

# Chapter 23. Measuring a Nation's Income

- **Gross Domestic Product, GDP**

- Measures the value of all final goods and services produced within the economy = Measures the total income of everyone in the economy = Measures the total expenditure on the economy's output of goods and services
- For an economy as a whole, income must equal expenditure.

- Circular-Flow Diagram: A Simple Description of Macroeconomy

- Firms, households, markets(goods and services markets, factors of production markets)
- Government, financial system, and the foreign sector.

- Gross domestic product GDP is the market value of all final goods and services produced within a country in a given period of time.

- 1) Market value... those without market price are excluded. Ex. Housewife's domestic work

- 2) All final goods and services

- All items produced and sold legally in markets
- Excludes most items Produced and sold illicitly, also Produced and consumed at home
- Value of intermediate goods is already included in the prices of the final goods
- Tangible goods & intangible services
- Goods and services currently produced

- 3) Within a country: Goods and services produced domestically

- Regardless of the nationality of the producer

- 4) In given period of time: measured on a yearly or quarterly basis

- Usually includes goods and services produced during the year.
- Does not include those produced in the past. ex. Excluding used car transactions, existing housing transactions, etc.
- Those that were made that year but not sold were included in GDP as inventory investments.

- GDP in terms of Expenditure

- Consumption (C), Investment (I), Government purchases (G), and Net export (NX)

- **Identity:  $Y = C + I + G + NX$**

- Consumption (C): Spending by household on goods and services
  - Exception: purchases of new house → investment, not consumption.
- Investment (I): Purchase of goods used to produce other goods or services in the future, total expenditure on capital goods
  - Business capital: business structures, equipment, intellectual property products
  - Residential capital: landlord's apartment building, a homeowner's personal residence
  - Inventory accumulation: goods produced but not yet sold
- Government purchases (G): Government consumption expenditure and gross investment on goods and services
  - Transfer expenditure (money given to the people by law, not at the cost of purchasing goods or services) not included
- Net export (NX):  $\text{Export}(X) - \text{Import}(IM)$
- $Y = C + I + G + NX$ 
  - Korea's GDP components: Share of consumption is relatively small and that of Investment is high. Focus on corporate investment
  - US: The share of consumption is overwhelming
- Example of GDP configuration items (caution!!) ☆ ☆
  - When a domestic company purchases foreign products (equipment, machinery) for business purposes, Investment increases, but Net exports decrease, and GDP remains unchanged.
  - Used products, and inventories made before the current year, do not affect GDP and its components no matter how much they are bought and sold.
- Real GDP and nominal GDP
  - Nominal GDP: Value of output calculated at current prices, not taking inflation into account
  - Real GDP: Value of output using base year prices(=valued at constant prices), not affected by changes in prices

- The rate of change in nominal GDP (= nominal growth rate) reflects both price and production changes.
- The rate of change in real GDP (=real growth rate) measures changes in output.
  - Real GDP eliminates the effects of inflation.
- GDP deflator: one measure of overall price level
  - **(nominal GDP / real GDP) X 100**
  - Indicate the proportion of nominal GDP growth that has nothing to do with real GDP growth
  - Measurement of the current price level compared to the base year (=inflation rate of the entire economy)
  - The GDP deflator displays the price fluctuations of goods and services produced in the country
- GDP and economic well-being: GDP per capita shows the average standard of living in the country, but it is not a perfect measure of well-being.
  - Robert Kennedy: "GDP measures everything but the very thing that makes our lives worthwhile."
- Things GDP doesn't consider.
  - Value of the environment, leisure time, various non-market activities (many things happening at home, such as childcare, rest, and housework), distribution of income, etc.
  - Nevertheless, as GDP increases, there is more to be done, such as education, environment, medical care, and welfare.
  - Indicators of quality of life have a positive (+) correlation with GDP.
  - What is the alternative to the metric of GDP?