Keynesian Cross and the Muliplier

1. The Keynesian consumption function assumes that 0 < MPC < 1; what is the basis for such assumption?

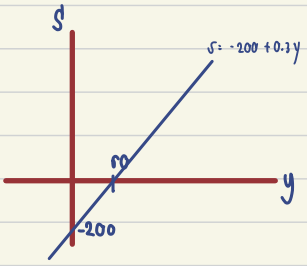
increase their consumption as their income increase, but not by as much as the increase in their income.

2. Assume a CLOSED economy with NO government. Let the autonomous consumption be 200 and MPS be 0.3. Draw and write equations for both saving and consumption functions.

saving

$S = -a + (1-b)y$

$S = -200 + 0.3y$



consumption

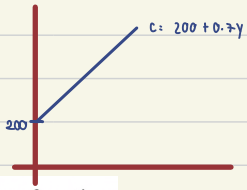
$C = a + by$

$C = 200 + (MPC)y \rightarrow MPS = 1 - MPC$

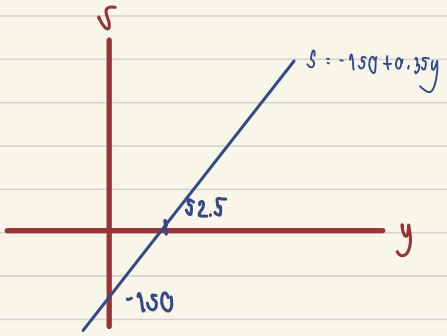
$0.3 = 1 - MPC$

$MPC = 0.7$

$C = 200 + 0.7y$



3. Let the saving function be S = -150 + 0.35Y. Find and draw the consumption function.

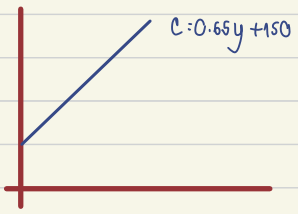


$S = Y - C$

$C = Y - S$

$C = Y + 150 - 0.35y$

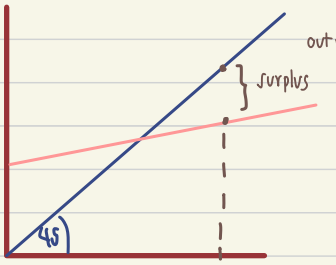
$C = 0.65y + 150$



4. How do the followings affect the AE graph (i.e. explain how the graph changes) and the equilibrium output?

1. I↓ , AE↑ , y^*↓
2. G↑ , AE↑ , y^*↑
3. S_0↑ , C↓ , AE↓ , y^*↓
4. MPS↑ , MPC↓ , AE↓ , y^*↓
5. T↑ , C↓ , AE↓ , y^*↓

5. In the Keynesian Cross Model, suppose that aggregate output is greater than aggregate expenditure. Explain the adjustment process towards the equilibrium.



· unsold output is unsold product, so they cut back on production for moving the economy towards eqbm.

6. Let C = 60 + 0.6Y and I = 20. Find the equilibrium output with the saving/investment approach.

demand = supply
AE = y

$y = C + S$
$y = 60 + 0.6y + S$
$0.4y - 60 = S$

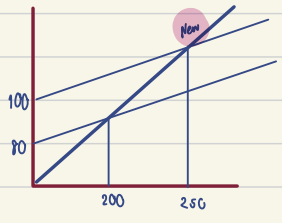
$S = I$
$0.4y - 60 = 20$
$0.4y = 80$
$y = 200$ # eqbm output

7. Let S = -60 + 0.4Y and I = 20. Find the equilibrium output with the standard approach. Now, suppose I increases by 20. Find the new equilibrium and the investment multiplier.

$S = -60 + 0.4y$ $I = 20$ find y^* standard approach $y = AE$

$C = y - S$
$C = y - (-60 + 0.4y)$
$C = y + 60 - 0.4y$
$C = 60 + 0.6y$

$AE = C + I$
$= 60 + 0.6y + 20$
$= 80 + 0.6y$
$y = 80 - 0.6y$
$y^* = 200$



I increase by 20
$60 + 0.6y + 40$
$y = 100 + 0.6y$
$y^* = 250$

investment multiplier
$\frac{\Delta y^*}{\Delta AE} = \frac{50}{20} = 2.5$

8. With the multiplier effect, an injection of money (for example, investment) can lead to a greater proportional increase in output. Explain how this can happen.

when money injected, Firm have more money to operate their business. That means firm can buy more machine, hire more labor. Therefore, there are more money in flow of income, labor have more income, and increase in output.

9. How is the investment multiplier related to MPC? Explain the intuition behind such relationship. (Hint: Question 9)

When MPC increase, I multiplier will increase too.

explain : When there is expenditure, firms receive more money and produce more for demand. Therefore, when firm reciave more fund, they can use it to buy new machine, pay to labor. When labor have more money in circular flow, and size of multiplier and change output.

10. What is the Paradox of Thrift? Explain it with diagram.

· Paradox of thrift states that increasing in autonomous saving leads to decrease in aggregate demand. Therefore, aggregate output decrease.