

# MACROECONOMICS

## Chapter 7: Measuring the Macroeconomics

**7-1. Macroeconomics field:** since the Macroeconomics is a branch of economics that deals with the performance, structure, and behavior of a national economy as a whole, so the Macroeconomists seek to understand the determinants of aggregate trends in an economy with particular focus on national income, unemployment, inflation, investment, and international trade.

While macroeconomics is a wide field of study, there are two areas of research that are exemplary of the rule:

- Attempt to understand the determinants of long-run economic growth (increases in national income).
- Attempt to understand the causes and consequences of short-run fluctuations in national income (the Business Cycle).

## 7-2. Measures of national income and output

Measures of national income and output are used to estimate the value of goods and services produced in an economy. They use a system of national accounts first developed during the 1940s.

Some of the more common measures for national income are :

- ✚ **Gross National Product (GNP)**: is the total value of all final goods and services produced by country's factors of production and sold on the market in a given time period usually one year.
- ✚ **Gross Domestic Product (GDP)**: is the total value of final goods and services produced within a country's borders per year.
- ✚ **Gross National Income (GNI)**: the total income paid to the factors that produced goods and services.
- ✚ **Net National Product (NNP)**: is GNP minus depreciation ).

+ **Net National Income (NNI)**: is NNP minus indirect taxes.

### + **Measures of national income**

$$\text{GDP} = C + I + G + (X - M)$$

$$\text{GNP} = C + I + G + (X - M) + \text{NR}$$

$$\text{GNI} = C + I + G + (X - M) + \text{NR} - \text{IBT}$$

$$\text{NI} = C + I + G + (X - M) + \text{NR} - \text{IBT} - \text{CC}$$

#### **When:**

C = Personal consumption expenditures

I = Gross private domestic investment

G = Government consumption expenditures

X = Gross exports of goods and services

M = Gross imports of goods and services

NR : Net income from assets abroad

CC : Depreciation

IBT = Indirect business taxes

### **7-3. Final goods**

Final goods are goods that are finally consumed rather than used in the production of another good. For example, a car is sold to a consumer is a final good; the components of car such as tires sold to the car manufacturer are not; they are

intermediate goods used to make the final goods. The same tires, if sold to a consumer, would be a final goods. Only final goods are included when measuring national income. If intermediate goods were included too, this would lead to double counting; for example, the value of the tires would be counted once when they are sold to the car manufacturer, and again when the car is sold to the consumer.

## Questions:

1. Give the definition of:
  - a. GNP.
  - b. GDP.
  - c. GNI.
  - d. NNP.
  - e. NNI.
2. Give the equation of:
  - a. GDP.
  - b. GNP.
  - c. GNI .
  - d. NI
3. Find GDP when: Personal consumption expenditures =100 billions \$, Government consumption expenditures=150 billions \$, Gross private domestic investment= 150 billions \$, Gross imports of goods and services= 70 billions \$, Gross exports of goods and services= 20 billions \$?
4. Translate the following paragraph:-

**War cut Iraq's national income  
40%**

What has been the economic cost of the Iraq war for Iraq? Several studies have dealt with the war's cost to

Americans, but few have studied the other side.

Published information on the subject is very limited, although one economist, Colin Rowat, has made some preliminary calculations. Rowat, a specialist on the Iraqi economy at the University of Birmingham in Britain, relied mainly on data from the International Monetary Fund to estimate the war's overall effect on the Iraqi economy. he has found that the cost amounts to a cut of at least 40 percent in Iraq's national income.

Rowat looked at the six-year stretch from 2000 to 2005 and divided it into thirds. During the first period, 2000 to 2001, United Nations trade sanctions against Iraq were beginning to collapse. The second period, 2002 to 2003, covers the buildup to war and the invasion itself. The last period, 2004 to 2005, covers post-invasion years when sanctions were removed.