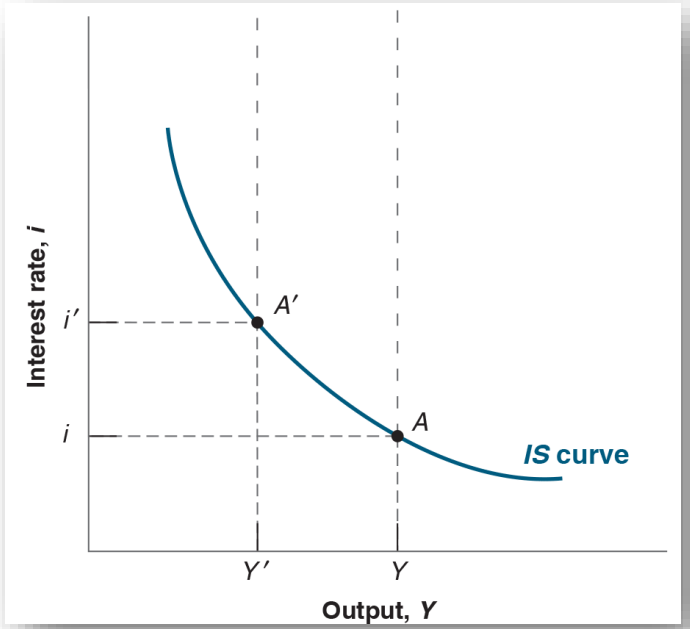
Exercise 4

- Economy:
  - $C = 70 + 0.8Y_D$
  - $I = 200$
  - $G = 200$
  - $T = 200$
- Assume that G is cut to 150
  - Solve for equilibrium output. Is it equal to demand?
  - Compute private plus public saving. Is the sum of private and public saving equal to investment spending?

Exercise 5

- True or false:
  The IS curve is less steep if output is more reactive to changes in the interest rate



Exercise 6

country	Nominal policy interest rate	Expected inflation	Real policy interest rate	Risk premium	Nominal borrowing interest rate	Real borrowing interest rate
A	3	0		0		
B	4		2	1		
C	0	2		4		
D				2	6	3
E	0	-2				5

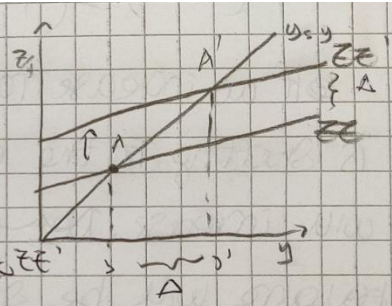
- Fill in the table
- Which situation(s) correspond to the case where the nominal policy interest rate is at the zero lower bound? Explain why low nominal policy interest rates constitute a risk for economic policy.
- Which situation has the highest risk premium? What is the rationale for demanding a risk premium?
- Why is it so important when the nominal policy interest rate is at the zero lower bound to maintain a positive expected rate of inflation?

Exercise 7

- You are a policy advisor for a government with a balanced budget (G=T)
- Question is: can policy changes in G and T that maintain a balanced budget boost aggregate demand and production?
  - is it possible to affect output through increasing both G and T by 1 unit each?
- Tip: what happens to final equilibrium if
  - G increases by 1 unit
  - T increases by 1 unit

Describe the mechanisms of the multiplier related to fiscal policy

3. Fiscal multiplier is in
a) closed economy could be seen in this graph since, after increase in EE and shift of the line upward to EE' the ΔY ≥ ΔE according to multiplier.



Moreover if we take into consideration consumption function and all the output function, the multiplier is given as $\frac{1}{1-c_1}$ and c_1 is from C function: $C(C_0+C_1(Y))$ indicates the marginal propensity to consume.

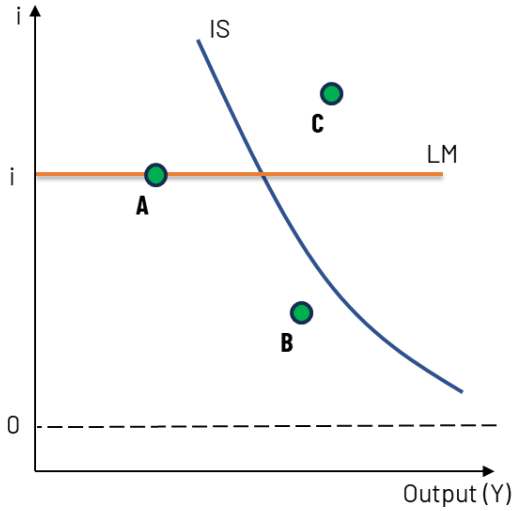
We arrive at $\frac{1}{1-c_1}$ by solving output function by Y.

3) In a close economy the fiscal multiplayer refer to an increase or decrease in the Government spending affects the overall economic activity within the economy.
An increase in the Government Spending could lead to an increase in consumer spending, could lead to a decrease in the economic activity, while a decrease in the G would lead to a decrease in economic activity.

