either declined or remained unchanged during the month under review. The prices of the remaining food items having an aggregate weight of about 15.7 percent in the food group, recorded subdued or moderate change (see **Table A2** in Annexure A).

On a month over month (MoM) basis, an increase was witnessed in the average prices of food commodities such as maida, wheat, chilli powder, vegetable ghee

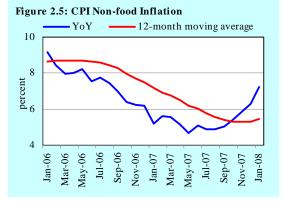


and some fruits during January 2008 compared to December 2007; whereas the prices of onions, potatoes, tomatoes, sugar, chicken etc. declined (see **Figure 2.4**).

The impact of high food inflation was reflected in the rising contribution of individual food items in the overall YoY CPI inflation. Seven out of the top10 contributors to overall inflation during January 2008 were from the food group. These items include wheat flour, vegetable ghee, fresh milk, rice, fresh fruits, meat and wheat.

2.2 Non-food Inflation

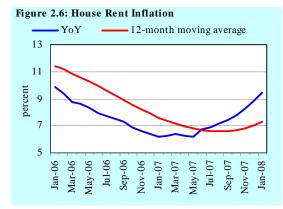
The rising trend of non-food inflation (YoY) continued for the fifth consecutive month reaching 7.3 percent in January 2008 as compared to 5.2 percent during the same month of the previous year (see **Figure 2.5**). This upward movement in the non-food inflation was attributed to a pickup in inflation recorded by the *house rent index, fuel & lighting* and *cleaning laundry*



& personal appearance sub-groups during the last few months.

A disaggregated analysis of non-food group shows that inflation (YoY) in the *apparel, textile & footwear* sub-group was recorded at 8.6 percent in January 2008, slightly lower than the inflation recorded in the previous month, while it is significantly higher than 4.1 percent inflation recorded in the same month last year. The significant year-on-year acceleration in inflation recorded by this sub-index was mainly due to increases in the prices of almost all kinds of footwear and winter dresses as compared to January 2007.

In year-on-years terms, inflation recorded by the *house rent index* maintained the rising trend seen since June 2007, reaching 9.5 percent (YoY) in January 2008 compared to 6.2 percent in the same month last year (see **Figure 2.6**). The rise in January 2008 reflects the strong increases in prices of bricks, iron bars & sheets, pipe fittings and timber.



The *fuel & lighting* sub-group of the CPI has also recorded an increase in inflation since September 2007, and witnessed a rise of 1.9 percentage points in January 2008 compared to December 2007. The rise in this sub-group was due to a significant increase in electricity charges and prices of firewood during January 2008 as compared to January 2007.

The *cleaning, laundry & personal appearance* sub-group continued its uptrend for the eighth consecutive month, accelerating to 10.1 percent in January 2008 compared to 4.5 percent during the corresponding month last year. On the other hand YoY inflation in the *medicare* sub-group slowed to 7.5 percent, compared to 9.9 percent during the same month last year (see **Figure A1** in annexure).

Inflation (YoY) in *household furniture & equipment* sub-group decreased in January 2008 and was recorded at 6.1 percent as compared to 6.6 percent in the previous month. *Transport & communication* sub-group witnessed disinflation, declining by 0.3 percent in January 2008 in contrast to a rise of 0.8 percent in the same month last year.

Inflation in *recreation & entertainment* sub-group showed a slight increase to 0.5 percent in January 2008 compared to 0.4 percent in December 2007. YoY inflation in the *education* sub-group declined and was recorded at 4.3 percent in January 2008 compared to that of 7.3 percent during the corresponding month last year.

Item wise details of non-food group inflation exhibit that out of the 250 non-food commodities included in the CPI basket, prices of 32 commodities witnessed double digit rise .These items included childrens' shoes, gas cylinder, electricity charges, air fare, gold and silver tezabi and doctors clinic fee etc. The prices of another 72 commodities showed a moderate increase in the range of 5 to 10 percent. The prices of all other commodities witnessed either rose by less than 5 percent, or declined, in year-on-year terms (see **Table A2** in the annexure). The commodities showing deflation or no change included petrol super, gas charges, urdu and english books, telephone charges, computer CD rom, etc. (see **Table A4** in the annexure).

2.3 City-wise Inflation

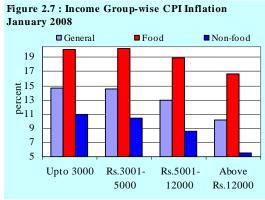
Inflation data of 35 cities exhibited that 25 cities were in the category of high inflation cities and remaining 10 cities were categorized in low inflation cities. **Table 2.2** exhibited that the highest level of YoY inflation was recorded in Bannu (17.9 percent) followed by Bahawalnagar (17.5 percent) and Nawabshah (17.3 percent) during January 2008. On the other hand, the lowest YoY inflation was recorded in Sialkot (8.9 percent) during the month under review (see **Table 2.2**).

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
Bannu	17.9	23.0	14.2	Attock	11.4	17.4	7.4
Bahawalnagar	17.5	22.3	14.1	Sargodha	11.1	15.4	8.0
Nawabshah	17.3	25.3	12.0	Jhelum	10.9	14.2	8.5
Khuzdar	16.3	20.3	13.4	Karachi	10.7	17.4	6.0
Shahdadpur	16.1	22.7	11.4	Bahawalpur	10.7	16.9	6.1
Samundari	15.4	23.2	10.0	Okara	10.2	14.2	7.1
Vehari	15.3	21.7	10.8	Lahore	10.1	16.7	5.3
Loralai	15.2	18.0	13.3	Rawalpindi	9.5	13.6	6.5
Sukkur	15.2	22.7	10.1	Islamabad	9.1	13.5	6.0
Turbat	14.6	17.9	12.3	Sialkot	8.9	13.3	5.6
Hyderabad	14.5	20.4	10.4				
Larkana	14.4	21.6	9.0				
Mianwali	14.0	18.6	10.7				
D.G. Khan	13.9	19.8	9.5				
Mardan	13.9	19.2	10.1				
Gujranwala	13.7	18.1	10.6				
Abbotabad	13.7	22.0	7.6				
Mirpur Khas	13.7	19.1	9.8				
Kunri	13.5	19.1	9.4				
D.I.Khan	12.9	18.4	9.0				
Jhang	12.7	17.8	9.1				
Multan	12.5	21.4	6.2				
Quetta	12.3	18.9	7.5				
Faisalabad	12.3	21.7	5.4				
Peshawar	12.2	20.0	6.7				

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

2.4 Income Group-wise Inflation

As in the previous month, data on inflation for various income groups during January 2008 indicates that three out of four income categories have experienced higher than the overall average CPI inflation (viz. general, food and non food). The only category that displayed lower inflation than the overall CPI inflation was the income group earning Rs. 12000 or above (**see Figure 2.7**).

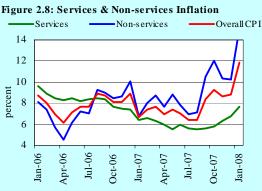


The highest YoY CPI inflation was recorded for the income group of upto Rs. 3000 that recorded a double digit inflation for the fourth consecutive month (14.7 percent), followed by income group of Rs. 3001 to 5000 (14.5 percent) and income group Rs. 5001 to 12000 (13.0 percent) while the highest income group, with incomes above Rs. 12000, experienced the lowest inflation in all categories (10.2 percent). City-wise data of income groups exhibits that the lowest YoY inflation was recorded in Rawalpindi by the group with income upto Rs. 3001 to 5000, and for the group with income in the range of Rs. 5001 to 5000, and for the group with income in the range of Rs. 5001 to 5000, and for the group with income in the range of Rs. 5001 to 12000). Rawlpindi recorded the lowest inflation for the income groups with earnings of above Rs. 12000 per month. The highest YoY inflation was recorded in Bannu for all income

groups (see **Table A5** in annexure A).

