Quiz 2 (10%)

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Final Exam Quiz

THOSE WHO COPY YOUR FRIENDS OR LET YOUR FRIENDS COPY YOU WILL BE AWARDED ZERO.

ปล ผมจดไว้แล้วนะครับว่าตอนมิดเทอมใครลอกของใคร ครั้งนี้ขอเตือนเลยว่าผมไม่ยอมแล้วนะครับ

ผมต้องลงโทษ ไม่งั้นต่อไปคงไม่มีใครอยากซื่อสัตย์

Submission Guide: You can upload up to 3 files on Moodle. If the whole file is too large, you should break it down and upload 3 files, each containing 1 question.

Question 1

Draw 3 diagrams (Keynesian Cross, Money Market, IS-LM) to **show and briefly explain** the followings:

a. The crowding-out effect when the government increases its spending
b. Another policy that can be used to avoid the crowding-out effect

Question 2

Draw the IS-LM diagram. **Pick ANY point on either the IS curve or the LM curve** (NOT the general equilibrium point). ย้ำว่าเลือกจุดไหนก็ได้ที่อยู่บนเส้น IS **หรือ** LM **ที่ไม่ใช่จุดตัดตรงกลางของสองกราฟ**

Use the diagram that you draw to briefly explain how the two markets at **your current point** will adjust towards the general equilibrium.

Question 3

Assume that the liquidity preference function (real money demand) is given by the $L(Y, i) = L_0 + L_Y Y - L_i i$.

Note that **L_0 is autonomous money demand**, while other terms are the same as in the lecture slides.

Now suppose that L_0 falls.

a. Give ONE reason why this may happen.
b. Show and briefly explain the effect of the fall in L_0 on the 4 diagrams (Keynesian Cross, Money Market, IS-LM, AD).

Question 1

Draw 3 diagrams (Keynesian Cross, Money Market, IS-LM) to **show and briefly explain** the followings:

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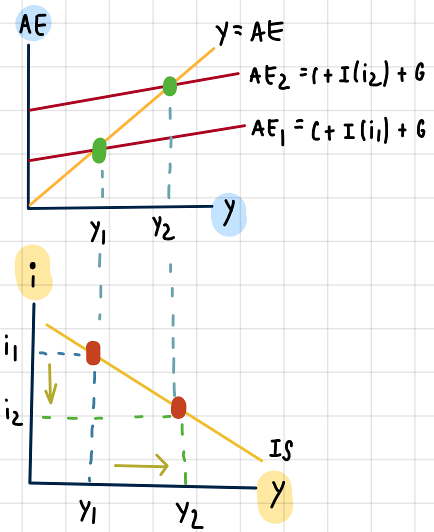
keynesian cross is AE & Y diagram

suppose i_1 Fall to i_2

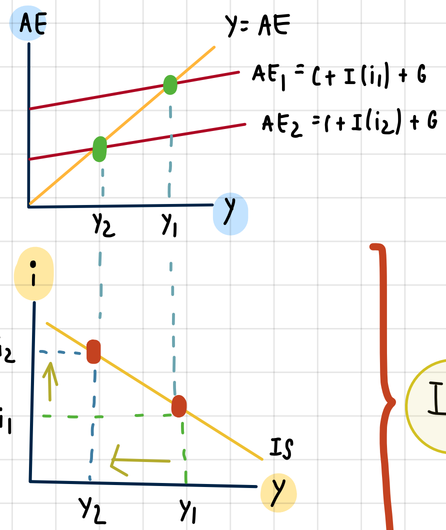
$i\downarrow \rightarrow I\uparrow \rightarrow AE\uparrow \rightarrow Y\uparrow$



∴ when interest Rate fall the output will increase

suppose i_1 increase to i_2

$i\uparrow \rightarrow I\downarrow \rightarrow AE\downarrow \rightarrow Y\downarrow$

