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The Consumer Price Index

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THE CONSUMER PRICE INDEX

Almost daily in the last few months, there are news items in the press and on radio and TV concerning the change in the "cost of living". While often called the "cost-of-living index", its official name is "Consumer Price Index for Urban Wage Earners and Clerical Workers", or just "Consumer Price Index" which is often abbreviated to "CPI".

What the Index Is
The index covers the prices of everything people buy for living - such as food, clothing, automobiles, homes, housefurnishings, household supplies, fuel, drugs, doctors fees, rents, repairs, and public utility rates. It includes prices actually charged to consumers and includes sales and excise taxes and real estate taxes on owned homes. Income and personal property taxes are excluded, however.

Meaning of the Index
The index reflects price changes from a designated reference period. Currently, 1967 is considered the base period, or 100. Thus the index of 125.3 for 1972 means that there was a 25.3 percent increase in prices between 1967 and 1972.

Movements of the index from one date to another are usually expressed as percent changes rather than changes in index points because index points are affected by the base period, while percent age changes are not. Thus if the change from 1971 to 1972 is desired, the following table shows the calculations:

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>121.3</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>125.3</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Percent \( \frac{4.0}{100} = 3.3 \)

Change 121.3

Thus there was a change of four points in the index but between the two years there was an increase of only 3.3 percent. It is the latter figure that is usually quoted.

Increases or decreases as between one month and another would be calculated in the same manner.

Uses of the Index
The Consumer Price Index is used widely by the general public to guide family budgeting and to understand what is happening to family finances. It is used extensively in labor-management contracts to adjust wages. It is also used as a measure of changes in the purchasing power of the dollar for such purposes as adjusting royalties, pensions, welfare payments and Social Security benefits. It is also a reflection of inflationary or deflationary trends in the economy.

The Market Basket
The index is calculated from the prices of about 400 items that have been objectively selected to compose the "market basket", beginning with the January 1964 indexes. The list includes the most important goods and services and a sample of the less important ones. In combination, these represent all items purchased. The content of this market basket in terms of items, quantities, and qualities is kept essentially unchanged in the index calculation between major revisions.
so that any movement of the index from one month to the next is due solely to changes in prices, with quality and quantity held constant. Adjustments for the latter are made at intervals of several years when it has become evident that what people are buying in the way of quality, quantities, and changes in items has changed significantly. This occurs about every ten years.

The indexes are often quoted as "seasonally adjusted" when they are computed to remove normal seasonal fluctuations. Since each commodity or service is computed separately and then combined, indexes are available for various categories. Food, one of the most frequently quoted, is one such category. All items are also available on a monthly basis.

Shown below are the monthly indexes for all items and those for food for the last year.

<table>
<thead>
<tr>
<th></th>
<th>All Items</th>
<th>Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>125.5</td>
<td>124.2</td>
</tr>
<tr>
<td>August</td>
<td>125.7</td>
<td>124.6</td>
</tr>
<tr>
<td>September</td>
<td>126.2</td>
<td>124.8</td>
</tr>
<tr>
<td>October</td>
<td>126.6</td>
<td>124.9</td>
</tr>
<tr>
<td>November</td>
<td>126.9</td>
<td>125.4</td>
</tr>
<tr>
<td>December</td>
<td>127.3</td>
<td>126.0</td>
</tr>
</tbody>
</table>

Robert J. Antonides
Extension Economist

Data Collection

Prices are collected at intervals ranging from once every month to once every three months, with a few items surveyed semiannually or annually. Because food prices change frequently and because foods are a significant part of total spending, food pricing is conducted every month in each urban location. Pricing of foods is done on three consecutive days each month.

Limitations

The Consumer Price Index is not an exact measurement of price changes. It is subject to sampling errors but these are considered slight. Another kind of error occurs because people who give information do not always report accurately. Again, efforts are made to minimize these errors. Other sources of error occasionally occur.

The indexes are not perfect reflections of changes for all classes of consumers or individual families, but they are useful measures of changes over time that affect most people in one way or another.