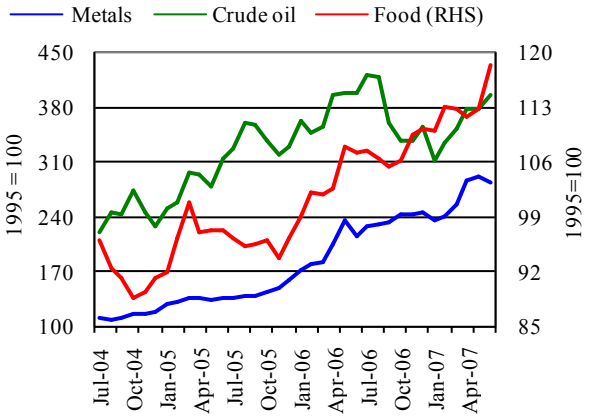
3 Prices

3.1 Global Inflation Scenario

Inflationary pressures have persisted in the global economy during 2007 aided by both supply and demand factors. Aggregate demand was sustained by the continued strong growth in many major developed and emerging economies (particularly India and China). On the supply-side, the inflationary impact of this robust growth was complemented by the strength in energy prices as well as rising food and metal commodity prices (see **Figure 3.1**).

Figure 3.1: International Commodity Price Indices



Source: International Financial Statistics, IMF

While international energy and metal prices had witnessed considerable inflation in FY06 as well, the rise in food commodity prices was more evident only in FY07, contributing significantly to the rise in inflationary pressures in both, developed and emerging economies. While the impact of rising food prices on overall CPI inflation was relatively muted in the former (as food products typically have a smaller weight in the CPI basket of such economies), the impact on CPI inflation in the latter group of countries was greater (see **Table 3.1**).

Rising demand pressures from improvements in income aside, a part of the strength in global food commodities stems from temporary factors such as supply shortfalls (e.g., poor wheat crop in Australia and weak rice harvests in India). However, the global economy may also be facing structural changes that would permanently push up the future average prices for other commodities well above the historical norms (see **Box 3.1**). These structural factors could include the following:

Table 3.1: Effect of Food Inflation in June 2007
percent

	Food inflation (YoY)	Overall CPI (YoY)
Pakistan	9.7	7.0
India	9.2	7.8
Sri Lanka	18.5	16.6
Bangladesh	8.4	8.1
USA	3.0	2.7
UK	4.8	2.4
New Zealand	3.0	2.5

Source: Web-sites of respective central banks

- Rising demand from emerging markets underpinned by rising incomes
  For example, over the next ten years China is forecast to be the world's single largest importer of oils and oilseeds.

- Increasing demand for agri-commodities as bio-fuel feedstocks
  Not only is this demand directly contributing to prices of feedstock commodities (e.g., corn and sugar for the production of ethanol and, palm oil for bio-diesel), prices of other commodities are also pushed up as production of competing crops falls, the demand for substitutes rises (e.g., prices of other edible oils have risen in response to rising palm oil prices), and the rising prices of these commodities raises cost push pressures where these are used as inputs (e.g., higher corn prices are pushing up the cost of meat globally). It should be kept in mind that if international energy prices change, the resulting impact on bio-fuel prices would have a ripple impact across this entire chain.

- Policy reforms in EU area
  For example, lower export subsidies in the EU are probably contributing to strength in the prices of dairy products and sugar. However, because of good global sugarcane crops in 2006, the impact is more evident in dairy product prices (especially milk prices).

There is now increasing evidence that the impact of the sustained rise in food commodity prices in the latter part of FY06 and in FY07 is contributing to a broad increase in inflationary pressures. Consequently many central banks in both emerging markets and developed economies have tightened their monetary policies in recent months (see **Table 3.2**). The greater role of rising food prices in overall inflation in economies has also led to renewed debate on the weight that central banks should place on core inflation and broader CPI measures in formulating monetary policy.

Table 3.2: Changes in Key Monetary Policy Rates
percent

	Current rates	Changes since January 2006
Pakistan	10.0 ↑ (Jul 07)	100 bps
United States	5.25 ↑ (Jun 06)	100 bps
Euro area	4.00 ↑ (Jun 07)	175 bps
Japan	0.50 ↑ (Feb 07)	50 bps
United Kingdom	5.75 ↑ (Jul 07)	125 bps
Canada	4.50 ↑ (Jul 07)	100 bps
Australia	6.50 ↑ (Aug 07)	100 bps
India	6.00 ↑ (Jul 06)	50 bps
Bangladesh	6.50 ↑ (Nov 06)	100 bps
Sri Lanka	12.00 ↑ (Mar 07)	175 bps

Source: Central banks websites, Bloomberg
Note: Figures in parenthesis denote last change occurred in policy rates of central banks.

A key question for policy makers now is whether international food commodity prices will soften in the near future. The fact that a significant part of the rise is structural in nature suggests that the prices of many key commodities may not soften in the near term, unless the global economy witnesses slows more significantly than currently envisaged. This would happen as a result of either high energy prices or if the turmoil in the international credit market worsens.

Table 3.3: Inflation Trends
percent

		Annual average			YoY		
	GDP deflator	CPI	WPI	SPI	CPI	WPI	SPI
FY01	6.7	4.4	6.2	4.8	2.5	4.6	2.0
FY02	2.5	3.5	1.2	3.3	4.4	1.9	3.7
FY03	4.4	3.1	5.6	3.8	1.9	4.1	1.9
FY04	7.7	4.6	7.9	6.0	8.5	12.8	11.7
FY05	7.0	9.3	6.8	11.1	8.7	6.2	9.4
FY06	9.2	7.9	10.1	7.8	7.7	9.0	8.7
FY07	7.8	7.8	6.9	9.4	7.0	7.3	8.1

3.2 Domestic Scenario

Inflationary pressures visibly declined in the domestic economy during the initial months of FY07, helping pull down the inflation numbers for the period below that in the preceding fiscal year (see **Table 3.3**). This evident deceleration in inflation, shown by all of the price indices, mainly reflects the impact of weaker growth in the prices of non-food components. The latter indicates a significant contribution by policies to contain excessive growth in aggregate demand.