2.5 Services and Non-services Inflation

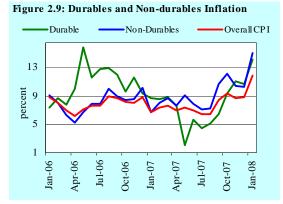
Inflation in the services¹ sector increased in January 2008 compared to the same month of the previous year. The services sector witnessed 7.7 percent inflation during January 2008



¹ The services group of the CPI basket includes items like house rent index, electricity charges, marriage hall, household servant, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges etc.

compared to 6.4 percent during the same month last year. Similarly, inflation in the non-services sector moved up significantly to 15.1 percent during January 2008 as compared to 6.8 percent in January 2007 (see **Figure 2.8**).

Further disaggregation of the non-services sector data reveals that YoY inflation in durable² and non-durable goods displayed acceleration in January 2008 compared to the same month last year. The YoY inflation in the durable goods stood at 14.1 percent in January 2008 compared to 8.7 percent for the same month last year mainly due to a rise in the prices of jewelry and furniture.

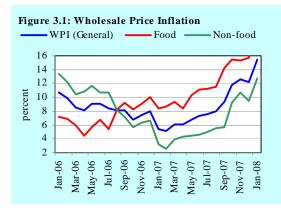


Similalry, inflation in the prices of non-durable rose to 15.1 percent in January 2008 compared to 6.7 percent in the corresponding month last year (see **Figure 2.9**).

² Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerators, air conditioners, vehicles, computer & allied products, watches and jewelry, etc.

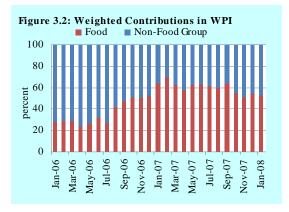
3. Wholesale Price Index

Similar to trends in the CPI, inflation measured by the WPI also remained strong in January 2008. The WPI exhibited a steep rise, with WPI inflation rising to 15.5 percent in January 2008 – the highest since March 1997 – compared to 5.4 percent in the same month last year. Both food and non-food WPI inflation contributed to the sharp upsurge. This 10.1 percentage



points YoY rise in WPI inflation is due to the unprecedented rise in the prices of essential food items such as rice, wheat, vegetable ghee and cooking oil coupled with an increase in the prices of coke and furnace oil in the non-food group of WPI. The WPI food inflation was recorded at 19.5 percent in January 2008 – the highest level since April 1995 – compared to 8.4 percent in January 2007. The non food group of WPI witnessed a YoY increase of 12.7 percent in January 2008 – the highest level in the last 24 months – compared to 3.2 percent during the same month last year (see **Figure 3.1**).

The contribution of food inflation in WPI inflation came down to 52.8 percent in January 2008 as compared to 64.4 percent in January 2007. While the contribution of nonfood group rose to 47.2 in January 2008 compared to 35.6 percent in the same month last year (see **Figure 3.2**). This is because of the higher weight of non-food group (i.e. 57.9 percent), the impact of rising



non-food WPI inflation is more pronounced in terms of contribution to the overall WPI inflation. Within the non-food group, the weighted contributions of all sub-groups except fuel, lighting & lubricant subgroup have declined continuously.

Table 3.1: Contribution of Sub-Indices to WPI Non- food inflation								
	Jan 07	Jun 07	Dec 07	Jan 08				
Raw materials	51.4	31.4	13.2	10.0				
Fuel, lighting & lubricants	4.4	34.9	56.5	60.4				
Manufactures	26.4	21.4	22.1	20.9				
Building materials	179	12.1	82	87				

The weighted contribution of fuel, lighting & lubricant sub-group has increased to 60.4 percent in January 2008 compared to 4.4 percent in January 2007 due to the rising international crude oil prices (see **Table 3.1**).

An item-wise break-up shows that 43 items exhibited more than double digit YoY growth in their prices ranging between 10 to 107 percent. The prices of major items that displayed a double digit rise of above 10 percent include rice, vegetable ghee and oil, wheat, maida, fresh milk, chemicals, furnace oil, coke, fertilizer, coke etc. The prices of 14 items exhibited growth

Table 3.2: WPI Pr	ice Distribution	n of YoY Cl	anges (Jan	uary 2008)	
No. of Items					
Groups	Decrease or no change	Up to 5%	5%- 10%	More than 10%	Total
A. Food	10	5	5	23	43
B. Non-Food	14	19	9	21	63
Raw material	2	1	3	3	9
Fuel, Lighting and Lubricant	4			7	11
Manufactures	5	15	3	9	32
Building Material	3	3	3	2	11
Total	24	24	14	44	106

between 5 to 10 percent in their wholesale prices whereas 24 items showed subdued increases and prices of another 24 items showed either decline or no change during the month under review.

It is evident from **Table 3.2** that the prices of 23 items of the total 43 food items included in the WPI basket witnessed a significant rise of over 10 percent in January 2008. There were 5 food items, exhibited growth between 5 to 10 percent in their wholesale prices, while another 5 items recorded subdued inflation of up to 5 percent. The wholesale prices of the remaining 10 food items either declined or remained stable.

An item-wise breakup of WPI food inflation showed that the wholesale prices of some key food items like tomatoes, rice, wheat, vegetable ghee, maize, eggs, fresh milk and pulse masoor witnessed double digit YoY growth of varying magnitude ranging between 10 to 66 percent. The significant YoY rise in the prices of major food staples was mainly due to supply disruptions. On the other hand, the wholesale prices of some important food items showed a YoY deflation of different magnitudes i.e. onions (-52.1 percent), potatoes (-29.7 percent), sugar (-24.0 percent), potatoes (-20.2 percent) and gram split (-19.7 percent) etc. The YoY decline in sugar price was the result of better supply conditions (see Table A7 & Figure 3.3). However, the price of sugar in the international market has shown reversal after declining for the preceding 14 months it registered a growth of 7.0 percent YoY in January 2008. This indicates that domestic sugar price may also go up in coming months following the uptrend in its international price.

Similar to WPI food inflation, the inflation for the non-food group of WPI witnessed an upward trend, rising to 12.7 percent in January 2008,

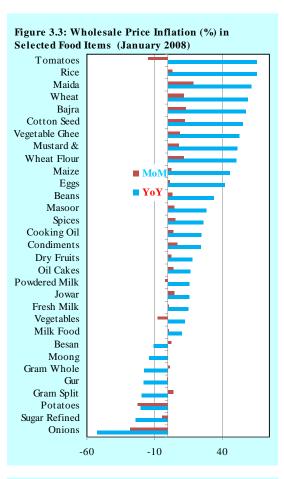
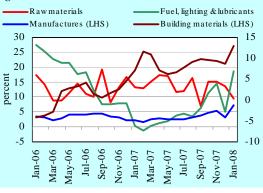


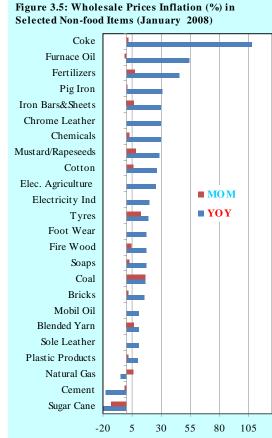
Figure 3.4: YoY Inflation in WPI Non-food



compared to 3.2 percent in the corresponding month of the previous year. All subgroups of the WPI non-food group exhibited a significant uptrend in prices, except for the raw material sub-group (see **Figure 3.4**).

