

CHAPTER 39

PRICES

In India, inflation has always been one of the most closely monitored macroeconomic indicators. The inflationary trends highlight the need to have an appropriate price index. The changes in prices over a period of time can be gauged by the statistical device of index number of prices. The price index can be either at the wholesale level (WPI) or at the level of the retail end of marketing channel or Consumer Price (CPI). The retail price is defined as money cost to the consumer of a specified unit of sale which is inclusive of all taxes but excludes all rebates, discount etc.

Recently the Central Statistics Office (CSO) released a new series of consumer price indices for all-India and states and Union Territories, separately for rural, urban and combined. The Office of the Economic Advisor (OEA), Ministry of Commerce and Industry, has been Publishing the Index Number of Wholesale Prices with effect from January 10, 1942 onwards. A new series of WPI was launched in September, 2010 with the base year 2004-05.

Wholesale Price Index (WPI)

Wholesale Price represents bulk transactions generally at the early stage of trading. The price pertaining to bulk transactions may have divergent nomenclatures e.g. farm harvest prices, wholesale prices, procurement prices, support prices, administered prices, import prices, forward prices etc. Wholesale price Index relates to the transactions at the primary stage which broadly correspond to producer prices. The Office of the Economic Advisor (OEA), Ministry of Commerce and Industry, has been Publishing the Index Number of Wholesale Prices with effect from January 10, 1942 onwards. The present data pertains to the Index Numbers of Wholesale Prices in India with base 1993-94=100. This series was introduced with effect from 1st April, 2000. The WPI commodity basket has three constituent commodity groups (a) primary articles, (b) fuel, power, light, and lubricants and (c) manufactured products, with respective weights of 22.02 percent, 14.23 percent and 63.75 percent. The (1993-94) series has 435 items for which there are 1918 quotations. All items having large transactions in the economy have been included in this series to the extent feasible.

A new WPI series with 2004-05 base was released on 14 September 2010. The new series is an improved version of the old series with base 1993-94. In the new series, a representative commodity basket comprising 676 items has been selected and weighting diagram derived for the new series. The total number of price quotations has also increased from 1918 in the old series to 5482 in the new series, indicating better representation of the prices in the wholesale markets. Sector-wise price quotations have increased from the old to new series from 455 to 579 in primary group and from 1391 to 4831 in the manufactured products group. The weights of the constituent commodity groups in the new series are primary articles 20.12%, fuel, power, light, and lubricants 14.91% and manufactured products 64.97%.

Some of the important items included in the new series basket are flowers , lemons, and crude petroleum in primary articles and ice cream, canned meat, palm oil, readymade/instant food powder, mineral water, computer stationery, leather products, scooter/motorcycle tiers, polymers, petrochemical intermediates, granite, marble, gold and silver, construction machinery, refrigerators, ovens, communication equipment (telephone instruments), TV sets, VCDs, washing machines, and auto parts in manufactured products.

The collection of price data is mostly through correspondence. Some of the important sources for collection of price data are as follows.

- (i) Directorate of Economics and Statistics, Ministry of Agriculture
- (ii) Agricultural marketing Departments of central and State Governments
- (iii) State Directorates of Economics and Statistics
- (iv) District Statistical Offices
- (v) Registrar of Cooperative Societies and other primary agencies belonging to the State Government
- (vi) The Non-Govt Office's sources are the various Chambers of Commerce Trade Associations, leading manufacturers and business houses.

Index is compiled on the principle of weighted arithmetic mean according to the Laspeyre's formula, which has fixed base year weights operating through the entire life span of the series.

Change in Reporting of Inflation

At present the WPI for all commodities including manufactured products is released only on a monthly basis. However, until recently WPI for primary articles and the fuel group was also being released on a weekly basis. This practice was interred to help in analyzing the trends for policy-making as these commodities are essential in nature. But it was observed over a period of time that there was a tendency for upward revisions in the indices reported once the final numbers were later released. The higher frequency weekly reporting was thus prone to more statistical 'noise' and sometimes provided a misleading picture. So the trade-off was between the more frequent and less reliable data and less frequent but more reliable data. International practice for reporting CPI inflation is also on a monthly basis.