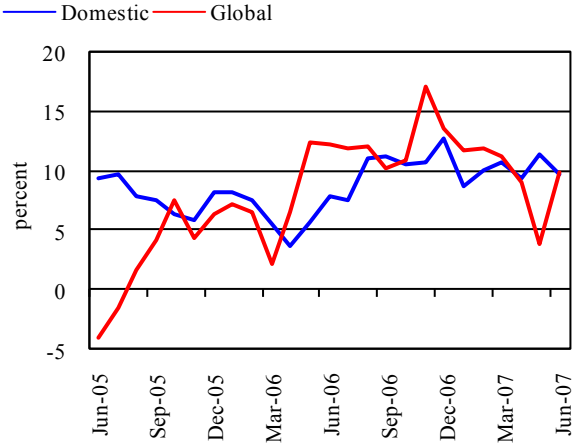
Despite these gains, the eventual FY07 inflation outcome was disappointing, given that the average annual CPI inflation of 7.8 percent was considerably higher than the 6.5 percent target for the year. The inability to achieve the inflation objective was principally due to the unexpected strength of food price inflation during the year, which considerably offset the gains from (1) the demand management policies, and (2) the government subsidies that partially cushioned the domestic economy from high international oil prices.

At least a part of the rise in food inflation in Pakistan during FY07 is correlated with the dynamics in international markets. Simultaneously, country-specific considerations such as rain and flood damage to some key minor crops (tomato, onions, citrus fruit, etc.), a degree of speculative & collusive practices of industry and distributors, as well as the inability of agri-production to keep pace with the rising demand following sustained high economic growth recorded in recent years, have all also contributed to high domestic food inflation.

Box 3.1: Rising Global Food Inflation

The rising food commodity inflation is a hot policy issue particularly as a challenge to maintain price stability in emerging economies. In international market food prices remained firm and showed average inflation of 11.1 percent in FY07 mainly on account of supply shortages and strong demand amidst sustained rise in income levels and changing consumption patterns in large economies like India and China (see **Figure 3.1.1**). According to a recent report published by the United Nation's Food and Agriculture Organization (FAO) and the Organization for Economic Cooperation and Development (OECD), food prices will rise between 20 and 50 percent over the next decade from the average levels of last ten years. There are three main reasons behind this upsurge in global food prices.

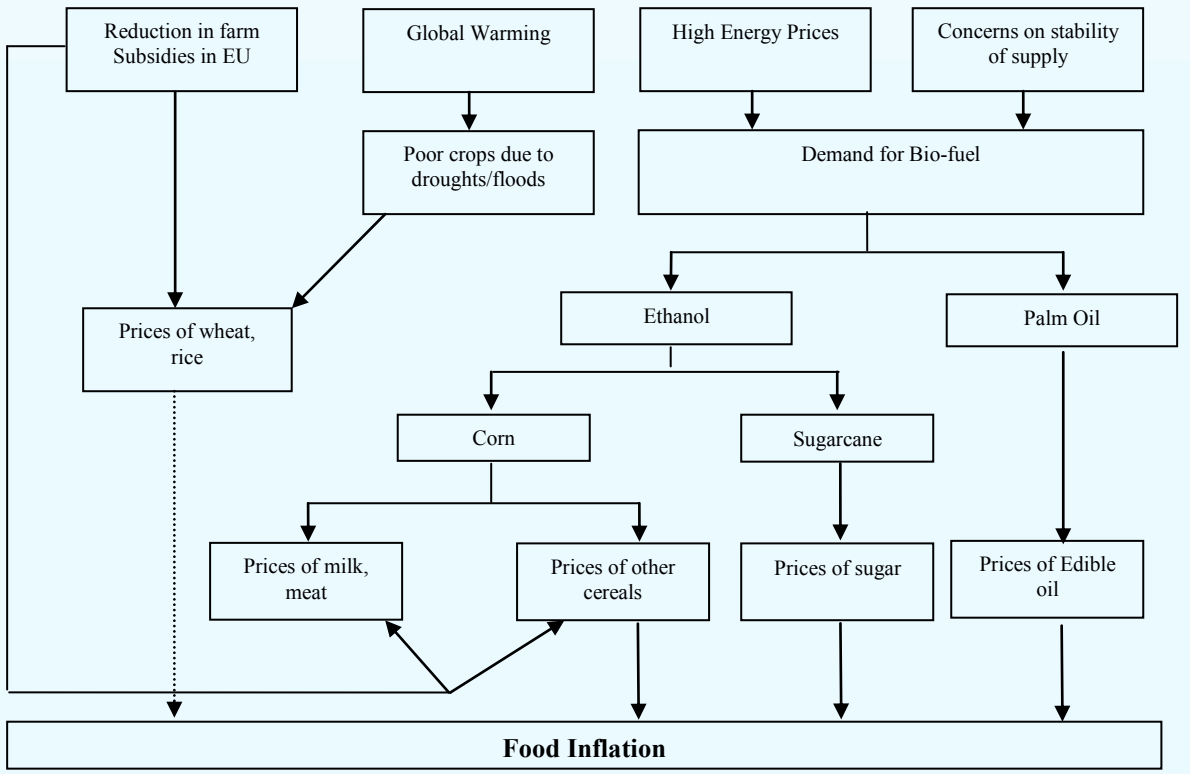
Figure 3.1.1: Food Inflation (YoY)



Source: FBS and IMF

First, high energy prices, second concerns over the sustainability of fuel supply due to uncertain political outlook in the Middle East, vulnerability in Venezuela and unrest in Nigeria. These two factors pushed up demand for bio-fuel and resulted in a sustained rise in the prices of sugarcane and corn. As a direct impact, prices of sugar increased, and indirectly prices of wheat and other cereals rose due to substitution effect. In addition increased cost of rearing animals pushed up the prices of dairy products as well. Finally, change of climate, which has led to a drought like situation in Australia and Canada, extreme weather in Black sea region and floods in China and India due to excessive rains damaged the crops of key food staples such as wheat and rice respectively. Moreover, fertilizer prices have also risen due to additional cultivation of crops such as corn in the US, which has affected the farmers around the world. This has caused a sharp increase in the prices of fertilizer, sugar, corn, etc. At the same time high-energy prices are making ethanol production attractive. Moreover, feedstock prices have increased due to its use in bio-fuel production. Globalization has also contributed in the rising food commodity prices as EU reduced subsidies for dairy farms and export of wheat. All this has led to accelerating food inflation around the globe. Reasons for global food inflation are captioned in the following chart.

