Essex EC248-2-SP
Class 2

Revision of Important Concepts from Macroeconomics with Applications

Alexander Mihailov, 25/01/06

Macroeconomic Definitions

Aggregate Output

Gross Domestic Product (GDP) = Value of all final goods and services produced in domestic economy during year

Aggregate Income

Total income of factors of production (land, capital, labor) during year

Distinction Between Nominal and Real

Nominal = values measured using current prices

Real = quantities, measured with constant prices

Aggregate Price Level

$$\text{GDP Deflator} = \frac{\text{nominal GDP}}{\text{real GDP}}$$

$$= \frac{\$10 \text{ trillion}}{\$9 \text{ trillion}} = 1.11$$

Consumer Price Index (CPI) = price of "basket" of goods and services

Levels and Growth Rates

Growth Rate

$$\text{Growth Rate} = \frac{x_t - x_{t-1}}{x_{t-1}} \times 100$$

$$\text{GDP Growth Rate} = \frac{\$9.5 \text{ trillion} - \$9 \text{ trillion}}{\$9 \text{ trillion}} \times 100 = 5.6\%$$

$$\text{Inflation Rate} = \frac{113 - 111}{111} \times 100 = 1.8\%$$

Web Applications

- Mishkin (2004), p. 19
  - <u>Exercise 1</u>: collecting and graphing data from the Web
    - DJIA: historical data
    - Go to <u>http://www.forecasts.org/data/index.htm</u>
    - Plot the time series in Excel (consult Mishkin, pp. 15-17)
  - <u>Exercise 2</u>: using a forecast of the Dow to calculate percentage changes over horizons of
    - 1, 3 and 6 months
    - Which of the forecasts is most reliable and why?