In view of this, the Cabinet Committee on Economic Affairs (CCEA) in its meeting held on 24 January 2012 agreed to discontinue the weekly release of WPI for the commodities/item under the groups "primary articles" and "fuel and power" with immediate effect. The last weekly WPI for the week ending 14 January 2012 was released on 27 January 2012 WPI shall, henceforth, be released on a monthly basis only.

Main Drivers of Headline WPI Inflation

Looking at the weighted contribution of major product groups of WPI inflation, it can be seen that the contribution of primary articles has significantly declined from about 46 per cent in 2010-11 (April-January) to 28 per cent in 2011-12 (April-January) On the other hand, that of manufactured products has gone up from 35 per cent in 2010-11 to about 49 per cent in 2011-12. The contribution of fuel has remained relatively stable at around 19 per cent in 2010-11 and 23 per cent in 2011.

International food inflation was also well above domestic food inflation and started accelerating from near zero per cent in June 2010 to about 42 per cent in June 2011: thereafter it stabilized and turned negative in December 2011. However, domestic food inflation remained relatively flat in the last one year, before dropping recently. The food price index (base 2002-04 = 100) of the Food and Agriculture Organization (FAO), which touched an all-time high of 238 in February 2011, has since declined to 214 in January 2012. This has been facilitated by a slowdown in demand besides improvement in global supply of agricultural commodities. Nevertheless, price levels and volatility continue to remain a cause for concern and are expected to continue to be impacted globally by incomes, diversification of dietary patterns, attraction of bio-fuels as alternative sources of energy, and weather disturbances.

As a consequence of these developments during the year 2011-12 inflationary pressures were witnessed particularly in the EDEs even though the outlook for global growth remained weak. However, the renewed sluggishness in the global economy has led to some moderation in commodity prices- particularly those of metals. Overall, going forward global commodity prices are expected to decline in 2012 as per World Bank projections, due to slowdown in demand and improved supply prospects.

Fuel was another contributory factor behind high headline inflation in the last two years. The sharp rise and volatility of prices of oil and petroleum products in international markets has become a matter of global concern. Crude oil prices remained volatile during financial year 2011-12 due to political upheaval in the major oil-exporting countries coupled with increasing uncertainty in the global economic environment. Crude oil prices have steadily been increasing since December 2008. International crude oil (Brent) prices have moved up very sharply from US \$ 75 per barrel to over US \$ 114 per barrel in June 2011, a 52 per cent year-on-year increase.

Global prices of crude oil and petroleum products play a decisive role in the domestic pricing of petroleum products since more than 75 per cent of the country's crude oil requirement is met through imports. Therefore the price of crude oil and petroleum products in the international oil markets has considerable impact on domestic prices of petroleum products. With the dismantling of administered petrol prices (with effect from 26 June 2010), prices of petrol have risen by 12.46 per cent, during 2011-12 (April-December) from Rs. 58.37 per liter (April 2011) to Rs. 65.64 per liter (December 2011).

Consumer Price Index (CPI)

Consumer Price Indices (CPI) measure changes over time in general level of prices of goods and services that households acquire for the purpose of consumption. CPI numbers are widely used as a macroeconomic indicator of inflation, as a tool by governments and central banks for inflation targeting and for monitoring price stability, and as deflators in the national accounts. CPI is also used for indexing dearness allowance to employees for increase in prices. CPI is therefore considered as one of the most important economic indicators.

CPI numbers presently compiled and released at national level reflect the fluctuations in retail prices pertaining to specific segments of population in the country viz. industrial

workers, agricultural labourers and rural labourers. These indices do not encompass all the segments of the population in the country and as such do not reflect true picture of the price behavior in the country. The new series of CPI for the entire urban population, viz. CPI (Urban), and CPI for the entire rural population, viz. CPI (Rural), reflects the changes in the price levels of various goods and services consumed by the urban and rural population. These new indices are compiled at State/UT and all-India levels. For construction of CPI numbers, two requisite components are weighting diagrams (consumption patterns) and price data collected at regular intervals.

