

3 Price Trends

3.1 Overview

The long-term deceleration in the annualized Consumer Price Index (CPI) inflation, visible over the last five years, continued into FY03 (see **Figure 3.1**); CPI inflation dropped sharply through the period to reach 3.1 percent by end-June 2003 – the lowest level for the last three decades.

At first sight, the other important inflation indices do not *clearly* reinforce this picture (see **Table 3.1**), depicting a small pickup in inflationary pressures during FY03 relative to the preceding fiscal year. Specifically, the Sensitive Price Indicator (SPI), which provides information on prices of selected essential items, manifested a marginal increase, while the Wholesale Price Index (WPI) and the GDP deflator both depicted slightly stronger increases in inflationary pressures during FY03.

However, it is important to note that the higher annual WPI inflation is largely contributed by the rise in energy prices during the first eight months of FY03 (see **Section 3.2** for details). Thereafter, the marginal WPI inflation too, has declined steadily (see **Figure 3.2**), and seems likely to continue this trend in the months ahead. This suggests that even the higher WPI inflation in FY03 is not inconsistent with the deceleration in CPI inflation for the period.

The relatively higher GDP deflator for FY03 is mainly contributed by the commodity-producing sector, as inflationary pressures clearly seem to have declined in the services sector. Within the commodity-producing sector, the largest contribution to inflationary pressures is from the agri-sector, which appears consistent with the price developments in the sector (see **Table 3.2**).

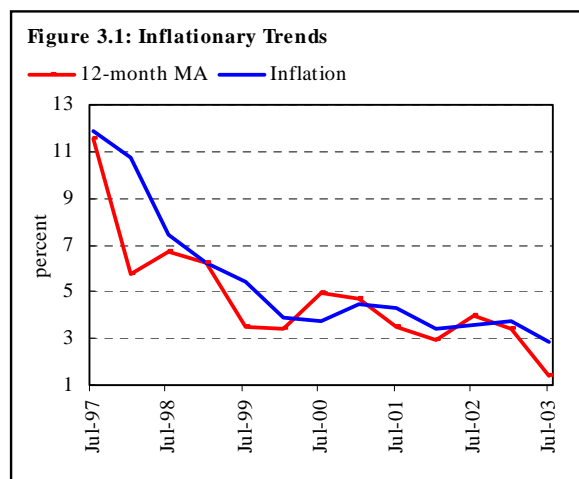


Table 3.1: Inflation Trends

Period	GDP deflator	Annual average			Annual marginal		
		July to June basis			June to June basis		
		CPI	WPI	SPI	CPI	WPI	SPI
FY99	5.9	5.7	6.4	6.4	3.7	4.6	4.1
FY00	2.8	3.6	1.8	1.8	5.1	3.4	3.3
FY01	6.0	4.4	6.2	4.8	2.5	4.5	2.0
FY02	3.2	3.5	2.1	3.4	4.4	2.4	4.4
FY03 ^p	4.5	3.1	5.9	3.5	1.9	4.4	3.5