Further disaggregation of nonfood WPI inflation into individual commodities³ reveals that the prices of cotton, pig iron, coke, furnace oil, electricity tariff, mobil oil, fertilizers, chemicals, foot wear, plastic products, iron bars & sheets, bricks etc; displayed a YoY growth between 10 to 55 percent in January 2008. The most prominent rise was witnessed in the wholesale price of coke, which recorded a triple digit YoY rise of 107 percent in January 2008 on account of rising international petroleum and oil prices. On the other hand, prices of 8 items declined in January 2008; these included sugarcane, cement, and natural gas (see Figure 3.5).

The YoY inflation recorded by *raw material* sub-group decelerated for the second consecutive month, to stand at 9.4 percent in January 2008. As



in the previous month, sugarcane and tobacco saw a decline in their wholesale prices in January 2008 offsetting partially the impact of double digit increases in the prices of commodities such as cotton, rapeseed and pig iron.

³ Non-food group of WPI consists of 63 individual items. These items are part of four subgroups of WPI non-food group; i.e. *Raw material* (9 items), *fuel, lighting & lubricant* (11 items), *manufactures* (32 items) and *building material* (11 items).

The most prominent increase (YoY) was witnessed in the *fuel, lightning & lubricants* WPI sub-index in January 2008, which recorded inflation of 18.6 percent during January 2008. Within this group, prices of coke, mobil oil, furnace oil, fire wood, electricity industrial supply tarrif-B, electricity agriculture tariff-D and coal witnessed double digit (YoY) growth during January 2008. Meanwhile, wholesale prices of natural gas, motor spirit, diesel oil and kerosene oil either showed a decrease or saw no change in their wholesale prices (see **Table A7** in Annexure A).

The *manufactures* sub-index of WPI group witnessed a 7.2 percent YoY growth in January 2008 compared to 2.3 percent in January 2007. This is led by doubledigit YoY increases in the prices of items such as fertilizers, chemicals, footwear, soaps, plastic products and sole leather experienced double digit. However, the impact of these price rises was muted due to YoY deflation recorded in prices of paper, cotton yarn, and drugs & medicines (see **Table A7** in Annexure A).

The *building material* sub-index witnessed a double digit YoY rise in January 2008 after having recorded single digit increase for the previous 9 months. Within this sub-group, a double digit rise was witnessed in the wholesale prices of bricks and iron bars during the month under review (see **Table A7** in Annexure A).

4. Global Commodity Prices

Commodity prices continued to show an uptrend in the international market during January 2008. All groups including food, energy and nonfood non-energy contributed to this uptrend. Crude oil prices, as well as the IMF and World Bank energy indices, showed strong upward movements as compared to the same month of the previous year. Crude oil price continued to climb in January 2008 to reach US\$90.8 per barrel compared to US\$68.2 per barrel in the same month last year. As for the energy group, prices of key food staples firmed up in January 2008. In the food group, rice, wheat, sugar, soybean oil and palm oil remained higher during the month under review.

Table 4.1: International Commodity Prices/Indices								
· · · ·	Jun- 07	Dec- 07	Jan- 08					
Energy								
Crude Oil (US\$ per barrel)	68.2	89.4	90.8					
IMF Energy Index (2005 =100)	126.5	163.9	168.1					
WB Energy Index (1990=100)	298.0	391.3	396.4					
Coal	66.0	97.5	98.3					
Food (\$/MT)								
Rice	326.3	378.0	393.5					
Wheat	223.0	368.6	369.6					
Sugar	9.3	10.4	11.7					
Palm Oil	748.4	883.4	987.0					
Soybean Oil	782.9	1027.0	1143.1					
Non-Food Non-Energy								
Cotton Outlook 'A' Index #	133.6	152.1	162.9					
WB Steel Products Index (1990=100)	133.5	140.1	149.1					
DAP (\$/MT)	434.5	594.0	707.7					
Urea (\$MT)	289.0	385.3	369.7					

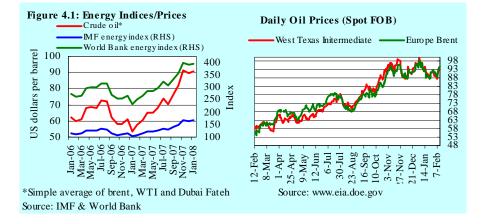
\$/MT = US\$ per metric tonne.

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.

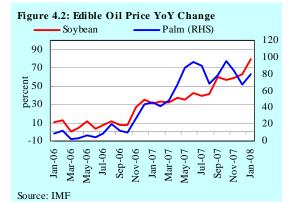
Source: IMF and World Bank.

In non-food non-energy group, cotton, steel and DAP prices increased, while urea prices showed a decline in January 2007 (see **Table 4.1**).

In January 2008, the crude oil prices touched highs of above US\$ 98.8 per barrel but later declined more than US\$10 per barrel on rising stocks and concerns about weakening global demand. However, recent power problems in China may give a short term boost to diesel demand and conflict between Venezuela and US oil firm. The spot crude oil price in the international market fluctuated in the range of US\$ 87.4 - US\$ 98.8 per barrel during January 2008 compared to US\$ 87.5 - US\$ 96.1 per barrel during the previous month.

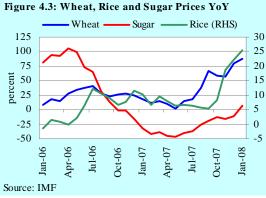


In the case of edible oils, prices of palm and soybean oil witnessed sharp increases, of 79.2 and 79.8 percent YoY, respectively in January 2008. On a month over month (MoM) basis, palm and soybean prices registered increases of 11.7 and 11.3 percent respectively in January 2008.

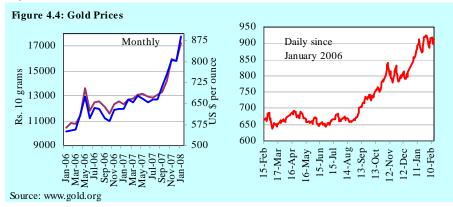


The current rise in palm and

other vegetable oil prices is attributed to tight supplies and strong demand for food and bio-fuel production. Increase in soybean oil prices is due to a shortfall in the estimated harvest in Brazil, and increased demand from China and India according the World Bank commodity market reviews (see **Figure 4.2**). In the food group, the prices of key food items such as wheat, rice and sugar witnessed an uptrend on an YoY basis in January 2008. Wheat prices exhibited a sharp YoY growth of 88.5 percent compared to 17.3 percent during the same month last year. On MoM basis wheat prices decelerated sharply. After witnessing negative growth (YoY) for 15 months, sugar prices registered



positive YoY growth of 7.0 percent in January 2008. On a monthly basis sugar prices increased by 11.7 percent in the month, on expectations of strong demand for ethanol production and lower estimates of Indian sugarcane crop (see **Figure 4.3**).

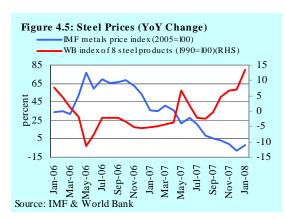


Within the non-food group, gold prices continued to remain volatile and further increased to US\$ 889.6 per ounce in January 2008. Gold prices exhibited a YoY growth of 40.9 percent (the highest since September 2006) in January 2008. A weak dollar, investors concerns about rising inflation and lower economic growth have contributed towards this rising trend of global gold prices. On a daily basis, gold price remained higher and fluctuated in a wider range of US\$ 846.7- US\$ 924.5 per ounce during January 2008 (see **Figure 4.4**).

