

# Econ 2 - Lecture 17 - 6/2/25

Lecture Quiz #9 Released Wednesday, June 4<sup>th</sup>

→ Due Before Final Exam, Tuesday, June 10<sup>th</sup> at 12<sup>pm</sup>

Discussion Activity #5 → AI-guided studying

Final Exam → 40 Multiple Choice Questions

→ June 10<sup>th</sup> from 12:00 - 2:30<sup>pm</sup>

Practice Final Exam Key Posted Later this Week

For those wanting more practice problems... create your own!

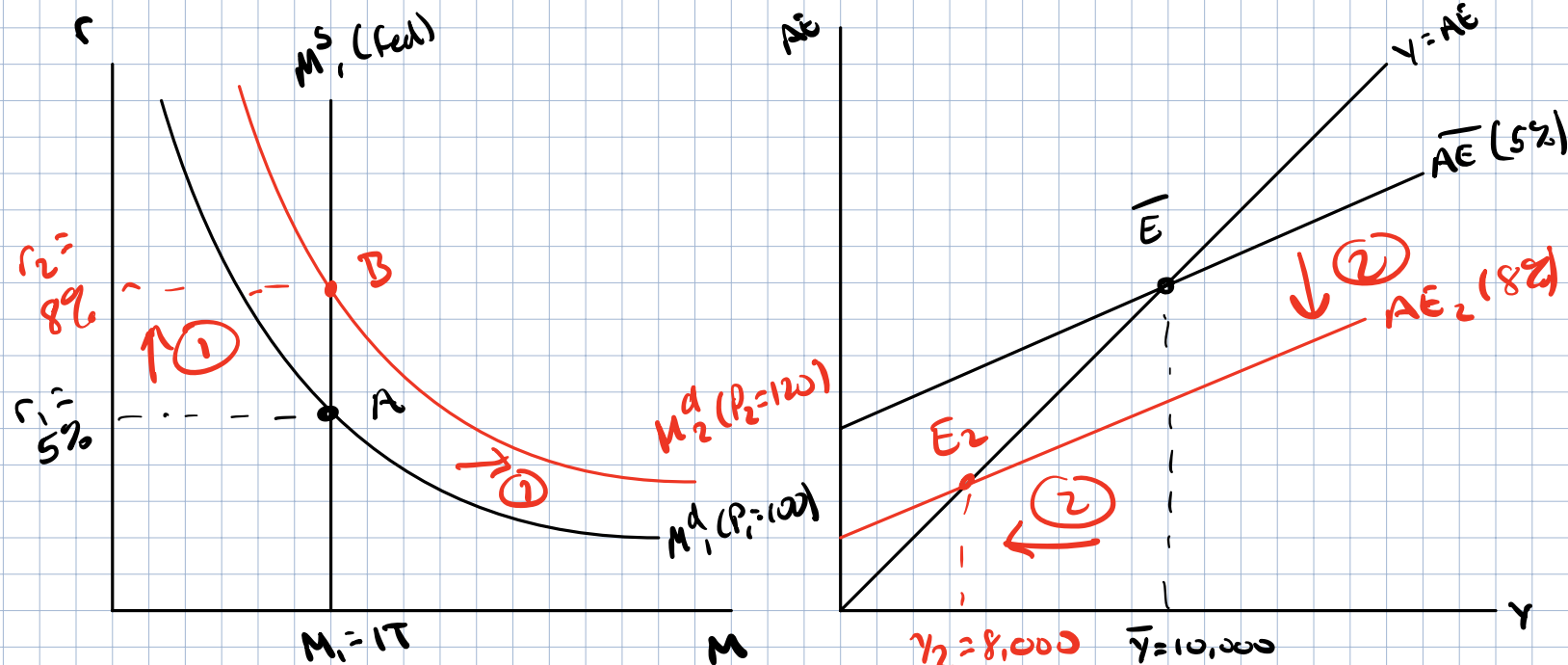
Purpose of Exam: Test understanding → unique looking questions