P: Provisional

Source: Federal Bureau of Statistics

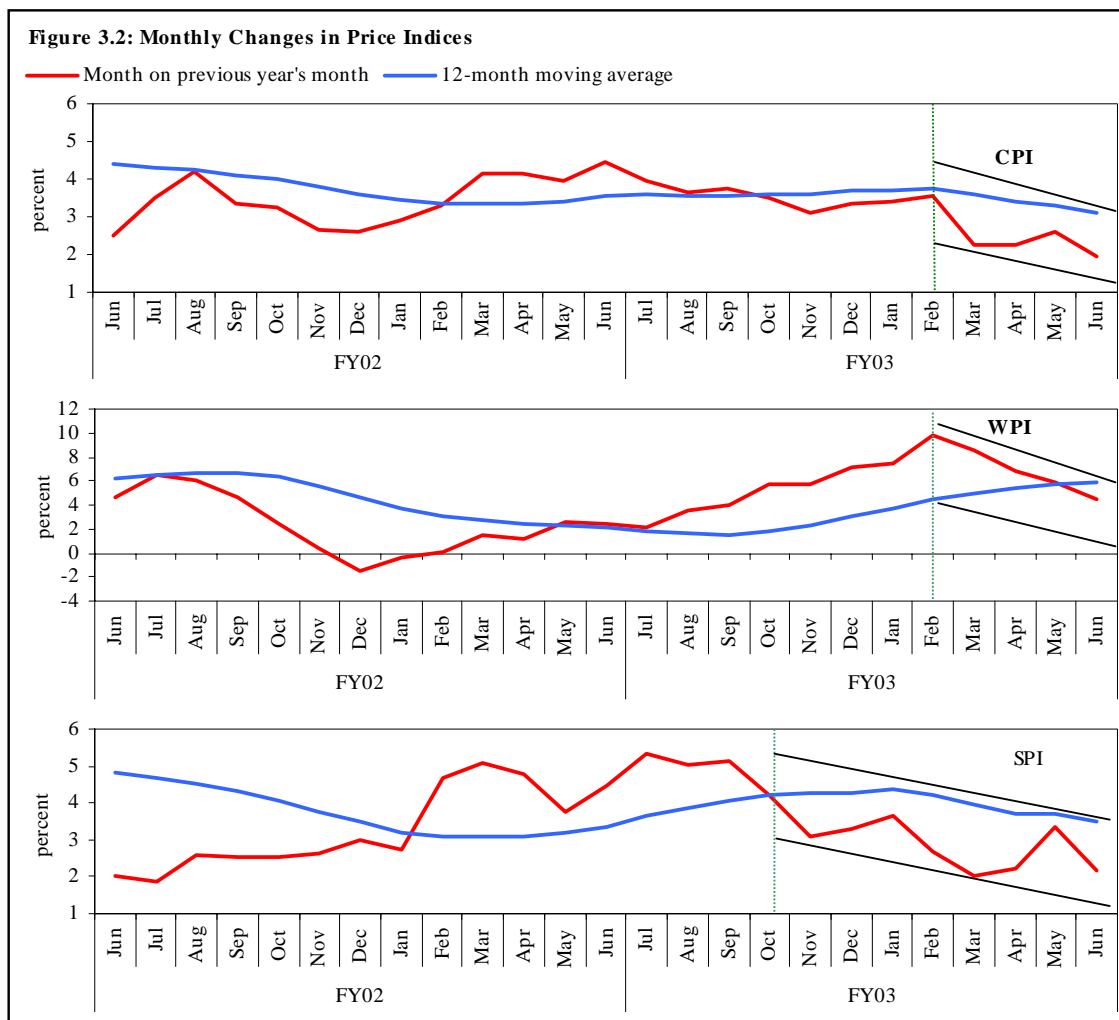
Table 3.2: GDP Deflator - Sectoral Contributions

	FY02	FY03
GDP (fc)	3.2	4.5
(A) Commodity producing	0.5	5.4
Industry	3.5	5.0
Agriculture	-2.1	6.0
Major crops	-8.1	18.9
Minor crops	2.6	-2.7
(B) Services	5.6	3.7

Source: Federal Bureau of Statistics

It is also interesting to note that for the first time over a decade the trend of the annual CPI inflation has differed from that of the GDP deflator during FY03. One possible explanation is that CPI better captures the impact of imported inflation/deflation (it is probable that imported deflationary pressures significantly impacted the domestic prices during FY03 as the rupee gained strength). More

importantly, the relative weakness in Consumer Price Index -(CPI) inflation is probably also a function of the *decline* in real private consumption evident in the National Income Accounts. It should be noted that the impact of decline would be muted in the GDP deflator due to the strong jump in the net export and investment activities.



All in all therefore, the inflationary pressures seem to be trending downward, as the marginal rate,¹ for all three indices, the benchmark CPI, the WPI and the SPI, is lower than the average annual rate, recording lows of 1.9 percent, 4.4 percent and 3.5 percent respectively.

The continued deceleration in marginal inflation rates, despite the exceptionally strong monetary expansion, appears to reflect the influence of positive supply-side factors as well as subdued private consumption demand.² Specifically, the following factors have contributed in containing inflationary pressures during FY03:

¹ The rate of change in June index over the same month in the previous year is referred to as annual marginal rate or point-to-point inflation.

² The latter reinforces views that visible pick up in investment has not yet led to a commensurate rise in employment.

- 1) The recovery by both the agricultural sector and manufacturing sector, which probably had a favorable effect on availabilities and relative prices of some commodities;
- 2) The appreciating rupee that would reduce production costs by lowering input prices in rupee terms. The deflationary impact of the rupee appreciation, in some cases, has been compounded by low international prices (this is particularly evident for food imports -see **Figure 3.3**);
- 3) A decline in interest rates to historical low, contributing to lower financing charges and working capital cost, thus easing pressure on upward price movements of goods produced.

In light of the above, the downtrend in domestic inflation needs to be carefully monitored going forward. It is unclear at this point if the lack of inflationary pressure in FY03, despite sustained growth in monetary aggregates, is simply because of: (1) lags in the transmission mechanism; (2) a weakening of the relationship between monetary aggregates and inflation as a result of the financial sector liberalization (which would argue that the SBP shift towards an inflation targeting regime); or else, (3) is a harbinger of a deflationary trend.

3.2 Consumer Price Index (CPI)

While both food and non-food components of inflation saw a visible decline during FY03, it was the former that witnessed a sharper fall. As a result, it was non-food inflation that made the larger contribution to the annualized CPI inflation of 3.1 during the period (see **Figure 3.4 & Table 3.3**).