The World Bank index of 8-steel products and IMF metals price index displayed

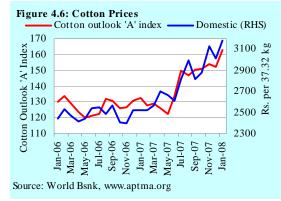
opposite trends in January 2008 because of the difference in compositions⁴.

World Bank index showed double digit YoY growth of 13.5 percent in January 2008 compared to 6.9 percent in the previous month. All items included in the metals & minerals group registered a MoM rise except Zinc. The notable rise was mainly observed in the prices of copper, nickel, gold, silver and steel. Copper prices increased to 7.2 percent on account of falling stocks and expected



strong Chinese demand. Nickel prices rose to 6.5 percent on expectations of a rebound in stainless steel production, which declined in the second half of 2007. While IMF metals price index showed a YoY decline and was recorded at 1.8 percent during the month under review⁵ (see **Figure 4.5**).

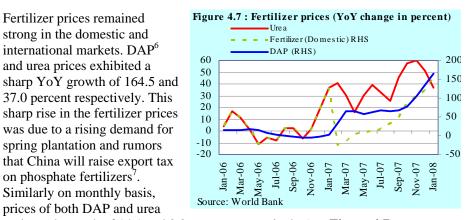




recorded in the domestic market. The uptrend in global cotton prices is a result of strong demand and lower cotton planting in major cotton producing countries.

⁴ IMF Commodity Metals Price Index includes Copper, Aluminum, Iron Ore, Tin, Nickel, Zinc, Lead, and Uranium Price Indices whereas World Bank index consists of ebar (concrete reinforcing bars), merch bar (merchant bars), wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet, and galvanized iron sheet.

World Bank Commodity Market Review, January 8, 2008



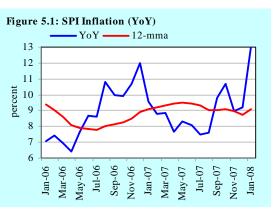
registered growth of 14.1 and 2.2 percent respectively (see Figure 4.7).

⁶ DAP: Diammonium Phosphate

⁷ World Bank Commodity Market Review, January 8, 2008

5. Sensitive Price Indicator

Following the trend of both CPI and WPI, the sensitive price indicator (SPI) showed a significant rise and was recorded at 13.1 percent in January 2008 as compared to 9.5 percent in the corresponding month last year. The long-run trend indicated by 12-month moving average showed no change in SPI inflation during January 2008 compared to the corresponding



month of last year and was recorded at 9.1 percent (see Figure 5.1).

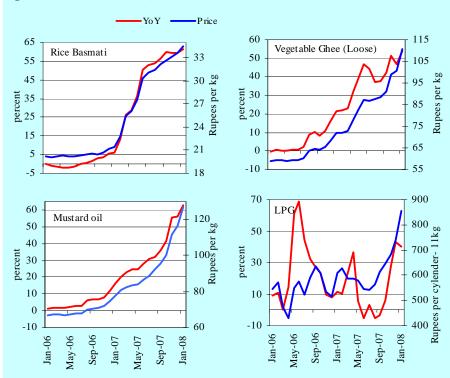
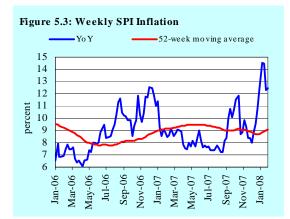


Figure 5.2: SPI Inflation (YoY) in selected Items

Out of 53 items included in the SPI basket, prices of 27 items showed YoY increases between 10 to 60 percent, prices of 7 items showed YoY rise between 5 to 10 percent, prices of 6 items recorded YoY change between 0 to 5 percent and preices of 13 items showed no change or decline in January 2007. The items showing SPI YoY inflation higher than the average were tomatoes, mustard oil, rice, wheat, vegetable ghee, LPG etc.(see **Figure 5.2**).

A comparison of previous month prices exhibits that almost 17 percent items included in the SPI basket witnessed either a decline or no change in the price level, 26 items showed MoM rise between 0 to 5 percent, 7 items recorded between 5 to 10 percent and 3 items showed a MoM inflation of more than 10 percent. The items that showed double digit MoM increase include wheat, banana and LPG (see **Table A8** in Annexure A).

Weekly SPI showed increasing trend in YoY inflation during the month under review and fluctuated in the range of 12.5 -14.5 percent. Weekly SPI YoY inflation was recorded at 12.5 percent in the last week of January 2008 compared to 10.8 percent for the last week of December 2007. The long-run trend indicated by 52-week moving average increased to 9.1 percent in the last week of January 2008 compared to 8.7



percent during the last week of December 2007 (see Figure 5.3).

The income group-wise SPI inflation reveals that all income groups showed an increase in inflation as compared to the previous month. In December 2007 the incidence of inflation was the highest in the lowest income group. On the other hand, the least affected group was the highest income group with YoY inflation maintaining single digit growth since the beginning of current calendar year (see **Table 5.1**). This is because most of the items showing high inflation are from the food group, which is more significant for the lowest income group as compared to high income groups.

Table 5.1 : Inco	me Group-wise	SPI Inflation (YoY)			
					percent
	Up to Rs. 3000	Rs. 3001-5000	Rs. 5000- 12000	Above Rs. 12000	All income groups
Jan-07	12.1	11.3	10.7	8.5	9.5
Feb-07	10.6	10.0	9.7	7.8	8.8
Mar-07	9.7	9.5	9.4	8.0	8.9
Apr-07	8.3	8.3	8.2	6.9	7.7
May-07	9.1	9.3	9.0	7.0	8.3
Jun-07	9.7	9.6	8.9	6.2	8.0
Jul-07	9.8	9.4	8.3	5.2	7.5
Aug-07	9.2	9.0	8.1	5.5	7.6
Sep-07	11.6	11.5	10.6	7.3	9.8
Oct-07	12.7	12.6	11.6	8.2	10.7
Nov-07	11.0	10.9	9.9	6.9	9.0
Dec-07	11.8	11.5	10.4	7.1	9.2
Jan-08	16.3	15.9	14.5	10.6	13.1

Table 5.1 : Income Group-wise SPI Inflation (YoY)

Annexure A

Table A1: CPI Inflation (YoY) by Groups

Table A1. CIT Initiation (101) by Groups	Weights	Jan-04	Jan-05	Jan-06	Jan-07	Jan-08
I. Food Group	40.3	7.8	10.4	8.2	8.7	18.2
II. Non-Food Group	59.7	3.4	7.2	9.2	5.2	7.3
Apparel, textile, etc.	6.1	2.3	2.6	3.9	4.1	8.6
House rent	23.4	4.5	12.0	9.9	6.2	9.5
Fuel & lighting	7.3	2.8	3.0	12.3	5.8	7.4
Household furniture & equipt	3.3	2.6	7.3	4.4	7.2	6.1
Transport & com.	7.3	3.7	7.2	18.4	0.8	-0.3
Recreation & entert.	0.8	-1.4	0.1	-0.3	0.1	0.5
Education	3.5	3.7	2.5	6.7	7.3	4.3
Cleaning, laundry, etc.	5.9	2.7	4.7	2.8	4.5	10.1
Medicare	2.1	1.5	1.1	2.4	9.9	7.5
Headline	100	5.2	8.5	8.8	6.6	11.9

