3 Prices[1]

3.1 Overview

Inflationary pressures in the domestic economy remain worrisome. On the face of it, they appear to have peaked for the time being during H1-FY05, as the inflation measured by all three price indices have moved down in unison after July 2004. But, it should be noted that the deceleration is most clearly visible only in the more narrowly-based inflation indices, and the up tick in all three indices during January 2005 could indicate a temporary resurgence in inflation. The more broad-based (and benchmark) CPI, while depicting a small deceleration, continues to hover stubbornly in the 8 to 9 percent range (see **Figure 3.1**),

Table 3.1: Inflation Trends - (January)

percent

	Marginal inflation (YoY)[1]		Annualized inflation [2]	
	FY04	**FY05**	**FY04**	**FY05**
CPI	5.2	8.5	3.0	7.7
Food	7.8	10.4	3.0	10.9
Non-food	3.4	7.2	3.1	5.6
House rent	4.5	12.0	2.0	9.1
WPI	9.5	5.6	6.8	8.1
Food	7.6	9.9	4.3	10.1
Non-food	10.8	2.6	8.5	6.7
SPI	8.4	10.3	3.9	11.0
Core[3]	3.8	8.3	2.8	7.2

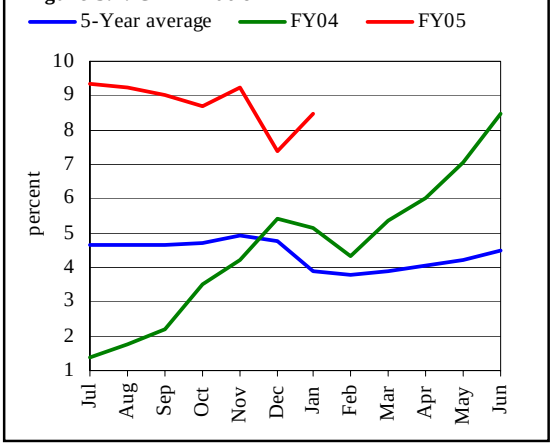
[1]: Change in January 05 over January 04.

[2]: Change in 12-month moving averages of Jan. 05 over Jan. 04.

[3]: By trimming both extremes by 10 percent each.

Source: Federal Bureau of Statistics.

Figure 3.1: CPI Inflation



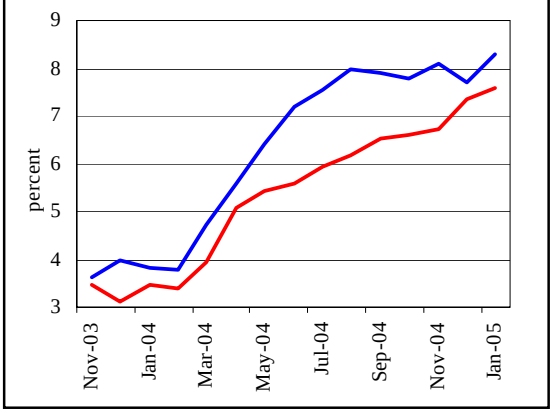
To put the divergence between CPI and WPI in simple terms, it appears that the producers of goods and wholesale traders in the country are benefiting from a relative decline in the prices of raw materials and food respectively, while the bulk of consumers are paying higher prices for buying their basket of daily consumable goods. There is

[1] This section was finalized before the release of February 2005 data.

however, a caveat to this broad finding. The method to compute house rents and its weight in the Consumer Price Index are highly suspect.

In fact, the H1-FY05 downtrend in inflation is mainly attributable to a softening of food inflation. It may be recalled that much of the strong rise in all three indices during FY04 owed primarily to rising food prices. This continues to play a major role in FY05 inflation. However, FY05 food inflation is still high in all three indices by end-January 2005 compared to the preceding year (see **Table 3.1**), it is visibly lower than in July 2004.