More practice problems → more unique exam questions

Final Week: Complete Macroeconomic Equilibrium

Last Class: Why is inflation a problem

Start at  $\bar{Y} = 10,000$ ,  $r = 5\%$ ,  $M_1 = 1 \text{ Tril}$ ,  $P_1 = 100$



Prices Rise from  $P_1 = 100$  to  $P_2 = 120$

1) Prices rises,  $M^d$  increases to  $M^d_2(P_2=120)$ ,  $r_1$  to  $r_2$

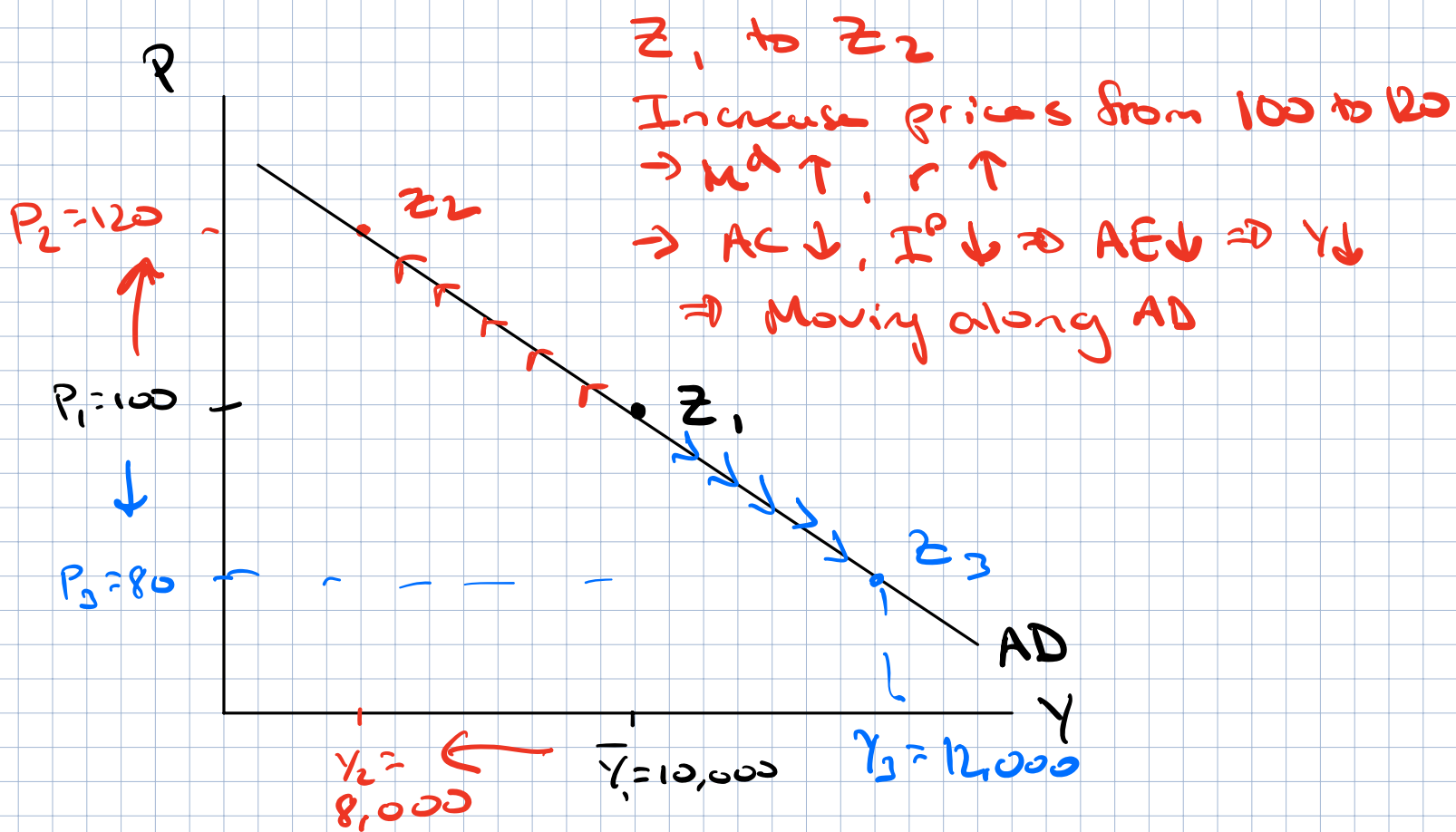
2) Increase  $r \Rightarrow$  Decrease in AC,  $I^P \Rightarrow \downarrow AE \Rightarrow \downarrow \bar{Y}$  to  $Y_2$

