GROSS DOMESTIC PRODUCT

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Gross Domestic Product

- GDP is the total market value of a country's output.
- The market value is all **final goods and services** produced within a given period of time by factors of production located within a country
- The value of **intermediate goods** is not counted in GDP
- Counting only the value added is used to avoid **double counting**
- The **value added** during some stage of production is the difference between the value of goods as they leave that stage of production and the cost of the goods as they entered that stage.
- In calculating GDP, we can sum up the value added at each stage of production or we can take the value of final sales.
- We do not use the value of total sales in an economy to measure how much output has been produced.

Gross Domestic Product

- GDP does not count transactions in which money or goods changes hands but in which no new goods and services are produced.
- GDP is the value of output produced by factors of production *located within a country.*
- *Gross National Product (GNP)* is the total market value of all final goods and services produced within a given period by factors of production owned by a country's citizens, regardless of where the output is produced.

Gross Domestic Product

- Calculating GDP
  - output approach
    - A method of computing GDP that measures final output of goods and services produced during a given period.
  - expenditure approach
    - A method of computing GDP that measures the total amount spent on all final goods and services during a given period.
  - income approach
    - A method of computing GDP that measures the income—wages, rents, interest, and profits—received by all factors of production in producing final goods and services.

Gross Domestic Product

- **The Expenditure Approach**
  - Personal consumption expenditures (C): household spending on consumer goods
  - Gross private domestic investment (I): spending by firms and households on new capital, that is, plant, equipment, inventory, and new residential structures
  - Government consumption and gross investment (G)
  - Net exports (EX- IM): net spending by the rest of the world, or exports (EX) minus imports (IM)

GDP = C + I + G + (EX- IM)

GDP = Final sales + Change in business inventories

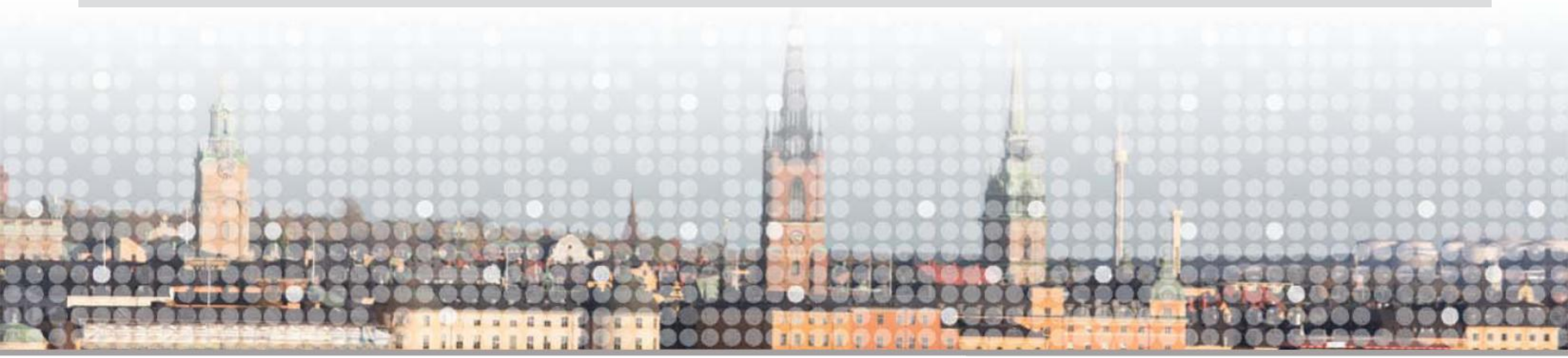
Gross Domestic Product

- The Income Approach
  - Sum of:
    - Compensation of employees
    - Proprietors’ income
    - Rental income
    - Corporate profits
    - Net interest
    - Indirect taxes minus subsidies
    - Net business transfer payments
    - Surplus of government enterprises

Gross Domestic Product

$$\left.\begin{array}{l}\text{Domestic product}\\ \text{Domestic income}\\ \text{Domestic expenditure}\end{array}\right\} + \boxed{\begin{array}{l}\text{Net income}\\ \text{from abroad}\end{array}} = \left\{\begin{array}{l}\text{National product}\\ \text{National income}\\ \text{National expenditure}\end{array}\right.$$

