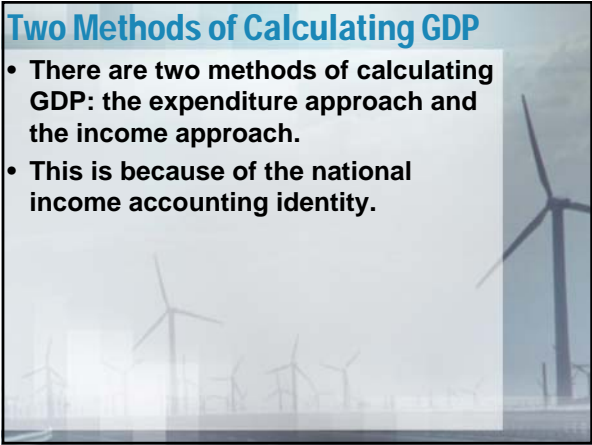




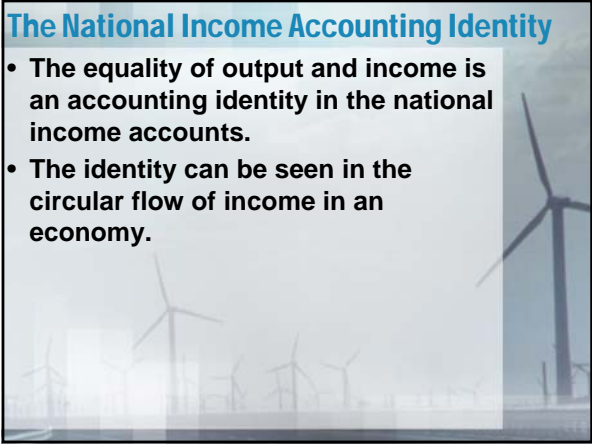
Expenditure Approach

National Income Accounting



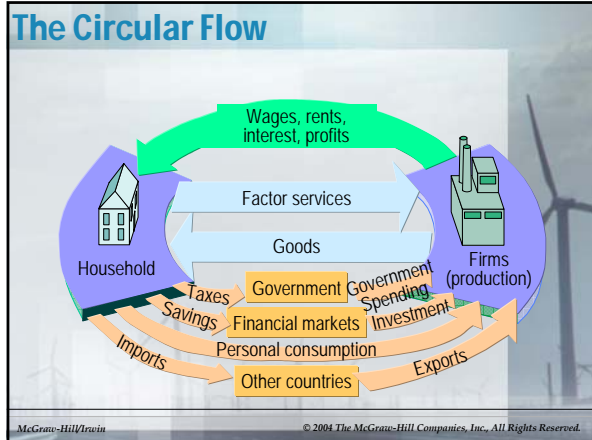
Two Methods of Calculating GDP

- There are two methods of calculating GDP: the expenditure approach and the income approach.
- This is because of the national income accounting identity.



The National Income Accounting Identity

- The equality of output and income is an accounting identity in the national income accounts.
- The identity can be seen in the circular flow of income in an economy.



The Expenditure Approach

- The expenditure approach is shown on the bottom half of the circular flow.
- Specifically, GDP is equal to the sum of the four categories of expenditures.

$$GDP = C + I + G + (X - M)$$

Consumption

- When individuals receive income, they can spend it on domestic goods, save it, pay taxes, or buy foreign goods.
- *Personal consumption expenditures* – payments by households for goods and services.

Consumption

- Consumption is the largest and most important of the flows.
- It is also the most obvious way in which income received is returned to firms.

Investment

- The portion of their income that individuals save leaves the income stream and goes into financial markets.
- *Gross private investment* – business spending on equipment, structures, and inventories.

Investment

- *Depreciation* – the decrease in an asset's value due to it wearing out.
- *Net private investment* – gross private investment minus depreciation.

Government Expenditures

- Taxes are either spent by government on goods and services or are returned to individuals in the form of transfer payments.

Government Expenditures

- *Government expenditures* – government payments for goods and services or investment in equipment and structures.
- If the government runs a deficit, it must borrow from financial markets to make up the difference.

Net Exports

- Spending on imports are subtracted from total expenditures because it escapes the system and does not add to domestic production.

Net Exports

- Exports to foreign nations are added to total expenditures.
- These flows are usually combined into net exports.

GDP and NDP

- **Net domestic product (NDP)** – the sum of consumption expenditures, government expenditures, net foreign expenditures, and investment less depreciation.

GDP and NDP

- Net domestic product is GDP adjusted for depreciation:

– Know the following formula!

$$GDP = C + I + G + (X - M)$$

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