

Inflation and the Price Level

Thursday, February 11, 2016

12:00 PM

The Consumer Price Index and Inflation

- Quantities that are measured in dollars (or other currency units) and then adjusted for inflation are called real quantities
- **Consumer Price Index (CPI):** for any period, a measure of the cost in that period of a standard basket of foods and services relative to the cost of the same basket of goods and services in a fixed year, called the base year
 - $$\text{CPI} = (\text{Cost of base-year basket of goods and services in current year}) / (\text{Cost of base-year basket of goods and services in base year})$$
 - The base-year CPI is always equal to 1
 - No unit of measurement
- **Price Index:** a measure of the average price of a given quality of goods or services relative to the price of the same goods or services in a base year
- **Rate of Inflation:** the annual percentage rate of change in the price level, as measured, for example, by the CPI
 - $$(\text{New CPI} - \text{Old CPI}) / \text{Old CPI}$$
- **Deflation:** a situation in which the prices of most goods and services are falling over time so that inflation is negative
- **Core Rate of Inflation:** the rate of increase of all prices except energy and food
 - Energy and food are frequently responsible for short-run fluctuations in the inflation rate
 - Core inflation excludes the sources of the most volatile price changes, so is a long-term measure of the inflation trend

Adjusting for Inflation

- CPI can be used to convert quantities measured at current dollar values into real terms, a process called deflating
- CPI can also be used to convert real quantities into current-dollar terms, a process called indexing
- **Nominal Quantity:** a quantity that is measured in terms of its current dollar value
- **Real Quantity:** a quantity that is measured in physical terms - for example, in terms of quantities of goods and services