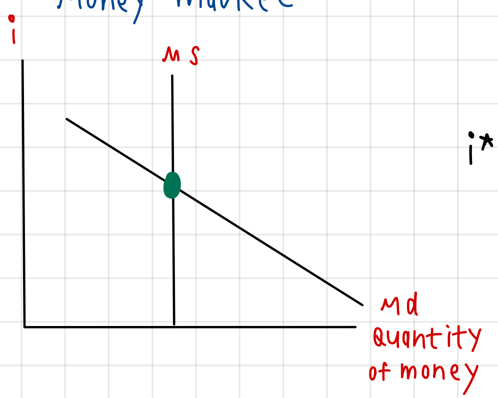


∴ when interest Rate raise the output will decrease

IS

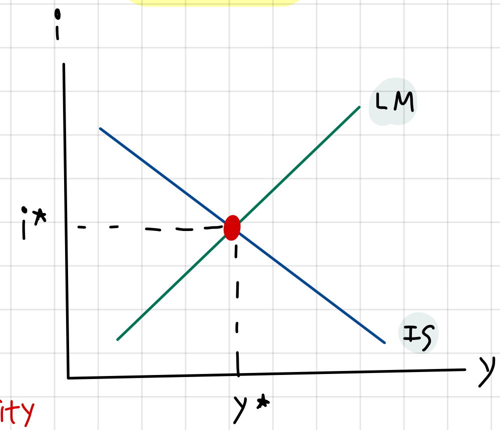
How to derive

Money market

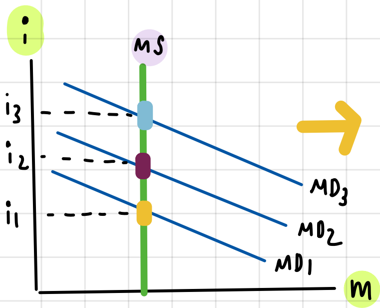


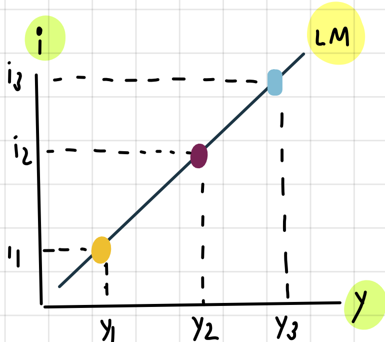
general Equilibrium

IS vs LM



derive LM curve from money market





LM

How to derive

a. The crowding-out effect when the government increases its spending

Crowding -out effect is caused by government increases its spending

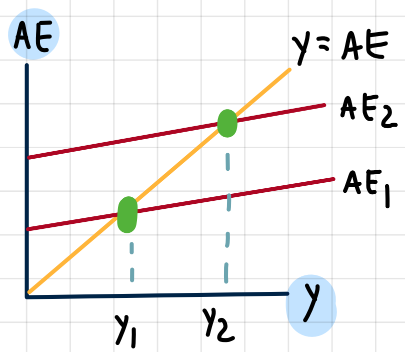
Crowding out Effect definition! — large borrowing = rises in the interest Rate

Crowding out Effect cause of government borrow a money it will be made the level of interest rate will higher than before [government borrow money → interest Rate increase ($i\uparrow$) → Investment reduce ($I\downarrow$)], so in the diagram IS curve will shift right Because the interest Rate increasing from i_1 to i_2, and it make general Equilibrium change from E_1 to E_2, and output at E_2 is y_3 when compare with y_2 it sure that y_3 lower than y_2 so, this problem call Crowding Effect (the output are lower than expectation)

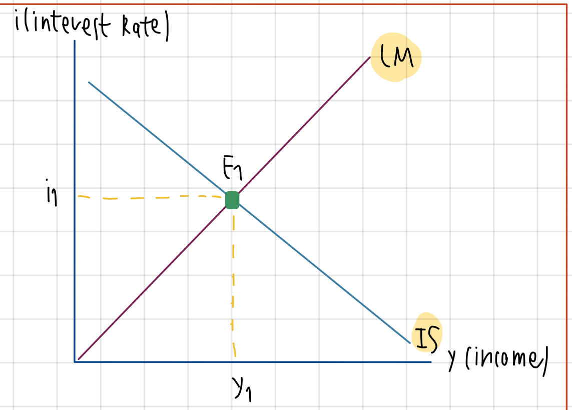
note: Crowding out effect : role of government (Fiscal policy) it affects the IS curve shift!