If the volatile components, i.e. food and energy, are excluded, the CPI inflation shows the lowest increase of only 1.2 percent (see **Figure 3.5**). In fact, the quarterly SBP forecast indicate that barring exceptional shocks the benchmark CPI inflation will continued to decelerate in the months ahead towards 2.4 to 2.8 percent range during FY04.

Figure 3.3: Import Unit Value Index - Selected Groups

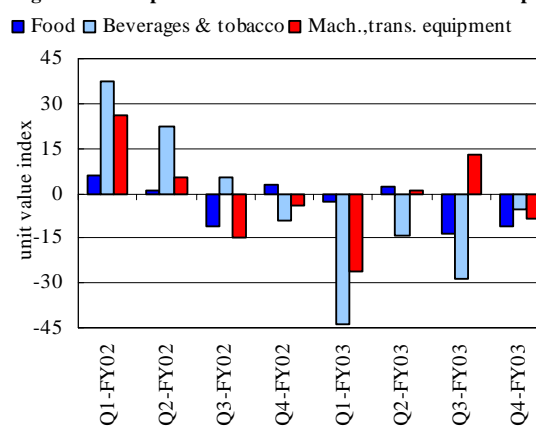


Figure 3.4: CPI Inflation and Contribution of Non-food

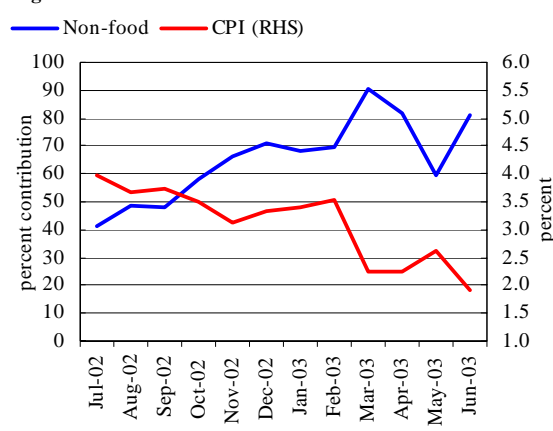


Table 3.3: Contribution in Inflation

Group	Weight	Weighted Inflation (%)
Food & Beverages	40.3	1.1
Non-Food Group	59.7	2.0
Apparel, textile & footwear	6.1	0.2
House rent	23.4	0.2
Fuel & lightening	7.3	0.7
Household furniture & equip.	3.3	0.1
Transport & communication	7.3	0.4
Recreation & entertainment	0.8	0.0
Education	3.5	0.2
Cleaning, laundry & p. appearance	5.9	0.3
Medicare	2.1	0.1
Overall	100.0	3.1

Within *food* items, the prices for 45 items *either declined or recorded no change* thus offsetting the contribution of other items recorded increases in their prices during FY03 (see **Table 3.4**). Amongst the essential items, which recorded significant decline in their prices, included potatoes, pulses, sugar, *gur*, onion, milk powder (loose) and tea.

Thus, most of the (lower) food inflation during FY03 stems from substantial increases in the prices of relatively fewer items, which carry higher weights in the CPI basket. These include key staples such as wheat and wheat flour with a combined weightage of approximately 7 percent (which saw price increases of 4.6 percent and approximately 3.0 percent respectively) as well as cooking oil and ghee (that saw double digit price hikes). Similarly, the prices of some other essential items i.e., rice, beef, mutton, chicken & eggs (farms) and milk fresh also witnessed sharp increases.

