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)
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)

\[
\text{Unemployment rate} = \frac{\text{# of Unemployed}}{\text{Labor force}} \times 100
\]

- 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)