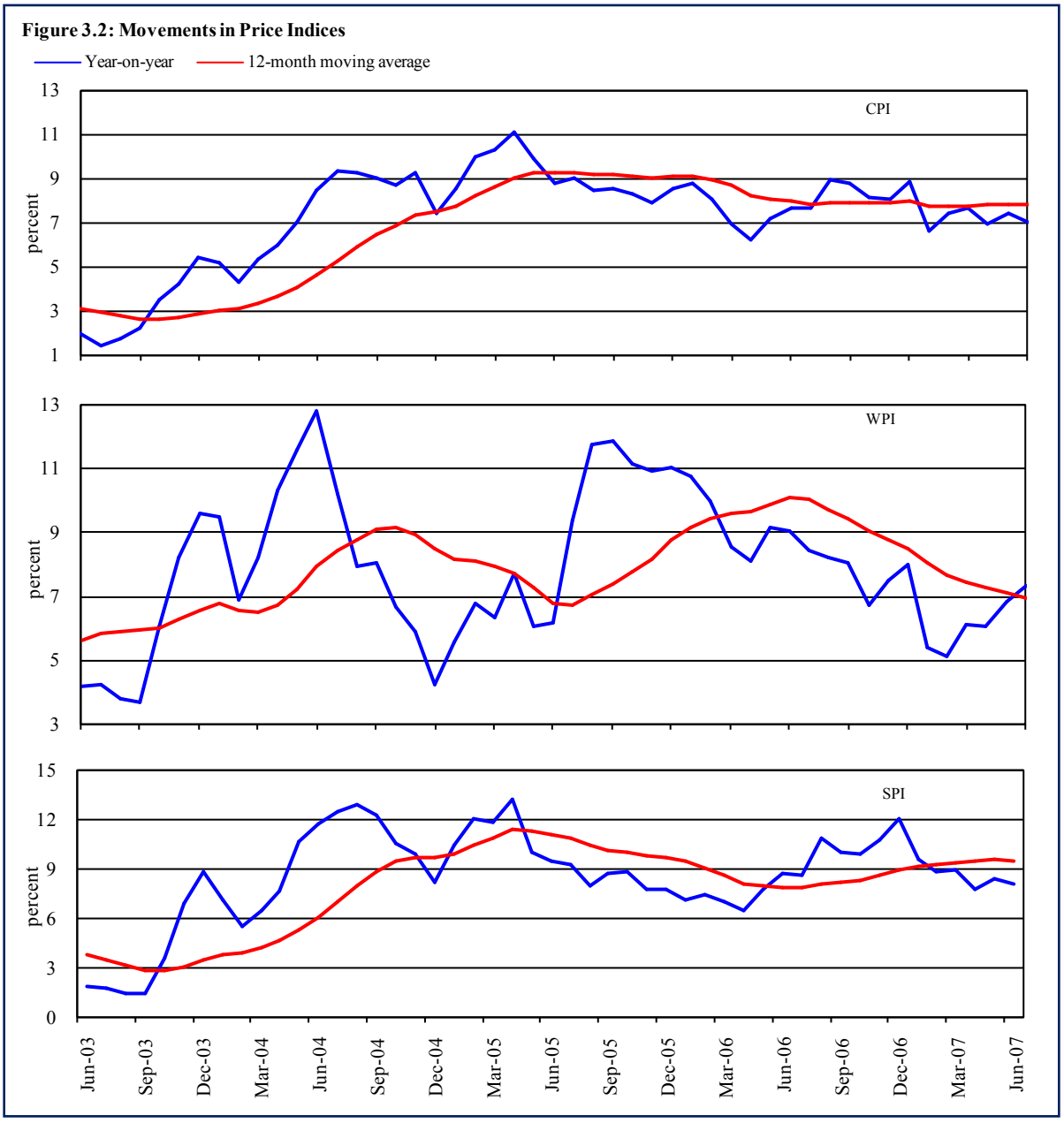
Flow Chart-1: Causes of Food Inflation



As in many other economies, Pakistan is beginning to witness second round impacts of the persistent high food inflation, with an increasing number of food products in the CPI basket witnessing higher inflation (suggesting that food commodity prices are now being Incorporated into the prices of processed food prices), rising wage increase pressures, and higher prices of non-food products, etc.

The resurgent inflationary pressures are also captured in the recent trends in all higher frequency inflation measures; the most recent CPI, WPI and the SPI year-on-year inflation numbers, have all bounced back after recording near-term lows a few months ago (see **Figure 3.2**), although they are all still below the levels seen in the corresponding period of the preceding year. In other words, each of the indicators suggests that the downtrend in inflation may have ended. This risk is captured even better in the trends exhibited by the core inflation measures (that record the more persistent part of inflation), both of which recorded an uptick in recent months (see **Figure 3.3**).

Figure 3.2: Movements in Price Indices



It is this broad acceleration in inflationary pressures that led to policies to tackle both food and non-food inflation. While the government focused principally on containing food and energy prices, the SBP sought to rein-in inflationary pressures by reducing the monetary stimulus from the economy. The latter was targeted through a monetary tightening (with the policy rate being raised by 50 basis points) as well as other measures to reduce the growth in reserve money. As a result, SBP forecast indicate that FY08 inflation is likely to fall closer to the 6.5 percent inflation target for the year. However, there is a risk to this outlook as higher international prices[1] for cereal products (particularly wheat) may create incentives for hoarding in domestic markets as well as to export. Thus, the effective management of domestic supply conditions will remain critical for containing food inflation

Figure 3.3: Core Inflation (YoY)