Figure 3.2: Core Inflation (YoY)



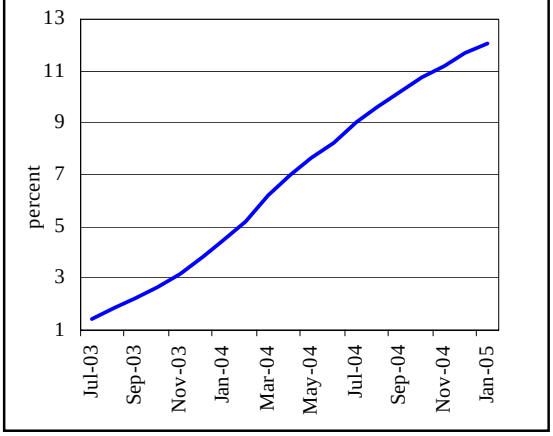
Interestingly, *food* inflation accounts for a part of the divergence between the decline in WPI and CPI inflation. Food inflation accounts for a larger proportion of WPI, and this impact was compounded by the steep fall in cotton prices, dragging down overall WPI inflation. In contrast, not only does food inflation have a relatively lower weight in the CPI, the deceleration in food inflation was significantly offset by a robust increase in house-rent index (HRI) and the impact of the recent increases in domestic oil prices.[2]

The strength of the CPI inflation, despite the evident weakness in food inflation, also highlights the rising core inflation in the economy. In fact, despite a gradual tightening of monetary policy, core inflation, both as (1) proxied by *non-food non-energy* prices and as (2) computed through the *trimmed* method (by excluding most volatile items totaled 10 percent weight at each tail), continues to mount steadily upwards (see **Figure 3.2**). The largest contribution to core inflation, as measured by either of the two methods, is the HRI. Not only does it have a

[2] The government had initially sheltered the domestic economy from the full impact of the rise in international oil prices by not raising the domestic prices of key products such as petrol, diesel and kerosene oil. However, these price caps were removed by mid-December 2004. The lagged impacts of the resulting increase in the prices of these products are yet to be fully incorporated in domestic inflation.

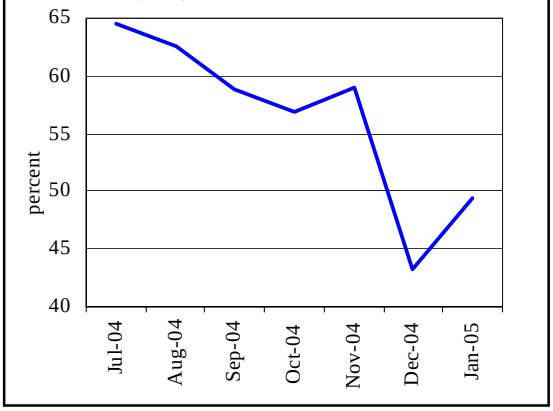
dominant weight in both measures,[3] the HRI has also risen steadily higher over the preceding 23 months (see **Figure 3.3**).

Figure 3.3: Changes in HRI (YoY)



This secular uptrend in the core inflation coupled with the steep rise in credit offtake, strong growth in money supply and negative real interest rates clearly reflects the fact that despite the tightening of monetary policy, with a 300 bps rise in the benchmark 6-month T-bill rates since July 2004 to 5.2 percent by 2nd March 2005, monetary policy had remained accommodative, focusing more on fostering growth than containing inflation. However, with GDP growth momentum gathering further pace, the balance of risk has clearly tilted in favor of containing inflation. In fact, revised SBP projections indicate that annualized[4] CPI inflation for FY05 is likely to fall in the 8.2-8.8 percent range, up from the 7.6 to 8.2 percent range expected earlier. This forecast assumes that the international oil prices would decline during spring onward, leading to a subsequent downward adjustment in domestic oil prices.