∴ Higher interest Rate discourages investors affecting in the decline of aggregate expenditure & output.

In conclusion, Crowding out effect is the aim of government to increase the output but the actual output is lower than expection.

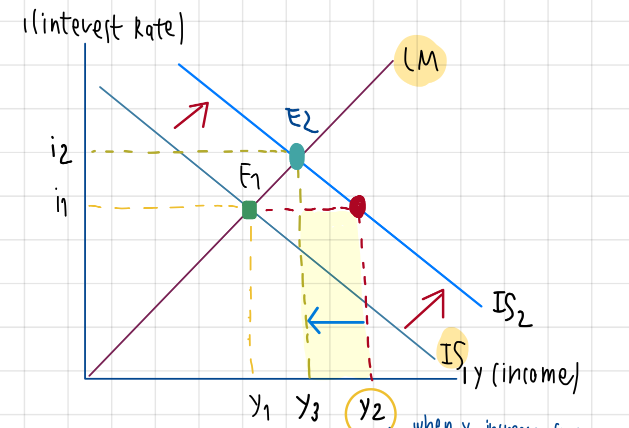


IS shift up because AE raise cause of government spending are increase



general Equilibrium is E_1 when LM & IS curve are intersect together (y_1, i_1)

Crowding out Effect *



when Y_2 increase from Y_1 the interest rate are increasing at i_2 **

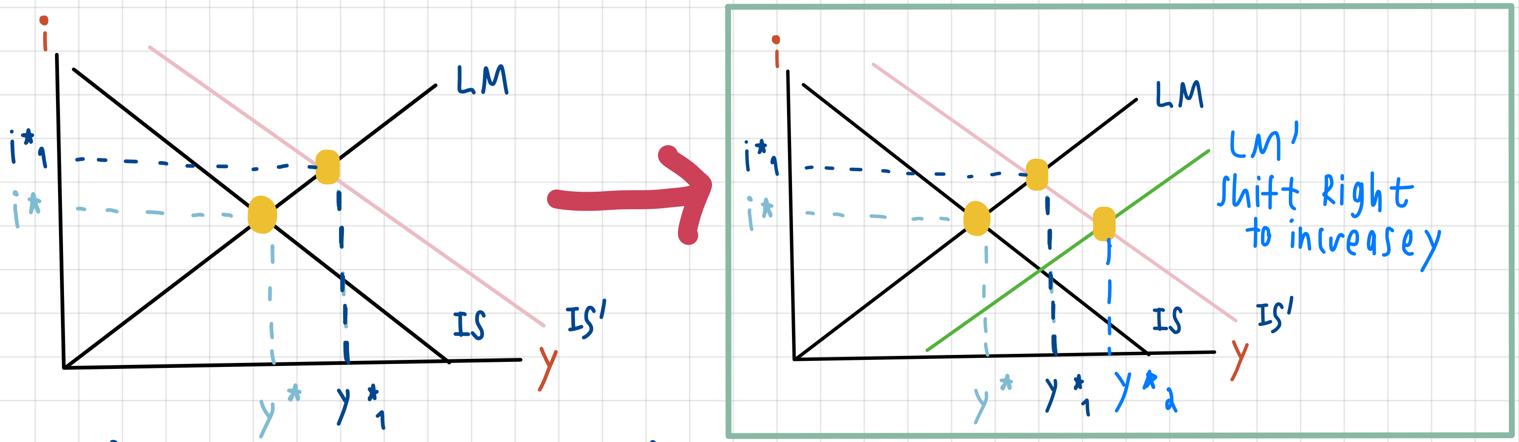
Crowding out Effect = IS curve shift to the right side. (IS_1 shift to IS_2)