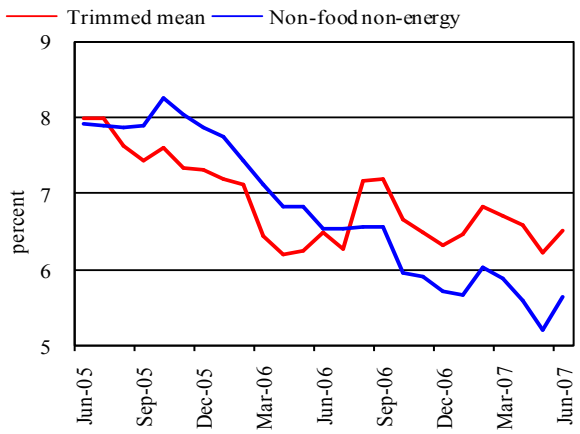
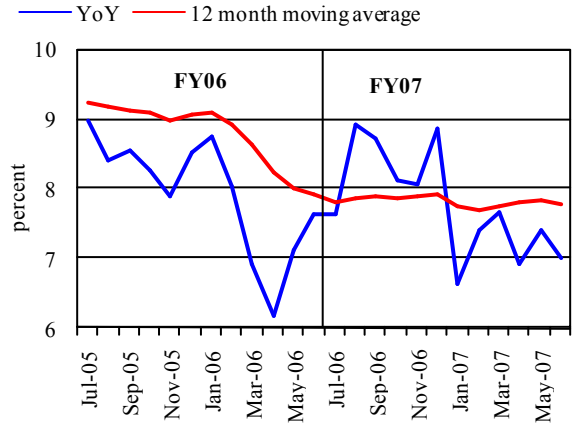


Figure 3.4: CPI Inflation (YoY)



3.3 Consumer Price Index

The declining trend of CPI inflation seen in FY06 was not maintained at the same pace throughout FY07. After an initial decline the annualized (12 month moving average) CPI inflation, remained stubbornly close to the 8 percent levels (see **Figure 3.4**), although[2] the volatility declined significantly in the final quarter of FY07 compared to the preceding 10 quarters.[3]

As a result of the resilience in CPI inflation, the average annualized CPI inflation for FY07 was 1.3 percentage points higher than the 6.5 percent target. This persistence in CPI inflation is well captured by the CPI core inflation measured by trimmed mean method; while CPI inflation for June 2007 is lower than in the corresponding period last year, the trimmed core inflation recorded in June 2007 was unchanged from the 6 percent seen in June 2006.

Table 3.4: Consumer Price Inflation (period average)
percent

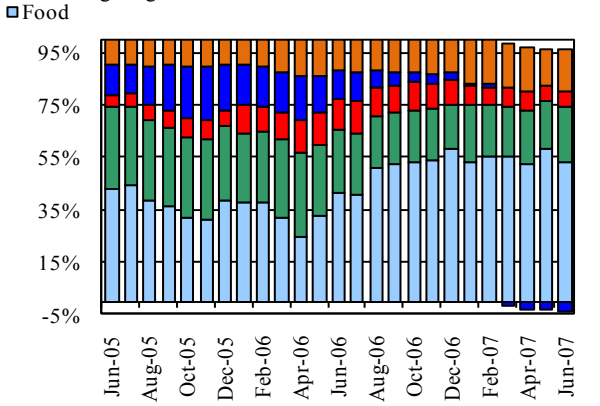
	FY06	FY07
Overall	*7.9*	*7.8*
Food	6.9	10.3
Non-food	8.6	6.0
Apparel, textile & footwear	4.1	5.2
House rent	9.9	6.7
Fuel & lighting	9.0	9.0
Household furniture & equipment	5.2	6.7
Transport & communication	16.6	2.1
Recreation & entertainment	-0.3	0.1
Education	6.4	7.0
Cleaning, laundry & personal appearance	3.1	4.2
Medicare	2.5	9.3

[1] The international prices for wheat and rice may remain under pressure due to lower estimated world production, strong global demand, increases in input costs and reduction in global stocks.
[2] 12-month moving average CPI inflation was moved in a narrow range of 7.7 – 7.9 percent during FY07.
[3] Variability measured by standard deviation, reduced to 0.26 in Q4-FY07 compared with an average standard deviation of 0.70 during the preceding 10 quarters, and was the highest (1.18) in Q4-FY05.

It is important to note that while CPI non-food inflation witnessed a secular declining trend throughout FY07, a high and volatile CPI food inflation was principally responsible for a high CPI inflation during the year (see **Table 3.4**). The declining trend in non-food inflation is mainly attributed to disinflation in *transport & communication*, as well as deceleration in inflation under *fuel & lighting* and *house rent* sub-indices.

In terms of contribution to overall inflation, the share of *food* group increased significantly during the year, its average contribution to inflation increased from 36.0 percent during FY06 to 54.5 percent during the year under review. In May 2007, the contribution of *food* group in overall CPI inflation reached 62.6 percent, the highest in the past 33 months (see **Figure 3.5**). Within the *non-food* group, the contribution of HRI declined from more than 29.0 percent in FY06 to 20.4 percent in FY07. Similarly, a significant decline in average contribution was recorded (from 15.8 percent in FY06 to 2.0 percent in FY07) in *transport & communication* sub-groups, whereas no change in average contribution was recorded in *fuel & lighting* sub-group of non-food group in FY07 as compared to FY06.

Figure 3.5: Weighted Contribution to CPI Inflation (YoY)



A frequency distribution of YoY change in the prices of items in CPI basket during June 2007 shows that 42 out of 110 items of *food* component witnessed a rise of prices in double digits (compared with 27 in June 2006), and 18 items witnessed either decline or no change in their prices (25 in June 2006); and the rest of the items showed a moderate rise between 5 and 10 percent. Within the *non-food* group, more than 71 percent of the items showed either negative price change or subdued inflation below 5 percent (compared with 67 percent in June 2006) and only 10 percent of the items were in double-digit range of inflation (13.6 percent in June 2006) (see **Table 3.5**). This analysis suggests that non-food inflation was concentrated in a few items both in FY06 and FY07.