Weighting Diagram

Weighting diagram gives the share of each item considered in the total consumption expenditure. The weighting diagrams for the new CPI series have been derived on the basis of average monthly consumer expenditure of an urban/rural household obtained from the NSS 61st round Consumer Expenditure Survey data (2004-05). Only consumption expenditure has been considered for the purpose of preparation of weighting diagrams. Non-consumption expenditure has been excluded.

After exclusion of non-consumption expenditure from the average monthly consumption expenditure, the remaining items were classified into several consumption groups and subgroups considering Classification of Individual Consumption according to Purpose (COICOP), the standard international classification as well as present classification of items adopted in the existing CPI numbers compiled at national level. The grouping followed is (1) Food, beverages and tobacco, (2) Fuel and light (3) Housing (4) Clothing.

Criteria of Selection of Items

Multiple norms were adopted for selecting the items depending on their importance, their popularity and suitability for pricing on a continuing basis.

Accordingly, following four-fold criteria were adopted

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- (i) to include all PDS items;
- (ii) to include all items accounting for 1% or more of total expenditure at sub-group level;
- (iii) to include all items accounting for more than specified percentage of total expenditure of all consumption items: Food, Housing & Miscellaneous > 0.04%, Fuel > 0.03%, Clothing > 0.02%
- (iv) to include all items for which more than 75% households have reported consumption.

All items satisfying any of the above four conditions were retained. These are termed as weighted items. Expenditure on certain item was imputed considering its insignificant share and/or difficulties involved in pricing to the item(s) retained on the basis of mainly same or similar price movements. All India weights of CPI (Rural), CPI (Urban) and CPI (Combined) are as under:

Price Collection in Urban and Rural Areas

Number of price schedules (quotations) that could be canvassed by the field investigators available was fixed around 1100. These quotations were distributed to States/UTs on the basis of urban population (Population Census 2001). For regular price collection by NSSO

(FOD)/Specified State Governments, all cities/towns having population (2001 Population Census) more than 9 lakh and all state/UT capitals not covered therein were selected purposively. In the selected towns, market survey was undertaken by NSSO (FOD) for (i) identification of popular markets (ii) selection of shops/outlets for different commodities in the selected markets and (iii) determination of specifications of commodities to be priced. Rented dwellings, from which house rent data are to be collected, were also identified in all the selected towns during the market survey. Prices are collected by the NSSO (FOD) every month.

For compilation of house rent index, rent data are also collected from sample rented dwellings in each of the selected town. In case of concessional or subsidized dwellings, the rent actually paid by the family for the dwelling along with any allowance foregone in lieu of the accommodation given to him/her is taken as rent payable per month. Fare Price Shop prices, are also collected for Rice – PDS, Wheat/ wheat- atta – PDS, Sugar-PDS and Kerosene- PDS in respect of Above Poverty Line (APL) and Below Poverty Line (BPL) households.

CPI (Rural) provides the price changes for the entire rural population of the country and therefore a total of 1181 villages *have* been selected at all India level. These villages have been distributed more or less equally among the four weeks to take in to account weekly variations in the prices.