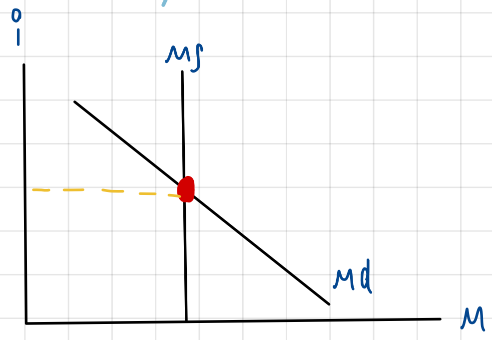
b. Another policy that can be used to avoid the crowding-out effect

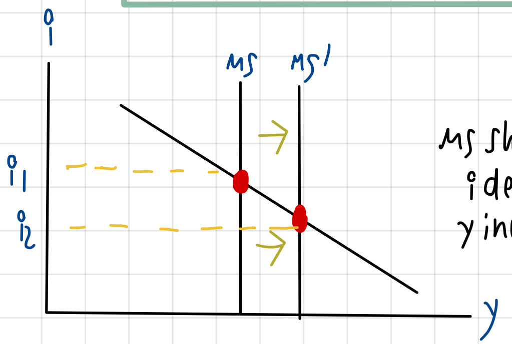
when crowding out effect happened, it can use monetary policy used to avoid the crowding out effect problem.

In term of monetary policy role → central Bank decrease interest Rate to control money system in economy by shift LM curve to the right, and you can see the interest rate will decrease.

in conclusion, Monetary will come to control money market if interest Rate decrease the output are increase Because have more aggregate Expenditure, so in LM curve the curve will shift Right to increase output (y↑)







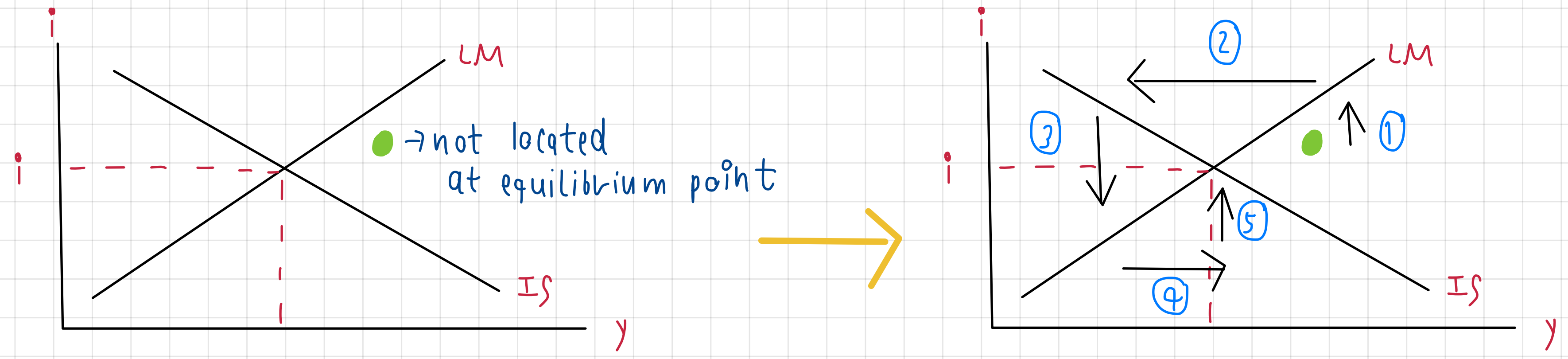
$\left.\begin{array}{l}\text{Ms shift right} \\ \text{i decrease} \\ \text{y increase}\end{array}\right\}$ So LM curve will shift to the right!

Question 2

Draw the IS-LM diagram. **Pick ANY point on either the IS curve or the LM curve** (NOT the general equilibrium point). ย้ำว่าเลือกจุดไหนก็ได้ที่อยู่บนเส้น IS **หรือ** LM **ที่ไม่ใช่จุดตัดตรงกลางของสองกราฟ**

Use the diagram that you draw to briefly explain how the two markets at **your current point** will adjust towards the general equilibrium.