Overall:

Started at  $P_1 = 100$ ,  $\bar{Y}_1 = 10,000$   
 $P_2 = 120$ ,  $Y_2 = 8,000$

As price level increase  
equilibrium level of spending ( $Y = AE$ ) decreases

Consolidate findings from money market &  $Y = AE$   
Shows Prices ( $P$ ) vs Equilibrium Output/Spending ( $Y$ )



$Z_1$  represents equilibrium in money &  $Y = AE$   
 $\rightarrow P_1 = 100 \Rightarrow r_1 = 5\% \Rightarrow \bar{Y} = \bar{AE} @ 10,000$

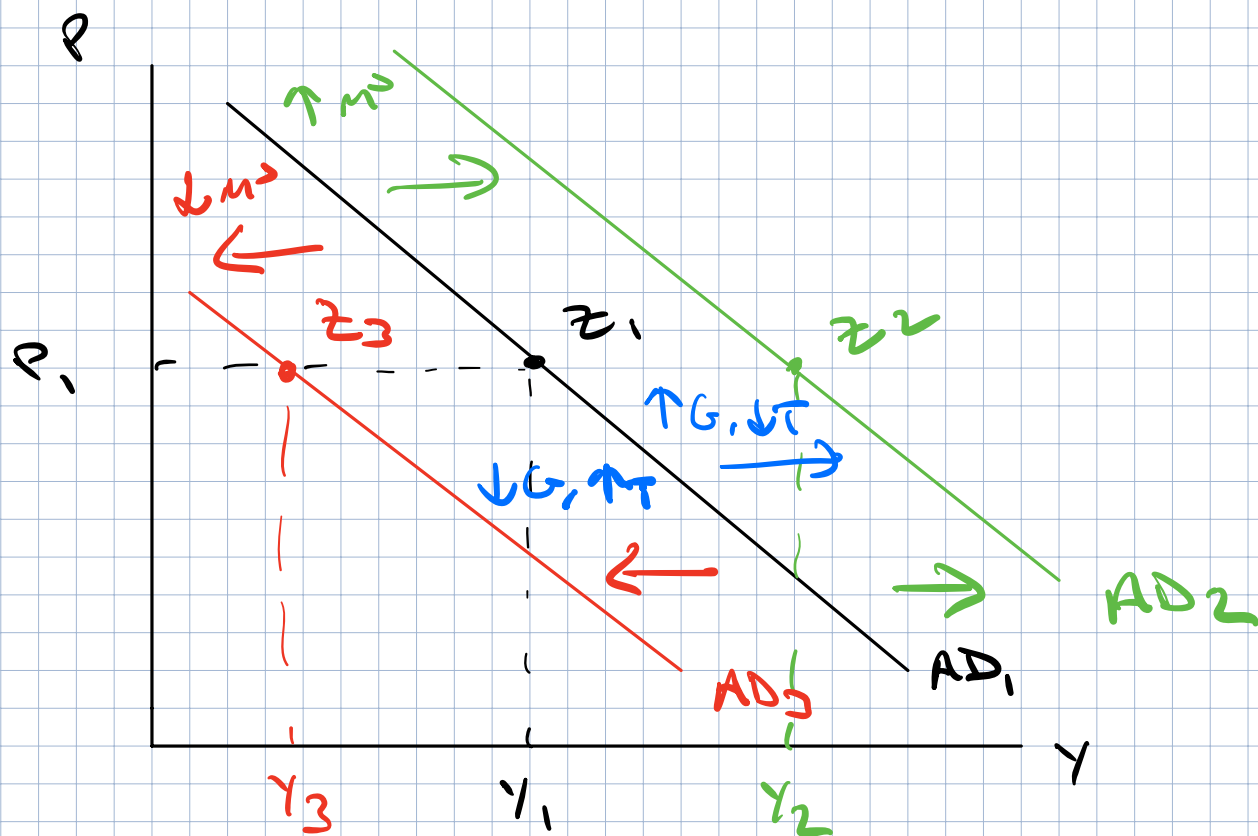
"Equilibrium level of spending at all prices" curve

