

# ECON 2:

## Principles of Macroeconomics

### Lecture 9: Short-Run Macroeconomics



# Spending = Production = Output = Income



- **GDP =**
  - Production(Expenditure)
  - Income(Factor Payments)
  - Firm-Value(Value-Added)
- **Introduce Aggregate expenditures = total spending in the economy = AE**
- **Short-Run Macroeconomic Equilibrium:**
  - Output = Aggregate Expenditures,  $Y = AE$
- **Goal: Explain why a particular equilibrium level of output (Y) is occurring by examining changes in AE**
- **Bigger Goal: get economy back to full-employment equilibrium output:**
  - $Y - \text{Bar}$

# Define Spending in the Economy



Break down spending in the economy based on categories of spenders

Household consumption = Consumption = C

What determines how much a household spends?

1. Income/Disposable Income

2. Wealth

# Define Spending in the Economy

Household consumption = Consumption =  $C$

What determines how much a household spends?

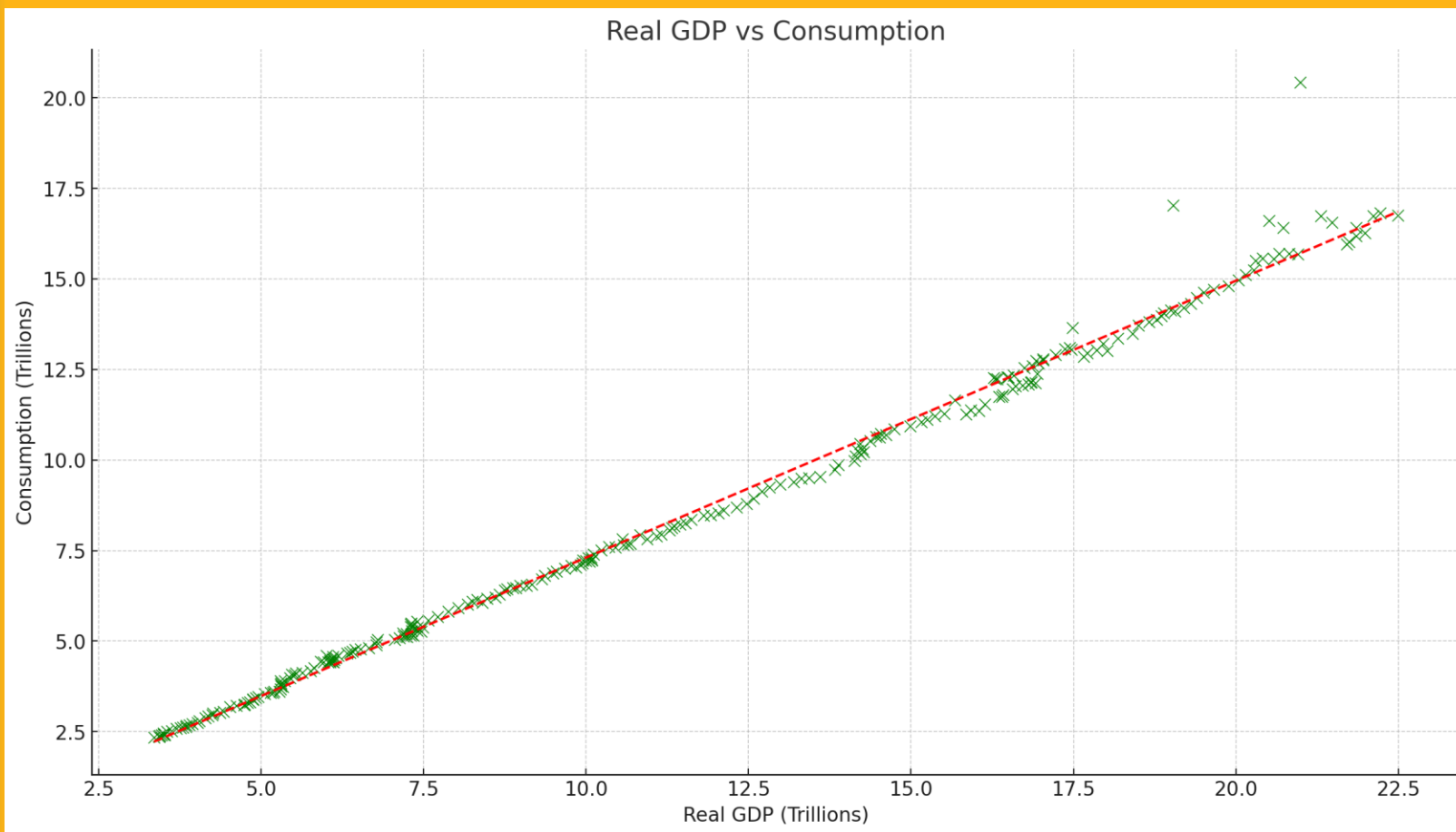
3. Interest Rate

4. Expectations

5. Preferences

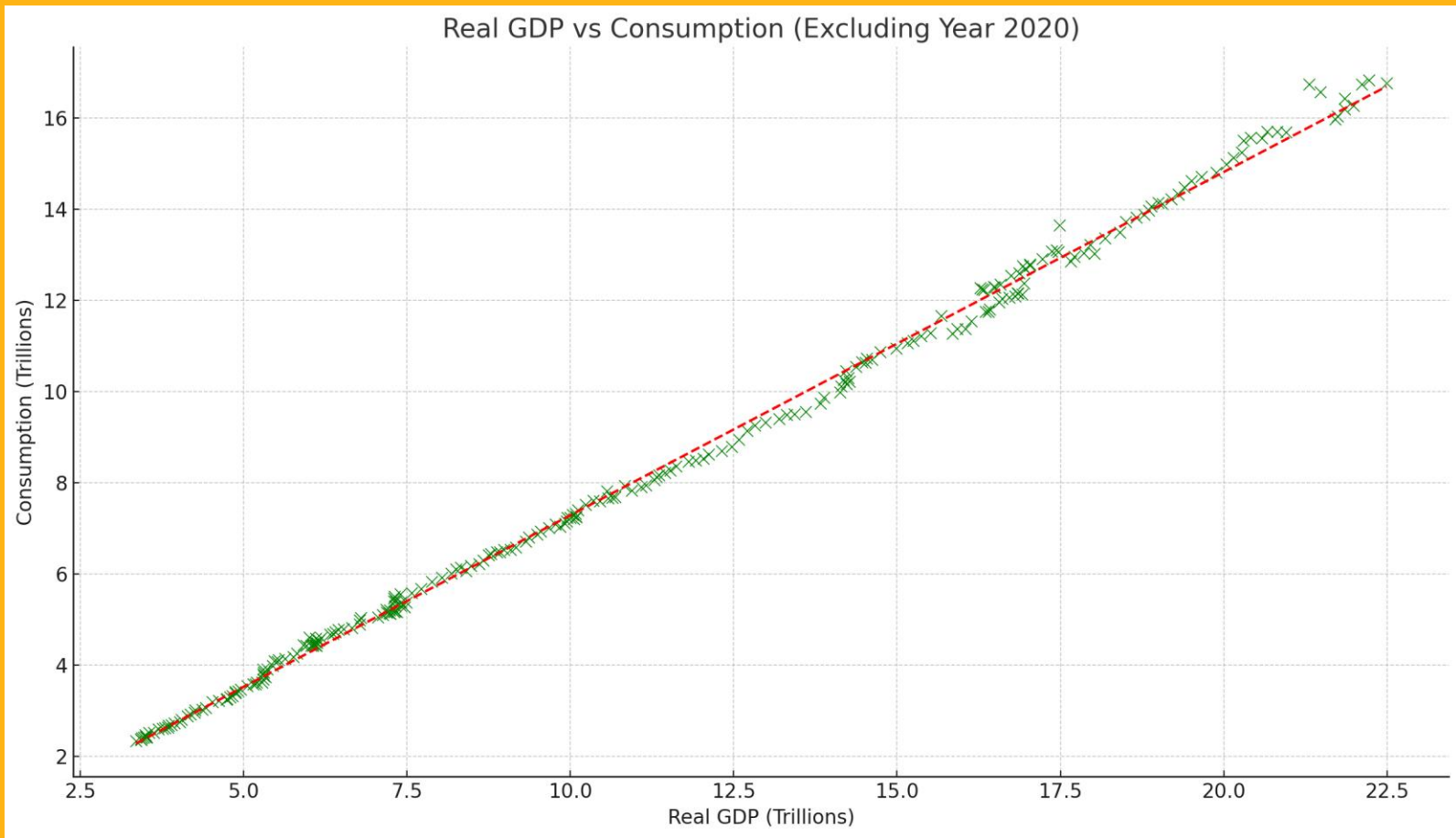


# How Important is Income (Y)?





# How Important is Income (Y)?



# Disposable Income and Consumption

- The Relationship between Disposable Income and Consumption:

		Real Disposable Income	Consumption
		0	2000
		2000	3200
		4000	4400
		6000	5600
		8000	6800
		10000	8000

# Disposable Income and Consumption



Autonomous Consumption (AC):

Marginal Propensity to Consume (MPC):



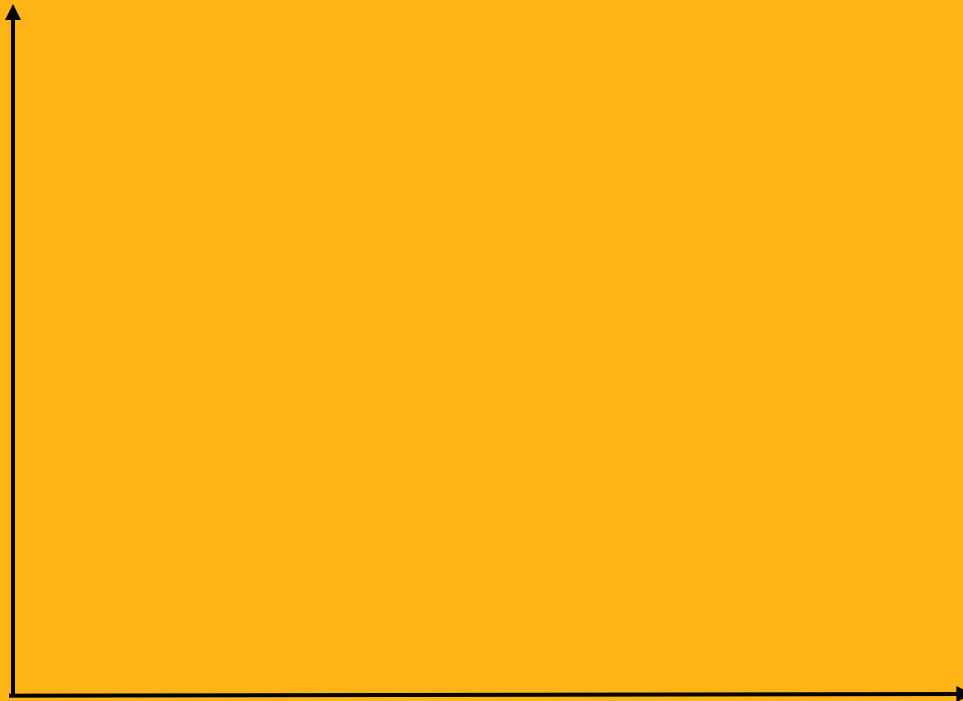
# Consumption Function

- Consumption Function

		Real Disposable Income	Consumption
		0	2000
		2000	3200
		4000	4400
		6000	5600
		8000	6800
		10000	8000

# Consumption Function

- Disposable Income vs. Consumption



# Consumption Function

- Consumption Function:

Income (Y)	Taxes (T)	Real Disposable Income	Consumption
2000	2000	0	2000
4000	2000	2000	3200
6000	2000	4000	4400
8000	2000	6000	5600
10000	2000	8000	6800
12000	2000	10000	8000