I will give example by this case (the green point no located at equilibrium point)



How to adjust

it staring by money market y

MM: MS↓, i↑

GM: i↑, I↓, AE↓ Y↓

MM: Y↓, Md↓, i↓

GM: i↓, I↑, AE↑, Y↑

MM: Y↑, Md↑, i↑

First green point is located in disequilibrium, there are excess money demand so Central Bank should increase the Higher interest rate, And High interest Rate make discourages in investors so the aggregate demand & aggregate output become fall. Lower income (Y↓) make less money demand from people and interest fall to Lower interest rate it makes many investors to invest more this cause it will be raise both aggregate demand and output, so firm will produce more of products and it increase money demand (MD↑). Higher incomes makes people to demand more money and money demand raises the interest rate also raise. This process will continue until both market reach in the general Equilibrium.

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Note that **L_0 is autonomous money demand**, while other terms are the same as in the lecture slides.

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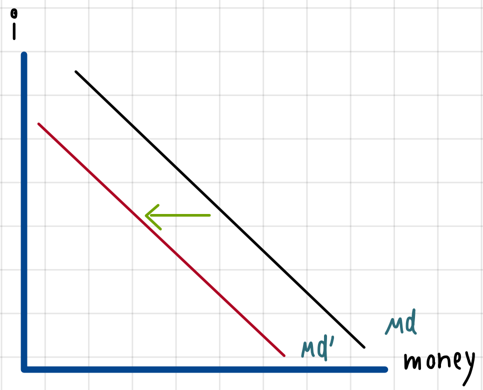
$L(y, i) = L_0 + L_y y - L_i i$

L_0 is autonomous money demand (md)

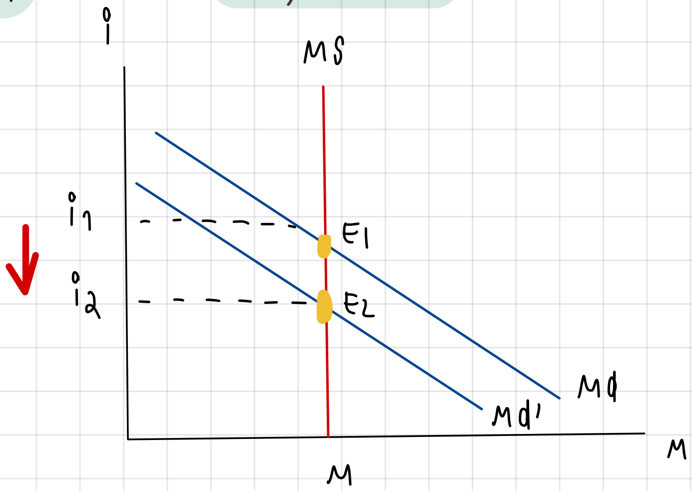
a)



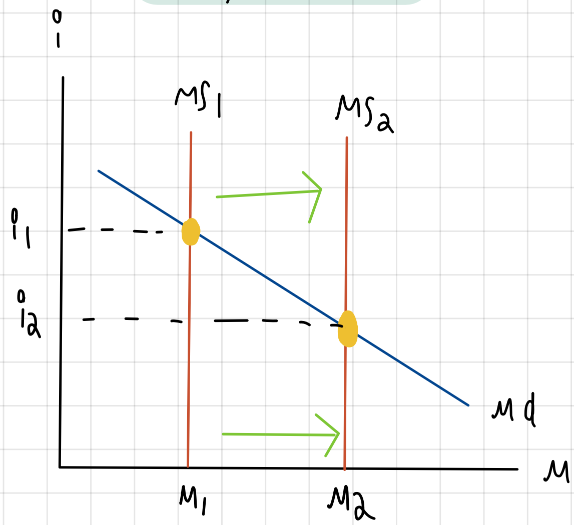
ans L_0 is autonomous money demand (md) can decrease or shift to the left because the preference that make people holding less cash from their personal factor, Income (cause of income) when we richer, we want to buy more goods but when we poorer, we want to save more money and have less purchasing power to buy commodities.

