

# 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 (%) = (CPI in the current year – CPI in the base year) divided by the base year CPI. and multiplied by 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
- $\text{Current amount} = \text{Amount in Year T} \times [\text{Current price level} / \text{Price level in Year T}]$ 
  - 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.
  - $\text{Real interest rate} = \text{nominal interest rate} - \text{inflation rate}$