

## 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

$$\begin{aligned}\text{GDP Deflator} &= \frac{\text{nominal GDP}}{\text{real GDP}} \\ &= \frac{\$10 \text{ trillion}}{\$9 \text{ trillion}} = 1.11\end{aligned}$$

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
  - Exercise 1: collecting and graphing data from the Web
    - DJIA: historical data
    - Go to <http://www.forecasts.org/data/index.htm>
    - Plot the time series in Excel (consult Mishkin, pp. 15-17)
  - Exercise 2: 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?