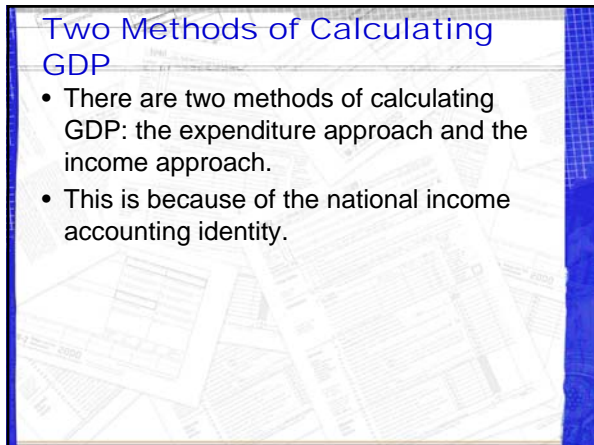
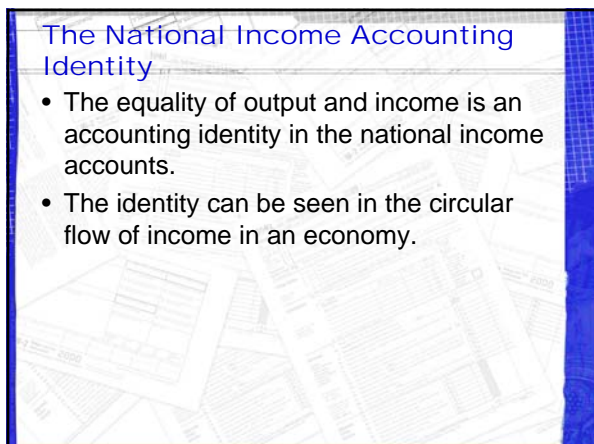


Income Approach
National Income Accounting



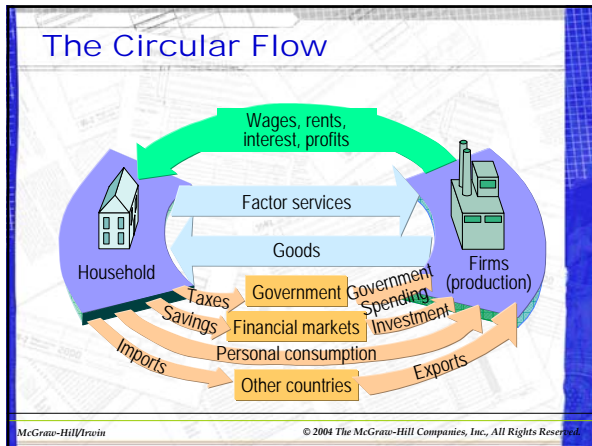
Two Methods of Calculating GDP

- 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.



GDP and NDP

- Net domestic product is GDP adjusted for depreciation:

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

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

The Income Approach

- The income approach is shown on the top half of the circular flow.
- Firms make factor payments to households for supplying their services as factors of production.

The Income Approach

- **National income** is the total income earned by citizens and businesses in a country in one year.
- It consists of employee compensation, rent, interest, and profits.

The Income Approach

- **Employee compensation** consists of payments for labor such as salaries and wages.
- **Rents** are payments for use of land and buildings.

The Income Approach

- **Interest** includes payments for loans by households to firms.
- **Profits** are payments to the owners of firms.

Equality of Income and Expenditure

- Income and expenditures must be equal because of the rules of double-entry bookkeeping.
- Profit is the balancing item.

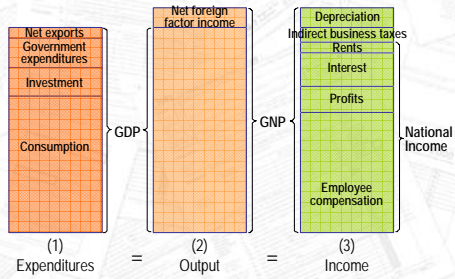
Equality of Income and Expenditure

- GDP is calculated either by adding up all values of final output or by adding up the values of all earnings or income.

Qualifications to the Income Accounting Identity

- To go from GDP to national income:
 - Add net foreign factor income.
 - National income is all income earned by citizens of a nation and is equal to GNP.
 - To move from "domestic" to "national" we add net foreign factor income.
 - Subtract depreciation from GDP.
 - Subtract indirect business taxes from GDP.

Equality of Expenditure and Income



Other National Income Terms

- **Personal income (PI)** is national income plus net transfer payments from government minus amounts attributed but not received.

$$PI = NI + \text{Transfer payments from government} + \text{Net non-business interest income} - \text{Corporate retained earnings} - \text{Social security taxes}$$

Other National Income Terms

- **Disposable personal income** is personal income minus personal income taxes and payroll taxes.
- Disposable personal income is what people have readily available to spend.

$$DPI = PI - \text{Personal taxes}$$