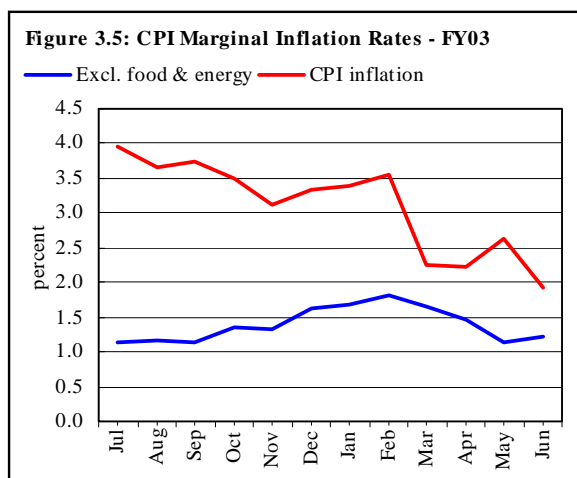


Table 3.4: Distribution of Price Changes of Items of CPI Basket -- FY03

	Weights	% Change	Total number of items	No. of items in each inflation range			
				Decrease or no change (0% or less)	Subdued increase (5% or less)	Moderate increase (5 to 10%)	Double digit increase (Over 10%)
I. Food group	40.34	2.8	124	45	44	15	20
Food, beverages	40.34	2.8	124	45	44	15	20
II. Non-food group	59.66	3.3	250	47	130	39	34
Apparel, textile & footwear	6.1	3.4	42	5	26	6	5
House rent	23.43	0.7	1	-	1	-	-
Fuel & lightening	7.29	7.6	15	4	2	4	5
Household furniture & equipment	3.29	2.9	44	5	31	5	3
Transport & communication	7.32	5.3	43	12	10	8	13
Recreation, entertainment	0.83	0.9	16	7	6	2	1
Education	3.45	4.7	24	5	11	5	3
Cleaning, laundry & personal app.	5.88	4.8	36	5	20	8	3
Medicare	2.07	3.1	29	4	23	1	1
Overall	100.00	3.1	374	92	174	54	54

The *non-food* group of the CPI recorded an increase of 3.3 percent during FY03 compared with a 4.2 percent rise in FY02. Within the *non-food* group, six out of nine subgroups recorded lower increases compared to the preceding fiscal year.

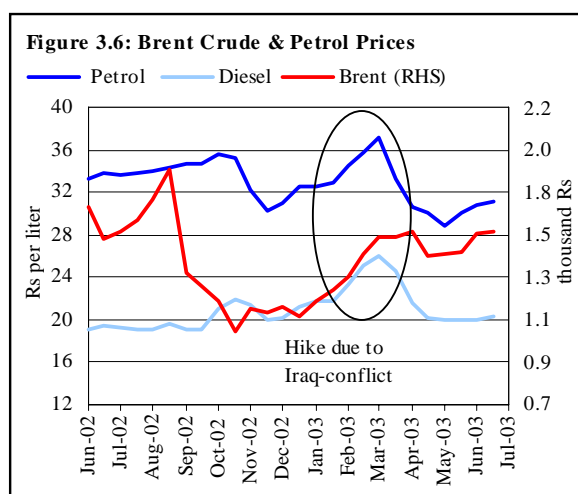
The highest increase of 7.6 percent was recorded in *fuel & lightening*, followed by *transport & communication* by 5.3 percent, *cleaning, laundry & personal appearance* by 4.8 percent and *education* by 4.7 percent.

While *fuel & lightening* remained the biggest contributor to non-food inflation for a second successive year, its impact on annual FY03 CPI inflation, at 0.7 percentage points, was the same as witnessed in FY02. Following the liberalization of the pricing policy by the government, pricing of key POL are now determined by the Oil Companies Advisory Committee,³ being re-set each fortnight, in line with

³ Oil Marketing Companies (OMCs) are authorized to announce HSD prices after deregulation from September 2002.

international prices, the value of the domestic currency and other factors (such as government levies; for further detail see **Figure 3.6 & Box 3.1**).

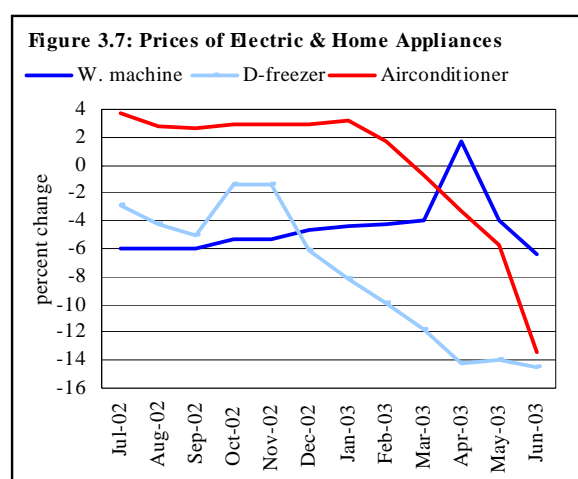
It should be noted that changes in oil price, have multiple downstream impacts on the CPI, over varying time lags, in addition to the immediate increase in the energy prices. This is because it is a key input for the production of other goods and services as well as of transportation costs, in subsequent periods. In particular, during FY03, the increases in POL prices had a spillover impact on *transport & communication* sub-group of the CPI during FY03.



Another important element in the lower FY03 CPI rise during FY03 is the dip in the average *house rent* index (AHRI), which carries a massive weight of 23.4 percent in the CPI basket. The AHRI annual growth slowed to just 0.7 percent during FY03 from 2.8 percent in FY02. The house rent index is computed on the basis of the changes in the index of construction material (60 percent weightage) and labor charges (40 percent weightage). Thus, given the increases in input cost of construction materials, the decline in the house rent index is a little puzzling, and is probably a function of the computation methodology of the index rather than a true reflection of current cost.⁴

Finally, the prices for most of *electronic and home electrical* appliances have also been falling during FY03 (see **Figure 3.7**). This is a little surprising at first sight, given the sharp jump in domestic demand as financial institutions increasingly focused on the consumer finance market.