Table A2:	Distribution	of Price	Changes	of CPI Basket	. January	7 2008 (YoY)

		No. of Items in each Inflation Range				
% Changes	Total Number of Items	Decrease or no change (0 % or less)	Subdued increase (0 to 5%)	Moderate increase (5 to 10%)	Double digit increase (over 10%)	
18.2	109	23	9	17	60	
7.3	250	73	75	68	34	
8.6	42	4	17	14	7	
9.5	1			1		
7.4	15	7		2	6	
6.1	44	2	10	26	6	
-0.3	43	22	11	8	2	
0.5	16	9	5		2	
4.3	24	8	8	5	3	
10.1	36	3	16	11	6	
7.5	29	18	8	1	2	
11.9	359					
	Changes 18.2 7.3 8.6 9.5 7.4 6.1 -0.3 0.5 4.3 10.1 7.5	% Number of Items 18.2 109 7.3 250 8.6 42 9.5 1 7.4 15 6.1 44 -0.3 43 0.5 16 4.3 24 10.1 36 7.5 29	% Changes Total Number of Items Decrease or no change (0 % or less) 18.2 109 23 7.3 250 73 8.6 42 4 9.5 1 7 6.1 44 2 -0.3 43 22 0.5 16 9 4.3 24 8 10.1 36 3 7.5 29 18	% Changes Total Number of Items Decrease or no change (0 % or less) Subdued increase 18.2 109 23 9 7.3 250 73 75 8.6 42 4 17 9.5 1 7 6.1 44 2 10 -0.3 43 22 11 0.5 16 9 5 4.3 24 8 8 10.1 36 3 16 7.5 29 18 8 8 10 10 10	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	

Note: Prices of 15 seasonal items were not reported during the month.

Table A3: Top Ten Contribution to YoY CPI Inflation in January 2008								
	YoY change			Weighted				
	Items	weights	Jan-07	Jan-08	Contribution			
A. Ra	nked by Weighted Contribution							
1	House Rent Index	5.11	3.11	58.48	24.80			
2	Wheat Flour	23.43	6.18	9.47	18.74			
3	Vegetable Ghee	2.67	16.47	43.59	10.53			
4	Milk Fresh	6.66	11.89	13.80	8.28			
5	Rice	1.34	5.92	61.04	6.42			
6	Electricity	4.37	0.00	10.07	2.86			
7	Fresh Fruits	0.48	4.26	66.30	2.73			
8	Meat	1.68	10.27	14.07	2.18			
9	Footwear	2.70	10.92	5.82	1.99			
10	Wheat	0.60	8.50	47.86	1.94			
	Total	49.04			80.47			
B. Ra	nked by Percentage Change							
1	Rice	0.48	4.26	66.30	2.73			
2	Mustard Oil	0.50	-51.54	65.55	1.81			
3	Wheat	1.34	5.92	61.04	6.42			
4	Vegetable Ghee	0.05	17.26	60.76	0.23			
5	Wheat Flour	0.11	0.21	59.95	0.50			
6	Pulse Masoor	5.11	3.11	58.48	24.80			
7	Maida	0.60	8.50	47.86	1.94			
8	Spices	2.67	16.47	43.59	10.53			
9	Cooking Oil	0.22	4.62	31.65	0.54			
10	Milk Powder	0.41	-7.08	31.01	1.27			
	Total	11.48			50.75			
	Tom	11110			conc			
C. Ra	nked by Weights							
1	House Rent Index	23.43	6.18	9.47	18.74			
2	Milk Fresh	6.66	11.89	13.80	8.28			
3	Wheat Flour	5.11	3.11	58.48	24.80			
4	Electricity	4.37	0.00	10.07	2.86			
5	Bakery & Confectionary	2.98	4.99	7.56	1.59			
6	Meat	2.70	10.92	5.82	1.99			
7	Vegetable Ghee	2.67	16.47	43.59	10.53			
8	Tution Fees	2.36	8.77	4.74	0.93			
9	Transport Fare/Charges	2.12	2.76	2.30	0.50			
10	Natural Gas	2.05	11.68	2.78	0.76			

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 11.9 percent in January 2008.

Table A4: Distribution of Price Changes - Selected CPI Items, January 2008						
	Decrease or no	Subdued increase	Moderate increase			
Groups	change	(upto 5%)	(5 to 10%)	Increase of over 10%		
Food Group	Sugar Refined Onion Potatoes Pulse Gram Pulse Moong (Washed) Pulse Mash (Washed) Cauliflower Gram Whole Yellow Av.Qlty Garlic	Bananas Fish-Rahu Medium Size Cigarettes K-2 10'S Rooh Afza Fruit Juice Tetra Pack Cocumber (Kheera) Betel Nuts Milo 200 Gm.	Beef With Bone Av. Qlty., Mutton Av. Qlty., Tea Prepared (Ordinary) Cigarettes Gold Leaf 20'S, Cooked Mutton (Av. Hotel) Cooked Beef (Av. Hotel), Cigarettes Morven Gold 20'S Betel Leaves Biscuits-Packed	Milk Fresh (Unboiled) Wheat Flour Bag Vegetable Ghee (Loose) Chicken Farm Broiler (Live) Cooking Oil (Dalda) Rice Basmati Broken Av.Qlty Tomatoes Eggs Farm Milk Powder Loose/Packed		
	Garne	Lawn Av.Qlty,	Biscuits-Packed	Loose/Packed		
Apparel & Textile	Ladies Sandal Bata Gents Shoes Paul Bata	School Uni., Kameez,Shal.Girl Tailoring Coat-Pant Suit	Long Cloth Av.Qlty. Shirting Av.Qlty. Tailoring Shirt	Tailoring Suit Female		
House Rent Index			House rent in Jan			
muex	Gas Chrg 6.7438 -		House rent index			
Fuel & Lighting	10.1157Mmb Kerosene Oil, Elect.Charges Upto 50 Units		Bulb Philips 100- Watts Tube Light Philips 40 Watts	Elect.Charges Above 1000 Uni Firewood Whole Gas Cylinder Stand. Size		
		Tea Set Pak. Chinaware 21 Pc	Household Servant	Marriage Hall With		
H/hold Furniture	Carpet Plain Av. Qlty Sewing Machine(Singer)	Blanket (90" X 54") Sewing Thread/Reel(Asli Pari	Female P/T Quilt (Lihaf) 3 Kg. Cotton, Bedsheet Single Bed Sup.Qlty	Furniture Washing Machine Singer Chair Shesham Wood With Arms		
Transmission 8	Petrol Super Tel Charges Out Side City	A/C Bus Fare Outside City Tyre Car With Tube				
Transport & Comm.	High Speed Diesel Hsd Motorcycle Honda Cd-70.	General Car Suzuki 800 Cc (W/O. A/C), Minibus Fare Max.With In Cit	Car Service Charges Auto Rickshaw Fares Cng Filling Charges Taxi 4 Seater Fare	Tyre Motor Cycle Without Tub Air Fare Economy Class.		
Recreation & Entertainment	Tv.Licence Feedomestic Daily "Jang" Daily "Nawa-E- Waqt"	Vid. Cassette Blk. Tdk/Sony, V.C.P. Panasonic/Lg/Nat Radio With C.Player National		Dry Cell 1.5 Volt(Local) Weekly "Akhbar-E- Jahan"		
Education	Govt. College Fee Ist. Year Govt. College Fee 4Th. Year Urdu Book Ist.Year/Inter	Govt. Engg. Coll. Fee I Year Eng. Book Ist.Yr Complete Se Pen Ink Dollor 57 Ml Bottle	Maths Book Class Ix Or X, School Fee 2Nd- Ry Eng.Med. Maths Book Ist.Year (T.B.B)	Paper Foolscape (27"X17") Ball Pen (Local) Urdu Book Class Ix/X(T.B.B)		
Cleaning & Laundry	Toothpaste Macklines 70 Grm Robin Blue (35 Grams) Hair-Colour Begin (6 Gms)	Haircut Charges For Men Washing Powder 1000 Grm Perfume Med.Size Medora/Broa Talc Powder Vice Roay,B.Cat	Shampoo Plain Medora 200 Ml. Surf (Medium) 160 Grm Hair-Oil Amla/Chambeli Dry Cleaning Suit Coat Pant	Washing Soap Nyl(135- 160Gms) Toilet Soap Lux 95 Grams Toilet Soap Lifebouy 140 Grm Gold Tezabi 24 Ct		
Medicare	Gripe-Water Woodwards Dettol (Medium) Jouhar Joshanda	Daonil Tab. 5 Mg. Flagyl Tab. 200 Mg. Brufen Tabs 200-Mg.	Galxos-D (450 Grms)	Doctor (Mbbs) Clinic Fee Polyfax Eye Ointment		

