

3 week: In-class Learning Activity

National saving Example:

1) Suppose that GDP is 10,000, Tax is 1,500, Government spending is 4,000 and consumption is 4,000. Calculate Public Savings, Private savings and National Savings.

Answer) Using the public savings equation

$$\text{Public Savings} = T - G$$

$$\text{Public Savings} = 1,500 - 4,000$$

$$\text{Public Savings} = -2500$$

This suggests that the government is running a budget deficit.

Using the Private savings equation

$$\text{Private savings} = Y - T - C$$

$$\text{Private savings} = 10,000 - 1,500 - 4,000$$

$$\text{Private savings} = 4,500$$

Now using the National savings equation

$$\text{National Savings} = \text{Public Savings} + \text{Private Savings}$$

$$\text{National Savings} = -2500 + 4,500$$

$$\text{National Savings} = 2,000$$

2) Suppose GDP equals \$12 trillion, consumption equals \$5.5 trillion, the government spends \$3 trillion and has a budget surplus of \$500 billion. Find public saving, taxes, private saving, national saving, and investment.

Given: $Y = 12$, $C = 5.5$, $G = 3.0$, $T - G = 0.5\text{tr}$

Public saving = $T - G = 0.5\text{tr}$

Taxes: $T = G + 0.5 = 3 + 0.5 = 3.5\text{tr}$

Private saving = $Y - T - C = 12 - 3.5 - 5.5 = 3\text{tr}$

National saving = $Y - C - G = 12 - 5.5 - 3 = 3.5\text{tr}$

Investment = national saving = 3.5tr