In fact, during FY03 these products recorded a sharp jump in production e.g., air conditioners and refrigerators production recorded an unprecedented growth of 224.3 percent and 19.9 percent respectively. However, local producers were hit not only from rising domestic competition but also due to an influx of cheap Chinese products. This has led domestic producers to pare margins in order to retain market shares. The increasing competition is evident from the increasing number of promotion campaigns launched by various foreign and domestic companies.



⁴ In order to smooth out the variations arising out of the volatility in the construction of input index, its geometric mean for the last 24 months is taken into account. It implies that any persistent increase in the components would push up *house rent* inflation about after 2 years.

3.3 Regional Incidence of Inflation

The consumer price index is constructed for 35 cities/urban centers across the country.⁵

An analysis of the incidence of inflation during FY03 reveals high variations in inter-city prices showing the differences in regional inflation during FY03 (see **Table 3.5**). These differences may be attributed to the characteristics of their markets. In particular, regions with higher inflation rates typically have higher food and transportation costs. Also, the higher than average food prices may be the outcome of local shortages. It is interesting to note that incidence of inflation is relatively subdued in almost all big cities, showing a smooth supply of consumer products due to better infrastructure and concentration of big markets in these cities.

On aggregate, the CPI covers approx. 20.9 percent of the total population of the country and over 65.0 percent of the total urban population.⁶ Out of this selected population group, 8.2 percent faced either a decline or a very low inflation rate of up to 1 percent; the biggest segment of the population (72.9 percent) was in the range of a subdued inflation of 1 percent to 2 percent range, 9.3 percent share of population faced inflation in the range of 2-3 percent while 9.5 percent people experienced inflation above the average inflation of 3.1 percent during FY03 (see **Table 3.5**).

3.4 Income Distribution and Incidence of Inflation

Since the consumption pattern of individuals depends on their income, the CPI is also constructed for different income groups in order to ascertain the impact of price changes on their purchasing power. An analysis of the incidence of inflation across these groups revealed a mixed trend during FY03.

Inflation was marginally higher for the group having monthly income of Rs 3001 to Rs 5000 than the average inflation of 3.1 percent recorded during FY03 (see **Table 3.6**). The lowest income group, however, continued with lower inflation rate that recorded an increase of 2.9 percent during FY03. The latter is probably a function of the continued fall in food inflation, to which the lower income group has typically a larger exposure.

The low inflation rate for the higher income group can probably be attributed to declining imported inflation arising from an appreciating rupee and deflationary price trends of imported goods.

Table 3.5: Regional Incidence of Inflation*

1 % or less	1 to 2 %	2 to 3 %	3 % and Above
Shahdampur	Jhelum	Peshawar	Vehari
Faisalabad	Sialkot	Bahawalpur	Sargodha
Samundari	Rawalpindi	Jhang	Bannu
Nawabshah	Khuzdar	Mianwali	Mirpur Khas
	Islamabad	Turbat	Gujranwala
	Multan	Quetta	Bahawalnagar
	Attock	Abbottabad	Loralai city & Cantt.
	Sukkur		D.I.Khan
	Hyderabad		Larkana
	Kunri		D.G. Khan
	Karachi		
	Okara		
	Mardan		
	Lahore		
Incidence of inflation on population (within CPI sample-percent)			
8.2	72.9	9.3	9.5

* June over June basis

Table 3.6: Inflation by Income Groups

Income groups	FY02	FY03
Income up to Rs.3000	3.0	2.9
Income up to Rs.3001-5000	3.4	3.2
Income up to Rs.5001-12000	3.4	3.1
Income above Rs 12000	3.6	3.1
All income groups combined	3.5	3.1

⁵ All the cities/urban centers have been categorized into four groups by size of the population (1) large cities having population 500,000 & above (2) medium with population in the range of 100,000 to 500,000 (3) small cities having population from 50,000 to 100,000 and (4) additional small cities one from each province with less than 50 thousand. The selection of these cities has been made in such a way that ensures geographical and regional representation of all areas of the country.

⁶ Based on population census 1998.

3.5 Wholesale Price Index (WPI)

Wholesale Price Index recorded an annual increase of 5.9 percent in FY03 as compared to 2.1 percent last year. Both *food* and *non-food groups* recorded higher increase compared with the preceding year.

As with CPI inflation, the WPI inflation was primarily driven by *non-food* components. Moreover, within the *non-food* components, the sub-indices of *fuel, lightening & lubricants* and *raw materials* tended to be strongly correlated with the movements in the overall WPI inflation (see **Figure 3.8**). By contrast, inflation in prices of *manufactured products* was around 3.0 percent.