Table 3.5: Distribution of Price Changes of CPI Basket, June 2007 (YoY)

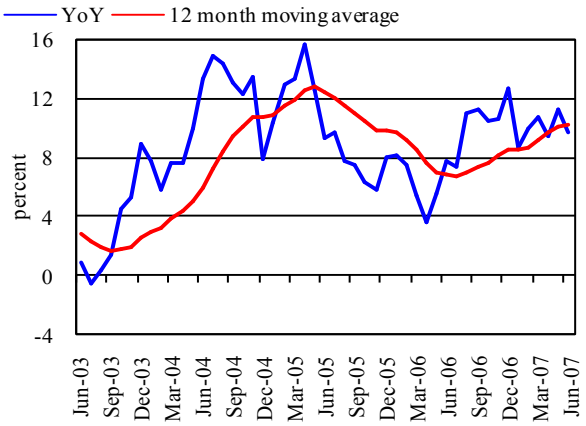
Groups	Weights	Percent changes	Total number of items	Number of items in each inflation range			
				Decrease or no change	Subdued increase	Moderate increase	Double digit increase
				(< 0 %)	(0 to 5%)	(5 to 10%)	(> 10%)
I. Food group	**40.3**	**9.7**	**110**	**18**	**21**	**29**	**42**
II. Non-food group	**59.7**	**5.1**	**250**	**71**	**107**	**47**	**25**
Apparel, textile, etc.	6.1	7.2	42	2	22	14	4
House rent	23.4	6.7	1	0	0	1	0
Fuel & lighting	7.3	6.1	15	5	4	1	5
Household furniture & equip	3.3	5.8	44	1	28	14	1
Transport & com.	7.3	-3.1	43	23	12	4	4
Recreation & entertainment	0.8	0.1	16	11	2	1	2
Education	3.5	6.4	24	7	11	1	5
Cleaning, laundry, etc.	5.9	4.7	36	2	20	11	3
Medicines	2.1	9.9	29	20	8	-	1
Overall	**100.0**	**7.0**	**360**	**89**	**128**	**76**	**67**

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

3.3.1 CPI Food Group

The recent surge in CPI *food* Inflation started from April 2006 and reached to a local peak of 12.7 percent YoY during December 2006 – the highest level seen in both FY06 and FY07. Out of 12 months, 8 months in FY07 witnessed food inflation was in double digit (see **Figure 3.6**). The persistence of food inflation is principally attributed to rising international prices of food items coupled with domestic supply shortages of some important minor crops.

Figure 3.6: CPI Food Inflation



Amidst rising international prices of food items, the inflationary pressures are strengthening globally. As seen in **Table 3.3**, food prices have pushed up inflationary pressures in all regional economies (all of which are developing economies) as well as in many major developed economies. This suggests that at least part of the rise in food inflation in Pakistan may owe to a common factor i.e. high international food commodity prices.

However, a part of the pressures on food prices in Pakistan may also reflect country specific considerations such as rain damage to some key minor crops (tomato, onion, citrus fruit etc.), a degree of speculative/collusive actions by key intermediaries, as well as the inability of agri-production to keep pace with the rising demand due to sustained high economic growth recorded in recent years (see **Table 3.6**). The latter phenomenon suggests that the country needs to raise investment in the sector to improve productivity and reduce wastage, if the country's rising agri-product requirements are to be met and if agricultural product exports are to gain any significant momentum.

Table 3.6: Growth in Per Capita Availability of Key Food Staples in Pakistan

percent

Year	Real GDP growth	Wheat[1]	Rice[2]	Pulses[3]	Milk[4]
FY00	3.9	-6.7	7.2	-5.4	
FY01	2.0	-13.5	-23.2	2.7	0.7
FY02	3.1	1.0	-11.8	-3.4	0.9
FY03	4.7	3.8	22.7	-9.7	0.3
FY04	7.5	0.1	6.2	5.2	0.9
FY05	9.0	-3.2	-29.1	8.3	1.0
FY06	6.6	1.7	21.3	1.0	4.2

[1] One Year lag has been taken between production and consumption.

[2] Net availability = Production - seeds - feed & wastage - exports.

[3] One year lag has been taken between production and consumption for Rabi pulses.

[4] Consumption of milk estimated from domestic production available for human consumption.

Source: Pakistan Economic Survey for GDP figures; and Agricultural Statistics of Pakistan 2005-06.

A micro-view of the inflation data shows that only a few items contribute to the high food inflation in Pakistan, with just four items accounting for about two-thirds of the rise in June 2007 (see **Table 3.7**). In other words of the 9.7 percent food inflation in June 2007, 7 percentage points were contributed by these four items.

In general, high food inflation in Pakistan is attributed to a number of factors: (1) continued strength of aggregate demand on the back of increased income; (2) changes in domestic climate further aggravated the situation by adding volatility in the prices of some important vegetables such as tomatoes and onion; (3) poor harvest of winter fruits particularly citrus; and more importantly (4) rising international commodity prices (particularly for edible oils, wheat and milk).

International food prices remained firm and showed an average inflation of 11.1 percent in FY07 mainly on account of shortage of supply and strong demand in the global commodity markets. Rapid developments in the bio-fuel sector have transformed the global agricultural market. Large quantities of traditional food/feed crops have been diverted for producing renewable energy in the form of bio-ethanol (from sugarcane, corn/maize and wheat) to be blended with petrol, and bio-diesel (from variety of vegetable oils, mainly of rapeseed, soybean and palm, for now).

It is also important to note that while, contribution to food inflation from vegetable ghee and grains seems temporary, major contribution to food inflation is stemming from milk and meat in a medium to long-term perspective (see **Figure 3.7** & **3.8**).

It is also worth noting that the prices of vegetables are volatile, which sometimes result in their significantly high contribution in food inflation despite having only a small weight in the CPI basket. This was particularly evident in FY07, when increases of up to 245 percent YoY and 209 percent YoY for onions and tomatoes respectively contributed 37.4 percent in CPI food inflation during December 2006.[4] This volatility principally stemmed from inclement weather and lack of adequate storage and processing facilities, leading to significant losses in these perishable items. This is likely to be evident in FY08 as well, as floods in Balochistan and in Sindh, could lead to acute shortage of onions. Therefore, large quantum of imports may be required from neighboring countries, on an urgent basis to avoid a further spike in the domestic prices of onion.

It is also very important to remember that, in the short run, policy can only mitigate short-term fluctuations. Indeed, too aggressive a government could weaken the vital market prices that are necessary for corrective behavior by economic agents (see **Box 3.2**).