Figure 3.4: Contribution of Food in CPI Inflation (YoY)



3.2 Consumer Price Index

After peaking at 9.3 percent in July 2004, CPI inflation began a gradual decline to a

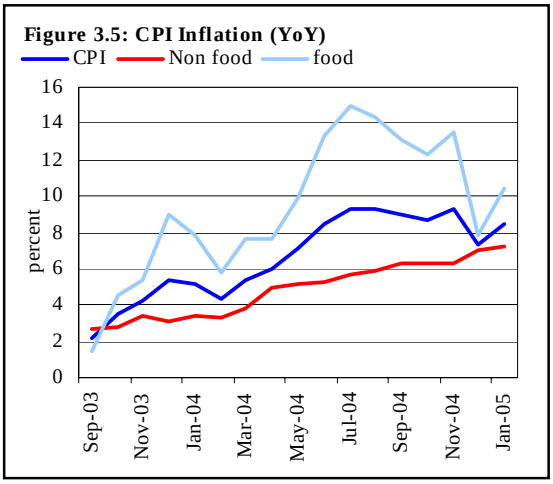
[3] In particular, HRI accounts for 44.7 percent of the non-food non-oil (NFNO) basket.
[4] Annualized inflation is computed by taking change in the moving average of the current 12-months over the corresponding 12-months moving average.

near term low of 7.4 percent in December 2004 before suffering an up tick in January 2005 to reach 8.5 percent. The H1-FY05 deceleration in CPI inflation owes entirely to a sharp fall in food inflation during the period, the impact of which was partially offset throughout this period by the continued rise in the non-food inflation (driven by the steady rise of the HRI). As a result, contribution of food inflation to overall CPI inflation has decreased steadily in FY05 (see **Figure 3.4**), in sharp contrast to FY04, when food inflation was the dominant contributor.

3.2.1 Food & Beverages

Though, *food* inflation is clearly exhibiting a declining trend since it touched the peak of 14.9 percent in July 2004 (see **Figure 3.5**), it nonetheless remains substantially higher than the level recorded in the corresponding period of FY04. Specifically, YoY *food* inflation registered at 10.4 percent during January 2005 compared with 7.8 percent in January 2004. It is important to note that the slowed down in *food* inflation is largely a function of the high base set in the preceding year.

Figure 3.5: CPI Inflation (YoY)



An examination of the major components of CPI inflation reveals interesting insights within *food* inflation.

(1) Components accounting for approximately a third of the *food* group witnessed a strong deceleration in price growth.

(2) Moreover, while processed food prices rose sharply, this owed entirely to sugar prices. Excluding this, the rise in the prices of processed food is quite subdued (see **Table 3.2**). This implies that the impact of current surge in inflation due to supply shortages was more pronounced in the case of the consumers, but was not effectively transmitted to the big buyers such as food processors etc.

Moreover, it also suggests that most processed food manufacturers either considered the present rise in major input prices to be temporary, or were unable to raise prices due to increasing competitive pressure.

(3) While the impact of major and minor crops and meat has substantially reduced, the current strength of *food* inflation stems mainly from the rise in prices of refined sugar and dairy products during January 2005 compared with January 2004.

Table: 3.2 Essential Food Staples Impact on YoY Inflation

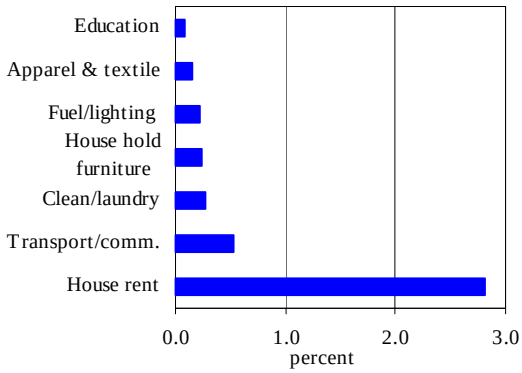
percent share in inflation

Groups	Weights	Jan-04	Jan-05
Major crops	**7.5**	**21.1**	**9.2**
Wheat	6.1	20.7	8.8
Rice	1.3	0.4	1.1
Minor crops	**6.4**	**25.7**	**12.0**
Pulses	1.2	-2.5	3.1
Vegetables	3.5	28.4	7.0
Fruits	1.6	-0.3	1.9
Processed food	**13.7**	**2.3**	**10.2**
Sugar refined	1.9	-2.1	6.7
Ketchup, jam, juice etc	11.8	4.4	3.5
Milk products	**7.0**	**4.8**	**8.8**
Meat & chicken	**4.1**	**13.0**	**10.1**
Others	**1.6**	**0.1**	**2.9**
Overall	**40.3**	**67.1**	**53.1**

Source: Federal Bureau of Statistics

SBP forecasts indicate that annualized *food* inflation would see a declining trend March 2005 onwards due to a likely improvement in supply of sugar and wheat on the back of sugar imports and an expected above-target wheat crop respectively.