In fact, a break down of the WPI indicates (see **Table 3.7**), that the wholesale prices of 41 commodities having combined weight of 20.4 percent, either *decreased or did not change* during FY03 while the prices of 24 commodities with a weight of 47.3 percent in the index, recorded increases of more than 5.0 percent.

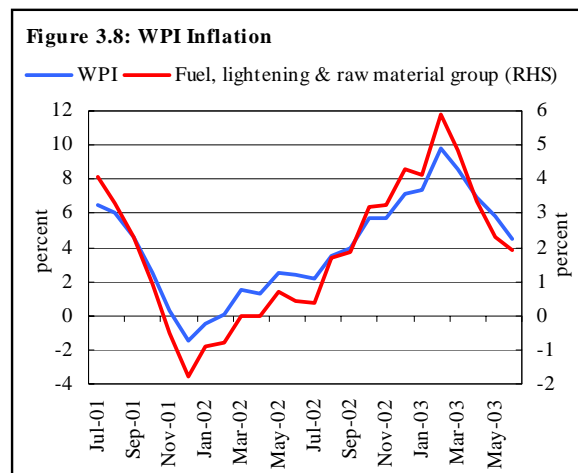


Table 3.7: Distribution of Price Changes of 96 Commodities of WPI Basket

Table 3.7: Distribution of Price Changes of 36 Commodities of WPI Basket						
Groups	% Change	Total Number of Items	No. of Items in each Inflation Range			
			Decrease or no change (0% or less)	Subdued increase (5% or less)	Moderate increase (5 to 10%)	Double digit increase (Over 10%)
During FY03						
I. Food Group	3.1	39	20	6	10	3
Food	3.1	39	20	6	10	3
II. Non-Food Group	8.3	57	21	25	5	6
Raw materials	10.5	10	2	5	1	2
Fuel, lighting & lubricants	13.8	8	3	2	-	3
Manufactures	3.0	29	14	11	4	-
Building materials	1.7	10	2	7	-	1
Overall	5.9	96	41	31	15	9
Weights		100	20.4	32.3	27.3	20.1
During FY02						
I. Food Group	1.9	39	17	5	6	11
Food	1.9	39	17	5	6	11
II. Non-Food Group	2.3	57	21	11	10	15
Raw materials	-0.4	10	3	2	1	4
Fuel, lighting & lubricants	4.0	8	3	1	2	2
Manufactures	2.1	29	11	5	5	8
Building materials	0.5	10	4	3	2	1
Overall	2.1	96	38	16	16	26
Weights		100	37.6	24.0	12.1	26.2

Even the relatively weak *food group* inflation within the WPI has mainly been due to higher prices of some key staples such as cooking oil, vegetable ghee, rice, meat, chicken, fresh fruits and wheat flour. An increase in import unit value by 13.1 percent, a decline in the domestic production of vegetable

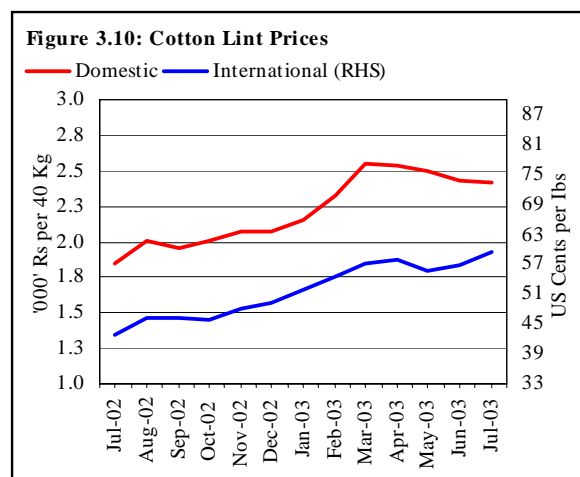
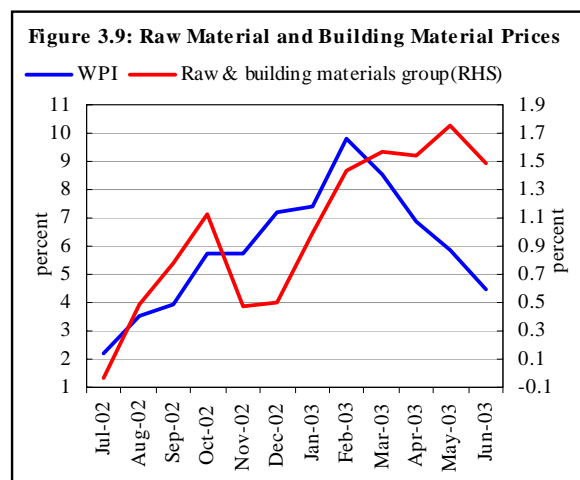
ghee by 6.7 percent, substantial increases in the prices of cotton seed oil, which together with the impact of various taxes imposed in the last budget, were important contributors to the higher prices of ghee and cooking oil during FY03. Similarly, despite a 15.4 percent rise in the domestic production of rice, the commodity continued to record a double-digit rise in the prices amid increasing export demand.⁷ Also, livestock based products (meat, mutton, fish, milk, curd, eggs & chicken) recorded higher increases in prices; the higher prices of meat, in particular, was driven in part by export demand for live animals and meat during FY03. Finally, the 6.5 percent higher prices of wheat were attributable to the lower than target production and a 77 percent jump in exports during FY03.