Table 3.7: Top Ten Contribution to YoY CPI Food Inflation in June 2007

-			YoY change		Weighted
	Items ranked by weighted contribution	weights	Jun-06	Jun-07	contribution
1	Vegetable ghee	6.6	0.4	38.2	24.6
2	Milk fresh	16.5	10.0	12.7	22.6
3	Rice	3.3	0.6	48.5	14.9
4	Fresh fruits	4.0	-1.5	24.2	10.1
5	Tomatoes	1.2	15.2	80.0	8.5
6	Wheat flour	12.7	-1.0	6.7	8.4
7	Meat	6.7	13.6	6.3	6.4
8	Cooking oil	1.7	-0.7	27.5	4.5
9	Readymade food	4.2	9.4	6.7	3.1
10	Spices	1.5	1.5	19.1	2.2
	Total	**58.4**			**105.1**

Figure 3.7: Temporary and Volatile Contributors to Food Inflation

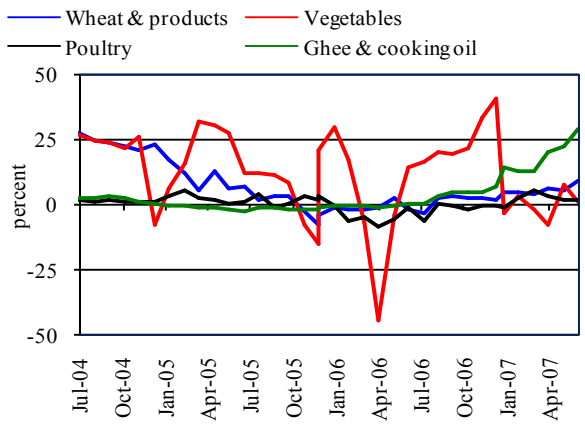
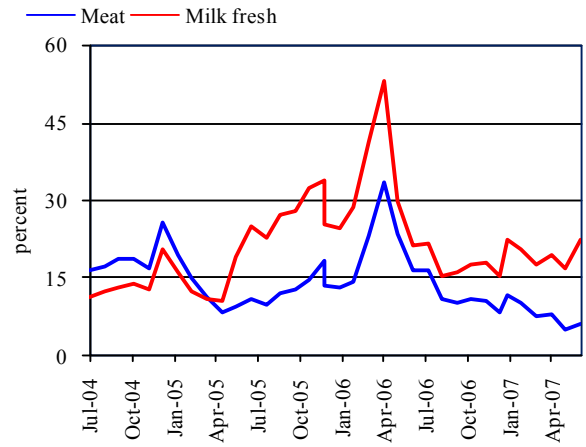


Figure 3.8: Permanent Contributors to Food Inflation



[4] Inexplicably, onions are not yet a focus for policy decision, despite the demonstrated significant impact on CPI in case of significant shortage. There is a need of pro-active import of sufficient quantity of onions to offset the impact of domestic shortages due to recent floods.

Box 3.2: How can Pakistan Overcome the Rising Food Inflation?
Food inflation in Pakistan continued to show strong growth throughout FY07. The supply disruption caused by floods and high global food prices are the main reasons behind this acceleration. It is the common man and the low income people who are affected the most due to price hike in food items as indicated in the Sensitive Price Indicator (SPI)[5].

The government is aware of the increasing food inflation and its implications and has therefore undertaken a number of measures to ease food inflation in the country. The following discussion includes a list of measures already taken by the government along with some recommendations to check food inflation.

1. Budgetary Measures: The government has announced a number of measures in the budget 2007. These include an increase in the number of subsidized items and setting up of 5000 new utility stores across the country.

2. Increase Investment for Inputs and Raw Material: In order to improve the production, it is important to have high quality seed, fertilizer and pesticides. Pakistan has to import all these inputs and the farmers find it difficult to pay due to their high price. The government is now providing finance and subsidy on fertilizer and pesticides at the retail level. Moreover, the State Bank of Pakistan is creating awareness amongst the farmers about the availability of agriculture credit through conducting of workshops countrywide.[6]

3. Mobilize Financial Sector to Increase Credit for Agricultural Sector: There are specialized banks operating in Pakistan that cater to the needs of the agriculture sector. Due to financial constraints and small network, a large number of farmers cannot avail credit facilities. There is a need for an increase in investment in order to finance infrastructural development and facilitate research in agricultural sector. It will be beneficial for the sector if commercial banks start their operations in the rural areas. This will ultimately improve the supply conditions and hence help in stabilizing food prices.

4. Diversify Agriculture Sector: The agricultural products are vulnerable to bad climate conditions that destroy a large number of crops every year in Pakistan. The changing climate conditions have become significant in the back of global warming that has caused a change in weather cycle. Farmers have yet to adjust to this changed weather cycle, which is hampering the agricultural production, particularly minor crops in recent years. This problem can be solved by diversifying the cultivation of food products and there is a need for balanced shift from traditional crops.

5. Develop the Post-harvest Sector: Due to lack of cold-storage and proper marketing facilities of agricultural products, the farmers suffer heavy losses every year. The government needs to develop a post-harvest sector. This will help improve the supply of agricultural commodities and thereby stabilize food prices.

6. Food Trade Regulation: The government should further liberalize trade in food commodities. If Pakistan cannot produce food items at lower cost domestically, then we should prepare a plan to import these items at lower cost. This can be done by analyzing the unit value of import and the domestic price. In this way we can also specialize in some commodities in which we have comparative advantage. Moreover smuggling of essential food items to neighboring countries is a major cause of pressure on domestic prices, there is a need of policy actions to check smuggling practices.

7. Proper Dissemination of Information: The effective dissemination of relevant information related to production, climatic conditions and marketing will improve the quality and supply of food items. It will create more competitive environment that will help in stabilizing food price.

8. Formulation of a High Level Committee to Review Food Prices: Recently the government of Pakistan has set up a committee to explore the causes of recent upward movements in food prices. This committee has also to provide recommendations to moderate the pressure on food prices.

The role of policy should be to remove barriers to structural problems that are evident through sustained medium-to-long term trends. For example, the rise in milk prices draws attention to the need to attract investment in the high growth potential livestock sub-sector. Similarly, the extreme volatility in the prices of key staple vegetables (onions and tomatoes) points to the need for polices to encourage investments in food storage and processing industries.