Figure 3.6: Contribution to Non-Food CPI Inflation (YoY) in January 2005



3.2.2 Non Food

Non-food inflation, which had been quite subdued in the initial months of FY04, has gradually gathered pace since then to dominate CPI inflation December 2004 onwards. As mentioned earlier, the major contributor to this change has been the rapid acceleration in HRI (see **Figure 3.6**). The increasing trend in HRI, in turn, is mirroring the robust rise in the *building material* sub-group of WPI (see **Box 3.1**). As a result, HRI witnessed an increase of 12.0 percent in January 2005 as against 4.5 percent in January 2004.

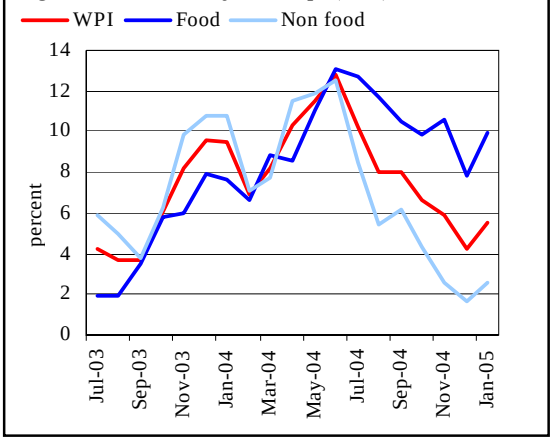
Moreover, since the removal of cap on fuel prices by the Government in mid-December 2004, *transport and communication* sub-index[5] also saw a significant rise of 7.2 percent YoY in January 2005 compared with 3.7 percent in the corresponding month of 2004. Principally as a result of the strong rise in both the HRI and *transport and communication*, *non-food* inflation rose from 3.5 percent in January 2004 to 7.6 percent during January 2005.

The impact of the increase in domestic oil prices was also seen in the *fuel & lighting* sub-group as the higher prices of kerosene led to high demand for substitutes such as firewood and cylinder gas. Prices of both of these items were further boosted due to an increased demand based on heavy rains and snowfall that caused unusually low temperatures across the country. The impact of the rise in fuel costs is probably underestimated due to the limited geographical coverage of CPI (see **Box 3.2**).

3.3 Wholesale Price Index

WPI inflation kept a decelerating trend throughout the first half of FY05 to reach 4.2 percent YoY, before registering an up tick during January 2005 (see **Figure 3.7**). WPI witnessed a rise of 5.6 percent during January 2005, far below than its peak level of 12.8 percent in June 2004, but a little higher than the 4.2 percent in December 2004.

Figure 3.7 WPI & Major Groups (YoY)



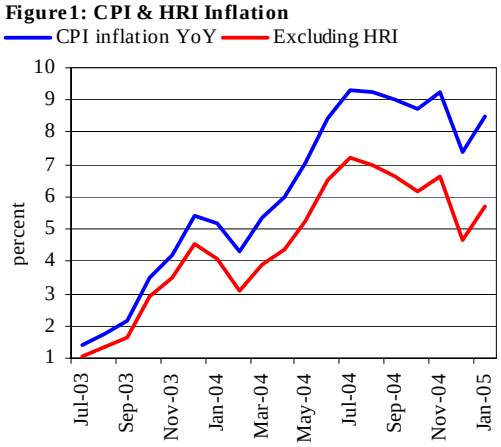
It is interesting to note, however, that while the trends of *food* and *non-food* components in CPI inflation (YoY) are in opposite directions, whereas both of these components are moving in the same directions in WPI.