However, stable or declining prices of pulses, vegetables (onion, tomatoes & potatoes), sugar, powdered milk, *gur* and tea helped in containing the further growth of WPI *food* inflation. The substantial decline in the prices of pulses should be seen in the context of ample stocks due to cheaper imports and improvement seen in the domestic production during FY03; the domestic production of *mung*, *mash* and *gram* went up by 20.0 percent, 3.6 percent and 60.8 percent respectively. The lower prices of sugar continued to reflect the improvement in the inventory because of carry-over from last year and subsequent increase in the production by 13.5 percent resulting supply growth outpacing increase in domestic demand.

Non-food Group recorded substantial increases of 8.3 percent compared with 2.3 percent last year. The highest increase of 13.8 percent was recorded in *fuel, lightening & lubricants* during FY03 compared with 4.0 percent in FY02, followed by *raw materials* that registered an increase of 10.5 percent. While *manufactures* and *building materials* also recorded increase over last year level (see **Figure 3.9**).

The acceleration in *fuel, lightening & lubricants* was on account of the substantial increase in prices of motor fuels, other oils and electricity rates. The conflict in Iraq has been the key culprit in pushing up oil prices to a record high of US\$ 33.85 a barrel in March 2003. Further, world supplies had also been tightened by some other developments including strike in Venezuela and disturbances in Nigeria. While, the impact of the increase in international oil prices was partly mitigated by the appreciation of the rupee against the dollar during FY03, the net rise in domestic oil prices during the year also caused an upward revision in electricity tariff rates since oil is also a major input for electricity generation in the country.

Raw material prices were up 10.5 percent in FY03. Higher prices for cotton and cottonseed, which increased by 16.9 percent and 14.7 percent respectively, were the major contributors to this increase. Although in



⁷ The quantum and unit value of rice exports rose by 10.3 percent and 12.6 percent respectively.

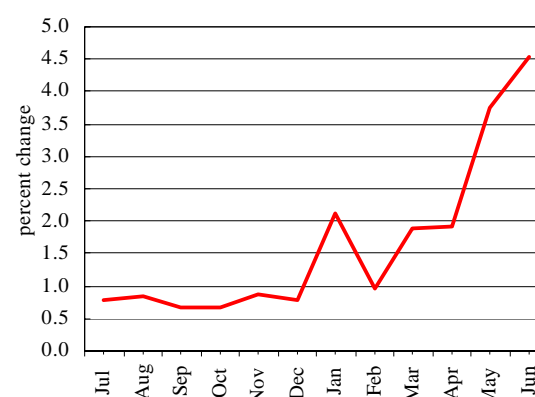
recent months, cotton prices have seen a downward trend, the overall increase in prices during FY03 was higher as compared to FY02 (see **Figure 3.10**). The increases should be seen in the backdrop of developments including higher export unit value of raw cotton, bed wear, towel and other cotton-based products as well as the higher production of cotton yarn that went up by 6.2 percent, reflecting the higher demand by the millers.

The world prices of cotton also have a considerable influence on the domestic cotton prices. The world cotton prices continuing an upward trend due to decreasing cotton stocks and therefore a tightening of world cotton supplies. The average Cotlook "A" Index reached 61 cents per pound in March 2003, the highest in the last two years. Oilseed sector also showed increasing trend as the prices of cottonseed, rapeseed and groundnut seed were up owing to higher demand from mills.

The wholesale prices of construction related materials (see **Figure 3.11**) i.e., cement, brick/blocks, glass sheet, paint & varnishes and wires & cables surged during FY03. It is attributable to the increase in demand related mainly to the public and private sector investment and other construction activities. During FY03, government adopted a number of measures to boost the construction sector.

Manufacturers' prices rose by 3.0 percent in FY03 over FY02. The increase in prices for cotton yarn, woolen textiles, soaps, fertilizers, footwear, transport and machinery seem to have largely contributed to this change. However, the decline in the prices of readymade garments, papers, glass products, plastic products and nylon yarn contained the rise in manufacturers' prices. Fertilizer prices rose by 5.4 percent mainly due to the costlier imports (unit value up by 16.7 percent) and other factors including lower production vis-à-vis the growing domestic demand on the back of strong growth in agriculture.