Tab	Table A5: City-wise Inflation (YoY) by Income Groups, January 2008							
			Upto Rs:3	000		Rs 3001-5000		
		General	Food	Non-Food	General	Food	Non-Food	
1	Lahore	11.5	16.8	7.9	11.9	17.8	7.9	
2	Faisalabad	13.2	21.4	7.6	14.6	21.7	9.8	
3	Rawalpindi	9.9	12.5	8.2	10.7	14.4	8.2	
4	Multan	15.4	23.3	10.1	15.4	23.6	9.8	
5	Gujranwala	13.7	18.5	10.4	15.4	20.4	12.0	
6	Islamabad	11.5	14.6	9.4	11.7	14.3	9.9	
7	Sargodha	13.3	17.4	10.4	12.3	16.3	9.7	
8	Sialkot	10.3	14.8	7.2	10.3	14.4	7.5	
9	Bahawalpur	12.3	16.9	9.2	12.8	18.2	9.2	
10	Karachi	12.5	18.8	8.3	13.0	19.9	8.3	
11	Hyderabad	16.0	21.1	12.5	15.4	20.7	11.8	
12	Sukkur	15.7	23.2	10.5	16.3	23.9	11.2	
13	Larkana	14.5	21.4	9.9	15.5	22.4	10.9	
14	Peshawar	13.5	18.4	10.2	15.9	22.7	11.3	
15	Bannu	18.1	22.5	15.1	19.1	23.5	16.2	
16	Quetta	14.7	18.7	12.1	14.0	19.9	9.9	
17	Khuzdar	16.9	18.6	15.8	18.0	19.6	17.0	

			D		L D 12000			
			Rs 5001-12	.000	8	bove Rs 12	2000	
		General	Food	Non-Food	General	Food	Non-Food	
1	Lahore	11.1	17.6	6.6	9.0	15.4	4.7	
2	Faisalabad	13.6	22.1	7.9	10.9	21.3	3.8	
3	Rawalpindi	10.2	14.0	7.7	8.6	13.1	5.7	
4	Multan	13.7	22.5	7.8	9.6	17.8	4.0	
5	Gujranwala	14.2	18.8	11.0	11.7	14.3	9.8	
6	Islamabad	10.7	14.9	7.9	8.8	13.2	5.8	
7	Sargodha	11.5	15.3	9.0	9.6	14.9	6.0	
8	Sialkot	9.5	14.0	6.5	8.4	12.6	5.5	
9	Bahawalpur	11.2	17.3	7.1	8.3	15.0	3.8	
10	Karachi	12.2	18.6	7.8	9.1	15.4	4.9	
11	Hyderabad	15.1	21.1	11.1	12.8	18.2	9.1	
12	Sukkur	15.3	22.8	10.2	14.1	21.5	9.2	
13	Larkana	14.5	21.6	9.7	13.1	20.9	7.9	
14	Peshawar	13.7	21.6	8.4	10.1	17.4	5.2	
15	Bannu	18.3	23.4	14.9	16.3	22.2	12.3	
16	Quetta	12.8	19.5	8.3	11.4	18.1	6.9	
17	Khuzdar	17.0	19.5	15.4	15.3	18.1	13.4	

Table A6 : Income Group-wise Inflation (YoY) per							percent	
	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08
<u>Up to Rs. 3000</u>								
General	7.7	7.5	7.3	9.9	11.2	10.1	10.4	14.7
Food	9.3	8.7	8.4	13.0	14.9	12.2	12.4	20.0
Non-food	6.6	6.7	6.5	7.6	8.5	8.6	9.0	10.9
<u>Rs. 3001-5000</u>								
General	7.9	7.5	7.3	9.9	11.2	10.2	10.4	14.5
Food	9.6	8.8	8.6	13.4	15.4	12.7	12.8	20.3
Non-food	6.8	6.6	6.5	7.4	8.2	8.3	8.7	10.5
<u>Rs. 5000-12000</u>								
General	7.5	6.9	6.9	9.1	10.2	9.4	9.5	13.0
Food	9.7	8.6	8.7	13.2	15.0	12.6	12.5	19.0
Non-food	5.9	5.6	5.6	6.1	6.7	7.0	7.4	8.6
Above Rs. 12000								
General	6.3	5.6	5.8	7.3	8.0	7.7	7.7	10.2
Food	9.8	8.1	8.6	12.6	13.9	12.3	11.8	16.6
Non-food	3.9	3.8	3.7	3.4	3.6	4.3	4.7	5.5
All income groups								
General	7.0	6.4	6.5	8.4	9.3	8.7	8.8	11.9
Food	9.7	8.5	8.6	13.0	14.7	12.5	12.2	18.2
Non-food	5.1	4.9	4.9	5.0	5.4	5.9	6.3	7.3

Table A7	Table A7: Distribution of Price Change (YoY)WPI Items: January 2008						
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase			
Food	Onions Sugar Refined Potatoes Gram Split Gur Gram Whole Moong Besan Tea Sugar Confectionary	Mineral Water Meat Fish Salt	Beverages Fruit Prepared/Preserved Fresh Fruits Chicken Vegetables Prepared/Preserved	Milk Food, Vegetables Fresh Milk, Jowar Powdered Milk Oil Cakes, Dry Fruits Condiments Cooking Oil Spices, Masoor Beans, Eggs, Maize Wheat Flour Mustard & Rapeseed Oil, Vegetable Ghee Cotton Seed Oil Bajra, Wheat, Maida, Rice, Tomatoes			
Raw material	Sugar Cane Tobacco	Wool	Cotton Seeds Skins Hides	Cotton Mustard/Rapeseeds Pig Iron			
Fuel & lighting	Natural Gas Diesel Oil Motor Sprit Kerosine Oil			Mobil Oil, Coal Fire Wood Electricity Ind. Supply Tariff-B Elec. Agriculture Tariff-D, Furnace Oil Coke			
Manufactures	Paper Cotton Yarn Drugs & Medicines Glass Products Audio-Visual Instruments	Woolen Textiles Mattresses, Cosmetics Transports Other Electrical Goods, Ready Made Garments,Utensils Cotton Textiles Pesticides & Insecticised Nylon Yarn Jute Manufactures Silk & Reyon Textiles, Matches Hosiery, Cigarettes	Dying Materials Machinery Tubes	Plastic Products Sole Leather Blended Yarn Soaps Foot Wear Tyres Chemicals Chrome Leather Fertilizers			
Building material	Cement Paints & Varnishes Cement Blocks	Sanitary Wares Glass Sheets Timber	Tiles Wires And Cables Pipe Fittings	Bricks Iron Bars & Sheets			