[5] Train and air fares increased (YoY) in January 2005 by 7.0 percent (average for all classes and ranges of distances) and by 19 percent respectively.

Box 3.1: Impact of House Rent Index on CPI Inflation

Though CPI inflation was recorded at 8.5 percent YoY in January 2005, CPI inflation excluding HRI was recorded at 5.7 percent YoY. This considerable difference between the two measures of inflation (see **Figure 1**) is mainly because of the fact that HRI carries a 23.43 percent weight in CPI basket (next only to that of the food group). Unfortunately, the accuracy of the HRI is unclear, as the house-rents are not being measured directly by surveys. Instead, the Federal Bureau of Statistics compiles this index using an indirect method, incorporating construction costs prevailing in 35-urban centers of the country, on the assumption that rental values move in parallel with construction costs.

Figure1: CPI & HRI Inflation

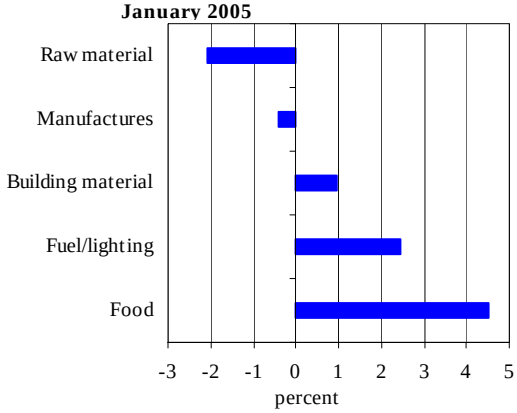


Both labor and material costs are taken into consideration in computing the construction cost; labor costs have a 40 percent weight in the HRI and remaining is accounted for by the material cost which, in turn, as proxied by the *building material* sub-index of WPI. The construction index is then compiled for the individual urban centers by taking a 24-month moving geometric mean of the weighted labor and material costs. Then the weights for house rent of the individual cities (obtained through family budget survey) are applied to compute the overall HRI. The building material sub-group in WPI, therefore, has a direct relationship with the HRI sub-group in CPI though incorporating lags of up to 24-months.

This indirect measurement of the HRI is not in conformance with international data compilation standards,[1] and given the large weight of the index in the CPI, and core inflation measures, this raises the risk of policy errors. In view of the high weight of the HRI in CPI, an improvement in the computational methodology would not only improve the credibility of CPI, it would also provide sound basis for the conduct and formulation of effective policies.

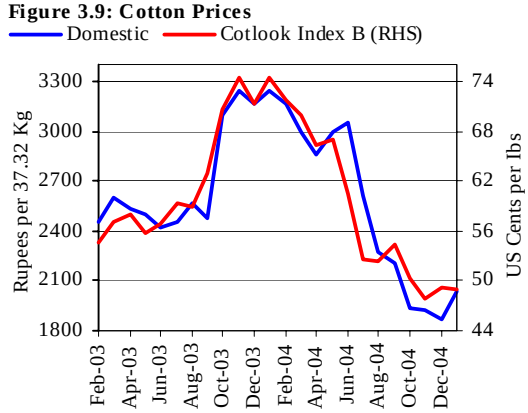
[1] International Monetary Fund (2004), "Pakistan: Report on Observance of Standards and Codes – Data Module, Responses by the Authorities, and Detailed Assessment Using Data Quality Assessment Framework", IMF Country Report No. 04/398, December.

Figure 3.8: Contribution in WPI Inflation (YoY) in January 2005



The major reason for the divergent movements of the *non-food* component in the two indices lies in the fact that though *building material* sub-group is increasing at a significantly high rate of 20.1 percent in January 2005, its weight in WPI is only 4.6 percent. On the other hand, this component has a significant weight of about 14.1 percent in overall CPI.[6] Another reason for a downtrend in WPI *non-food* sub-group is the decline in the sub-indices of *manufactures* and *raw material* during FY05; these two sub-indices accounts for about 63.3 percent weight in *non-food* WPI basket (see **Figure 3.8**).