~~4) Typically the size of the multiplayer is longer in a open economy~~ more eff by spillover effects from foreign trade

To better explain the ~~effe~~ mechanisms behind this process I can focus the longer form of the consumption $C = c_0 + c_1(Y-T)$, where c_1 is the marginal propensity to consume, while c_0 is the goods and ser. ~~increase by a set output~~ ~~to be lead to an increase~~. that a consumer would consume regardless ~~the increase in~~ the all the other variables // $Z = C_0 + c_1(Y-T) + G + I$
An increase in C_0 increases demand Z, which increases production Y with leads to an increase in income (this is the first round) With the second round there is a further increase in Consumption by c_1, which leads to an increase in demand...
This process keeps going on but ~~eac~~ each increase is smaller then the previous one until reaches a state of equilibrium
the multiplier is $\left(\frac{1}{1-c_1}\right)$

- Consider an economy in the short-run. Define in words when an economy is in equilibrium in the short-run, using appropriate equations from the IS-LM model to describe all the relevant determinants of such equilibrium.
- Consider the IS-LM diagram: define the IS curve and the LM curve, and provide an interpretation for three generic points A, B and C shown in the diagram
- If in equilibrium the nominal policy interest rate is 4% and the expected rate of inflation is 4%, what should be the value for the vertical intercept of the LM curve?
- Suppose that expected inflation increases, and the central bank keeps a target on “i": discuss what would happen in this economy, using the IS-LM model.



- Consider the IS-LM diagram: define the IS curve and the LM curve, and provide an interpretation for three generic points A, B and C shown in the diagram

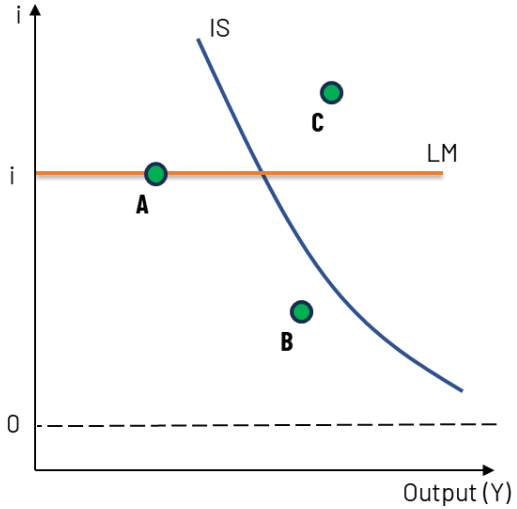
b) In this diagram, the IS curve describes the relation between investment and output. In other words, it describes that how much the output increases, how much People want to make more investments.

And LM curve, it is a constant parameter that describes the interest rate.

Point A: It is a constant amount because it is placed exactly on the LM curve and we don't have equilibrium at this Point.

Point B: In this Point the total investment is less than total saving.

Point C: In this Point, the total investment is more than total saving.



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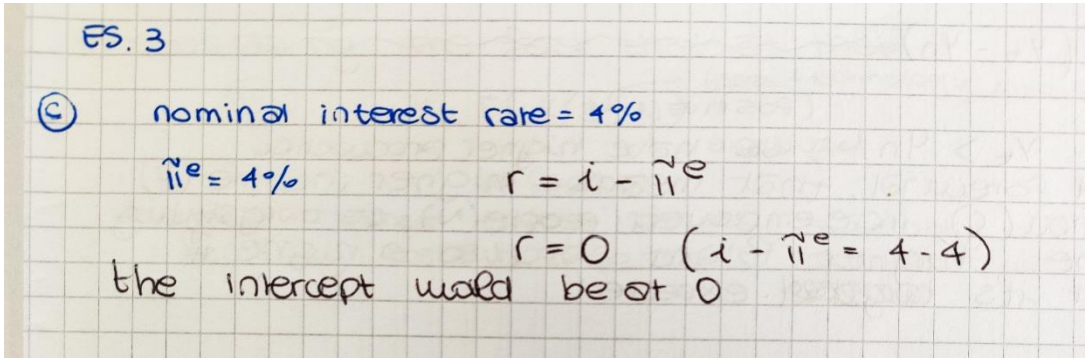
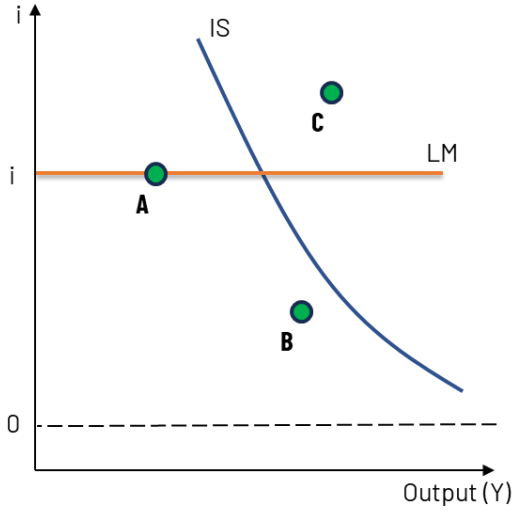
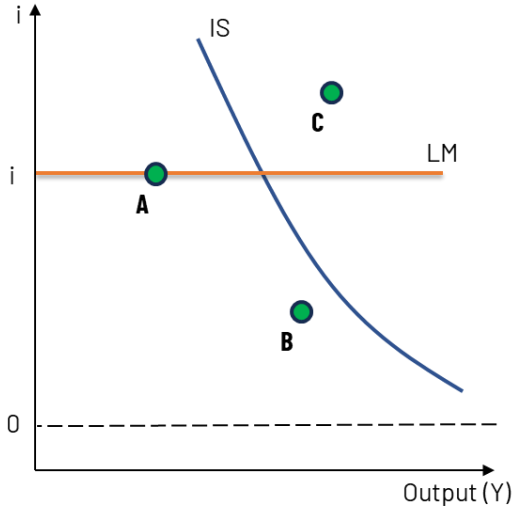




- Suppose that expected inflation increases, and the central bank keeps a target on “i": discuss what would happen in this economy, using the IS-LM model.

d) If the expected inflation increases and central bank keeps a target on "i", it has some consequences. First of all People want to save more than before, ~~and~~ as a result the total amount of investment decreases. when the total investment decreases, the total output decreases.



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