

# Macroeconomics & well-being II

*Principles of Macroeconomics // Spring 2025*

Prof. Santetti

[marcio.santetti@emerson.edu](mailto:marcio.santetti@emerson.edu)

# Readings

# Recommended readings

## Required readings:

- *Macroeconomics in Context*, 4th ed.
  - Chapter 4, sections 1—3.

## Required listening:

- Planet Money podcast: GDP and what counts (NPR)

# Words of the day

- “Economic” vs. “business” investment;
- Circular flow.

# Quick review

# Quick review

Measured by what each economic sector **spends**, **Gross Domestic Product** (GDP) can be defined by:

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

A few questions:

- Examples of *Consumption* ( $C$ ) expenditures?
- What do we mean by *Investment* ( $I$ )?
- Examples of *Government* spending?
- How do we call  $(X - M)$ ?

# The income approach

# The income approach

After seeing how GDP can be computed via the **spending approach**, one can get the same results by:

- Adding up all **incomes**, rather than *expenditures*.
- What is the *logic* of doing that?

What are the incomes earned by:

- *Households?*
- *Firms?*
- *Government?*



# The income approach

$$\text{Wages} + \text{Profits} + \text{Rents} + \text{Interest} + \text{Net Taxes} \approx C + I + G + (X - M)$$

With that, we arrive at a country's **Gross Domestic Income** (GDI).

# The income approach

A country's **Gross Domestic Income** (GDI) is defined by:

*The total amount of money earned by a nation's people and its businesses.*

Q: What is the **GDI** of the U.S. economy?

A: As of the third quarter of 2024 (2024Q3), its GDI is of US\$ **29.11 trillion**.

Q: But wasn't the U.S. GDP around US\$ **29.37 trillion**?

A: Yes, but different data *sources* yield different *results*.

- *Statistical discrepancy.*

# The income approach

As an **example**, suppose a simple economy producing a *single* product: bread.

It is produced in **three** stages:

1. Wheat is grown, harvested, and sold for \$1 by a farmer to a miller (for simplification, assume the wheat is produced using *no* intermediate goods);
2. The wheat is used by a miller to produce flour, which is sold for \$3; and
3. The flour is used by a baker to produce bread, which is sold to a consumer for \$7.

Q1: What is this economy's *Gross Domestic Income*?

Q2: What is this economy's *Gross Domestic Product*?

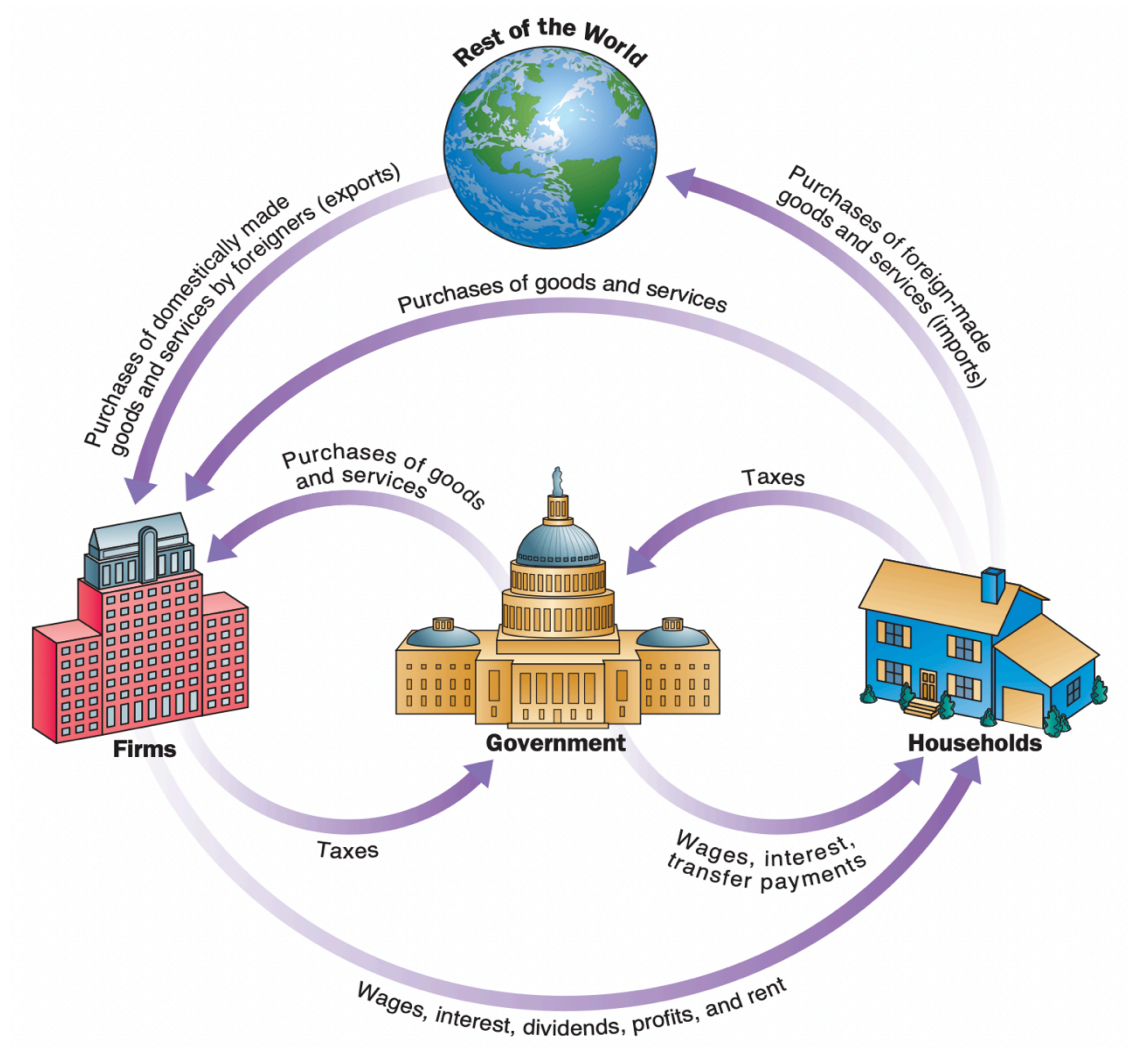
Reality check

# Reality check

- U.S. Gross Domestic Product over time
- U.S. National Income and Product Accounts

# GDP wrap-up

# The circular flow



Source: Case, Fair, and Oster (2012).

# Breaking down GDP

What do we mean by:

- *Gross?*
- *Domestic?*
- *Product?*



# GDP by expenditure

- U.S. Gross Domestic Product over time, again

Quick practice

# Quick practice

Suppose you are given the following data (in US\$ billions):

- *Sales of durable goods*: \$ 1,035
- *Nonresidential investment expenditures*: \$ 1,388.80
- *Federal Government expenditures*: \$ 1,144.80
- *Changes in business inventories*: \$ -120.90
- *Exports*: \$ 1,564.20
- *Services*: \$ 6,833.90
- *Sales of nondurable goods*: \$ 2,220.20
- *State and local government spending*: \$ 1,786.90
- *Imports*: \$ 1,956.60
- *Residential investment*: \$ 361.00

Compute (a) each **aggregate expenditure** and (b) its **total value**.

Next time: Shapes and forms of  
GDP