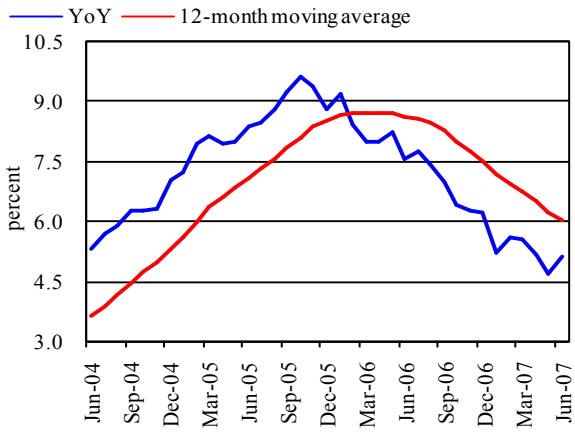
[5] SPI consists of the most essential items with more than 60 percent items from the food group. Incidence of SPI inflation is most prevalent in the lowest income group. For detail items and income group wise inflation in SPI basket see Inflation Monitor June 2007 at http://www.sbp.org.pk/publications/Inflation_Monitor/index.htm
[6] For more details visit SBP's website: www.sbp.org.pk

More importantly, it has been observed that consumers are price takers in Pakistan; there is no effective voice of consumers in price determination process even for the perishable commodities. There is a need to form effective Consumer Associations that can effectively guide consumers to alter their consumption pattern in case of shortage of a commodity or in case of price increase as a result of anti-trust practices. These consumer associations can counter a sustained rise in the prices of a number of commodities.

3.3.2 CPI Non-food Group

In contrast to *food* inflation, CPI *non-food* inflation witnessed a secular decline and averaged 6 percent during FY07, significantly lower than the 8.6 percent average for FY06 (see **Figure 3.9**). The major contributors to this slowdown in CPI *non-food* inflation during FY07 are *transport & communication*, house rent index as well as fuel & lighting sub-groups. A part of the deceleration in non-food inflation owes to monetary tightening and but another significant contribution attributed to a downward revision in the prices of POL by the Government in December 2006. Despite significant volatility in international market thereafter, the government kept domestic POL prices remained unchanged by subsidizing key products. This has also helped contain inflationary expectations in the economy.

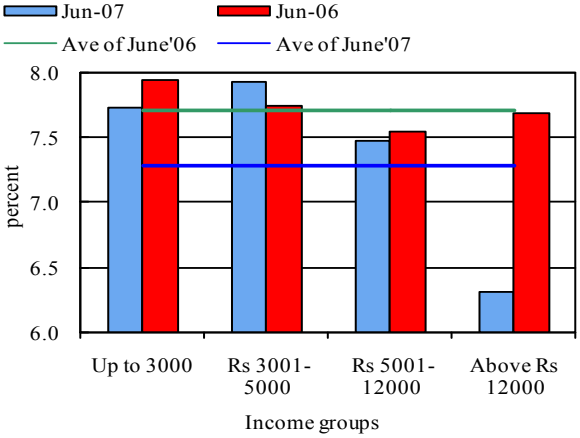
Figure 3.9: CPI Non-food Inflation



As a result, *transport & communication* sub-group declined from 10.4 percent YoY in June 2006 to (-) 3.1 percent YoY by June 2007. Similarly, *fuel & lighting* sub-indices posted a smaller increase of 6.1 percent YoY during June 2007 compared with 11.8 percent YoY in the same month of 2006. During June FY07, deceleration in non-food component of CPI was well supported by a continued weakening in *house rent index* (HRI), slowed from 7.9 percent YoY in June 2006, to as low as 6.2 percent YoY by January 2007, before bouncing back to 6.7 percent YoY during June 2007.

In contrast, *medicare* sub-index of *non-food* component showed significantly higher inflation in June 2007 compared with the corresponding month of FY06. However, the rise in *medicare* is entirely attributed to a sharp rise in only one item i.e., doctors fee (that increased by 18.5 percent YoY in June 2007).

Figure 3.10: Income Group-wise Inflation (YoY)



3.4 Incidence of Inflation

The incidence of CPI inflation on different income groups showed that the highest inflation was experienced by the middle-income group (having income Rs.3001-5000 per month per household) in June 2007 (see **Figure 3.10**). This is because of a significant increase in *food* inflation, sustained rise in the costs of education and medical treatment, which have a dominant weight in the consumption basket for the middle-income group.

However, it should be kept in mind that though incidence of inflation is marginally lower for the low-income group (having income upto Rs 3000 per month per household), this is the most vulnerable group. Therefore the government enhanced the network of utility stores as well as coverage of subsidized essential items available.

3.5 Wholesale Price Index (WPI)

WPI inflation significantly slowed during FY07, decelerated from 9.0 percent YoY in June 2006 to 5.1 percent in February 2007 before bounced back to 7.3 percent YoY by June 2007. This sharp decline was entirely attributed to the non-food component of WPI inflation that decelerated to 4.6 percent YoY in June 2007 compared with 10.7 percent YoY during June 2006, and partially offset the significant growth of WPI food inflation. It is pertinent to note that the inflationary pressures in WPI have started strengthening since March 2007 (see **Figure 3.11**) mainly due to a trend reversal in almost all sub-indices other than *building material*.

Figure 3.11: WPI Inflation

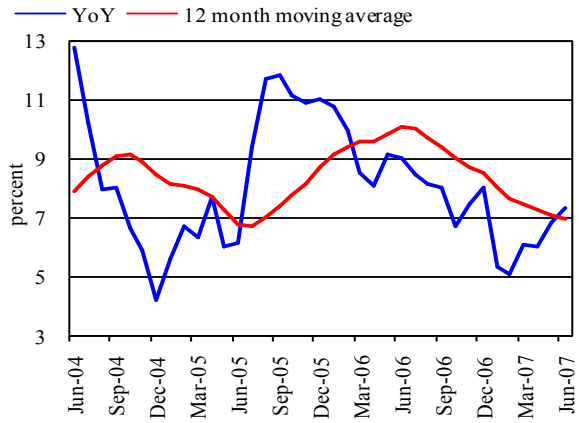
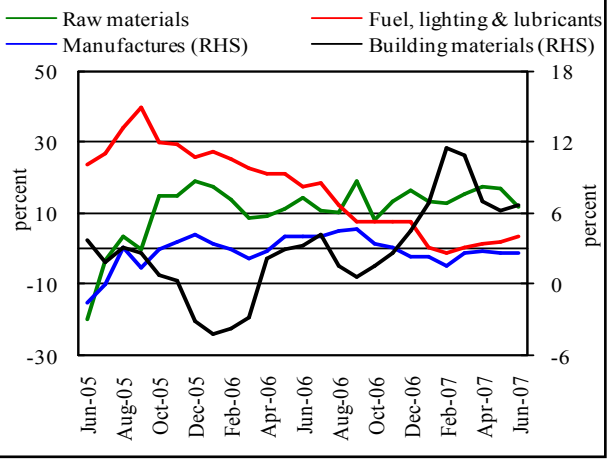