Figure 3.9: Cotton Prices



Source: APTMA website; http://www.cotcorp.com

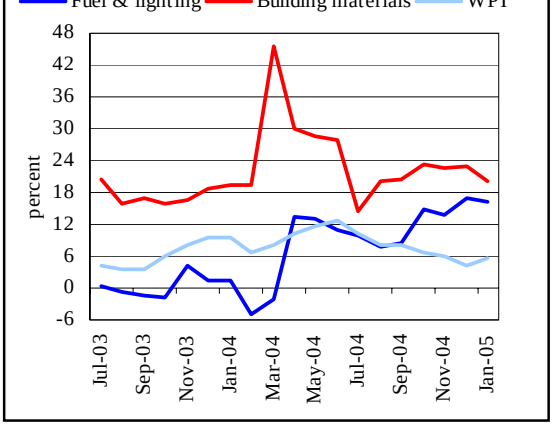
More specifically, during January 2005, the decline in the *raw material* sub-index is largely attributed to lower international cotton prices after most cotton growing countries witnessed bumper crops. It is interesting to note that January 2005 cotton prices, though far below than their January 2004 level, saw a rise over December 2004 prices (see **Figure 3.9**). This rise may reflect either that (1) response of a temporary rise in international cotton prices during December 2004, or (2) the strong domestic demand pushed up the domestic

[6] *Building material* sub-index has a weight of 60.0 percent in HRI, which has a 39.3 percent weight in *non-food* CPI (23.43 percent in overall CPI), thus the weighted contribution of *building material* sub-index in *non-food* CPI is 35.8 percent.

prices on the back of implementation of quota free regime in the trade of textiles. The fall in the prices of cotton yarn also played an important role in the decline of *manufacturing* sub-index during January 2005.

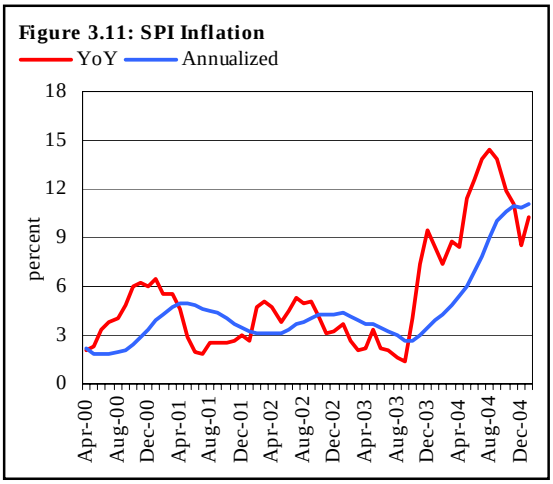
On the other hand, though WPI *food* inflation rose to 9.9 percent YoY during January 2005 from 7.6 percent in the same month of 2004, its relative strength was more pronounced in CPI than the WPI. Given a higher share of *food* component in WPI, this probably reflects that the prices at wholesale level witnessed a smaller rise than at the retail level, and that retailers may be making higher profits by exploiting the limited information of the consumers.

Figure 3.10: WPI Inflation (YoY)



An increase was also witnessed in the prices of diesel and kerosene oil in January 2005 as a result of Government's decision to remove the cap on the prices of PoL products in mid-December 2004. Prices of diesel oil and kerosene oil witnessed a rise of 17.1 percent YoY and 14.9 percent respectively in January 2005. Finally, 41.1 percent increase was recorded in the price of furnace oil during this period. Increase in all these prices drove the YoY *fuel and lighting* sub- group inflation to 16.1 percent in January 2005 against a subdued level of 1.4 percent in January 2004 (see **Figure 3.10**).

