

PRINCIPLES OF ECONOMICS

Lecture 38: AGGREGATES OF GDP AND THEIR MEASUREMENT

November, 2015



TOPICS OF DISCUSSION

➤ **GDP & Its Aggregates**

- Gross National Product (GNP)
- Net National Product (NNP)
- National Income
- Personal Income
- Disposable Personal Income

GROSS DOMESTIC PRODUCT (GDP)

- **Gross Domestic Product-** is the total market value of all final goods and services produced within a the domestic territory of an economy in a given period of time, generally one year.

$$\text{GDP}_{\text{MP}} = \text{OUTPUT} \times \text{MARKET PRICE}$$

- **$\text{GDP}_{\text{FC}} = \text{GDP}_{\text{MP}} - \text{Net Indirect Taxes}$**
 - Net Indirect Taxes = Indirect Taxes - Subsidies

OTHER AGGREGATES OF GDP

- Gross National Product (GNP)
- Net National Product (NNP)
- National Income
- Personal Income
- Disposable Personal Income

GROSS NATIONAL PRODUCT

- Gross national product (GNP) is the total income earned by a nation's permanent residents .
- It differs from GDP by including income that our citizens earn abroad and excluding income that foreigners earn here.

$$\text{GNP}_{\text{MP}} = \text{GDP at Market Prices} + \text{Net Factor Income from Abroad}$$

NET NATIONAL PRODUCT (NNP)

- Net National Product (NNP) is the total income of the nation's residents (GNP) minus losses from depreciation.
- Depreciation is the wear and tear on the economy's stock of equipment and structures.

$$\text{NNP at Market Price} = \text{GNP at Market Price} - \text{Depreciation}$$

NATIONAL INCOME

- National Income is the total income earned by a nation's residents in the production of goods and services.
- It differs from NNP by excluding indirect business taxes (such as sales taxes) and including subsidies.

NNP at Factor Cost = NNP at Market Price – Net Indirect Taxes

Net Indirect Taxes = Indirect Taxes - Subsidies

PERSONAL INCOME

- Personal income is the income that households and non-corporate businesses receive
- Unlike national income, it excludes retained earnings, which is income that corporations have earned but have not paid out to their owners.
- In addition, it includes household's interest income and government transfers.

DISPOSABLE PERSONAL INCOME

- Disposable personal income is the income that household and non-corporate businesses have left after satisfying all their obligations to the government

**Disposable Income = Personal Income - Personal Taxes
and Non-tax Payments**

COMPONENTS OF GDP

GDP is the sum of the following:

- Consumption (C)
- Investment (I)
- Government Purchases (G)
- Net Exports (NX)

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

COMPONENTS OF GDP

➤ **Consumption (C):**

- The spending by households on goods and services, with the exception of purchases of new housing.

➤ **Investment (I):**

- The spending on capital equipment, inventories, and structures, including new housing.

COMPONENTS OF GDP

➤ **Government Purchases (G):**

- The spending on goods and services by local, state, and federal governments.
- Does not include transfer payments because they are not made in exchange for currently produced goods or services.

➤ **Net Exports (NX):**

- Exports minus imports.

Thank You 😊