

KEYNESIAN MODEL

ASSUMPTIONS

- KEY
- ① \bar{P} (SHORT RUN)
 - ② SUPPLY ADJUSTS TO MEET DEMAND
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③ $T = T_0 + t_1 Y$

↳ set $t_1 = 0$: $T = T_0$

④ $M = M_0 + m_1 Y$

↳ set $m_1 = 0$: $M = M_0$

slope of
AE
= MPC

$$Y = C + I + G + NX$$

AGG. DEMAND /

AGG. EXPENDITURES

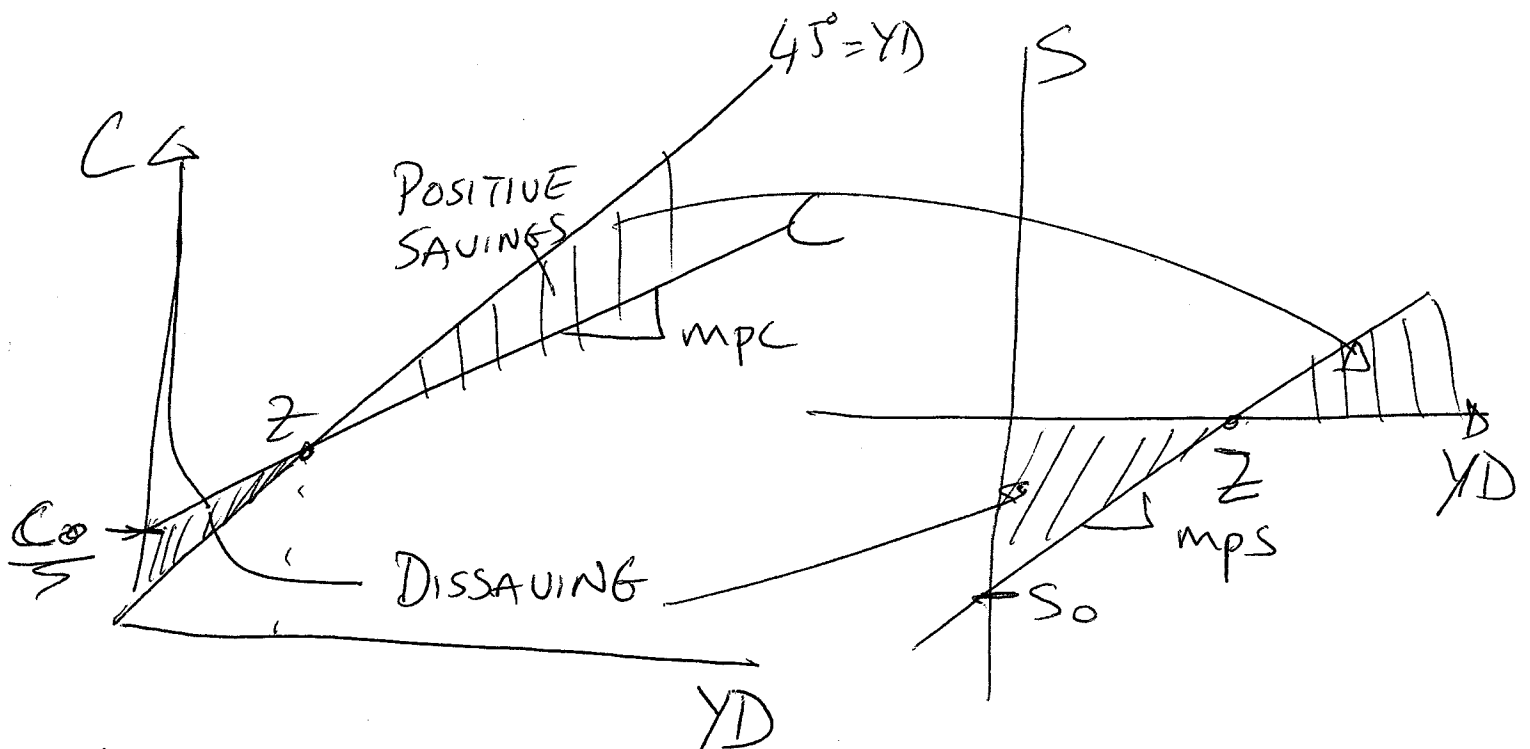
CONSUMPTION FUNCTION

$$C = C_0 + c_1(Y - T) = 475 + \frac{3}{4}(Y - T)$$

Autonomous Consumption mpc: $0 \leq c_1 \leq 1$

$$S_p = S_0 + s_1(Y - T) = -475 + \frac{1}{4}(Y - T)$$

Autonomous Savings mps: $0 \leq s_1 \leq 1$



- Note:
- ① $0 \leq c_1 \leq 1$; $0 \leq s_1 \leq 1$
 - ② $c_1 + s_1 = 1$
 - ③ $C_0 + S_0 = 0$