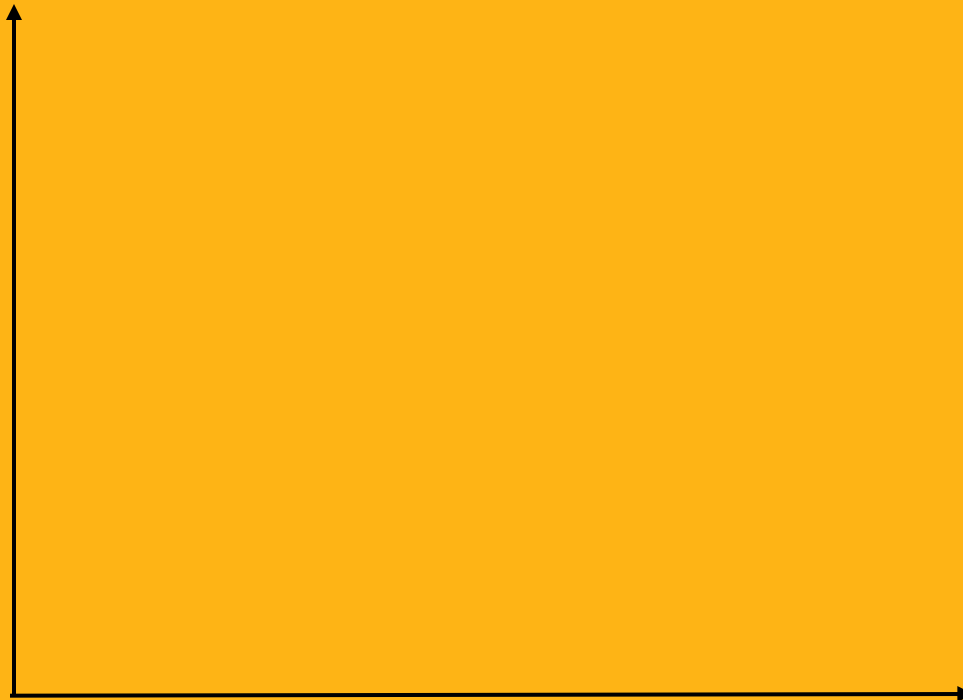
# Consumption Function

- Income vs. Consumption, holding taxes constant



# Consumption Function

- What changes the consumption function?



# Additional Types of Spending

Spending by businesses

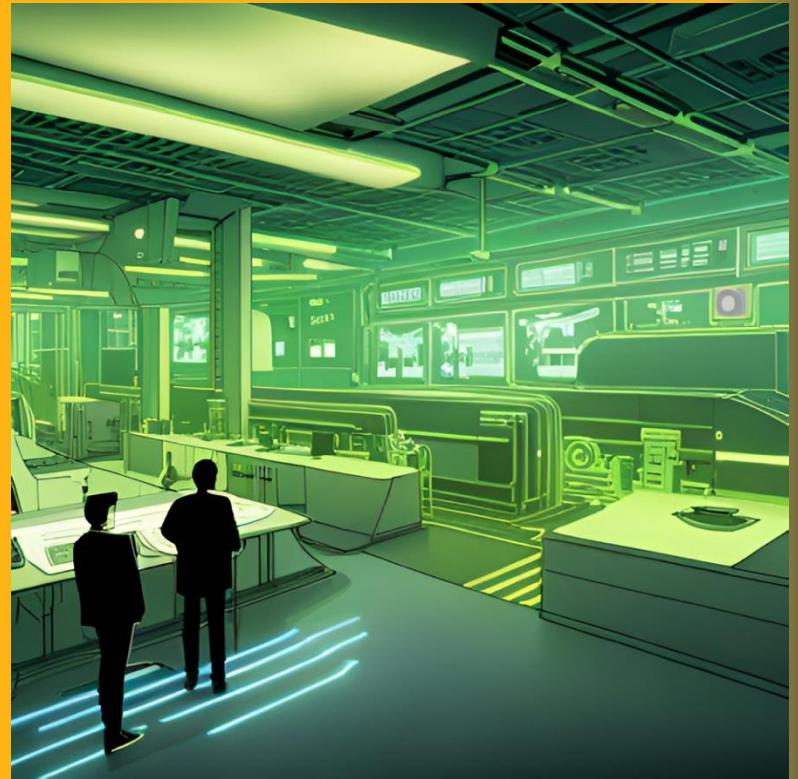
Planned Investment Spending ( $I^P$ )

Two Major Categories:

1.

2.

What is “unplanned investment”?







## Determinants of Planned Investment Spending ( $I^P$ ):

- 1.
- 2.
- 3.

