

Consumer Price Index Details

- Compiled by the Bureau of Labor Statistics (BLS).
- Surveys prices paid directly by consumers for goods and services.
- Price weights based primarily on the Consumer Expenditure Survey:
 - Household survey conducted by the Census Bureau for the BLS.
 - Weights are fixed for two years.

Formula

- The CPI is based on a fixed weight (or Laspeyres) index.
- The CPI selects a basket of goods and services in a base year (q_0) and then computes the ratio of the value of the basket using current prices (p_t) to the value of the basket using base-year prices (p_0) . The formula is provided on the next page.

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$$(\text{Laspeyres Index})_t = \frac{\text{Value of period 0 quantities at current prices}}{\text{Value of period 0 quantities at base - year prices}} = \frac{\sum p_t q_0}{\sum p_0 q_0}$$

- The index is multiplied by 100 so that its value in the base year (when $t = 0$) always equals 100.
- Because of the fixed weights, the CPI does not account for substitution effects. That is, it ignores the fact that consumers typically react to price changes by changing the quantities they buy. Consequently, the CPI tends to overstate inflation.