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Gross Domestic Product

- **Gross domestic product** or **GDP** measures the total value of all *final goods and services* produced in the economy during a given year.
- GDP does not include the value of *intermediate* goods (i.e., goods bought from one firm by another firm).



Calculating Gross Domestic Product

- GDP can be calculated three ways:
 - Add up the *value added* of all producers
 - Add up all **aggregate spending** on domestically produced final goods and services. This results in the equation: **$GDP = C + I + G + (X - IM)$**
 - Add up all income paid to factors of production

Calculating Gross Domestic Product

2. Aggregate spending on domestically produced final goods and services = \$21,500

	American Ore, Inc.	American Steel, Inc.	American Motors, Inc.	Total factor income
Value of sales	\$4,200 (ore)	\$9,000 (steel)	\$21,500 (car)	
Intermediate goods	0	4,200 (iron ore)	9,000 (steel)	
Wages	2,000	3,700	10,000	\$15,700
Interest payments	1,000	600	1,000	2,600
Rent	200	300	500	1,000
Profit	1,000	200	1,000	2,200
Total expenditure by firm	4,200	9,000	21,500	
Value added per firm	4,200	4,800	12,500	
=				
Value of sales – Cost of intermediate goods				

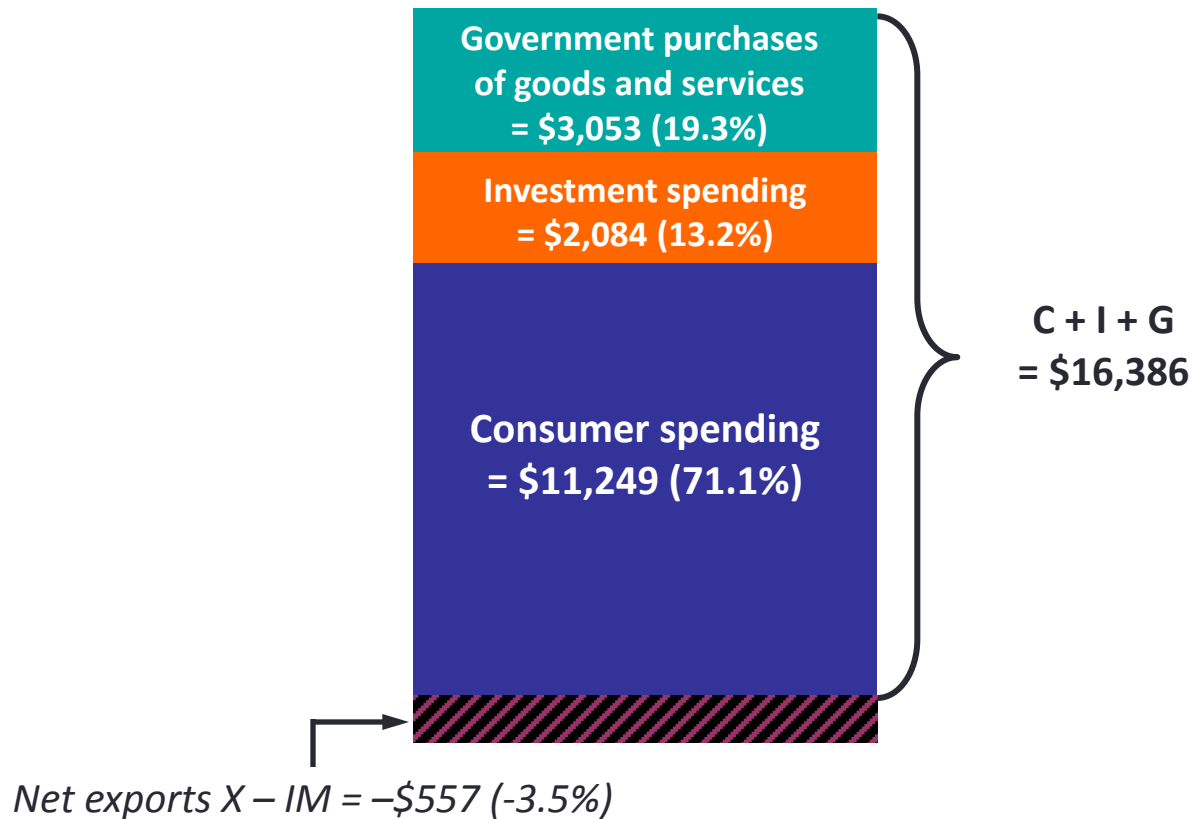
3. Total payments to factors = \$21,500

1. Value of production of final goods and services, sum of value added = \$21,500

Calculating Gross Domestic Product

Components of U.S. GDP (billions of 2012 dollars)

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



GDP: What's in and what's out?

- GDP measures **production** of goods & services
- GDP measures production within national borders
- Inputs are NOT in GDP
- Used goods are NOT in GDP
- Financial assets (e.g., stocks and bonds) are NOT in GDP
- When someone provides services for pay, those services are included as part of GDP, but the services of family members is not
- GDP includes an imputation for the value of “owner-occupied housing”