CH 3 : National Income Equilibrium

Expenditure App: $Y = C + I + G + (X - M)$ CH2

< actual >

This chapter

$DAE = C + I + G + (X - M)$ < Desired >

$\Downarrow$

(linear)

$f(Y)$ = a function of Y

$\Downarrow$

equilibrium : $Y = \text{constant}_0 + \text{constant}_1 \cdot Y$

$Y = DAE$

$\Downarrow$

Solve for Y_E^*

* $C = C_0 + bY_d \quad , \quad Y_d = Y - T = C + S$

$S = Y_d - C = -C_0 + (1-b)Y_d$

$MPC = \dfrac{\Delta C}{\Delta Y_d} \; , \; APC = \dfrac{C}{Y_d}$

$MPS = \dfrac{\Delta S}{\Delta Y_d} \; , \; APS = \dfrac{S}{Y_d}$

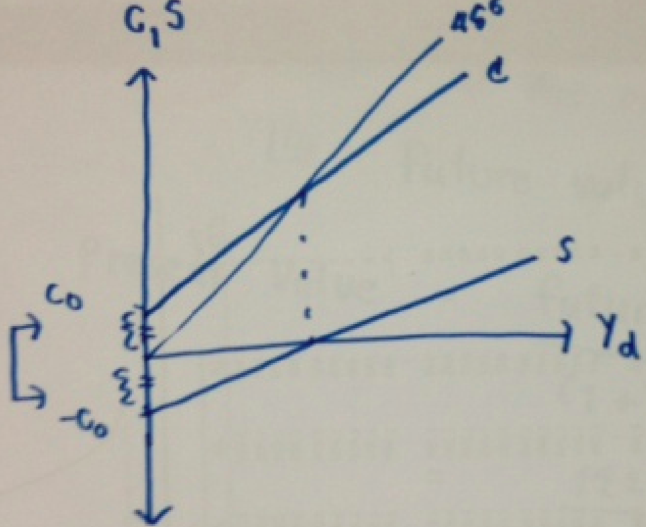
* Break-even $Y_d \Rightarrow C = Y_d$

* $C = C_0 + bY_d \;\; (Y_d = Y - T \; ; \; T = T_0) \Rightarrow C = C_0 + b(Y - T_0) = \underline{C_0 - bT_0} + \underline{b}Y$

$S = Y_d - C \Rightarrow S = -C_0 + (1-b)(Y - T_0) = \underline{-C_0 - (1-b)T_0} \underline{+ (1-b)}Y$

$= -C_0 + (1-b)Y_d$

*



$$C = C_0 + bY_d$$

$$S = -C_0 + (1-b)Y_d$$

* Can S be greater than C?

⇒ Yes

depend on C, S functional form

linear : $C = C_0 + \underline{\underline{b}}\, Y_d$

$S = -C_0 + \underline{\underline{(1-b)}}\, Y_d$

⇓

Slope

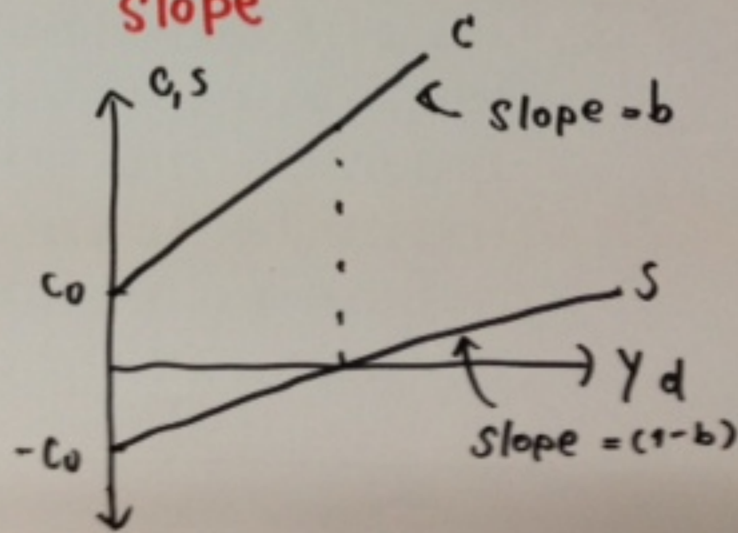
C steeper than S : $C > S$

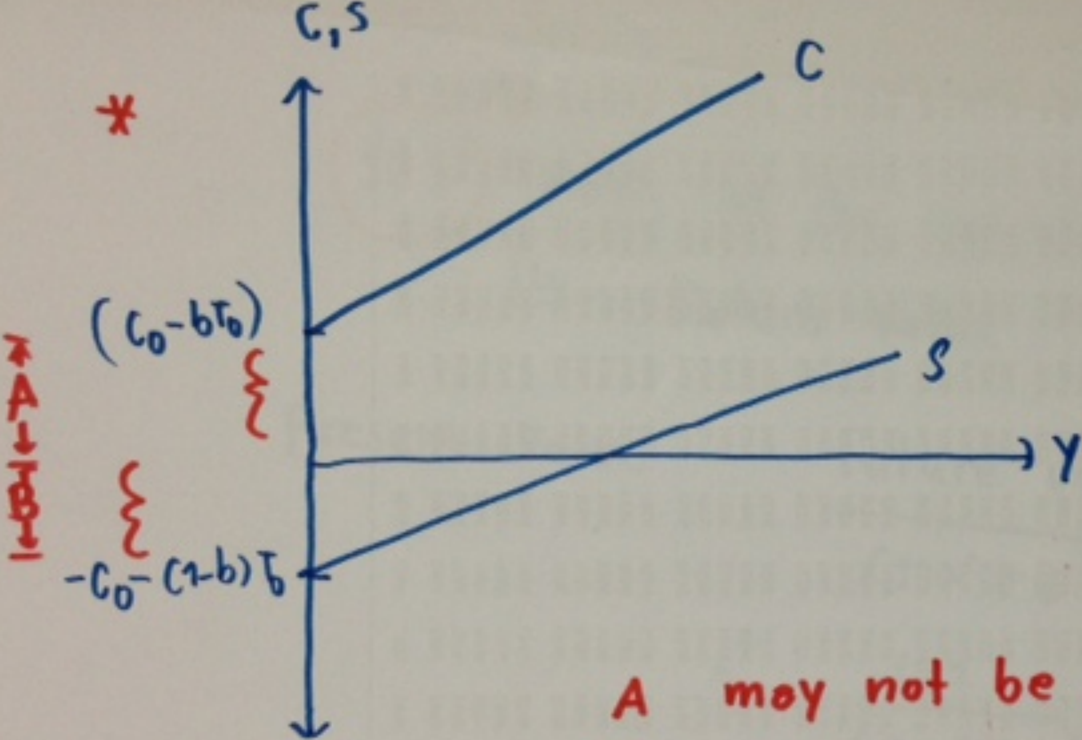
S steeper than C :

it is possible

that $S > C$

when Y_d is very large





$$C = [C_0 - bT_0] + bY$$

$$S = -C_0 - (1-b)T_0 + (1-b)Y$$

A may not be equal to B