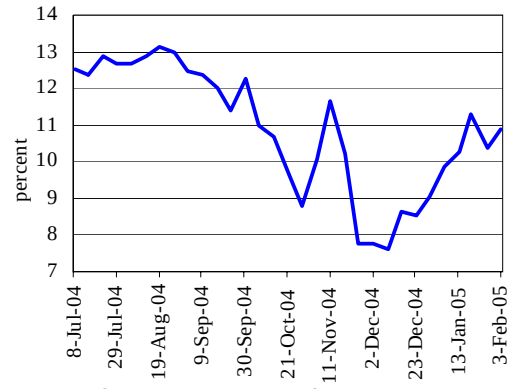
Figure 3.11: SPI Inflation



3.4 Sensitive Price Indicator

SPI, being a subset of CPI, has also followed the same pattern. While decelerating since September 2004 SPI YoY inflation remains high at 10.3 percent in January 2005 against 8.4 percent recorded in the same month last year (see **Figure 3.11**). As most of the items in SPI basket are those of the *food group*, a deceleration in CPI *food* inflation was also visible in SPI based inflation, which decelerated from 14.6 percent YoY in August 2004 to 8.6 percent in December 2004, but rose to 10.3 percent again in January 2005. This rise was not surprising given the increase in PoL prices and a substantial rise in the prices of sugar.

Figure 3.12: Weekly SPI Inflation (WoW)



WoW: week on previous year's week

The same effect was also captured by weekly SPI data. **Figure 3.12** shows that SPI, being a sensitive indicator, took a sharp rise in week on previous year's week (WoW) inflation on December 16, 2004 as a quick response to the rise in PoL prices.

Box 3.2: Geographical Coverage of CPI

Federal Bureau of Statistics compiles extensive data on prices every month to prepare consumer price index (CPI) that helps to find out the level and trends of inflation in the economy. CPI is probably the best proxy to measure the cost of living in the urban areas of Pakistan. It has coverage over the retail prices of 374 items in 71 markets of 35 major urban centers in the country (see **Table 1**).

Table 1: Selected Cities for CPI Survey

Sr. No	Cities	No. of markets	Sr. No	Cities	No. of markets
1	Lahore	7	19	Karachi	13
2	Faisalabad	2	20	Hyderabad	4
3	Rawalpindi	6	21	Sukkur	2
4	Multan	3	22	Nawabshah	1
5	Gujranwala	1	23	Larkana	1
6	Sialkot	1	24	Mirpurkhas	1
7	Sargodha	1	25	Shahdadpur	1
8	Islamabad	4	26	Kunri	1
9	Jhang	1	27	Peshawar	3
10	Bahawalpur	1	28	Mardan	1
11	Bahawalnagar	1	29	Abbotabad	1
12	Okara	1	30	D.I Khan	1
13	Jhelum	1	31	Bannu	1
14	D.G Khan	1	32	Quetta	2
15	Mianwali	1	33	Khuzdar	1
16	Attock	1	34	Turbat	1
17	Samundri	1	35	Loralai	1
18	Vehari	1	**Total Markets**		**71**

Source: Federal Bureau of Statistics

Cities have been categorized into four groups on the basis of their population size: (1) large cities having population of 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 selected 35 cities in CPI include all the four provincial capitals and Islamabad, while rest of the cities mostly consists of those falling under the definition of *major* cities.

On the basis of the selected 35 major cities, CPI covers almost 21[1] percent of the total population of the country and over 65 percent of the total urban population. Thus, this index is not covering 79 percent of the population that live in small towns and rural areas. This fact challenges the credibility of CPI being a representative of just less than one fourth of the population.

In particular, it should be noted that a broader coverage of CPI will not only change the weights of different groups, it would also affect the dynamics of the inflation recorded for Pakistan. For example, most of the landless farmers receive wages in terms of crops and farmers are self sufficient in food; the impact of *food* inflation would be totally different what it is in an urban-based consumer basket. Similarly, consumption of manufactured goods of a large segment of population is insignificant; therefore the impact of non-*food* inflation would also be changed.

It is in this perspective important that the coverage of CPI should be broadened to make it comprehensive, credible and representative for the overall economy.

[1] Based on population census 1998.