

## The Circular-Flow Diagram

National accounts keep track of the flows of money among different sectors of the economy. **National income and product accounts** are the national accounts.

Money flows between households, markets for goods and services, firms, and factor markets.

Households buy goods and services from the market for goods and services in return for money.

Markets for goods and services are supplied by individual firms. The money from the households then goes to those individual firms.

Firms purchase factors from the factor market.

The factor market is supplied by households (for example, labor).

**Vocabulary** Household: can refer to an individual or a group of people who share their income

Markets for Goods and Services: Also known as product markets, it is where households buy the goods and services they want.

Firm: an organization that produces goods and services for sale and employs members of households.

Factor Markets: The market from which firms buy the resources to provide goods and services.

**The underlying principle is that the inflow of money into each market or sector must equal the outflow of money from that market or sector**

## Expanded Circular-Flow Diagram

Four sectors of economy households, firms, government, and the rest of the world

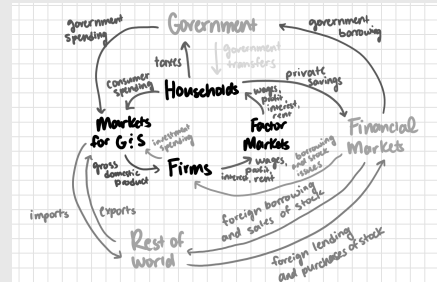
Three types of markets factor markets, markets for goods and services, financial markets

The three types of markets connect the four sectors of the economy

The total flow of funds, or GDP is all the spending in the market.

$GDP = \text{Consumer Spending} + \text{Investment Spending} + \text{Government Spending} + \text{Exports} - \text{Imports}$

## Expanded Circular-Flow Diagram



### GDP

Included	Domestically produced final goods and services, including capital goods, new construction of structures, and changes to inventories
Not Included (IF IF U)	Intermediate goods and services Financial assets and transfer payments (stocks and bonds) Inputs Foreign-produced goods/services Used goods

### The Value-Added Approach to GDP

Survey firms and add up their contributions to the value of final goods and services.

**Value added** The "value added" of a producer is the value of its sales minus the value of its purchases of inputs (prevents double counting)

### The Expenditure Approach to GDP

Add up aggregate spending on domestically produced final goods and services in the economy - the sum of consumer spending, investment spending, government purchases of goods and services, and exports minus imports.

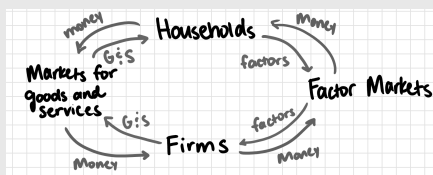
$$\text{GDP} = \text{Consumer Spending} + \text{Investment Spending} + \text{Government Spending} + \text{Exports} - \text{Imports}$$

$$\text{Net exports} = \text{Exports} - \text{Imports}$$

### The Income Approach to GDP

Add up all the income earned by factors of production in the economy - the wages earned by labor, the interest earned by those who lend their savings to firms and the government, the rent earned by those who lease their land or structures, and the profit earned by the shareholders, the owners of the firms' physical capital.

### Circular Flow Diagram



### Vocabulary

Stocks	A share in the ownership of a company
Bond	A loan in the form of an IOU that pays interest

### Vocabulary (cont)

Government Transfers	Payments from the government to individuals
Disposable Income	The total amount of household income available to spend on consumption and to save
Private Savings	Disposable income not spent on consumption
Financial Markets	The banking, stock, and bond markets which channel private savings and foreign lending into investment spending, government borrowing, and foreign borrowing
Government Borrowing	The amount of funds borrowed by the government
Government Spending	Total expenditures on goods and services by the government
Exports	Goods and services sold to other countries
Imports	Goods and services purchased from other countries
Inventories	Goods and raw materials that firms hold on to facilitate their operations. Inventories count as investment spending in the national accounts.
Investment Spending	Spending on new productive physical capital, like machinery, structures, and changes in inventories
Final Goods and Services	Goods and services sold to the final user
Intermediate Goods and Services	Goods and services bought by one firm from another to be used as inputs
Gross Domestic Product	The total value of all final goods and services produced in the economy during a given year
Aggregate Spending	The total spending on domestically produced final goods and services in the economy