Assumption: Output today ( $Y$ ) doesn't directly affect  $I^P$

**As  $Y$  changes,  $I^P$  is constant!**



# Spending by the Government = Government Expenditures (G)

What is included?

- Military
- Fire and Police
- Public Education
- Parks and Rec
- Highway infrastructure

Industries that produce necessary goods/service, but have trouble making a profit

Does not include *Transfer Payments* such as:

- Social Security/Welfare
- Financial Aid
- Subsidies

Assumption: Output today (Y) doesn't directly affect G

**As Y changes, G is constant!**



# Additional Types of Spending

Spending by the Foreigners

Net Exports (NX) = Exports (X) – Imports (M)

Assumption:

Output (Y) in the short-run does not directly affect Net Exports (NX)







# Aggregate Expenditures

Total Spending in the Economy = Aggregate Expenditures = AE

$AE = \text{Consumption} + \text{Planned Investment} + \text{Gov't Expenditures} + \text{Net Exports}$

$AE = C + I^P + G + NX$  (Note:  $I^P = I$  when change in inventories = 0)

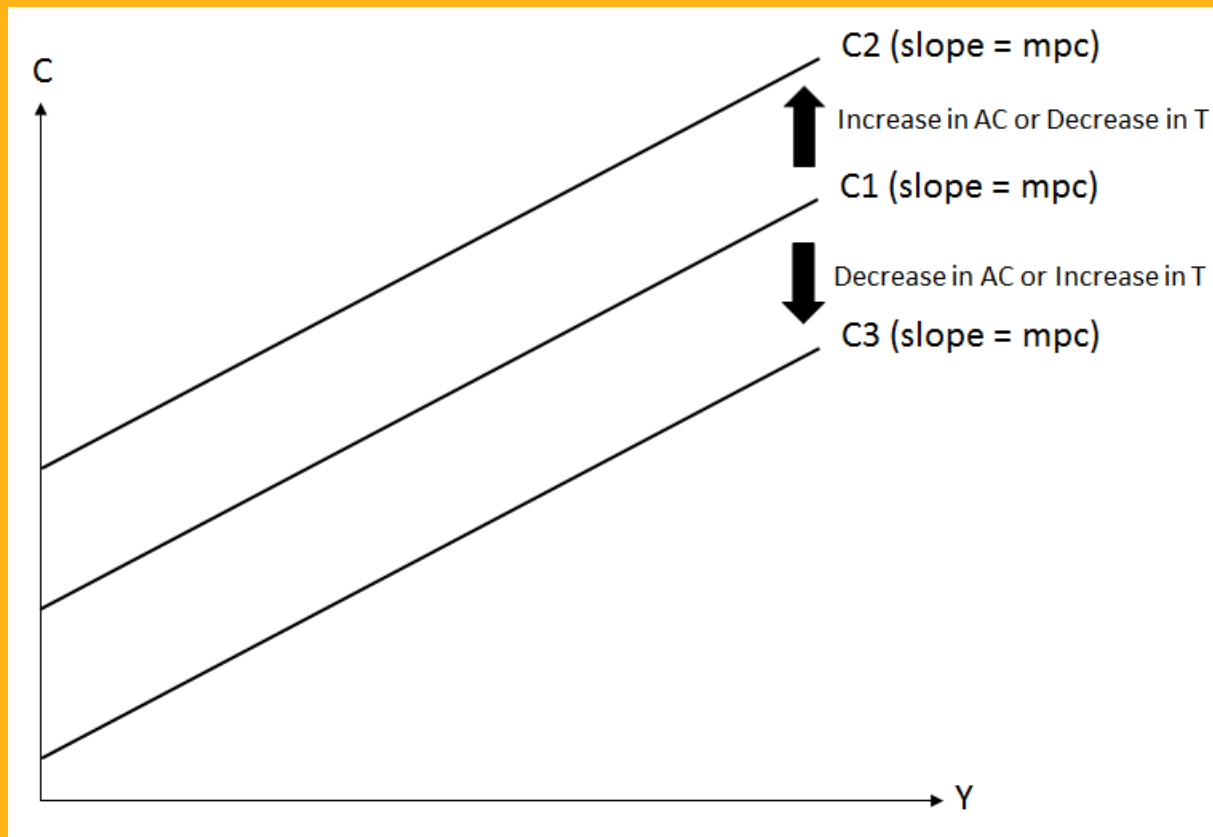
Show how spending (AE) changes when Y changes and find where  $Y = AE$