Table A8: SPI Item-wise Price Movements

			Price	Percentage change		
S.No	Items	Unit	Jan 08	YoY	Monthly	
1	Wheat	Kg.	17.1	53.1	11.0	
2	Wheat flour a.qlt.	Kg.	18.5	39.7	5.2	
3	Rice basmti.broken	Kg.	33.7	61.7	2.6	
4	Rice irri-6	Kg.	24.5	52.3	2.5	
5	Masur pulse washed	Kg.	60.5	38.1	6.5	
6	Moong pulse washed	Kg.	50.0	-8.4	1.0	
7	Mash pulse washed	Kg.	70.2	0.8	0.5	
8	Gram pulse washed	Kg.	39.6	-12.0	3.7	
9	Beef	Kg.	121.5	3.5	0.7	
10	Mutton	Kg.	233.3	4.8	0.2	
11	Egg hen (farm)	Doz.	57.0	30.5	3.1	
12	Bread plain m.s.	Each	18.0	22.6	5.2	
13	Sugar	Kg.	27.0	-17.7	-3.9	
14	Gur	Kg.	32.1	-17.5	0.0	
15	Milk fresh	Litr	29.6	11.5	0.3	
16	Milk powdered nido	400g	145.3	21.1	0.0	
17	Curd	Kg.	34.5	11.3	0.3	
18	Veg.ghee tin	2.5k	288.7	34.7	3.8	
19	Veg.ghee loose	Kg.	100.6	54.2	10.0	
20	Mustard oil	Kg.	116.5	62.8	8.8	
21	Cooking oil	2.51	288.7	34.9	4.2	
22	Potatoes	Kg.	13.2	-12.2	-14.2	
23	Onions	Kg.	18.4	-47.2	-17.4	
24	Tomatoes	Kg.	26.7	63.6	6.6	
25	Bananas	Doz.	28.4	3.4	11.2	
26	Salt powdered	Kg.	5.1	9.6	2.1	
27	Red chillies(powd)	Kg.	133.8	38.0	2.0	
28	Garlic	Kg.	50.5	-29.2	-2.9	
29	Tea packet	250g	65.0	-7.1	0.0	
30	Tea (prepared)	Cup	6.7	10.1	3.6	
					continued	

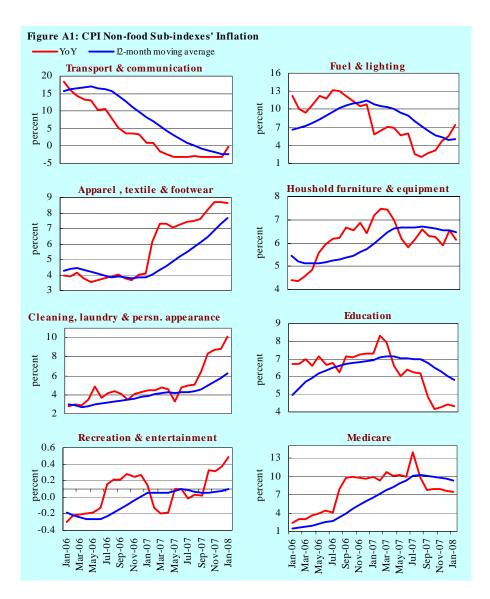
			Price	Percent	age change
S.No	Items	Unit	Jan 08	YoY	Monthly
31	Cooked beef plate	Each	32.3	9.2	2.0
32	Cooked dal plate	Each	19.5	12.5	3.8
33	Cigarettes k-2	10's	8.4	5.2	0.0
34	Coarse latha	Mtr.	38.9	11.8	0.2
35	Lawn (avg.+s.qlty)	Mtr.	80.5	2.8	-0.8
36	Voil printed	Mtr.	39.2	4.7	-0.8
37	Shirting	Mtr.	70.9	9.2	0.8
38	Sandel gents bata	Pair	499.0	25.1	0.0
39	Sandel ladies bata	Pair	299.0	0.0	0.0
40	Chappal spng. Bata	Pair	99.0	11.2	0.0
41	Kerosene	Litr	40.1	8.3	5.6
42	Firewood	40kg	217.3	17.1	4.5
43	Elec. Bulb 60-wats	Each	12.8	6.6	0.8
44	Match box	Each	0.9	31.0	4.5
45	Washing soap	Cake	9.4	20.6	3.7
46	Bath soap lifebuoy	Cake	17.0	21.8	0.3
47	Chicken (farm)	Kg.	76.0	19.7	-1.6
48	Gas chrg. All clb. Comb	D.mmbt	224.7	-5.4	2.6
49	L.p.g .(cylender 11kg.)	Each	741.0	39.9	15.2
50	Elec.chrg.all slabs com	Bd. Unit	5.1	9.9	0.0
51	Petrol	Litr	53.8	-3.6	0.0
52	Diesel	Litr	37.9	-1.3	0.0
53	Telephone local	Call	2.3	0.0	0.0
Maximum				63.6	15.2
Median				10.1	0.8
Minimum				-47.2	-17.4

Table /	Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities				
Item ar	nd Specification			dex	
	<u> </u>	Weights	Jan-07	Jan-08	
GENE		100.0006	141.01	157.73	
FOOD 1	& BEVERAGES. WHEAT	40.3412	146.27	172.96	
2	WHEAT FLOUR	0.4830	142.34	236.71	
2	MAIDA	5.1122 0.1059	138.70	219.81 208.88	
3 4	BESAN	0.1320	130.59 159.47	208.88 149.09	
5	RICE	1.3369	139.47	211.64	
6	PULSE MASOOR	0.2214	128.86	169.65	
7	PULSE MOONG	0.2214	128.80	170.04	
8	PULSE MASH	0.2230	154.78	154.83	
9	PULSE GRAM	0.4272	160.51	143.42	
10	GRAM WHOLE	0.1491	147.62	135.41	
11	MUSTARD OIL	0.0456	138.60	222.81	
12	COOKING OIL	0.6858	141.76	184.54	
12	VEGETABLE GHEE	2.6672	151.40	217.39	
13	SUGAR	1.9467	116.98	94.77	
14	GUR	0.0735	148.84	121.50	
16	TEA	1.2559	114.80	109.20	
17	MILK FRESH	6.6615	150.69	171.48	
18	MILK POWDER	0.1105	134.66	175.11	
19	MILK PRODUCTS	0.5607	137.60	155.54	
20	HONEY	0.0358	131.01	132.96	
20	CEREALS	0.0878	132.12	163.90	
22	JAM,TOMATO,PICKLES & VINEGAR	0.2472	125.65	139.28	
23	BEVERAGES	0.7286	126.96	141.63	
23	CONDIMENTS	0.3392	114.09	140.21	
25	SPICES	0.6008	112.87	166.89	
26	DRY FRUIT	0.2760	210.98	238.59	
20	BAKERY & CONFECTIONARY	2.9837	117.82	126.73	
28	CIGARETTES	0.9527	147.42	158.43	
29	BETEL LEAVES & NUTS	0.1851	136.14	147.11	
30	READYMADE FOOD	1.6833	153.84	175.48	
31	SWEETMEAT & NIMCO	0.3846	151.43	178.65	
32	FISH	0.2703	147.10	150.02	
33	MEAT	2.6981	212.16	224.50	
34	CHICKEN FARM	0.9158	123.64	141.31	
35	EGGS	0.4119	165.91	217.36	
36	POTATOES	0.5931	131.97	119.98	
37	ONIONS	0.6362	261.69	142.94	
38	TOMATOES	0.4958	92.98	153.93	
39	VEGETABLES	1.7998	145.77	155.20	
40	FRESH FRUITS	1.6156	154.10	158.96	
	REL, TEXTILE & FOOTWEAR.	6.0977	122.46	133.03	
41	COTTON CLOTH	1.6197	128.00	135.99	
42	SILK,LINEN,WOOLEN/CLOTH	0.5766	126.78	134.32	
43	TAILORING CHARGES	0.8636	127.96	136.93	
44	HOSIERY	0.1528	135.54	143.00	
45	READYMADE GARMENTS	1.2038	121.86	127.70	
46	WOOLEN READYMADE GARMENTS	0.1485	139.80	151.85	
47	FOOTWEAR	1.5327	109.38	128.61	
HOUS	E RENT.	23.4298	141.24	154.61	
48	HOUSE RENT INDEX (Combined)	23.4298	141.24	154.61	
FUEL	AND LIGHTING.	7.2912	149.05	160.04	
49	KEROSENE	0.1366	235.87	235.87	
50	FIREWOOD	0.4778	204.35	243.47	
51	MATCH BOX	0.1301	100.00	100.00	
52	BULB & TUBE	0.1311	86.73	93.52	