Data from different locations are uploaded through a web portal developed by NIC. Compilation of CPI numbers generally consists of two stages i.e. (i) calculation of price indices for elementary aggregates (item level indices) and (ii) the aggregation of these elementary price indices to higher level indices using the weights associated with each level. Laspeyres formula is used for aggregation of indices. Specifications of items have been selected on the basis of popularity in the respective areas. These specifications are different in terms of units, quality etc for different price schedules. Prices relative of each product specification (current month price/base year average price) is worked out. Average of these price relatives under the respective item multiplied with 100 gives the index for that item. In case of seasonal items of vegetables and fruits, whenever prices of these items are not reported in a particular month, weights of such items are imputed on pro-rata basis to the items in the respective section (root vegetables, fresh vegetables, fresh fruits, and dry fruits). House rent index is compiled in a different way. Two categories of dwellings viz. rented dwellings and self-owned dwellings are considered in the compilation of the house rent index. The rental equivalence approach is adopted in respect of self owned dwellings. For each State/UT, six months data (January to June or July to December) are used to compile rent relatives. Rent relative is calculated as current month rent/rent six months ago and then simple average relative is worked out by classifying the dwellings by number of living rooms (1 room, 2 rooms, three rooms and four or more rooms). These rent relatives are weighted to get a combined rent relative using the estimated proportions of dwellings under each group, obtained from the NSS 58th round survey on Housing Conditions (July-December 2002). Chain base method is adopted in the compilation of house rent index and these indices are repeated for the subsequent six months period. That is, indices compiled using the data of January to June are repeated for the period July to December. For the period January-June 2011, house rent is taken as 100, as previous six months period is a part of the base year 2010.

For PDS items, price relatives are worked out separately for Above Poverty Line (APL) and

Below Poverty Line (BPL) categories. These price relatives are combined with the respective share of expenditure as obtained from the Consumer Expenditure Survey (2004-05).

Revised CPI (UNME), 2010

The Consumer Price Index for Urban Non-Manual Employees [CPI (UNME)] numbers on base 1984-85=100 in respect of 59 urban centers and all -India were earlier compiled and released by the Central Statistical Organisation, Ministry of Statistics and Programme Implementation. Because of outdated base year and also deployment of field investigators for collection of price data for a broad based CPI (Urban) number, the National Statistical Commission in its meeting held on 15.2.2008 decided to:

- (i) Discontinue the CPI (UNME) and
 - (ii) Adopt link index, based on ratio method after aggregating the sub group level indices of Labour Bureau's CPI (Industrial Workers) using CPI (UNME) weights at group/sub-group level for all India.
 - (iii) Compile linked CPI(UNME) numbers till new series of CPI(Urban) is brought out
2. Based on the methodology given by National Statistical Commission, ratio of CPI (UNME) numbers to CPI (Industrial Workers) numbers for each of the 24 months for the two year period from January, 2006, December, 2007 at sub-group level has been worked out. Average ratio at each level based on 24 months figure is taken as the linking factor at the respective level. The CPI (UNME) weights have been used to get the indices at group and all groups levels.
3. Price collection for CPI (UNME) was discontinued with effect from April 2008.

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has introduced a new series of Consumer Price Indices (CPI) on base 2010=100 for all-India and States/UTs separately for rural, urban and combined with effect from January, 2011.

Industrial Workers

The Labour Bureau, an attached office of the M/o Labour & Employment, has been compiling and disseminating Consumer Price Index for Industrial workers since its inception in the year 1946 .Consumer Price Index Numbers for Industrial workers measure a change over time in prices of a fixed basket of goods and services consumed by Industrial Workers. These index numbers are utilized for regulation of wages and dearness allowances of millions of employees and workers in the organized sector. It also serves as an indicator of retail prices in the country and is used for measuring inflation rates,

formulation of wages and interest policies The Labour Bureau, an attached office of the M/o Labour & Employment, has been compiling and disseminating Consumer Price Index for Industrial workers since its inception in the year 1946.

This index series till 2005 was based on 1982=100. A new series on base: 2001=100 has been released w.e.f. January, 2006 in respect of 78 important centers in which workers belonging to 7 sectors viz. factories, Mines, Plantations, Railways, Public Motor transport Undertakings Electricity Generating and Distributing Establishments and Ports & Docks. The data on Consumer Expenditure have been obtained from an ad-hoc survey "Family Income and Expenditure Survey" conducted during September 1999 to August 2000 in respect of 78 selected centers by the NSSO on behalf of Labour Bureau. The survey was conducted over a period of 12 months in each selected centre. These 78 centres were selected on the basis of their industrial importance in the country and distributed among different states in proportion to the Industrial employment in the State subject to a maximum allotment of 5 centers per state per sector. On the basis of the results thrown up by the survey, the weighing diagrams have been derived in respect of 78 constituent's centers and All -India. The indices are compiled by using price data collected on monthly basis and house rent survey data on half yearly basis. The CPI (IW), numbers at centre and all India levels are released every month (the last working day of the following months).