DERIVE THE AE SCHEDULE

$$C = 475 + \frac{3}{4}(Y - T)$$

$$I = 150$$

$$G = 250 \quad ; \quad T = 100$$

$$X = 150 \quad ; \quad M = 50$$

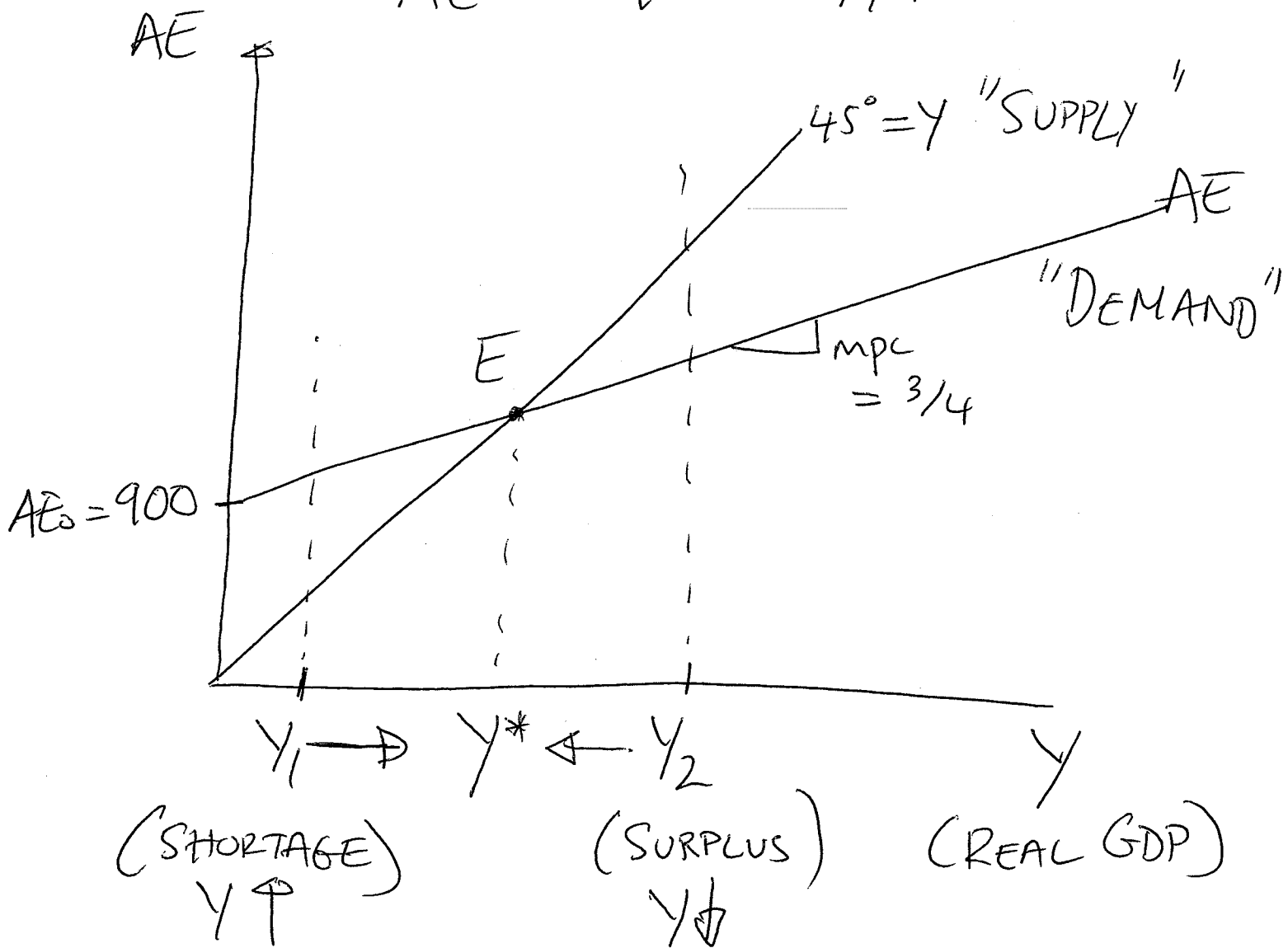
$$AE = C + I + G + NX$$

$$= 475 + \frac{3}{4}(Y - 100) + 150 + 250 + 150 - 50$$

$$AE = 900 + \frac{3}{4}Y$$

$$= \underbrace{AE_0}_{\text{Autonomous Expenditures}} + \underbrace{\left(\frac{\text{slope of the AE}}{\text{the AE}}\right) \times Y}_{\text{Induced Expenditures}}$$

$$AE = 900 + \frac{3}{4}Y$$



At E : No unplanned changes in inventory.

At Y_1 : Unplanned drop in inventory.

At Y_2 : " increase in inventory.