(continued)

Table A9	(continued)

tem and Specification			In	dex	
	•	Weights	Jan-07 Jan-08		
53	ELECTRICITY	4.3698	108.59	119.53	
54	NATURAL GAS	2.0458	223.86	230.09	
	LD.FURNITURE & EQUIPMENT ETC.	3.2862	132.31	140.44	
55	UTENSILS	0.3690	119.05	125.80	
56	PLASTIC PRODUCTS	0.1055	137.06	147.20	
57	SUITCASE	0.0470	121.06	130.64	
58	HOUSE HOLD EQUIPMENTS	0.0953	118.47	124.66	
59	FURNITURE (Ready Made)	0.3054	130.06	142.63	
60	FURNISHING	0.6362	128.07	136.61	
61	ELECT.IRON FANS & WASHING MACHINE	0.1889	119.43	128.06	
62	SEWING MACHINE, CLOCK AND NEEDLES	0.1270	117.24	119.84	
63	REFRIGERATOR & AIRCONDITIONER	0.1756	95.27	101.77	
64	MARRIAGE HALL	0.0445	138.43	155.73	
65	HOUSE HOLD SERVANT	1.1918	149.25	156.80	
TRAN	SPORT & COMMUNICATION.	7.3222	148.63	148.21	
66	PETROL	1.7253	175.59	175.59	
67	DIESEL	0.2070	238.74	238.74	
68	CNG. FILLING CHARGES	0.1649	140.21	152.27	
69	SERVICE CHARGES	0.3835	129.57	137.42	
70	VEHICLES	0.2596	100.73	101.54	
71	TYRE & TUBE	0.2831	122.11	127.59	
72	TRANSPORT FARE/CHARGES	2.1236	171.27	175.21	
73	TRAIN FARE	0.1514	170.01	170.01	
74	AIR FARE	0.0983	218.72	280.47	
75	COMMUNICATION	1.9255	99.42	86.82	
RECR	EATION & ENTERTAINMENT.	0.8259	105.79	106.31	
76	RECREATION	0.3399	100.00	101.91	
77	ENTERTAINMENT	0.4860	109.84	109.38	
EDUC	ATION.	3.4548	133.70	139.51	
78	TUTION FEES	2.3629	138.99	145.58	
79	STATIONERY	0.3500	120.29	130.63	
80	TEXT BOOKS	0.6894	126.25	127.62	
81	COMPUTER & ALLIED PRODUCTS	0.0525	82.67	82.10	
CLEA	NING LAUNDRY & PER.APPEARANCE.	5.8788	124.75	137.33	
82	WASHING SOAP & DETERGENT	1.5535	116.21	126.41	
83	TOILET SOAP	0.7436	118.93	144.11	
84	TOOTH PASTE	0.4036	106.94	108.67	
85	SHAVING ARTICLES	0.3480	110.92	119.05	
86	COSMETICS	1.4272	123.37	128.34	
87	WATCHES	0.0552	118.84	127.90	
88	JEWELLERY	0.3936	190.88	246.29	
89	LAUNDRY CHARGES	0.2207	140.64	152.06	
90	HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	127.95	133.35	
MEDI	CARE.	2.0728	121.54	130.61	
91	DRUGS & MEDICARES	1.0752	106.61	107.39	
92	DOCTOR'S FEE	0.9976	137.63	155.63	



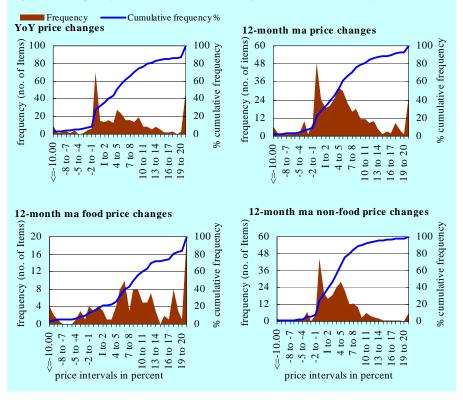


Figure A2: Frequency Distribution of Price Changes of CPI Items, January 2008

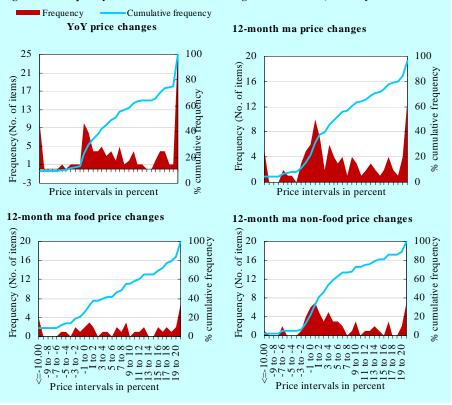


Figure A3: Frequency Distribution of Price Changes of WPI Items, January 2008

Annexure **B**

Technical Notes

1. All the three measures of inflation, viz. CPI, WPI and SPI are computed by the following Laspeyres Index formula:

$$I_t = \sum_j w_0^j \left(\frac{P_t^j}{P_0^j} \right)$$

where I_t is price index, w_0^j is weight of commodity j in the overall basket,

 P_t^j is price of commodity j in period t and P_0^j is its price in the base year.

- 2. Base year for all the indices is the year 2000-01.
- 3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities.
- 4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

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

5. Period average inflation is the percent change of the average index during the period from July to the given month of a fiscal year over the average index during the corresponding period of the last year. It is computed as follows:

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

where *v* is the serial number of the month of July of current fiscal year in a given time series.

6. Monthly inflation is the percent change of an index in a given month over the index in the preceding month. It is computed as follows:

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

7. 12-month moving average inflation (Long-run trend inflation) is the percent change of 12-month moving average of a price index; it is computed as follows:

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

- 8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods:
 - a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.
 - b) 20% trimmed-mean inflation; it is computed through the following steps:
 - 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_{ii} : Contribution of ith item to the overall inflation

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

 w_i : Weights of ith item

 π_{it} : Inflation of ith item

 π_t : Overall inflation