Figure 3.12: WPI Non-food Inflation (YoY)



As discussed earlier, the decline in non-food inflation was a major factor that contributed in the decline of WPI inflation. In non-food group, the *fuel, lighting and lubricants* sub-group was a major driver in bringing inflation down which slowed sharply to 3.8 percent YoY in June 2007 from 17.7 percent YoY in June 2006 (see **Figure 3.12**). This steep deceleration in *fuel, lubricant and lighting* inflation largely depicted an impact of higher base. The only sub-group of non-food WPI inflation saw an acceleration during June 2007 was *building material*. As a result, the weighted contribution of *fuel, lighting and lubricant* sub-group significantly came down from 65.7 percent in June 2006 to 34.9 percent in June 2007. On the other hand, the contributions of all other subgroups increased (see **Table 3.8**).

Table 3.8: Contribution of Sub-Indices to WPI Non-food Inflation
percent

Groups	June 2005	June 2006	June 2007
Raw materials	-67.6	16.4	31.4
Fuel, lighting & lubricants	173.8	65.7	34.9
Manufactures	-13.5	15.2	21.4
Building materials	7.2	2.7	12.1

3.6 Sensitive Price Indicator (SPI)

On average, weekly inflation (YoY) in SPI decreased considerably from 9.4 percent in last week of FY06 to 7.7 percent in the corresponding week of FY07. However, the long run trend in the weekly SPI inflation, indicated by the 52 week moving average generally maintained an upward movement throughout FY07 (see **Figure 3.13**). This is mainly because almost 60 percent of items included in the SPI basket are from the food group, thus it largely exhibited the up trend of the CPI food component.

Major items contributing to the SPI inflation were pulses, poultry items, red chilies, vegetable ghee, gas and other liquid fuel. More than one-third of the total items in the SPI basket recorded double-digit YoY inflation during June 2007, with some of the items like rice, eggs, vegetable ghee, red chilies, etc. witnessing inflation of more than 35 percent.

The incidence of SPI inflation remained generally the highest in the low- income group throughout FY07. On the other hand the least affected group was the high- income group. This is because most of the items showing high inflation are from the food group and are thus more significantly impacting the low-income group as compared to other income groups.

3.7 Wage Inflation[7]

Despite a significant deceleration during FY07, wage inflation remained in double digit (see **Figure 3.14**). Thus, the rise in wages slowed from 18.2 percent in June 2006 to 11.1 percent in June 2007. The continued strength of wage inflation is principally driven by increased construction activities[8] both in public as well as private sectors. A strong demand for the unskilled labor is reflected in a higher increase in their wages relative to skilled labors (see **Figure 3.15**). The continued rise in the wages of construction workers associated with unemployment also indicate quality mismatch between the demand and supply of labors. The city-wise wage inflation data reveals that in general Jhang, Okara, D.G.Khan, Vehari and Quetta remained amongst the high wage-inflation cities and on average recorded more than 20 percent YoY inflation in FY07. On the other hand, Sargodha, Larkana, Nawabshah and Kunri remained amongst the cities with low city-wise YoY wage-inflation during FY07.

Figure 3.13: Weekly SPI Inflation

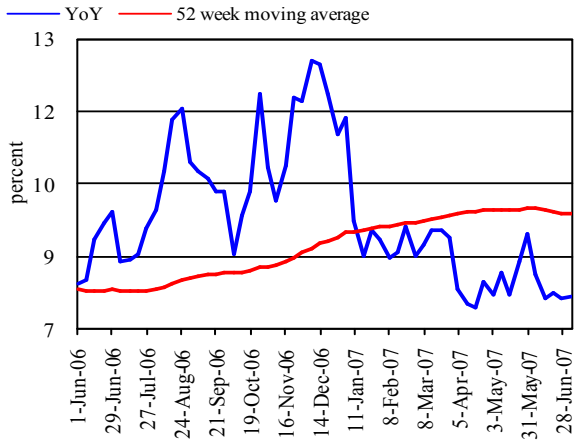


Figure 3.14: Wage Inflation

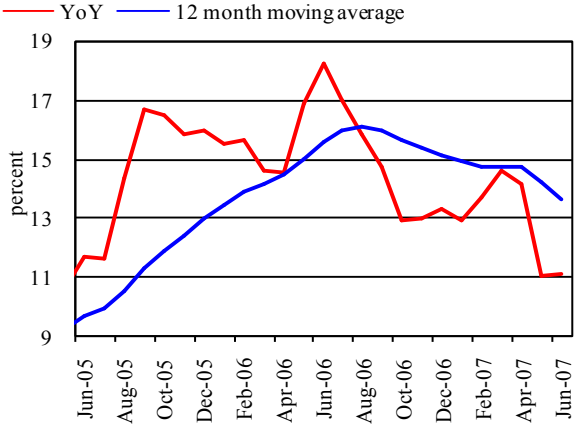
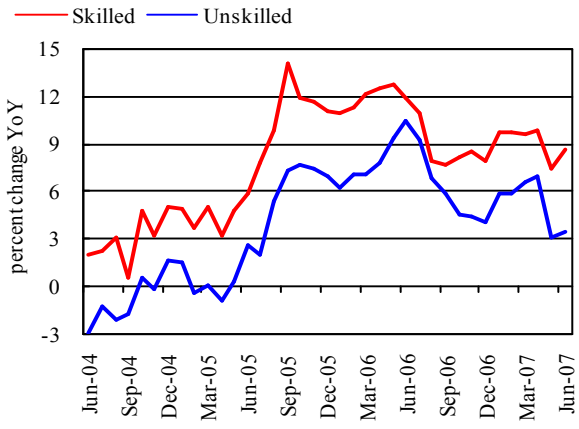


Figure 3.15: Real Wages of Construction Workers



[7] This section is based on the wages for the skilled and unskilled *construction* workers only.
[8] Real value addition in the construction sector rose by 17.2 percent during FY07 on top of 5.7 percent in FY06.