b)

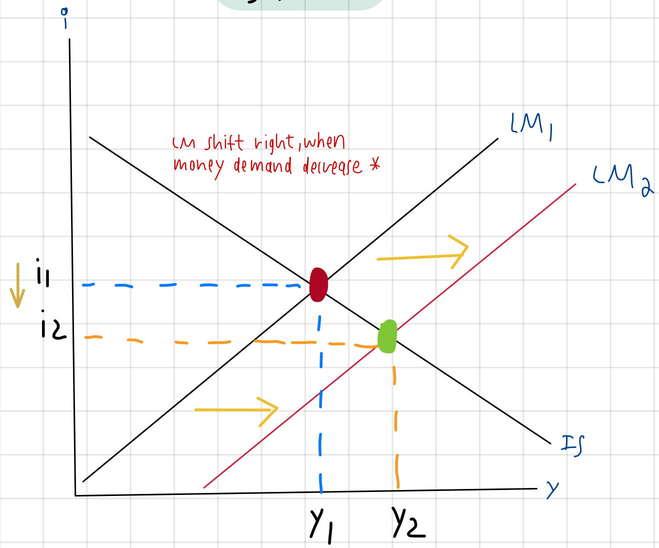
money market



money market



IS / LM

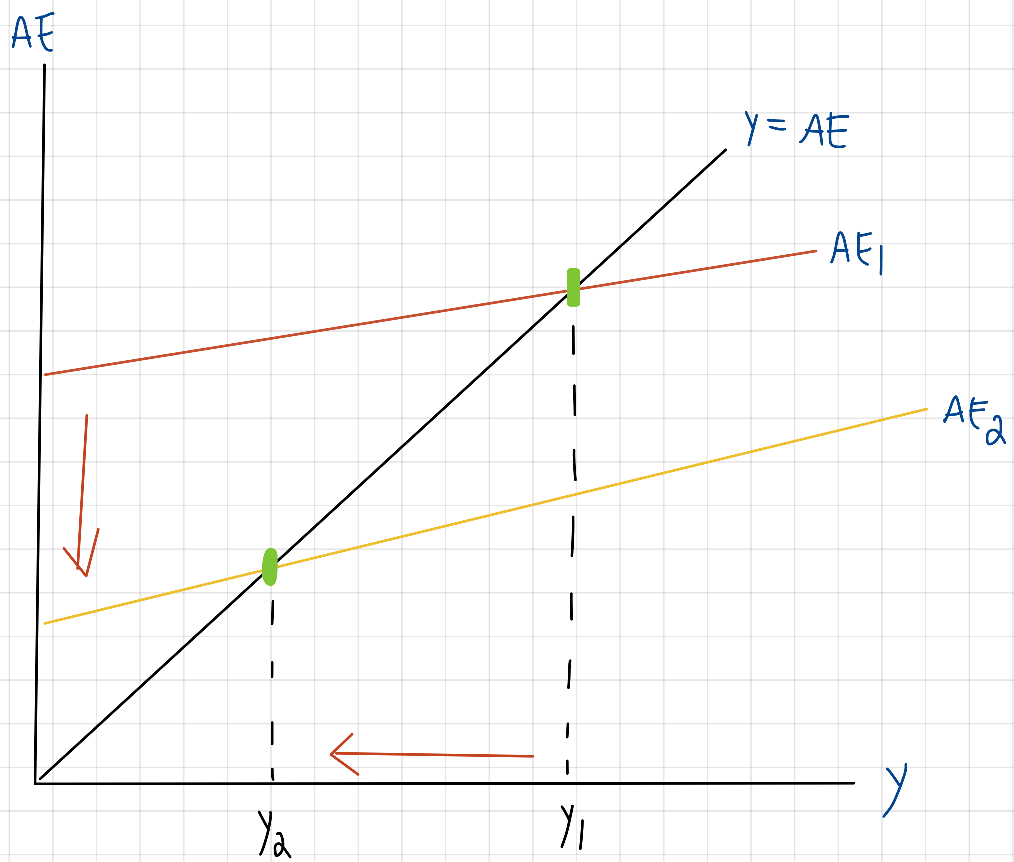


in term of money market you can see from diagram if md shift down md to md' the interest Rate will decrease *

The LM curve shift left when the money supply (Real money balances) decrease it also shift right when money demand decrease.

