

**Chapter 24: Measuring the Cost of Living**  
**Principles of Economics, 8<sup>th</sup> Edition**  
**N. Gregory Mankiw**  
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1. *Introduction*
  - a. *This is a straight forward and readable chapter, so we will cover it fairly quickly in class.*
  - b. *It is an important chapter because the CPI is used as the measure of inflation that is used to “adjust” current data to real figures.*
  - c. *However, since the CPI tends to overstate the decline in the value of the dollar, it tends to make current conditions look worse than they are.*
  
2. The Consumer Price Index (CPI) is a measure of the overall cost of the goods and services bought by a typical consumer. P. 496.
  - a. How the consumer price index is calculated
    - i. There are five steps:
      - (1) Fix the basket,
      - (2) find the prices,
      - (3) compute the basket’s cost,
      - (4) choose a base year and compute the index and
      - (5) compute the inflation rate.
    - ii. **Table 1: Calculating the Consumer Price Index and the Inflation Rate: an Example. P. 497.**
    - iii. Inflation rate is the percentage change in the price index from the preceding period. P. 498.
      - (1) *Be careful about this concept:*
        - (a) *the increase in a given price alone is not inflation and*
        - (b) *increases in overall prices is evidence of inflation, but not the cause.*
      - (2) *Remember than Mankiw in Chapter 1 said that it is due to too much money.*
    - iv. Core CPI is a measure of the overall cost of consumer goods and services excluding food and energy. P. 499.
    - v. Producer price index is a measure of the cost of a basket of goods and services bought by the firms. P. 499.
  - b. Problems in Measuring the Cost of Living
    - i. **FYI: What is in the CPI’s Basket?, P. 498.**
      - (1) **Figure 1: The Typical Basket of Goods and Services. P. 498.**
    - ii. **In the News : Monitoring Inflation in the Internet Age, P. 500.**
    - iii. Substitution bias,
    - iv. introduction of new products and
    - v. unmeasured quality changes.
    - vi. Several studies in the 1990s concluded that the CPI overstated inflation by about one percent per year.

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- (1) With some changes, many believe that it is off by about .5 percent.
    - vii. *If the CPI overstates the cost of living by 1 percent per year, instead of falling by 8%, real hourly earnings have risen by 28 % from 1973 to 2014.*
  - c. The GDP Deflator Versus the Consumer Price Index
    - i. GDP is strictly domestic, while the CPI is all consumer expenditures.
    - ii. The GDP Deflator holds prices constant, while the CPI holds quantities constant..
    - iii. **Figure 2: Two Measures of Inflation. P. 503.**
      - (1) The gap is due to oil prices (imported goods).
- 3. Correcting Economic Variables for the Effects of Inflation
  - a. Dollar figures from different times
  - b. Indexation is the automatic correction of a dollar amount for the effects of inflation by law or contract. P. 506.
  - c. **FYI: Mr. Index Goes to Hollywood, P. 504.**
  - d. **Case Study: Regional Differences in the Cost of Living, P. 505.**
    - i. **NM is slightly below average.**
  - e. Real and Nominal Interest Rates
    - i. *Economic decisions are based on the expected real interest rate.*
    - ii. *Other than cash flow considerations, you should be indifferent about the mortgage rate when you buy a house.*
      - (1) *When it is low, inflation is expected to be low and your house is expected to appreciate slowly.*
      - (2) *When it is high, inflation is expected to be high and your house is expected to appreciate more rapidly.*
    - iii. Nominal interest rate is the interest rate usually reported without a correction for the effects of inflation. P. 507.
    - iv. Real interest rate is the interest rate corrected for the effects of inflation. P. 507.
      - (1) *The equation should read: real interest rate = nominal interest rate - (expected) inflation rate.*
    - v. **Case Study: Interest Rates in the U. S. Economy, P. 508.**
      - (1) **Figure 3: Real and Nominal Interest Rates. P. 508.**
        - (a) This graph presents nominal rates minus current inflation.
        - (b) However, decisions are based on nominal rates minus expected inflation.
        - (c) In the mid to late 1970s, the markets under estimated expected inflation resulting in negative real rates.

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(d) *We bought our house in 1977 and for a while the banking was paying us to take their money: the inflation rate far exceeded the mortgage rate.*

4. Conclusion

5. Summary