Figure 3.11: Construction Material Prices - FY03

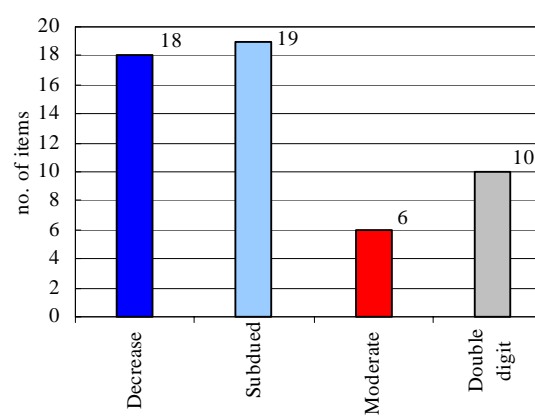


3.6 Sensitive Price Indicator (SPI)

Inflation rate based on Sensitive Price Indicator also recorded subdued rate of increase during FY03. SPI cover price movements of 53 essential items including 5 items of utilities. At a disaggregated level, the prices of 18 items recorded decline over the last year level (see **Figure 3.12**); there was a subdued increase in prices of 19 items; 6 items registered moderate rise; while 10 items recorded double digit increase.

The items shown decrease or recorded no change in their prices included mainly pulses (i.e., *moong*, *mash*, *gram* and *masoor*), *gur*, sugar, tea, tomatoes, potatoes and onion. Prices of all pulses moved down in unison under the lead of mash by 16.4 percent. The improvement in the production of minor crops such as

Figure 3.12: Distribution of Price Change - SPI Items



onion, tomatoes and potatoes (by 17.1 percent, 11.8 percent and 8.1 percent respectively) and the subsequent slowdown in the export of these commodities causing relative surpluses of these items in the domestic market thus pushing their prices downward during FY03. The price of onion was Rs 11.0 per kg in July 2002, which came down to Rs 5.5 per kg in June 2003 (down by 49.3 percent). Similarly, the prices of potatoes and tomatoes declined by 40.9 percent and by 23.7 percent during FY03.

However, certain other items registered increase in their average prices that included wheat, wheat flour bag, rice *basmati*, cooking oil and vegetable ghee, milk fresh, beef, mutton and kerosene oil. The kerosene price went up by 20.3 percent while that of electricity surged by 13.1 percent.

Box. 3.1: Petroleum Product Pricing Structure & Mechanism

As a part of deregulation and privatization in the recent past, government had allowed the private sector to import and set prices of some key petroleum products according to an automatic price adjustment formula that is linked with international prices.

Thus with effect from July 1, 2001, the prices are set on a fortnightly basis by the oil marketing companies through Oil Companies Advisory Committee (OCAC). The member of OCAC comprises of the four oil refineries i.e., Attock Oil Refinery Ltd, National Refinery Ltd., Pak-Arab Refinery Ltd. and Pakistan Refinery Ltd. and the five Oil Marketing Companies namely Attock Petroleum Ltd., Caltex Oil (Pakistan) Ltd., Pakistan State Oil Co Ltd, Shell Pakistan Ltd. and TOTAL-Parco Pakistan Ltd. The two Gas transmission and distribution companies Sui Northern Gas Pipelines limited and Sui Southern Gas Company Limited have also been made associate members of the OCAC.

Under the approved pricing mechanism, POL pricing being followed by the OCAC has been as per the approval of the Government. The Oil Company Advisory Committee determines the prices of POL products keeping in view the variation in the rate/share of the following elements.

- Ex-refinery/import price.
- Government levies (excise duty, and petroleum development levy). Government levies are the prerogative of the government and are fixed in accordance with the budgetary needs of the government. The Government levy on petrol as on 16-6-2003 was Rs 10.38/litre representing excise duty and petroleum development levy while on Light diesel oil it was Rs 1.2/litre representing petroleum development levy only.
- Inland freight charges.
- Distributors and dealers margins. The government also fixes the dealers & distributors margins, which represent the profit element for the oil companies. These margins are represented as a percentage of the fixed sale prices. As a sort of incentive and making the sector more attractive, government allowed an upward revision from July 2002, and has fixed these margins at 3.5 percent for OMC's and 4 percent for the dealers.
- Sales tax is another element of the consumer pricing and is computed @ 15 percent of the price before sales tax. This varies in accordance with the movement in the price of various POL products based on FOB values and the rupee-dollar parity.

The per litre price structure of Petrol and LSD as on June 16, 2003 is given in **Figure 3.1**. However, it is pointed out that effective from September 2002, the HSD price is no more fixed by the OCAC and it is now determined by the individual Oil Marketing Companies on cost and competition basis. Under the new arrangement the oil marketing companies are maintaining their respective price uniform at the designated 29 depots, although the intra company prices slightly differ.