Aggregate Demand Curve (AD): Prices vs.  $Y = AE$

Does Aggregate Demand ever shift?

What shifts AD curve?

What changes AE other than price?



## Categories of AD Shifters

### 1.) Monetary Policy

⇒  $M^s \uparrow$  (Buy bonds) ⇒  $r \downarrow$  ⇒  $AE \uparrow$  ⇒  $Y \uparrow$  ⇒  $AD \uparrow$  (right)

⇒ General prices of goods are the same (initially)

⇒  $M^s \downarrow$  (sell bonds) ⇒  $Y \downarrow$  ⇒  $AD \downarrow$  (left)

### 2) Fiscal Policy

⇒  $\uparrow G$  or  $\downarrow T$  ⇒  $AE \uparrow$  ⇒  $\uparrow Y$ , no change in  $P$

↳  $\uparrow AD$  (right)

⇒  $\downarrow G$  or  $\uparrow T$  ⇒  $\downarrow Y$ , no change in  $P$  ⇒  $\downarrow AD$  (left)

### 3.) Word Cloud

- ⇒ Direct change in  $I^p$ ,  $G$ ,  $NX$ ,  $AC$
- ⇒ Consumer confidence increases ⇒  $\uparrow AE$ ,  $\uparrow Y$ 
  - ↳ Prices today are the same ⇒  $\uparrow AD$  (right)
- ⇒ Pandemic / Lockdown ⇒  $\downarrow AD$
- ⇒ Housing Crash ⇒  $\downarrow AD$

Add other side of market prices & output

AD: Consumer Spending & Prices

Aggregate Supply (AS):

