

Chapter 24. Measuring the cost of living

- **What is the Consumer Price Index, CPI?**

- Measure of the overall level of price
 - Measures the overall cost of goods and services purchased by a typical consumer.

- CPI, how do you calculate it?

- Confirmation of purchase items: Regular surveys are conducted to find out what is in the shopping basket(the basket is 'fixed')
 - Find the prices
 - Compute the basket's cost:
 - Choose a base year and compute the CPI: compute price of basket of goods and services in the current price and divide it by the price of basket in base year
 - Multiply by 100 to create a CPI.

- The inflation rate (%) = $(\text{CPI in the current year} - \text{CPI in the base year}) / \text{base year CPI} \times 100$

- Eventually, measure how much has changed in the cost of living for consumers between the two points in time

- Problems in measuring the cost of living

- Because of the use of a fixed package, it results in overestimating the cost of living, which affects the cost of the public sector.

- Substitution bias : Consumers substitute toward goods that become relatively less expensive
 - Introduction of new goods : More variety of goods
 - Unmeasured changes in quality : improving quality increases the value of consumers' money

- Comparison of CPI and GDP deflator

- Imported consumer goods vs. capital goods
 - Different basket used to compute each price indicator.

- Currency values from different times

- Minimum wage \$1.25 in 1963 vs. Minimum Wage \$7.25 in 2013
 - Which **of the two has greater** purchasing power (the amount of goods or services you can put in your shopping basket when you go to the market with a certain amount of money)?
 - You can convert 1963 dollars into 2013 dollars

- To compare the value of money at different points in time
- Current amount = Amount in Year T x [Current price level / Price level in Year T]
 - The consumer price index CPI is used as the price level here.
 - eventually eliminating the effects of inflation
- Nominal interest rate vs. Real interest rate
 - Real interest rates are corrected for the effects of inflation.
 - Real interest rate = nominal interest rate – inflation rate