

## 1. What Macroeconomists Study

- Macroeconomics, the study of the economy as a whole, attempts to answer the following issues.
  - (1) Economic growth
  - (2) Inflation
  - (3) Unemployment
  
- cf)* Microeconomics: the study of the economy in the small (individual firm, industry, or consumer)

## 2. The Data of Macroeconomics

- (1) *Measuring the Value of Economic Activity (chapter 3)*
  - Gross Domestic Product (GDP): Sum of *money values* of all *final* goods and services produced in the *domestic* economy *within the year*
  - What gets counted in GDP?
    - 1) For the most part, only goods and services that pass through organized markets count in the GDP
      - illegal activities, housework, do-it-yourself repairs, and leisure will be excluded
    - 2) Only final goods and services count in the GDP
      - intermediate goods will be excluded
    - 3) Production within the geographic boundary of the U.S.

- 4) The GDP for a particular year includes only goods and services produced within the year.  
→ Sales of items produced in previous years are excluded
- The Bureau of Economic Analysis (<http://www.bea.doc.gov>)
  - GDP = total income of everyone in the economy (=  $Y$ )  
= total expenditure on the economy's output of goods and service (=  $C + I + G + NX$ )
- cf)* GDP and the components of Expenditure  
(table 2-1, p. 26)

- Nominal GDP: the value of goods and services measured at current prices  
→ not a good measure of economic well-being
- Real GDP: the value of goods and services measured at constant prices  
→ RGDP is not influenced by changes in prices
- Real GDP per person: income of the average person in the economy (fig. 1-1, p. 4)  
→ Boom vs. Recession (Depression)
- Other measures of income (pp. 27-29)

(2) *Measuring the Cost of Living (chapter 4)*

- Inflation: sustained increase in general price level
  - cf) Stagflation: inflation occurring while the economy is growing slowly or in a recession
- Inflation rate: the percentage change in the average level of prices from the year before (fig. 1-2, p.5)
- Deflation: sustained decrease in general price level

**1) The Consumer Price Index (CPI)**

- The CPI is measured by pricing the items on a list representative of a typical *urban* household budget
- CPI is calculated and announced each month by the Bureau of Labor Statistics (BLS, <http://www.bls.gov>)

- CPI in given year =

$$\frac{\text{Cost of market basket in given year}}{\text{Cost of market basket in base year}} \times 100$$

*“most price indexes, like CPI, are computed by pricing a standard market basket of goods in subsequent periods”*

### **cf) Deflating**

- Deflating is the process of finding *the real value* of some monetary magnitude by dividing by some appropriate *price index*

$$\text{- Real wage in 2000} = \frac{\text{money wage in 2000}}{\text{CPI of 2000}} \times 100$$

*“A price index can be used to **measure inflation** and to **deflate nominal values** to adjust for inflation”*

### **2) The GDP Deflator**

- Definition: The price index used to deflate GDP

$$\text{- Real GDP} = \frac{\text{Nominal GDP}}{\text{GDP Deflator}} \times 100$$

*“Different price indexes, such as the CPI and the GDP deflator, will show slightly different measures of inflation because they use **different market basket**”*

i.e., The GDP deflator includes the price of Airplanes, government service, other goods purchased by business. However, the discrepancy is usually minor (fig. 2-3, p.32)

### (3) *Measuring Joblessness (chapter 6)*

- How well an economy uses its resources (fig. 1-3, p.6)
- *Unemployment rate* is calculated and announced each month by the BLS (<http://www.bls.gov>)
- Labor force = Number of employed  
+ Number of unemployed (fig. 2-4, p.35)
- Unemployment rate = 
$$\frac{\text{\# of Unemployed}}{\text{Labor force}} \times 100$$
- Okun's Law: the negative relationship between unemployment and GDP (fig. 2-5, p.36)

## 3. How Economists Think

- Economists use “model” to illustrates the essence of the real economy and to help explain economic variables
- Endogenous variables: those that the model explains  
Exogenous variables: those that come from outside the model
- An economic model can show how the exogenous variables affect the endogenous variables.

Ex) the model of supply and demand (pp. 7-10)

## **4. The Circular Flow of Dollars through the Economy**

- The linkages among the economic actors - households, firms, and the government - and how dollars flow among them through the various markets in the economy (fig. 3-1, p.43)