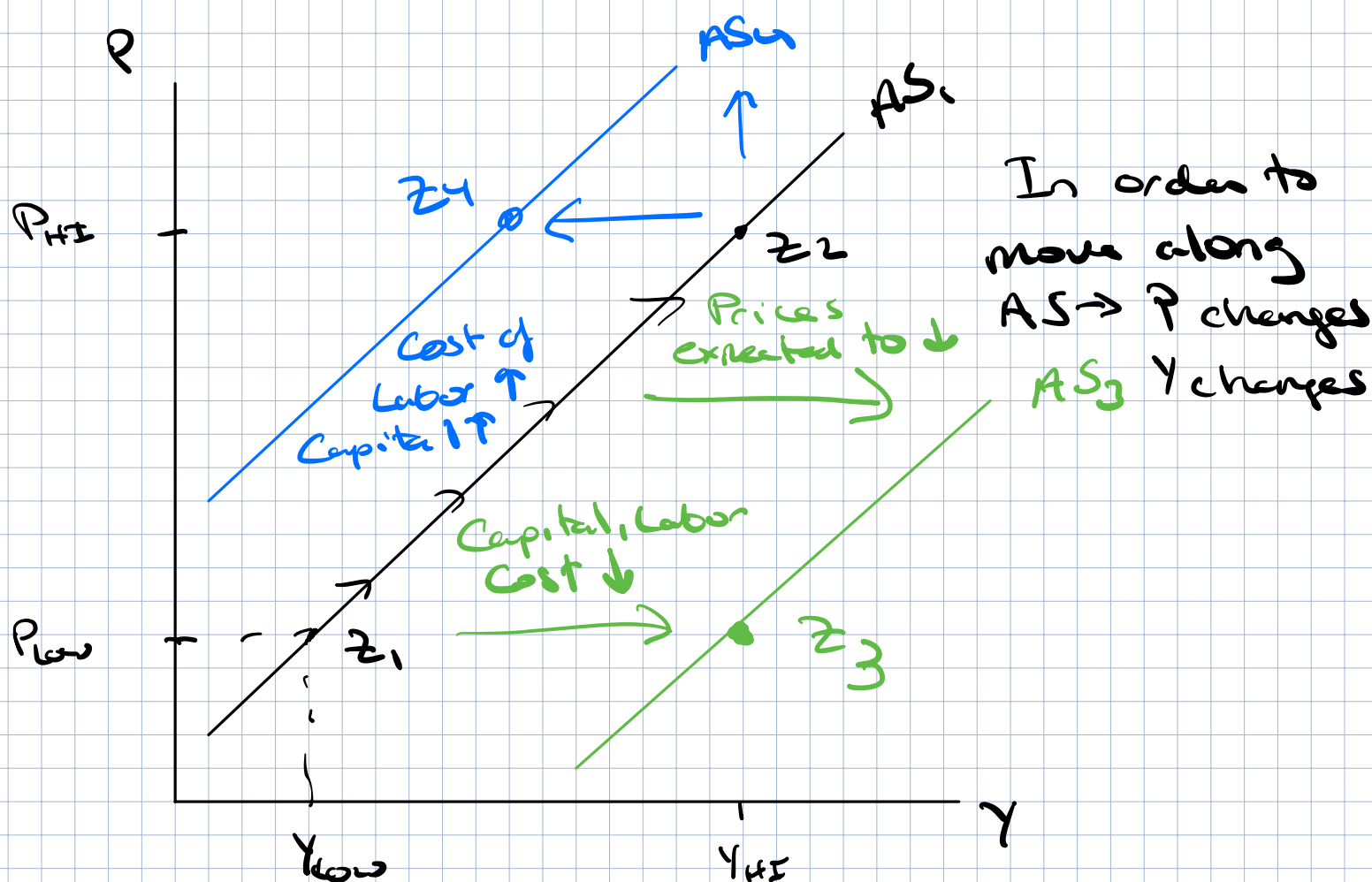
How will firms change production ( $Y$ )  
in response to price changes ( $P$ )?

### Econ 1 / Chapter 2:

Quantity Supplied: amount a firm is  
willing & able to produce / sell at a given price

As  $P \uparrow$ ,  $Y \uparrow$  } Entire economy,  
As  $P \downarrow$ ,  $Y \downarrow$  } aggregate up for all firms