In term of IS - LM

money demand is related to LM curve so when money demand decrease the interest Rate is also decrease, so the LM curve will Shift to the Right keynesian cross



in term of keynesian cross, when autonomous money demand decrease to Aaggregate Expenditure is decrease and y are also decrease

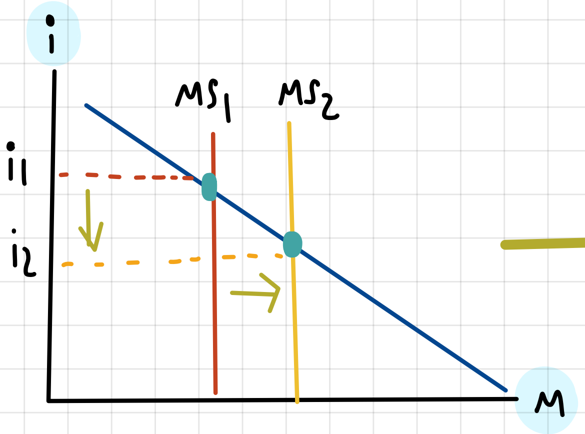
cause of income (y) If people have less income the aggregate expenditure or demand are decrease *

$P\uparrow = Md\uparrow = i\uparrow = I\downarrow = Y\downarrow = AE\downarrow$

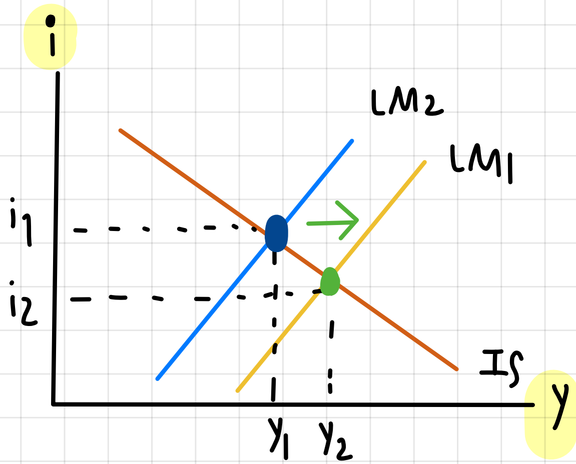
$\boxed{P\downarrow = Md\downarrow = i\downarrow = I\uparrow = y\uparrow = AE\uparrow}$

↳ money demand decrease → money supply shift to the right
(cause of price level decrease

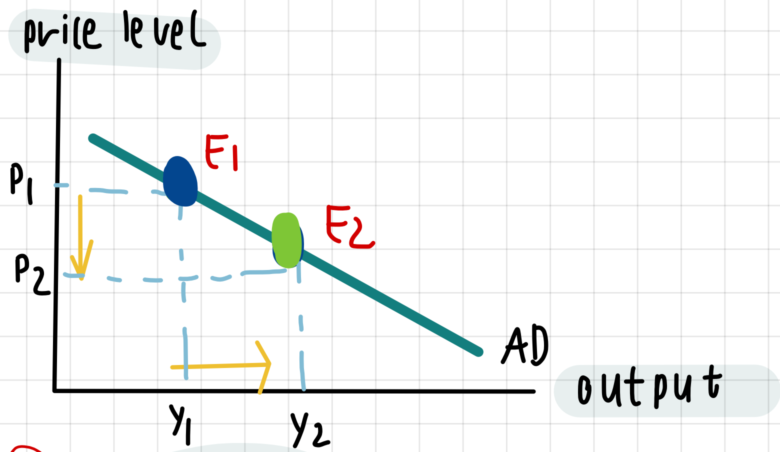
when price level decrease



① money market



② shift LM curve



③ derived to AD curve