$AE = AC + mpc(Y - T) + I^P + G + NX$

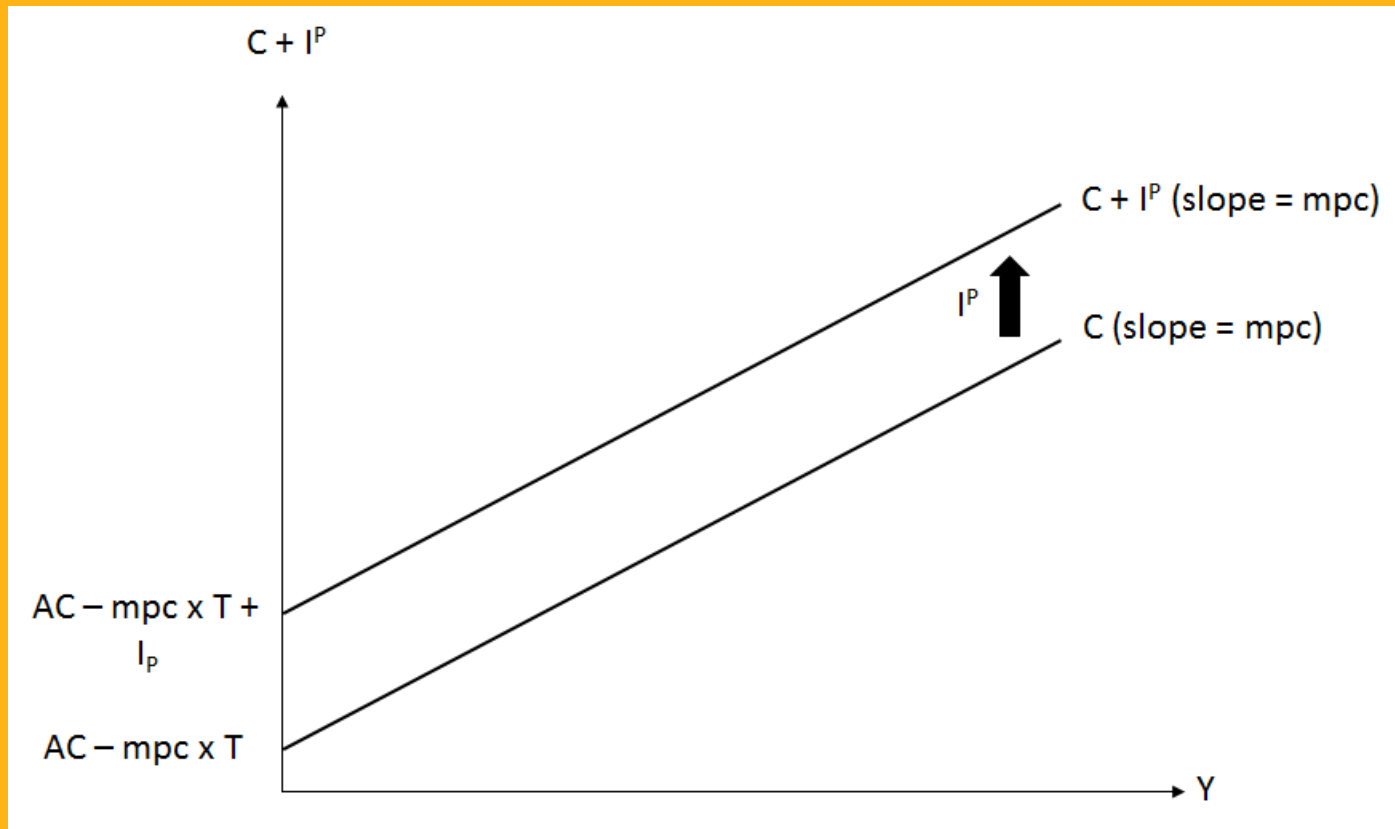


# Building the Aggregate Expenditure Curve

Start with Consumption

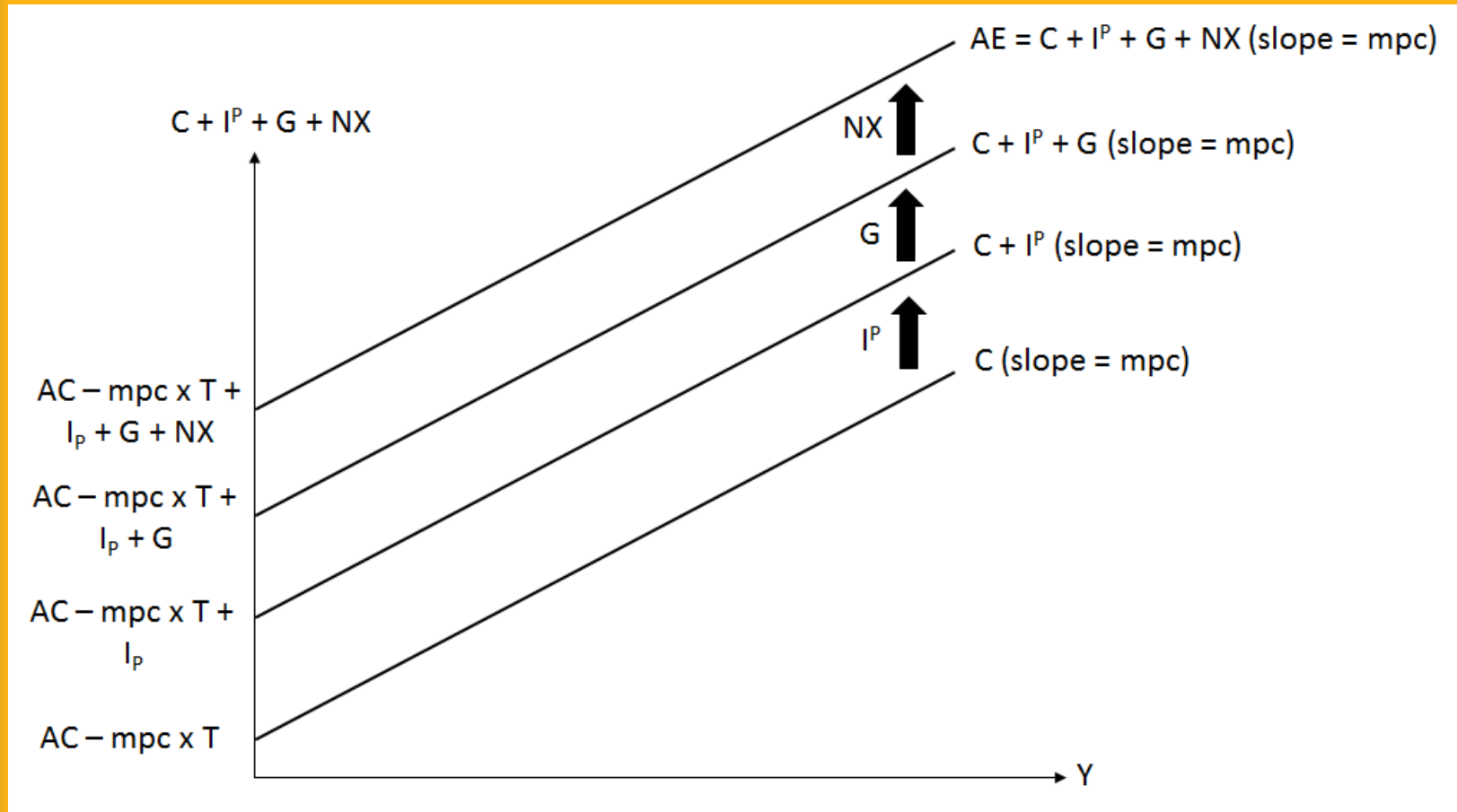


# Building the Aggregate Expenditure Curve





# Building the Aggregate Expenditure Curve



# Where is equilibrium?



- Scenario 1:  $Y = 12000$ , but  $AE = 11000$ 
  - Unsold production?
- Scenario 2:  $Y = 8000$ , but  $AE = 9000$ 
  - Meeting consumer demands without production?
- Scenario 3: ?



# Graphing Equilibrium