AS: Plot relationship between general price level  
& output

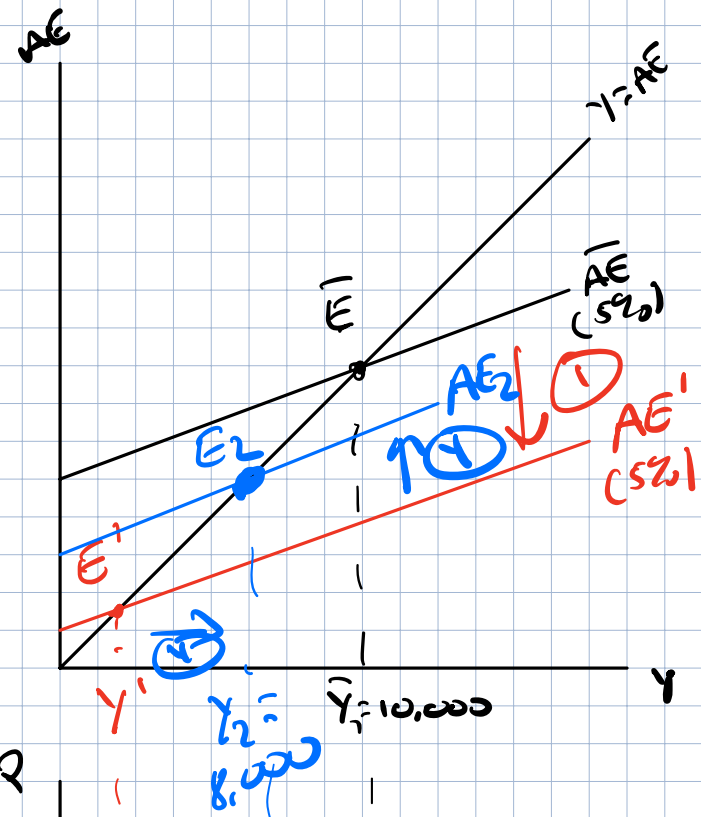
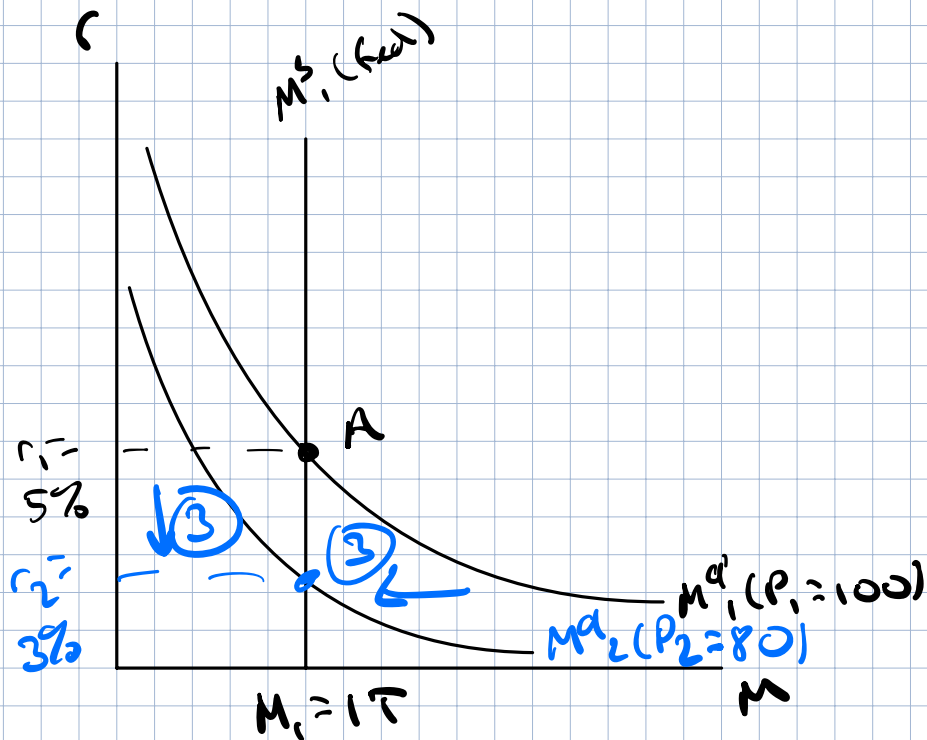


### Shifts in AS:

- Cost of Inputs: Labor (wages) & Capital
- Expectations
- Technology  $\Rightarrow$  makes capital more productive ( $\uparrow Y$ )
- # of firms
- Regulations / Tariffs
- Weather

# Complete Macroeconomic Equilibrium

$$M_s = 1 \text{ Tril}, r = 5\%, \bar{Y} = 10,000, P_1 = 100$$



Firms must be willing to produce  $\bar{Y} = 10,000$  at  $P_1 = 100$   
No pressure for any part of economy to move