Agricultural and Rural Labourers

Consumer Price Index Numbers for Agricultural and Rural labourers are compiled on the basis of the weights derived from consumer expenditure data collected during NSS 38th round in 1983 and the prices are collected by NSSO(FOD) on monthly basis. The CPI-AL/RL is compiled for 20 States. The index of each State covers 85 to 106 items, from a fixed sample 600 villages spread over 66 zones.

Highlights:

- Year-on-year WPI inflation after remaining persistently high over the past two Years has started to show signs of moderation lately. Financial year 2011-12 started with a headline inflation of 9.7 per cent, which briefly touched double digits in September 2011 before coming down to 6.6 per cent in January 2012.
- WPI inflation remained relatively sticky at around 9 per cent during the calendar year 2011. The factors contributing to this situation and their relative importance have however, been changing over time.
- Inflation in primary articles has declined drastically, falling to 2.25 per cent by January, 2012 after remaining in double digits for almost two years. However, inflation in fuel has continued to remain high during the last two years. Inflation in manufactured products has started to accelerate since January 2011, remaining range-bound between 7 and 8 per cent in 2011 due to surge in metal and chemical prices, but it has also recently started to moderate.
- Whole Sale Price Index had a long-run average of around 5 per cent in early 2011-12. Among individual product groups. Inflation in food products, beverages, textiles,

chemicals, and basic metals remained elevated mainly on account of high global commodity prices and cost push pressures.

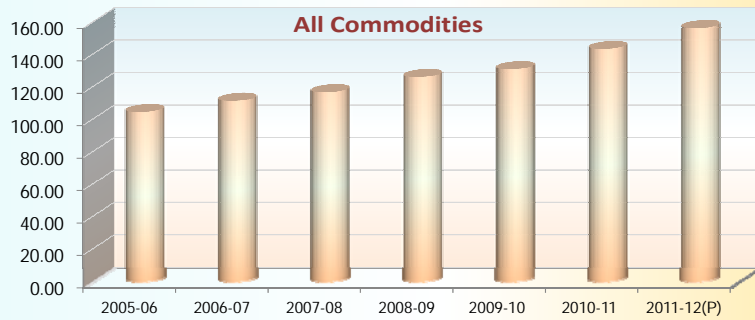
- During 2011-12 the WPI for all commodities was 156.13, which was 9.1% more than the WPI of 2010-11, which was 143.32. The increase in the price indices was most prominent in case of primary articles (9.8%) followed by increase in the price indices fuel and power 14%. The increase in the price indices of manufacture product was only 7.3%.
- The WPI (base 2004-05) rose of 8.5% in 2006-07 over the previous year. In 2007-08 it rose by 4.7% which was a moderate increase, but it again increased by 8% in 2008-09. In 2009-10 it rose by a modest 3.8% before rising by a 9.5% in 2010-11.
- In 2011-12, among the commodities group "Primary Articles", the price index for food articles increased by 9.8%, while the price index for non - food articles increased. by 9.6% and Mineral increased by 26.6%.
- General Consumer price index numbers for Agriculture Labourers and Rural Labourers (1986-87=100) rose by 8.9% in 2010-11 over 2009-10 and 7.8% of 2010-11 over 2011-12. Increase in Consumer Price Index for Rural Labourers is almost same.

PRICES

Table 39.1(A)

INDEX NUMBERS OF WHOLESALE PRICES IN INDIA BY MAJOR GROUPS, GROUPS AND SUB-GROUPS

(Base:2004-05=100)



Weight of Commodities