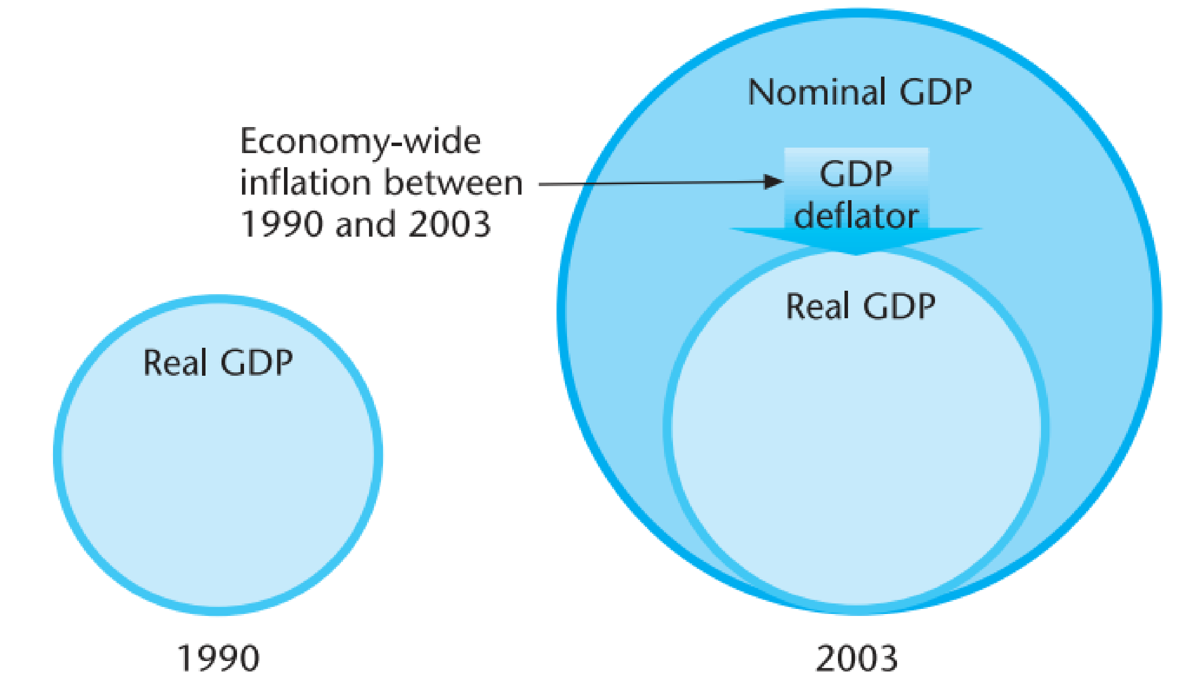
$$\left.\begin{array}{l}\text{Gross national product (GNP)}\\ \text{Gross national income (GNI)}\\ \text{Gross national expenditure (GNE)}\end{array}\right\} - \boxed{\text{Depreciation}} = \left\{\begin{array}{l}\text{Net national product (NNP)}\\ \text{Net national income (NNI)}\\ \text{Net national expenditure (NNE)}\end{array}\right.$$



Gross Domestic Product

- Nominal versus Real GDP
  - **Nominal GDP**: Gross domestic product measured in current value of money.
  - **Real GDP** : Nominal GDP adjusted for price changes
    - GDP deflator: the weigthed average of prices of all goods and services produced in an economy and purchased by households, firms, government and foreigners.

Gross Domestic Product



$$\text{Real GDP}_{2003} = \frac{\text{Nominal GDP}_{2003}}{\text{GDP deflator}} \times \text{Base year price level}$$

Uses of National Income Statistics

- To measure standard of living of a country
- To measure improvement in national wealth and standard of living over time
- To compare the economic activity of different countries
- To identify trends in consumer expenditure
- To identify trends in industrial production
- To assist central government in its economic planning

Factors influencing the size of national income

- Availability of natural resources
- Nature of the labour force (labour size *vs* total population, energy, skill, ability, mobility, etc)
- Amount of capital investment
- Efficient utillisation of resources (i.e. land, labour, and capital)
- Innovation (e.g. new technologies)
- Political stability
- Foreign direct investment

Limitations of the GDP Concept

- GDP and Social Welfare
  - Social welfare (decrease in crime, increase in leisure time) are not counted at GDP
  - Nonmarket and domestic activities (housework and child care) are not counted at GDP
  - Pollution are not counted at GDP
  - GDP cannot measure the redistributive policies
  - GDP is neutral to all kinds of good
- Underground Economy
  - Undeclared incomes and loss of tax rvevenue
- Gross National Income per Capita
  - Difficulties in converting currency

References

- Case, K., Fair, R., & Oster, S. M. (2010). *Principles of Economics,* 10th Editions. Prentice Hall Business Publishing.
- Nellis, G. J., & Parker, D. (2004). *Principles of Macroeconomis*. Pearson Education Ltd.