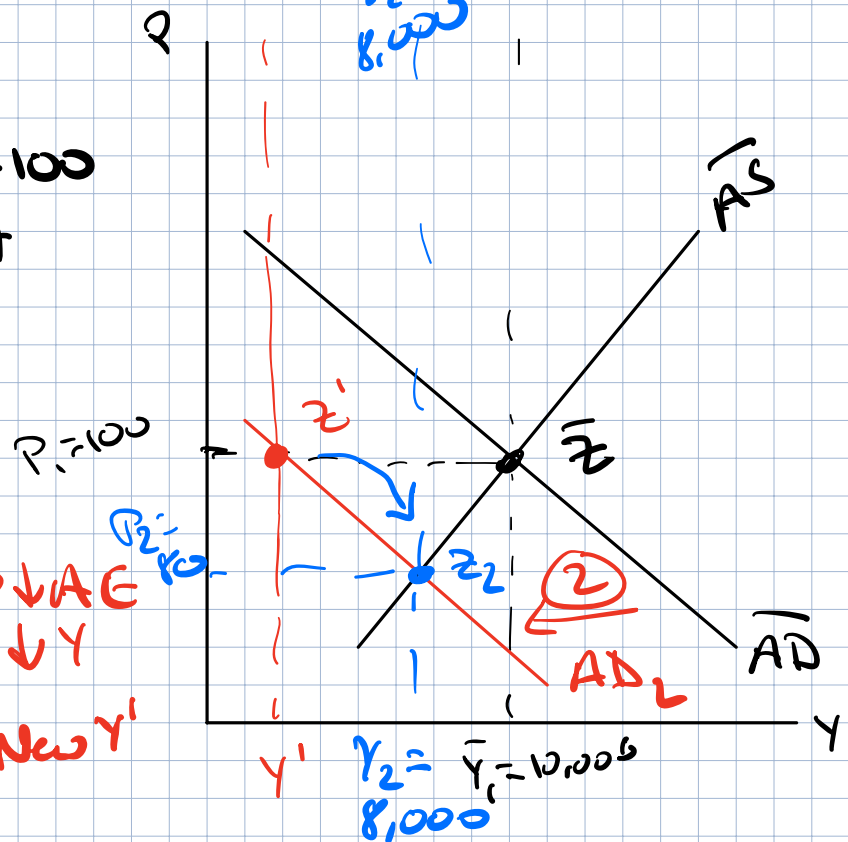
## Analyze Housing Crash

1)  $\downarrow$  wealth,  $\downarrow AC$ ,  $\downarrow I^p \Rightarrow \downarrow AE$   
 $\downarrow Y$

2) Prices initially  $P_1 = 100$ , New  $Y'$   
 $\Rightarrow \downarrow AD$  (Shift)

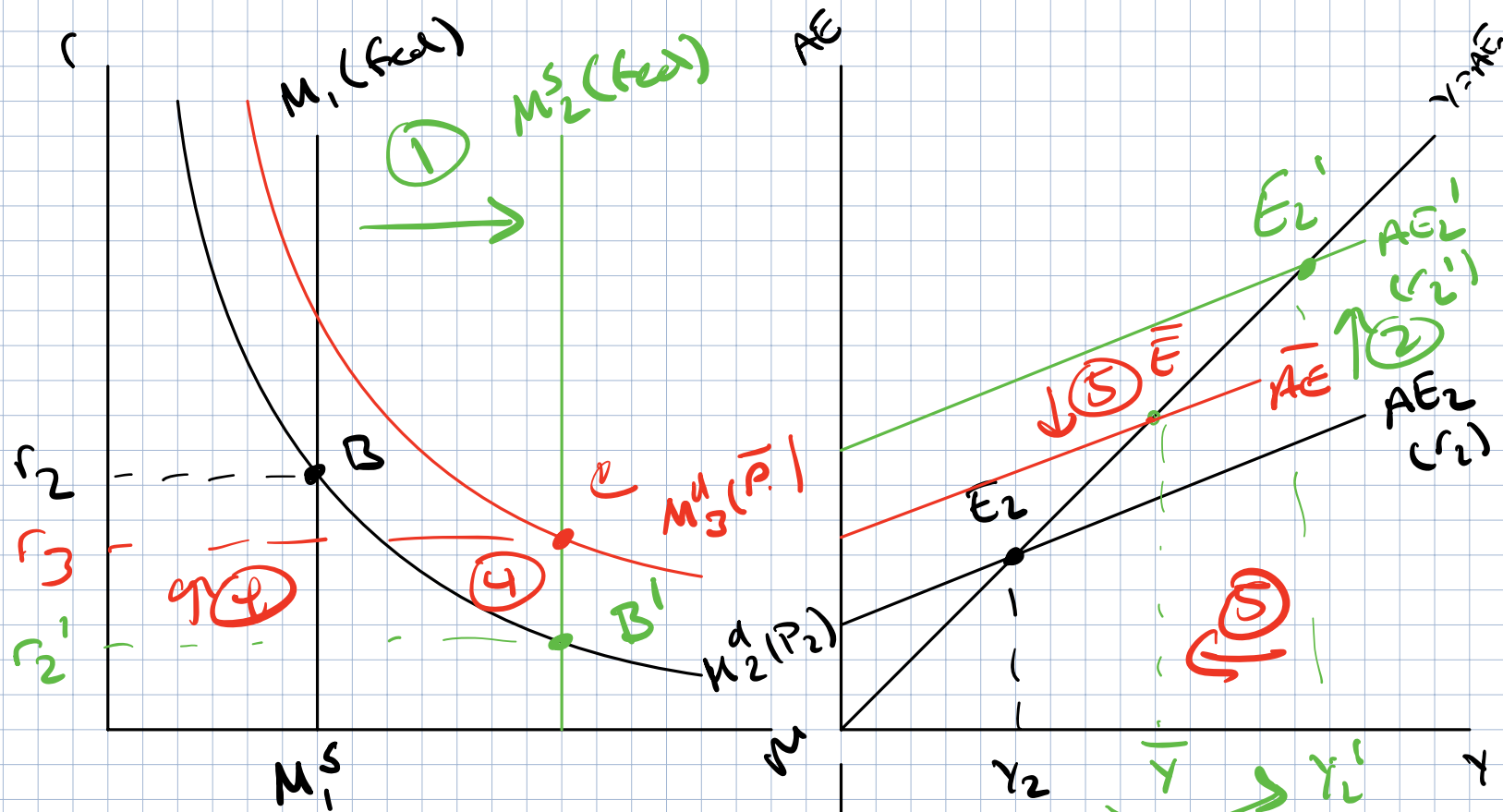
3) Downward pressure on prices,  $P \downarrow$ ,  $M^d \downarrow$ ,  $r \downarrow$

4)  $\uparrow AC$ ,  $\uparrow I^p \Rightarrow \uparrow AE$ ,  $\uparrow Y$  to  $Y_2 = 8,000$



Housing Crash  $\Rightarrow \downarrow Y$  (lower GDP)  
 $\downarrow P$  (lower prices)

Start at  $Y_2 < \bar{Y}$ ,  $r_2$ ,  $P_2 < \bar{P}$ ,  $M^s = IT$ ,  $M^d_2(P_2)$



Buy bonds!

- 1)  $\uparrow M^s \Rightarrow \downarrow r_2$  to  $r_2'$
- 2)  $\uparrow AC, \uparrow IP \Rightarrow \uparrow AE, Y$
- 3) Prices initially unchanged  $P_2 \Rightarrow Y_2' \Rightarrow AD$  shifted right
- 4) Prices rise,  $P_2'$  to  $P_2$   
 $\rightarrow \uparrow M^d, \uparrow r$
- 5)  $\downarrow AC, \downarrow IP \Rightarrow \downarrow AE$  back to  $\bar{Y}$

